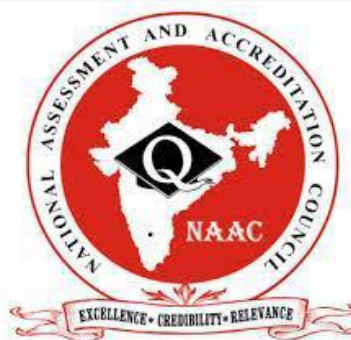


INSTITUTIONAL ACCREDITATION

SELF STUDY REPORT

Submitted to

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
(NAAC)**



An Autonomous Institution of the University Grants Commission
P.O. Box No.1075, Nagarbhavi
Bengaluru-560072

By



Dr. Ambedkar Institute of Technology

(An Autonomous Institution, Aided by Government of Karnataka,
Affiliated to Visvesvaraya Technological University, Belagavi)

Near Jnana Bharathi Campus, Mallathahalli, Bengaluru – 560 056



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Preface

Dr. Ambedkar Institute of Technology (Dr AIT) was established in the year 1980 by Panchajanya Vidyapheeta Welfare Trust (PVPWT) Bangalore. PVPWT is founded by Late Sri. M. H. Jayaprakash Narayan. The Institution was started with Three AICTE approved undergraduate (UG) programmes in Departments of Civil Engineering, Mechanical Engineering and Electrical and Electronics Engineering (EEE). Later UG programmes in Electronics and Communication Engineering, Industrial Engineering and Management, Instrumentation Technology, Computer Science and Engineering, Telecommunication Engineering, Information Science and Engineering and Medical Electronics, were also inducted. In addition, the institution currently also holds 14 research centers recognized by Visvesvaraya Technological University (VTU), Belagavi. This year (2015-16), the college has grown manifold with a total student intake of 1285 pursuing courses in ten undergraduate, eight postgraduate programmes (PG) of engineering and the PG Programmes, MBA, MCA and MSc (Engg.) by research/Doctoral Programmes.

The vision and mission of the Institute are:

Vision Statement:

- To create **Dynamic, Resourceful, Adept and Innovative Technical** professionals to meet global challenges.

Mission Statement:

- To offer state-of-the-art undergraduate, postgraduate and doctoral programmes in the fields of Engineering, Technology and Management.
- To generate new knowledge by engaging faculty and students in research, development and innovation.
- To provide strong theoretical foundation to the students, supported by extensive practical training to meet industry requirements.
- To install moral and ethical values with social and professional commitment.

The Institution is aided by Government of Karnataka, approved by All India Council for Technical Education (AICTE), New Delhi and is affiliated to VTU, Belagavi. The college was granted with Autonomous Status by UGC during 2007 and the college implemented the same during 2010-11 academic year. The Institute has ISO 9001:2008 certification and all departments are accredited by NBA, New Delhi.

Board of Management

Chairman: Dr. S. Chinnaswamy
Secretary: Dr. M. Mahadeva
Treasurer: Shri A. R. Krishnamurthy
Trustee: Shri P. L. Nanjundaswamy
Trustee: Shri S. Mariswamy
Trustee: Shri S. Shivamallu

PRINCIPAL





Executive Summary- The SWOC Analysis of the Institution

Executive Summary

I. Curricular Aspects:

Dr AIT established in 1980 received autonomous status from UGC in the year 2010. Though the UGC mandates that the autonomous status needs to be given to the institute, the VTU statutes defined the same program wise. Since in 2010 more than 80% of PG programs did not had Accreditation/Permanent Affiliation, VTU granted autonomous status only to UG programmes and not to PG programs. The curriculum of PG programmes are given by the affiliating University, which is revised once in every two years to meet the industry and societal requirements. Dr AIT has been making continuous progress in designing its curriculum and developing academic programmes based on Outcome Based Education (OBE), since the academic year 2010-11. The institute aspires in fulfilling and attaining the vision and mission goals by providing the dynamic and challenging education in frontiers of engineering, science and management. The curriculum of all UG programmes is revised and updated every year to meet the needs of Industry and current research. The curriculum meets the standards as prescribed by VTU, AICTE, Professional Bodies and other regulatory agencies. The Board of Studies of each Programme/Department consisting of academicians from highly reputed Institutions, VTU Nominee, Industry Professionals and Alumni representatives design the curriculum to attain certain attributes to employability, innovation and research. The knowledge of faculty members through the research on various fields, feedback from the students, alumni, employer and the suggestions given by the experts help in framing the curriculum which in turn helps in introducing new courses and updating the syllabus.

Further, the institute has MOUs with various leading industries who provide the internship opportunities/Project works to UG/PG students. Apart from this, Co-curricular activities organized by the respective departments makes the students more competitive and Industry ready. Good number of events/programs on soft skills and professional development are conducted within the campus to enrich the skills of all students.

II. Teaching-Learning Evaluation:

Being a Government aided Institution 95% admissions to all UG programmes of the college are through government, based on the CET conducted by Karnataka Examination Authority (KEA), Comed-K, and GOI quota. The remaining 5% student admission is done under Management Quota as per the Government norms. Admissions through KEA and COMED-K are as per the rules framed by the respective authorities.

Faculty acts both as a mentor and as a guide. A thorough planning and execution of the plan in teaching the courses throughout the semester pave the way for efficient learning for the students. Academic calendar prepared by the Dean (Academic) consists of list of working days, Continuous Internal Evaluation

(CIE) and Semester End Examination (SEE) dates, result announcement dates, public holidays, study holidays and all other important events like Sports day, Maithri, parents meet, Alumni meet etc planned by the institute/departments. Head of the department monitors the academic progress as per the proposed schedule. Faculty adheres to the proposed lecture plan and regularly updates their course files.

The Teaching Learning Evaluation process at Dr AIT has been standardized as per the guidelines for autonomy issued by VTU. Preparing the lesson plan, lecture notes, laboratory manuals etc tuned to the requirements of providing experiential learning platforms to the students of both at the UG and PG level. The evaluation in the case of B.E. programs consists of Continuous Internal Evaluation (CIE–50% weight age of total marks) and Semester End Examination (SEE–50% weightage of total marks). The CIE is based on assessment tools, which includes three Continuous Internal Evaluation consisting of three Tests and Quizzes; the best two performances in test & quiz combined will be considered for the award of final CIE marks. The Semester End Examination (SEE) is conducted for the whole syllabus, evaluated by two examiners (internal and external or both external). The question papers for the SEE are set by External and Internal examiners. The final grade will be awarded based on the combined marks obtained in both CIE and SEE. External examiners are invited for evaluating the courses with the Laboratory components as well as for project based courses. Absolute Grading on a 10 point scale has been adopted in the Evaluation system. SGPA (Semester Grade Point Average) and CGPA (Cumulative Grade point Average) are awarded at the end of every semester end examination. Finally, the degree shall be awarded by the VTU, Belagavi to all the students who have earned 200 credits and recommended by the College after approval from the Academic Council of Dr AIT.

III. Research, Consultancy and Extension

Empowerment of engineering students is achieved with strong theoretical knowledge, interdisciplinary skills, creativity, innovation, hands on expertise and professional ethics. R&D initiatives at Dr AIT foster these needs among students and faculty members. R&D policies and advisory committee drive research thrust with constant monitoring and encouragement. State-of-the-art lab facilities established with grants from DST, VGST and AICTE provide the researchers exposure to advanced technology and urge to carryout research activities in the recent trends. The World Bank assistance, TEQIP-II received during October, 2012 also helped in improving the existing infrastructure and quality of Human Resources to carry out R&D and Consultancy related to various domains. Over the last five years R&D has contributed in publishing research work in reputed journals, conferences and filing patents that are of societal relevance. Partnering with leading MNCs and research agencies through MOUs, R&D center works on prime areas of research such as guidance and control, embedded systems, image processing and data analytics. Resources at R&D center is put to optimum use in providing industry relevant training and consultancy activities that in turn generates revenue for further investment. Faculty of Dr AIT are encouraged to pursue Ph.D from VTU and other leading premier organizations under QIP providing them relevant support as per the

government norms. Roadmaps and vision, mission documents set the pace for R&D center at Dr AIT to be one of the leading research hubs of national importance providing solutions that of societal needs.

IV. Infrastructure and Learning Resources:

Dr AIT has well maintained campus spread over 20.53 acres out of which the built up portion is around 50% to house all the Departments and Central Facilities. The Green cover on campus has been consciously maintained and any plans for expansion of buildings to cater to increased students and faculty strengths are taken with a thought of maintaining the green cover and the academic ambience and Learning environment for inspiring the students and the faculty, who join Dr AIT with the pursuit of Excellence in mind. Every Department is housed in an Independent Block with adequate space provision for class room, Laboratories, research Laboratories, and other requirements.

A Central Library & Information Centre is located in the Centre of the Campus, which acts as a hub of knowledge, with a collection of Voluminous Number of titles and annual subscriptions to several internationally reputed journals in all disciplines of science, engineering and technology. The library has several E Resources and facilities such as E-Books, learning resources like NPTEL, DELNET and are well equipped with access via the internet and the Wi-Fi connectivity to the entire faculty and students anywhere on the campus. Dr AIT is a member of the VTU Consortium of libraries and under this scheme access to knowledge resources have no limitation whatsoever. The use of these resources is evidenced in terms of a large number of publications in peer reviewed and refereed international journals.

V. Student Support and Progression

An effective Student mentoring and Support scheme is practiced at Dr AIT since many years. Mentors are nominated for every group of 20 to 25 students and given the responsibility of monitoring the academic performance and advise them on personal matters to certain extent which helps to give individual attention to every student in the group. The Departments conducts Parents Teachers meet as part of the system to involve the parents who are the key stakeholders in the progress of their respective wards. Issues related to the academics and personality developments are discussed with the parents during this meet. Student's participation in Extra-Curricular activities, sports and other co-curricular activities are also recorded in the course registration book. The system of mentoring has resulted in providing timely corrective advice to keep the students on track in the academic and non-academic engagements. Rules for academic progression are published in the "Handbook of Rules and Regulations" given to every student admitted into the undergraduate degree program. These rules are in line with the guidelines for the autonomous institution given by the VTU, which finally awards the degree to the graduates based on the recommendations of the institution.

The Institute also provides the welfare measures such as scholarships, free-ships and student safety insurance scheme to ensure a financially trouble free environment. It provides information about the competitive examinations and offers career counselling, soft skills training, entrepreneurial skills to enhance the employable opportunity of the students. The Placement cell is well equipped

with full time Training and Placement Officer (TPO) and infrastructure to ensure smooth placement process. On an average every year 80% of eligible students gets placed at many reputed Companies/Industries, while the remaining few will pursue their higher education in and outside the Country. The institute has grievance redressal, sexual harassment prevention, Anti ragging cells to address the issues. The alumni association provides a platform for alumnus to interact with the college. The institution takes up the measures to monitor the slow learners and drop out students. It also monitors the career growth of the students. The students are encouraged to take part in several responsible administrative positions which not only improves their leadership skills but also helps them to achieve the academic excellence. Participation in several events, research, NSS, blood donation camp, Swach Bharat instils social responsibility amongst the students.

VI. Governance, Leadership and Management:

Dr AIT is governed by the Board of Trustees of the PVPWT, an educational trust established in the year 1979 at Bangalore. The distinguished personalities of PVPWT with rich experience in the field of Higher Education and the niche segment of Technical education on the Governing body guide all the activities of the institution. The Governing body gives lot of credence to the autonomy of the academic council, which is the highest academic body overseeing the Teaching-Learning process in various programs of study administered in the institution. The institute has been contributing to Engineering and Management Education with a focus towards developing graduates with a global outlook and with necessary Entrepreneurial, Managerial & Software Development skills to succeed in a competitive world. As an academic institution, Dr AIT is continuously learning, evolving with every year and updating the needs of the companies by promoting all necessary requirements.

The Institute believes in overall development of its all stakeholder. The institution is striving towards excellence and imparting practical knowledge through Technical expertise since its inception. Engineering students at Dr AIT are privileged to have world class Education and well-furnished lab facilities, good infrastructure over all personality development with the support of Management and dedicated staff. Management of the Dr AIT has empowered its faculty members at all the level of the organization. The participation of teaching faculty in the governing bodies of institution has been ensured. All the stakeholders are involved in the development of the institution.

VII. Innovations and Best Practices

The College has adopted various measures to maintain a green campus which helps in developing an eco-balanced environment. The College ensures environmental consciousness in the minds of students by conducting environmental awareness programmes from time to time. A two credit course, Environmental Studies is prescribed in 1st semester of all UG programs. Entrepreneurship development cell has been established to meet the challenge and need of the society. College has adopted certain Best Practices like “Mentoring System”, “Research and Development” amongst students and faculty members and “Training and Placement activities” which makes Dr AIT as one of the best institution to enhance the performance of the students.

The SWOC Analysis of the Institution

Strengths

- Management with a vision for imparting quality education and student welfare.
- Government aided Institution.
- Autonomous, TEQIP Funded Institution.
- Institute has well qualified and highly dedicated Teaching and Non-Teaching Staff.
- Better retention of faculty with 24% of Ph.D holders.
- Sufficient infrastructure and Hostel facility.
- Outcome Based Education focused on employment, entrepreneurship development and research orientation.
- Stakeholder's need based curriculum and its periodic revision.
- Value added courses to UG/PG students.
- Institute has excellent rapport with outside corporate world for technical and managerial support.
- Active memorandum of understanding with industries and foreign universities.
- Faculty members are regularly encouraged and given opportunities to pursue higher studies, research work and encouraged to apply for research projects.
- The Institute has well equipped digital library which has access to e-books, National and International e-journals.
- Special Book Bank for SC/ST Students
- Institute Faculty members and students are members of professional bodies like IEEE, ISTE, IETE, CSI, ISOI, SAE and IWS.

Weaknesses

- Students, being from rural area, are striving to meet national and global standards in technical education and facing language barriers.
- Institute has to upgrade their teaching community for more funded projects; quality research and development; and patents and consultancy. Consultancy work to be improved.
- Lack of opportunities for international collaboration.
- Poor Industry supported laboratories.
- Lack of faculty exchange or student exchange programmes.
- Campus placements of the college, needs to be improved.
- Aptitude of the students for higher learning is low.
- Involvement of Staff in research is constrained due to more academic work load.

Opportunities

- Institute is continuously organizing various developmental programs for the benefit of teachers and students through seminars, workshops, conferences, symposiums and other student meets.
- Ever increasing demand for technical education at UG & PG level of Engineering & Technology.

-
- Many more opportunities for tie-ups with both established and start-up companies in India and abroad for enhancing learning outcomes.
 - Situated at the centre of Bangalore city where multinational companies are setting up their design houses.
 - Enhancing engineering values among socio-economic background Students through innovative teaching and learning process.
 - Promoting the young and motivated faculty members towards research and academic excellence.
 - Industry institute interactive learning to prepare industry ready candidates.
 - Enhancement of research and entrepreneur activity in the field of engineering and technology.
 - Innovation in teaching-learning process.
 - To develop R&D activities by interacting with premier Industries and high performing Institutions.
 - Scope for strengthening the industry institute interaction for better placement of students.

Challenges

- Matching 100% placement against declining quality of students.
- Bridging the gap between curriculum and industry needs due to fast developing technology.
- Grooming students for inculcating Entrepreneurship in cut-throat competitive markets.
- Working strategically on key requirements of industry to increase revenue through consultancy.
- Institute has competition from other technical Institutions/ universities.
- Competition from other institutions and foreign universities that may setup their operations in India in near future.
- Decreasing availability of committed and quality faculty with passion for teaching.
- Collaboration with foreign universities.
- Students with diverse background.
- Continuous change in technology that challenges the employability of the students.
- Increasing number of engineering colleges.
- Input quality of students, their academic performance and providing placement opportunities.

**PROFILE OF THE AUTONOMOUS COLLEGE**

1. Name and Address of the College:

Name: **Dr. Ambedkar Institute of Technology**
 Address: Dr. Ambedkar Institute of Technology, Near Jnana
 Bharathi Campus, Outer Ring Road, Malathahalli
 City: Bengaluru Pin: 560056 State: Karnataka
 Website: <http://www.dr-ait.org>

2. For Communication:

Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Dr. C. Nanjundaswamy	O: 080-23211506 R:	9448739885	080-23217789	swamy_vtu@yahoo.com
Vice Principal	-	-	-	-	-
Steering Committee Co-ordinator	Dr. M. Meenakshi	O: 080-23211507 R: 080 - 23211849	09480494025	080-23217789	meenakshi_mbhat@yahoo.com

3. Status of the Autonomous College by Management: **Grant-in Aid**

- I Government
- II Private
- III Constituent College of the University

4. Name of the University to which the College is affiliated

Visvesvaraya Technological University, Belagavi

5. a. Date of establishment, prior to the grant of 'Autonomy': **04/11/1980**

b. Date of grant of 'Autonomy' to the College by UGC: **18/04/2011**

6. Type of Institution

a. By Gender

- i. For Men ☐
- ii. For Women ☐
- iii. Co-education ☒

b. By Shift

- i. Regular ☒
- ii. Day ☐
- iii. Evening ☐

c. Source of Funding

- i. Government ☐
- ii. Grant-in-aid ☒
- iii. Self-Financing ☐



7. It is a recognized minority institution

Yes ☐
No ☒

8. a. Details of UGC Recognition

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (if any)
i. 2 (f)	27 -05 - 2009	-
ii. 12 (B)	Applied	Applied to UGC on 15 - 04 -2011

(Enclose the Certification of recognition u / s 2 (f) and 12 (B) of the UGC Act)

Ph. 23236351, 23232701, 23237721
23234116, 23235733, 23232317
23236735, 23239437, 23239627
UGC Website: www.ugc.ac.in

विश्वविद्यालय अनुदान आयोग
बहादुरशाह जफर मार्ग
नई दिल्ली-110 002
UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

F. No. 8-366/2007 (CPP-I)

The Registrar,
Visvesvaraya Technological University
Jnana Sangama
Beigaum - 590 014
Karnataka

SL No. 1467
1 JUN 2009
PVP

27 MAY 2009 May, 2009

Sub:- List of Colleges prepared under Section 2 (f) of the UGC Act, 1956-Inclusion of New College-

Sir,
I am directed to refer to the letter No. Dr.AIT/DVP/007/2008-09 dated 02.04.2009 received from the Principal, Dr. Ambedkar Institute of Technology, Mallathally, Bangalore on the subject cited above and to say that the name of the following College has been included in the list of Colleges prepared under Section 2 (f) of the UGC Act, 1956 under the head Non-Government Colleges teaching upto Post Graduate Degree:-

Name of the College	Year of Establishment	Remarks
Dr. Ambedkar Institute of Technology, Near Jnana Bharthi Campus, Mallathally, Bangalore - 560 056. (On permanent affiliation)	1980	The College is <u>not</u> eligible to receive Central assistance in terms of the rules framed under Section 12 (B) of the UGC Act, 1956.

The Indemnity Bond and other supporting documents submitted in respect of the above College have been accepted by the Commission.

Yours faithfully
(S.C.Chadha)
Deputy Secretary

Copy to:-

- ✓ The Principal, Dr. Ambedkar Institute of Technology, Near Jnana Bharthi Campus, Mallathally, Bangalore.
- The Secretary, Government of India, Ministry of Human Resource Development, Department of Secondary & Higher Education, Shastri Bhawan, New Delhi-110 001.
- The Principal Secretary, (Higher Education), M.S. Building, 5th Floor, Dr. B.R. Ambedkar Road, Bangalore (Karnataka).
- The Deputy Secretary, UGC, South-Western Regional Office, Prasanna Kumar Block, Palace Road, Bangalore-560 009.
- Publication Officer, UGC-Website, New Delhi.
- Section Officer, FD-III Section, UGC, New Delhi.
- All Sections, UGC, New Delhi.
- Guard file.

Dr. AIT/DVP/007-10 RD 16/09 at 3AM

(Sunita Gulati)
Section Officer



b. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section / Clause	Day, Month and Year	Validity	Programme/institution	Remarks
AICTE	25-04-2016	1 Year	B.E (UG) M. Tech (PG) M.B.A M.C.A	

(Enclose the Certificate of recognition / approval)

AI India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)
7th Floor, Chandrasekhar Building, Jagdish, New Delhi-110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. South West/1-281242882/2016/EOA Date: 25-Apr-2016

To,
The Principal Secretary (H & T Education)
Govt. of Karnataka, K. G.S., 8th Floor,
M.S. Building, R. N. 645/D, B. R. Ambedkar Road,
Bangalore 560021

Sub: Extension of approval for the academic year 2016-17

Ref: Application for the Institution for Extension of approval for the academic year 2016-17

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations, 2012 notified by the Council vide notification number F.No.37-S/Regd/2012 dated 27/08/2012 and norms, standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	South West	Application No.	1-281242882
Name of the Institute	DR. AMBEDKAR INSTITUTE OF TECHNOLOGY	Permanent No.	1-273084
Name of the Society/Trust	PANCAJANITA VIDYA SOCIETY (WILLIAMS ROAD) (P)	Institute Address	OUTER POND ROAD, NEAR ANNA BHARATHI CAMPUS, MALLATHURALLI, BANGALORE-560095
Institute Type	Self-aided	Society/Trust Address	N.O. ONE, 1ST FLOOR, KALAHASTRI, BANGALORE-BANGALORE-560095

Changed for change from Women to Co-ed or vice versa	No	Changed for change of name	No	Changed for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2016-17

Program	Level	Full Time	Part Time	Intake 2016-17	Intake 2017-18	Min. Approval	Min. Approval	Min. Approval	Min. Approval	Min. Approval
ENGINEERING	UG	Full Time	Part Time	24	24	NA	NA	NA	NA	NA
ENGINEERING	UG	Full Time	Part Time	24	24	NA	NA	NA	NA	NA

Application Number: 1-281242882
Note: This is a Computer generated Report. No signature is required.
Printed By: AC/22/05 Page 1 of 5
Letter Printed On: 11 May 2016

AI India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)
7th Floor, Chandrasekhar Building, Jagdish, New Delhi-110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

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ENGINEERING	UG	Full Time	Part Time	24	24	NA	NA	NA	NA	NA

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Ref: Application for the Institution for Extension of approval for the academic year 2016-17

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations, 2012 notified by the Council vide notification number F.No.37-S/Regd/2012 dated 27/08/2012 and norms, standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	South West	Application No.	1-281242882
Name of the Institute	DR. AMBEDKAR INSTITUTE OF TECHNOLOGY	Permanent No.	1-273084
Name of the Society/Trust	PANCAJANITA VIDYA SOCIETY (WILLIAMS ROAD) (P)	Institute Address	OUTER POND ROAD, NEAR ANNA BHARATHI CAMPUS, MALLATHURALLI, BANGALORE-560095
Institute Type	Self-aided	Society/Trust Address	N.O. ONE, 1ST FLOOR, KALAHASTRI, BANGALORE-BANGALORE-560095

Changed for change from Women to Co-ed or vice versa	No	Changed for change of name	No	Changed for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2016-17

Program	Level	Full Time	Part Time	Intake 2016-17	Intake 2017-18	Min. Approval	Min. Approval	Min. Approval	Min. Approval	Min. Approval
ENGINEERING	UG	Full Time	Part Time	24	24	NA	NA	NA	NA	NA
ENGINEERING	UG	Full Time	Part Time	24	24	NA	NA	NA	NA	NA

Application Number: 1-281242882
Note: This is a Computer generated Report. No signature is required.
Printed By: AC/22/05 Page 1 of 5
Letter Printed On: 11 May 2016

AI India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)
7th Floor, Chandrasekhar Building, Jagdish, New Delhi-110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. South West/1-281242882/2016/EOA Date: 25-Apr-2016

To,
The Principal Secretary (H & T Education)
Govt. of Karnataka, K. G.S., 8th Floor,
M.S. Building, R. N. 645/D, B. R. Ambedkar Road,
Bangalore 560021

Sub: Extension of approval for the academic year 2016-17

Ref: Application for the Institution for Extension of approval for the academic year 2016-17

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ENGINEERING	UG	Full Time	Part Time	24	24	NA	NA	NA	NA	NA

Application Number: 1-281242882
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Printed By: AC/22/05 Page 1 of 5
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All India Council for Technical Education
 (A Statutory body under Ministry of HRD, Govt. of India)
 7th Floor, Chandralekha Building, Jagdish, New Delhi-110 001
 PHONE: 2324101/2324102/2324103 FAX: 011-2324103 www.aicte.ac.in

PANCHAJANYA VIDYA FEETHA WELFARE TRUST (P)
 501, CAD. IRE, 4th Floor, 42, PADMANABH, RAMANA SHIP,
 BANGALORE, BANGALORE URBAN,
 Karnataka-560010

G. Grant File(AICTE)

Application Number: 1/2011/24/2011
 Date: 11/10/2011
 Project: 11/10/2011

Letter Forwarded On: 11/10/2011

9. Has the college recognized

a. By UGC as a College with Potential of Excellence (CPE)?

Yes ☐ No ☒

If yes, date of recognition:.....

b. For its contributions / performance by any other governmental agency?

Yes ☒ No ☐

if yes, Name of the agency **Government of India (TEQIP)** and

Date of recognition: **01-10-2012**

10. Location of the campus and area:

Location *	Urban
Campus area in sq.mts or acres	20.53 Acres
Built up area in sq.mts.	79725.38 sq. mts.

(* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Does the College have the following facilities on the campus (Tick the available facility)? In case the College has an agreement with other agencies in using such facilities provide information on the facilities covered under the agreement.

• Auditorium / Seminar Complex	<input checked="" type="checkbox"/>
• Sports facilities	<input checked="" type="checkbox"/>
❖ Play ground	<input checked="" type="checkbox"/>
❖ Swimming pool	--
❖ Gymnasium	<input checked="" type="checkbox"/>
• Hostel	<input checked="" type="checkbox"/>
❖ Boys Hostel	<input checked="" type="checkbox"/>
❖ Girls Hostel	<input checked="" type="checkbox"/>
• Residential facilities	--
❖ Teaching	--
❖ Non-teaching Staff	--



• Cafeteria	<input checked="" type="checkbox"/>		
• Health Centre	<input type="checkbox"/>		
❖ First aid facility	<input checked="" type="checkbox"/>		
❖ Inpatient facility	<input type="checkbox"/>		
❖ Outpatient facility	<input type="checkbox"/>		
❖ Ambulance facility	<input type="checkbox"/>		
❖ Emergency care facility	<input type="checkbox"/>		
• Health Centre Staff	<input type="checkbox"/>		
❖ Qualified Doctor	<input type="checkbox"/>	Full Time <input type="checkbox"/>	Part Time <input type="checkbox"/>
❖ Qualified Nurse	<input type="checkbox"/>	Full Time <input type="checkbox"/>	Part Time <input type="checkbox"/>
• Other Facilities	<input checked="" type="checkbox"/>		
❖ Bank	<input checked="" type="checkbox"/>		
❖ ATM	<input checked="" type="checkbox"/>		
❖ Post Office	<input type="checkbox"/>		
❖ Book Shops	<input checked="" type="checkbox"/>		
• Transport facilities	<input checked="" type="checkbox"/>		
❖ for students	<input checked="" type="checkbox"/>		
❖ for staff	<input checked="" type="checkbox"/>		
• Power house	<input checked="" type="checkbox"/>		
• Waste management facility	<input checked="" type="checkbox"/>		

12. Details of programmes offered by the institution: (Give data for current academic year)

Sl. No	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student intake	No. of students admitted
A	UG						
1	Civil Engineering	1980	4 Years	PU + Recognized entrance test	English	120	127
2	Mechanical Engineering	1980	4 Years	PU + Recognized entrance test	English	180	163
3	Electrical and Electronics Engineering	1980	4 Years	PU + Recognized entrance test	English	60	56
4	Electronics and Communication Engineering	1982	4 Years	PU + Recognized entrance test	English	180	172
5	Industrial Engineering and Management	1984	4 Years	PU + Recognized entrance test	English	60	52
6	Instrumentation Technology	1985	4 Years	PU + Recognized entrance test	English	60	51
7	Computer Science and Engineering.	1987	4 Years	PU + Recognized entrance test	English	180	183
8	Telecommunication Engineering.	1991	4 Years	PU + Recognized entrance test	English	60	54
9	Information Science & Engineering.	1992	4 Years	PU + Recognized entrance test	English	60	54
10	Medical Electronics	1999	4 Years	PU + Recognized entrance test	English	30	12



B	PG						
1	M C A	1999	3 Years	Recognized UG Degree + VTU PGCET	English	60	51
2	M B A	2001	2 Years	Recognized UG Degree + CAT/CMAT	English	60	55
3	M.Tech in Computer Science and Engineering	2002	2 Years	Recognized UG Degree + GATE/VTU PGCET	English	25	24
4	M.Tech in VLSI Design and Embedded Systems	2004	2 Years	Recognized UG Degree + GATE/VTU PGCET	English	18	17
5	M Tech in Power Electronics	2010	2 Years	Recognized UG Degree + GATE, VTU PGCET	English	18	15
6	M Tech in Digital Communication and Networking	2010	2 Years	Recognized UG Degree + GATE, VTU PGCET	English	18	16
7	M Tech in Structural Engineering	2011	2 Years	Recognized UG Degree + GATE, VTU PGCET	English	18	18
8	M. Tech in Machine Design	2013	2 Years	Recognized UG Degree + GATE, VTU PGCET	English	24	21
9	M. Tech in Computer Network Engineering	2013	2 Years	Recognized UG Degree + GATE, VTU PGCET	English	24	20
19	M.Tech in Electronics	2015	2 Years	Recognized UG Degree + GATE, VTU PGCET	English	30	21
3	Integrated Masters			NA			
4	M.Phil.			NA			
5	Ph. D.			Recognized PG Degree + VTU Ph.D. Entrance Examination	English	NA	131
6	Integrated Ph.D.			NA			
7	Certificate			NA			
8	Diploma			NA			
9	PG Diploma			NA			
10	Any Other (Please specify)			NIL			

13. Does the institution offer self-financed Programmes?

Yes ☒ No ☐

If yes, how many?



14. Whether new programmes have been introduced during the last five years?

Yes ☒ No

If Yes

Number

15. List the departments: (Do not list facilities like library, Physical Education as departments unless these are teaching departments and offer programmes to students)

Particulars		Number	Number of Students
Science			
	Under Graduate	NA	
	Post Graduate		
	Research centre(s)		
Arts			
	Under Graduate	NA	
	Post Graduate		
	Research centre(s)		
Commerce			
	Under Graduate	NA	
	Post Graduate		
	Research centre(s)		
Any Other (please specify)			
	Under Graduate	10	
	Civil Engineering		127
	Mechanical Engineering		163
	Electrical and Electronics Engineering		56
	Electronics and Communication Engineering		172
	Industrial Engineering and Management		52
	Instrumentation Technology		51
	Computer Science and Engineering.		183
	Telecommunication Engineering.		54
	Information Science & Engineering.		54
	Medical Electronics		12
	Post Graduate	10	
	M C A		51
	M B A		55
	M.Tech in Computer Science and Engineering		19
	M.Tech in VLSI Design and Embedded Systems		14
	M Tech in Power Electronics		14
	M Tech in Digital Communication and Networking		13
	M Tech in Structural Engineering		18
	M. Tech in Machine Design		21
	M. Tech in Computer Network Engineering		14
	M. Tech in Electronics		21
	Research Centre(s)	15	
	Civil Engineering		15
	Mechanical Engineering		15
	Electrical and Electronics Engineering		11
	Electronics and Communication Engineering		12



	Industrial Engineering and Management		07
	Instrumentation Technology		06
	Computer Science and Engineering.		14
	Telecommunication Engineering.		07
	Information Science & Engineering.		06
	Medical Electronics		02
	MCA		05
	MBA		04
	Mathamatics		16
	Physics		04
	Chemistry		06

16. Are there any UG and/or PG programmes offered by the College, which are not covered under Autonomous status of UGC? Give details.

- **YES** - All PG Programmes offered by the college are not covered under Autonomous status of UGC and are under VTU, Belagavi

Details are:

Sl. No	Programme
1	M C A
2	M B A
3	M.Tech in Computer Science and Engineering
4	M.Tech in VLSI Design and Embedded Systems
5	M Tech in Power Electronics
6	M Tech in Digital Communication and Networking
7	M Tech in Structural Engineering
8	M. Tech in Machine Design
9	M. Tech in Computer Network Engineering
10	M. Tech in Electronics

17. Number of Programmes offered under (Programme means a degree course like BA, MA, BSc, MSc, B.Com etc.)

- a. annual system

Nil

- b. semester system

10

- c. trimester system

10

18. Number of Programmes with

- a. Choice Based Credit System

10

- b. Inter / Multidisciplinary Approach

--
- c. Any Other (Specify)

--

19. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

- (a) Including the salary component

₹ 91026 /-

- (b) Excluding the salary component

₹ 83295 /-

20. Does the College have a department of Teacher Education offering NCTE recognized degree programmes in Education?

Yes ☐ No ☒



- a. How many years of standing does the department have?
..... years
- b. NCTE recognition details (if applicable) Notification
No.:
Date:
- c. Is the department opting for assessment and accreditation separately?
Yes ☐ No ☒
21. Does the College have a department of Physical Education offering NCTE recognized degree programmes in Physical Education?
Yes ☐ No ☒
- a. How many years of standing does the department have?
..... years
- b. NCTE recognition details (if applicable) Notification
No.:
Date:
- c. Is the department opting for assessment and accreditation separately?
Yes ☐ No ☒
22. Whether the College is offering professional programme?
Yes ☒ No ☐
- If yes, please enclose approval / recognition details issued by the statutory body governing the programme.
- **YES** - By AICTE New Delhi - AICTE Approval Letter is enclosed above in 8b
23. Has the College been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon.
- **YES** - By AICTE New Delhi - AICTE Approval Letter is enclosed above in 8b
24. Number of teaching and non-teaching positions in the College

Positions	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC/University/State Government Recruited Yet to Recruit	18	05	29	12	15	08	31	29	89	05
	21	5	32	11	14	10	29	33	76	6
Sanctioned by the Management/Society/or other authorized bodies Recruited Yet to Recruit	9	3	8	12	45	83	59	14	31	6
	9	3	8	12	45	83	59	14	31	6

*M-Male

*F-Female



25. Qualifications of the teaching staff

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.	20	5	3	4	4	1	37
M.Phil.							
PG	1	-	29	7	10	9	56
Un Aided							
Ph.D.	8	3	2	2	4	0	19
M.Phil.							
PG	1	-	6	10	41	83	141
Part-time teachers							
Ph.D.							
M.Phil.							
PG							

26. Number of Visiting Faculty / Guest Faculty engaged by the College.

03 – One each in Civil Engineering, Mechanical Engineering and Electrical and Electronics Engineering.

27. Students enrolled in the College during the current academic year, with the following details:

Posit ions	UG		PG		Integr ated Master s		M.Phil I		Ph.D		Integr ated Ph.D		D.Litt. / D.Sc.		Certifi cate		Diplo ma		PG Diplo ma	
	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
From the state where the College is located	517	278			N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A
From other states of India	54	10																		
NRI students																				
Foreign students																				
Total	571	288																		

*M - Male

*F - Female



28. Dropout rate in UG and PG (average for the last two batches)

UG **2%** PG **0.5%**

29. Number of working days during the last academic year **259**

30. Number of teaching days during the last academic year **203**

31. Is the College registered as a study centre for offering distance education programmes for any university?

Yes ☐ No ☒

If yes, provide

a. Name of the University

b. Is it recognized by the Distance Education Council?

Yes ☐ No ☒

c. Indicate the number of programmes offered. **NA**

32. Provide Teacher-Student ratio for each of the programme / course offered

UG Programmes: 2015-16

Sl. No	Programme	Teacher-student ratio
1	Civil Engineering	1:14
2	Mechanical Engineering	1:16
3	Electrical and Electronics Engineering	1:15
4	Electronics and Communication Engineering	1:24
5	Industrial Engineering and Management	1:20
6	Instrumentation Technology	1:15
7	Computer Science and Engineering	1:16
8	Telecommunication Engineering	1:15
9	Information Science and Engineering	1:17
10	Medical Electronics	1:6

PG Programmes: 2015-16

Sl. No	Programme	Teacher-student ratio
1	M C A	1:15
2	M B A	1:11
3	M.Tech in Computer Science and Engineering	1:11
4	M.Tech in VLSI and Embedded Systems	1:9
5	M Tech in Power Electronics	1:12
6	M Tech in Digital Communication and Networking	1:12
7	M Tech in Structural Engineering	1:7.2
8	M. Tech in Machine Design	1:12
9	M. Tech in Computer Networking	1:15
10	M.Tech in Electronics	1:7



33. Is the college applying for?

Accreditation: Cycle 1 ☒ Cycle 2 Cycle 3 Cycle 4

Re-Assessment

☐

34. Date of accreditation * (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle 1:NA..... Accreditation outcome / results

Cycle 2:NA..... Accreditation outcome / results

Cycle 3:NA..... Accreditation outcome / results

Kindly enclose copy of accreditation certificate(s) and peer team report(s)

Cycle 1 refers to first accreditation; Cycle 2 and beyond refers to reaccreditation

35. a. Date of establishment of Internal Quality Assurance Cell (IQAC)

25/06/2016

b. Dates of submission of Annual Quality Assurance Reports (AQARs).

(i) AQAR for year on

(ii) AQAR for year on

(iii) AQAR for year on

(iv) AQAR for year on.....

NA

36. Any other relevant data, the College would like to include. (Not exceeding one page)

CRITERION – 1: CURRICULUR ASPECTS

1.1. Curriculum Design and Development**1.1.1. How are the institutional vision / mission reflected in the academic programmes of the College?****Vision of the Institution:**

- To create **D**ynamic, **R**esourceful, **A**dept and **I**nnovative **T**echnical professionals to meet global challenges.

Mission of the Institution:

- To offer state-of-the-art undergraduate, postgraduate and doctoral programmes in the fields of Engineering, Technology and Management.
- To generate new knowledge by engaging faculty and students in research, development and innovation
- To provide strong theoretical foundation to the students, supported by extensive practical training to meet industry requirements.
- To install moral and ethical values with social and professional commitment.

The vision and mission of the college are realized through the vision mission statements of various departments, which in turn realized through continually changing syllabi formulated under the guidance of academicians from premier institutions/reputed colleges, Professors and Associate/Assistant Professors of the college, alumni of the college and employers, in order to cater the requirements of changing technological developments with appropriate emphasis on basic & engineering sciences and mathematics. The curriculum is designed to offer sufficient flexibility in choosing the departmental and/or interdisciplinary courses right from the third year of the program. The students are exposed to innovative research problems through the centre of excellence set by the college in the field of Virtual Instrumentation in collaboration with National Instruments and Electrono solutions. Organizing various inter college and intra college technical events, competitions, co-curricular and extracurricular activities by the college or through various student clubs help the students to develop leadership qualities, team work spirit, professional and soft skills, which help them to succeed in their life. The studies on Environmental Engineering & Industrial Management addresses the values related with good citizenship and civic sense and business ethics

1.1.2. Describe the mechanism used in the design and development of the curriculum? Give details on the process. (Need Assessment, Feedback, etc)

The mechanism used in the design and development of curriculum is as depicted in Fig. 1.1.

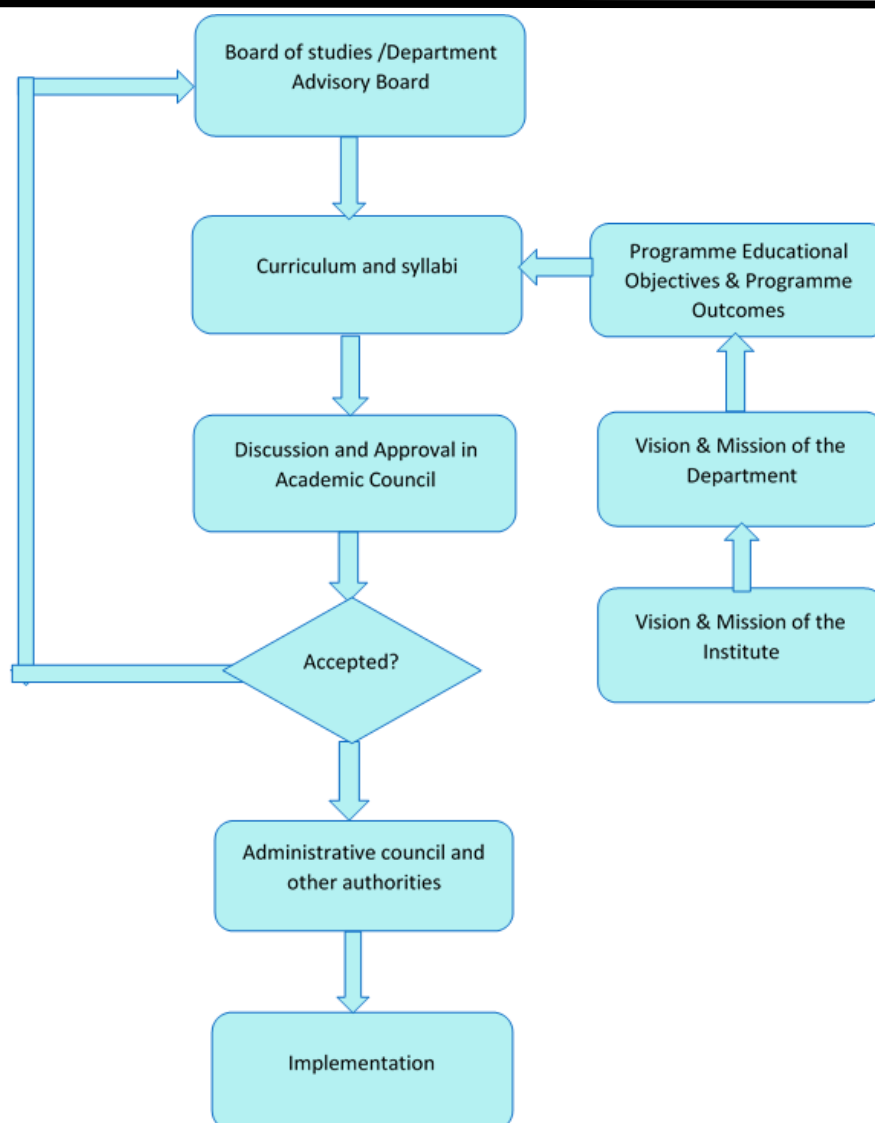


Fig 1.1. Mechanism used in the design and development of curriculum

The curriculum is designed as per the guidelines of Outcome Based Education (OBE). Accordingly the mapping of various criteria's are made with curriculum. The starting point is the input from faculty, industries, lead societies and roadmaps. Department committee identifies faculty members with relevant specialization and assigns the curriculum design to them. Faculty members prepare the course curriculum incorporating the latest developments in the respective subject domains. Department committee lists the courses and prepares semester wise sequence of courses and scheme of study. Periodically department committee meets & revisits the curriculum. The proposal is placed before the Board of studies (BOS)/Department Advisory Board (DAB) of the Department, for deliberations and suggestions. The assessment of needs is carried out on the basis of the following: Feedback from all the stake holders. Feedback from industry i.e the organizations where the graduates may get employed and from the organizations which visit the institution for on campus placement process are taken. Independent study by faculty covering latest

development trends in research, science and technology are also considered.

1.1.3. How does the College involve industry, research bodies, and civil society in the curriculum design and development process? How did the College benefit through the involvement of the stakeholders?

As mentioned above, BOS/DAB of each department has members from industry, other academic and/or research Institute, Alumni to offer their suggestions for starting new courses, or modifying existing courses as well as for introducing innovation in teaching learning methodologies and assessment methods. The formal and informal discussions with employers when they visit the college for campus placement and with civil society help each department to imbibe sense of social responsibility.

The interaction with research institutes like DRDO, reputed academic institutes like IIT Bombay, IISc, Bangalore, state level autonomous institutes etc and Industries such as TCS, Infosys, TI, etc. helps in obtaining sponsored projects and internship for students and collaborative research in emerging areas of Engineering. Since stakeholders are actively involved in curriculum development of the departments, they are assured of the abilities of the graduates from the department which partly results in employment of the students of the department by them.

Besides this, the guidelines of outcome based education and curriculum design by NBA New Delhi is taken in to consideration to attain world class standard in line of ABET standards

1.1.4. How are the following aspects ensured through curriculum design and development?

- **Employability**
- **Innovation**
- **Research**

Employability:

Curriculum and syllabi of both UG and PG programmes are prepared with the contribution from industry representatives to meet their general and specific requirements.

- Most of the courses of UG and PG program enable the students to enhance their technical and logical skills.
 - Theory courses are augmented by corresponding practical courses which develop in students the skills related with design, development, debugging, evaluation, instrumentation etc.
 - Mini-projects are a part of curriculum of 3rd Year (VI Sem) of all UG programmes. Main project is split in to two phases, carried out by the UG students in seventh & eighth semester of the program either in the department or in the industry. For PG programs, one full year dissertation is a part of curriculum. In addition, internship programme is also a part of curricula of all PG programmes
 - The presentation of mini-projects and main projects through seminars for UG program and exclusive seminar course for one semester for UG and two semesters of PG programs help to develop
-

communication and professional skills and team skills in the students.

- Need based training programs are provided to the students in the form of workshops and guest lecturers from industry experts and R/D organizations, professors from reputed foreign or national institutes or in-house faculty.
- Special Soft-Skill, Aptitude, Attitude development programs from industry professionals are arranged from Training and placement cell on regular basis.
- Industrial Visits are arranged by various departments to give vision and understanding of current trends and needs of industries.
- Efforts are taken to introduce open electives of UG Programs so that students can get knowledge from multidisciplinary platforms and apply skills to develop integrated systems.

Innovation:

- Students are given number of opportunities to exhibit their innovative skills by participating in Project Exhibition (a national level annual technical event organized by the college every year during Ambedkar Jayanthi celebration on 14th April), Tech-FEST and conferences/seminars (organized by various departments), Design contest held by TI Bangalore, and technical events organized by other colleges. The students of this institute had not only participated in such National level events, but also have grabbed the prizes.
 - Each department student organization mentioned below organizes competitions on various technical skills throughout the year.
 - TECHKSHETRA- Electronics and Instrumentation Engineering Student technical club arranges Circuit Design, Programming Skills, Circuit Simulation activities technical Quiz, and Paper presentation competition to nurture the Electronic Design and Debugging related skills in the students.
 - POWER CLUB – Electrical engineering department technical club, etc.
 - Apart from various students organization there are other student chapters under professional bodies with memberships are in existence for Technical Activities. This includes ISA–International society for Automation student charter, ISTE–Indian society for Technical education student chapter, ISAMPE, etc. These programs are innovative, creating social awareness and responsibility towards society.
 - PG and UG students are encouraged to present the papers on their dissertation and project work in the conferences held anywhere in India and abroad.
 - The college is arranging training programmes with help of National instrumentals and Electrono solutions in the Area of LABVIEW and its applications. This will help the students to develop
-

professional skills in product development and real time applications.

Research:

- College has established 15 research centers under VTU to provide the platform to the candidates to register for part time/full time Ph.D. / M.Sc. Engg by research degree. Apart from this college has a linkage with research organization (DRDO), academic institutes of national repute (IISC, IITB, IITM) and industries (Bosch, Texas Instruments, National Instruments, Corel, PRDC, etc.) in order to pursue collaborative research.
- The courses on mini-projects and projects make the students to review the literature and prepare the synopsis. This helps them to cultivate self-learning attitude.
- Faculties are deputed under QIP to pursue Ph.D. at IITs/ IISC.
- Financial support is given to the students and faculty members who present papers in national or international conferences or journals.
- Research funding and projects from VTU, AICTE, DRDO, VGST etc. were undertaken to pursue research in areas of national thrust. (A list of funded R&D projects received by various departments is presented in Criterion 3).

1.1.5. How does College ensure that the curriculum developed address the needs of the society and have relevance to the regional / national developmental needs?

Curriculum up-gradation is done based on the discussions in the department Committee, Board of Studies/Department Advisory Board and the Academic Council. The formal and informal feedback from Alumni, Employers and local society is analyzed by the department committee and discussed in BOS/DAB and AC meetings. The curriculum is correspondingly framed including the subjects to address the needs of local as well as global society. Table 1.1 lists the subjects offered by various departments to address the needs of regional and national development.

The institution has a dedicated Department of Humanities and Social sciences, which offers the courses in the areas of humanities and social sciences. The Department offers courses in Professional Communication, Constitution of India, professional ethics, IPR and Kannada. Constitution of India and Professional ethics (2 credits) and Environmental studies (2 credits) are offered as mandatory credit courses for all the under graduate students including lateral entry students (for lateral entry students these courses are non-credit mandatory courses). The department aspires to strengthen language skills, communication competence and general awareness about the Indian constitution and also provides knowledge on ethical responsibilities, which are most important for sustaining any socio-technical system.

1.1.6. To what extent does the College use the guidelines of the regulatory bodies for developing or restructuring the curricula? Has the College been instrumental in leading any curricular reform which has created a national impact?

Table 1.1. Curriculum Components in Percentage as per Guidelines of VTU and Dr AIT

Sl. No	Subject Area	Total Credits				Actual Credits offered by each Programmes									
		In %		In credits											
		Min	Max	Min	Max	CV	ME	EE	EC	IT	IM	CS	TE	IS	ML
1	HSS	5	10	10	20	10	15	10	10	10	12	12	10	12	10
2	BS	15	20	30	40	27	27	27	31	27	25	29	27	29	27
3	ES	15	20	30	40	27	30	35	34	35	27	27	27	27	49
4	PS-Core	30	40	60	80	97	80	80	85	80	97	90	101	90	71
5	PS-Electives	10	15	20	30	15	24	21	16	21	15	18	11	18	19
6	Other Electives	5	10	10	20	08	08	08	08	08	8	08	08	08	08
7	Project work	10	15	20	30	16	16	16	16	16	16	16	16	16	16
8	TOTAL	200	200	200	200	200	200	200	200	200	200	200	200	200	200

HSS: Humanities and Social Sciences

BS: Basic Sciences

ES: Engineering Sciences

PS - Core: Professional core Subjects

PS- Elective: Professional Elective Subjects

College strictly follows the autonomous guidelines prescribed by AICTE, UGC and affiliating University – Visvesvaraya Technological University Belgaum.

- The comparison of current curriculum of all Engineering programmes with that recommended by UGC/VTU Belgaum is as depicted in the Table 1.1
- The curriculum is finalized so as to confirm all the aspects as per the program specific criteria recommended by International Professional bodies (e.g. IEEE for Electrical and Electronics, ASME for Mechanical Engineering, ISA for Instrumentation Technology, ASCE for Civil Engineering, CSAB for Computer Science and Engineering and Information Science department)
- The Basic and Engineering Sciences including Mathematics and Basic Computing (generally included in the first year of Engineering and is common to UG programs) is to a level of 15-20% in terms of number of credits. The Professional Core and Professional Electives courses are to a level of 30-40% and 10 – 15% respectively. Enough emphasis is given to Design related courses in all the programs.
- The percentage wise contribution of courses on Project work, Humanities and Interdepartmental electives is to a level of 10-15%, 5-10% and 5-10% respectively.
- As per the guidelines of UGC and university, the mandatory courses on Environmental Science and Engineering Economics and Industrial Management are included in the curriculum as credit courses.
- The curriculum also includes non-credit courses such as Industrial Visits, Case Studies, NSS activities, Team Building activities and specialized skill based programs etc.

The college has been instrumental in leading curricular reform in terms of:

- Offering Mini-project in sixth semester.
- Offering interdepartmental elective courses to the tune of eight credits from the third year onwards.
- Allotting the final year project in two phases (Two credits in seventh Semester and 10 credits in 8th semester).
- Offering more electives in UG program.
- Absolute grading scheme.

1.2. Academic Flexibility

1.2.1. Give details on the following provisions with reference to academic flexibility NAAC for Quality and Excellence in Higher Education

Manual for Self-study Report Autonomous Colleges

- a Core / Elective options**
- b Enrichment courses**
- c Courses offered in modular form**
- d Credit transfer and accumulation facility**
- e Lateral and vertical mobility within and across programmes and courses**

a. Core / Elective options:

Professional Core and Elective courses (UG):

Professional Core and Professional elective course offered by each programme are as per UGC/VTU guidelines. (The range of Core courses and Professional Electives refer Table 1.1) Core courses include all the basic and higher level courses of corresponding program besides those required as per the Program Specific Criteria of corresponding international professional body. This establishes the equivalence of the graduate of this institute with any other related engineering graduate anywhere in the world.

Inter-departmental Elective Courses (UG):

The college provides academic flexibility to the students by offering interdisciplinary courses to the tune of 8 credits, called as interdepartmental electives from the fifth semester onwards till eighth semester. These electives have been formulated based on the prevailing trends and cutting edge technologies. This allows students to choose the courses of their choice from any other department excluding the parent department. This enables the student to acquire breadth of knowledge from other engineering programs to be more useful to solve the real world engineering problems.

Professional Elective Courses at UG:

The academic flexibility is also extended from the fifth semester onwards to choose two electives from a pool of electives offered by the department. Professional elective courses are program specific courses but are part of specialization in that program. This enables them to acquire in-depth knowledge of the specialized area of the concerned engineering discipline of their choice. These courses can be offered and can be altered by the BOS from time to time as per the trends in industries.

Choice for Project (UG)

The students are given option to carry out mini project in the sixth semester in the department and the project work in two phases ranging from seventh to eighth semester in the department, in the industry or research institute of their choice. The last option gives exposure of industrial/research environment to the students and helps them broaden their perceptions and views.

Choice for Seminar (UG)

The students are given option to select the seminar topics of their choice from reputed journals of their interest and present in eighth semester. This gives exposure of latest trends in engineering and technology to the students and helps them to improve their communication skills.

PG programmes

The PG programmes are running under VTU and its curriculum is defined by the university time to time. Though the curriculum is defined by the university, the faculty gives self-learning tasks on latest developments in the specific courses and the learning's are disseminated through seminar and group discussions.

Professional Core Courses (PG):

Sufficient number of core courses in each semester are offered to PG students making a cumulative of eight (course work is of only two semesters) professional core courses. It is expected that the PG students of a particular program must have in-depth knowledge of generally expected courses of that program irrespective of specialization in the chosen program.

Professional Elective Courses at PG:

For PG students, academic flexibility is extended by offering one each elective in first, second and fourth semester as per their choice for specialization in sub-areas of the chosen discipline.

b. Enrichment Courses:

Depending on the skills needed for employability and for successful professional career, department offers tailor made courses for the enrichment of students. These courses help the students to acquire technical skills, personality development and knowledge of contemporary issues in their own branch.

In addition, the college/departments also arrange student workshops and guest lectures by industry experts/R&D organizations/ IISc/IITs etc., on various emerging areas to enrich the knowledge over and above the curriculum. A list of such courses include: Courses on LABVIEW by National Instruments, Courses on PLC, SCADA & DCS, and Advanced courses on Image Processing etc.

Apart from this all departments regularly:

- Arranges Live Virtual classes, virtual labs and tutorials facilitated under QEEE.
- Provides Massive online open courses of NPTEL and are used by students.
- Arranges Industrial visits which help students to visualize industry scenario.

Internship and Dissertation at (PG):

In case of PG students, Internship is for the third semester and dissertation work is for the entire second year of their M. Tech. program. The student can opt for carrying out the dissertation work in Research Organization such as DRDO, CSIR, HAL, NAL/IIT-IISc, BEL or internationally recognized industries like GE, Honeywell etc. Many students work at the institute for carrying out their dissertation. It is expected that students publish at least one paper in journal or conference at national/international level.

c. Courses offered in modular form

The college doesn't offer any courses in modular form.

d. Credit transfer and accumulation facility

- Currently, there is a provision for credit transfer and accumulation facility to the Students who come from other Universities and non-autonomous/ autonomous colleges or from old schemes. If required, they need to earn additional credits.
- BOS in every department decides about the additional courses and course exemption in case of lateral entry students through college / university transfer.
- Credits are accumulated from semester to semester and the final result is declared on the basis of CGPA. The total credits to be earned are 200 for completion of degree.

e. Lateral and vertical mobility within and across programmes and courses

Lateral entry to Diploma students (as per DTE, Govt. of Karnataka) is allowed at the second year of the UG program. Vertical entry in other program through branch transfer, which is purely on merit and depends on the vacancy of seat in a particular program, is allowed at the second year level of the UG program

Following academic regulations are applied for both regular and lateral entry students for vertical progression:

- A student has to earn Cumulative grade point Average (CGPA) of not less than five and not more than 4 'F' grades (Failure grades) of previous semesters for vertical progression for every odd semester.
- There is no supplementary examination for any course in the *credit system*. Students who have failed in any course, need to re-register for the course to meet the minimum passing standards prescribed during the *summer semester*. However, a student, can also register for failed courses whenever it is offered.
- A student needs to earn 200 credits within a maximum duration of eight years of his/her getting admitted to the program or else he/she will have to discontinue the program.

1.2.2. Have any courses been developed specially targeting international students? If so, how successful have they been? If 'no', explain the impediments.

"No"- at present no such courses have been developed specially targeting international students. Till 2013-14 academic year, there

was no permission from the regulatory body (AICTE) to admit NRI students and was granted from 2014-15 onwards.

1.2.3. Does the College offer dual degree and twinning programmes? If yes, give details.

No, college does not offer any dual degree and twinning programmes as per guidelines of the affiliating University – VTU Belgaum since there is no provision to offer such programmes as per AICTE norms.

1.2.4. Does the College offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes?

Two UG Programmes - Medical Electronics and Information Science Engineering and All PG programs are self-financing. Admission is through the CET conducted by Karnataka Examination Authority (KEA) and COMED-K conducted by CUPEKA. Fee structure, teacher qualification and salary are at par with the aided programmes and as per AICTE norms (Table 1.2)

Table 1.2 - List of Self Financing Programmes

Programme	Year of Starting
UG Programme	
Information Science Engineering	1992
Medical electronics	1999
PG Programme	
M C A	1999
MBA	2001
M.Tech (Computer Science and Engineering)	2002
M.Tech (VLSI and Embedded system Design)	2004
M Tech (Power Electronics)	2010
M Tech (Digital Communication and Networking)	2010
M Tech (Structural Engineering)	2011
M. Tech (Machine Design)	2013
M. Tech (Computer Networking)	2013
M.Tech (Electronics)	2015

1.2.5. Has the College adopted the Choice Based Credit System (CBCS)? If yes, how many programmes are covered under the system?

College has not yet adopted Choice Based Credit System. The minimum number of credits to be earned for completing any year of the program and the entire program is fixed currently. However, all UG programs have provision for choice based credit systems through Professional electives and interdepartmental electives.

- All UG programs have choice of credits under Electives, but the total credits to be earned are 200 to get the degree and 150 credits for lateral entry students (Diploma students).
- The total number of credits which were choice based is 15-25% of 200 credits(Max)

1.2.6. What percentage of programmes offered by the College follows:

- Annual system
- Semester system
- Trimester system

Annual system:

NIL

Semester system:

50 % (All PG

Programmes)

Trimester system:

50 % (All UG Programmes)

1.2.7. What is the policy of the College to promote inter-disciplinary programmes? Name the programmes and what is the outcome?

No interdisciplinary program has been floated for UG. However, students have the flexibility to opt for interdepartmental elective courses to a level of 8 credits from V semester up to VIII semester.

1.3. Curriculum Enrichment**1.3.1. How often is the curriculum of the College reviewed for making it socially relevant and/or job oriented / knowledge intensive and meeting the emerging needs of students and other stakeholders?**

Curriculum is reviewed in the Board of studies every year and the comments and suggestions by various experts of BOS are incorporated in the next revised curriculum. During revision, feedback from all stakeholders is considered for quality improvement and for inclusion of latest technology & science contents.

Until 2015-16 PG programmes were under VTU and the curriculum was defined by VTU, which was revised every 2 years. Since 2016-17 academic year all PG programs accorded autonomy by VTU and the curriculum is designed by BOS for the respective programs.

1.3.2. How many new programmes have been introduced UG and PG level during the last four years? Mention details.*** Inter-disciplinary***** programmes in emerging areas****Table 1.3: List of Programmes introduced during the last four years**

UG Programme	NIL	
PG Programme	Year	Sanctioned Intake
M. Tech in Electronics	2015-16	30
M. Tech in computer Networks	2013-14	24
M. Tech in Machine Design	2013-14	24
Inter-disciplinary	NIL	
Programmes in emerging areas:	NIL	

1.3.3. What are the strategies adopted for revision of the existing programmes? What percentage of courses underwent a major syllabus revision?

Incorporation of Technological priorities at International, National and regional level is done after a thorough review of curriculum. Experts from industry and universities are involved in the development of curriculum as members of Board of Studies. The members meet regularly and make changes in the curriculum depending on the need from Industry. The inputs from Alumni and industry are taken into consideration while revising the existing curriculum. Normally a maximum of 20% courses undergo major changes. In recent revision

in most of the departmental programmes 10% of the courses underwent major revision and rest with minor revision.

The strategies adopted for revision of the existing programme are as follows:

- Analysis of feedback from students and subject experts
- Reference to syllabi of nationally reputed academic colleges such as IITs.
- Reference to guidelines on model Curriculum by AICTE.
- Outcome Based Education as per requirement of NBA and ABET.
- Formal and informal suggestions by experts from industries and Academic council members.
- Review of global scenario through interaction with International standard experts.

Approximately 30% courses underwent a major syllabus revision in last three years. 100% courses underwent a revision for properly defining the course objectives, course outcome and their mappings to program outcomes in view of national thrust on Outcome Based Education philosophy. Evaluation of attainment level is made mandatory for each course.

1.3.4. What are the value-added courses offered by the College and how does the College ensure that all students have access to them?

There are several value added courses run for both UG and PG programmes. For lateral entry students bridge courses are also run to bring their competency on par with regular students.

The value added courses offered are:

- Communication skill, soft skills are offered by the college and due credits are given for these Courses.
- English language lab for communication improvement.
- Seminar and Mini – project introduced in present curriculum, in addition to main project.
- Introduced Industry specified elective in many departments.
- Personality Development Programs.
- Hands on training programs in areas related to the program of study.

(Note: Details are given in department wise evaluation Report)

1.3.5. Has the College introduced any higher order skill development programmes in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies?

In accordance with the guidelines given by National Skill Development Organization, enhancement of employability skills has been a part of the education imparted in the college along with academic curriculum.

The Initiatives made by the institute to improve the skills of the students are as below:

- The college conducts competitions and workshops on prototype development through a) workshops on circuit simulation and circuit building, b) miniprojects, c) competition on Robot Design etc. to enhance knowledge and skills of the students.

- Organizing the courses like LABVIEW, MATLAB, etc in the modular form to enhance higher order skills of a student.
- Students are encouraged to participate in competitions held by Texas Instruments, India, Indian Institute of Technology, Mumbai, and other engineering colleges to test their capabilities in design, development and fabrication of electronic circuits/systems etc.
- Students are encouraged to design and fabricate small electronic gadgets and build experimental set-ups for laboratories to enable them to develop their entrepreneurial skills.
- Students are encouraged to take their final year project (UG) or PG dissertation in the industry to get the exposure to industry environment besides obtaining technical skills.

1.4. Feedback System

1.4.1. Does the College have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?

Yes, the college has a formal mechanism to obtain feedback from students regarding the curriculum. Course end survey questionnaire is prepared for every course by the course coordinator and distributed to the students at the end of the semester. The course end survey feedback is analysed by the faculty on that directs for the strengths and weakness of that course so that modifications in content or delivery or assessment can be carried out in the subsequent batches by discussing in the BOS committee.

A separate Graduate exit feedback is collected from the graduating students for their satisfaction on the attainment of program outcomes, the contents of curriculum and in general infrastructure of the department. Their genuine suggestions are taken into consideration while revising the contents of the curriculum.

Feedbacks from alumni and employer are also collected to compute the attainment of Program Educational Objectives. The informal discussions with them also are taken into consideration to revise the curriculum, lab facilities, central facilities etc. A thrust is given to identify the areas where graduates failed to perform as per expectations of the employers.

Regular Meeting with third year and final year students (nominated as student BOS members) are arranged to collect the feedback regarding the modifications to be incorporated to the curriculum as per their requirement.

1.4.2. Does the College elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods adopted to do the same - (conducting webinar, workshop, online forum discussion etc.). Give details of the impact on such feedback.

Yes - The BOS committee of the various academic UG programmes and Academic council of the Institute comprises of experts from internationally reputed industries (Texas Instruments, GE India, Sunlux pvt ltd. etc.) and reputed research institutions like DRDO, IISc and IIT's. The institute under academic autonomy has thus been

successful in designing the courses which are on par with reputed academic institutes like NIT's and IIT's.

1.4.3. Specify the mechanism through which alumni, employers, industry experts and community give feedback on curriculum enrichment and the extent to which it is made use of.

Mechanism for feedback:

- Online alumni feedback form
- Online employer feedback form
- Feedback obtained at annual alumni meet at the college.
- Oral feedback from employer and industry during informal meets or during their visits to institute for campus interviews
- Oral feedback during informal meets with local stakeholders
- Oral feedback from parents during parent meet held every year.

Questionnaires for different stake holder's mentioned above are prepared, approved by the department committee and circulated to the stakeholders. Any Feedback received from any of the stake holders is analysed critically and the valid points of improvement from all feedback reports are prioritized in terms of their relevance and importance and are taken into consideration for revising the curriculum, laboratory facilities, infra-structure and establishing /modifying the PEOs. Feedback on every course is also taken at the end of the course and all these feedback are analysed to refine the syllabi. The various feedbacks are also used as an assessment tool to establish the attainment of the POs and PEOs.

1.4.4. What are the quality sustenance and quality enhancement measures undertaken by the institution in ensuring effective development of the curricula?

Board of studies meeting will be conducted every year for improving the curriculum and to meet the industrial requirements. Guidelines of the national and International Quality assurance and accreditation agencies like ABET, NBA, ISO etc. are adopted in periodic revisions of curriculum. The college has made it a point to define Program objectives, Program outcomes and course outcomes for every program.

Any additional information regarding Curricular Aspects, which the institution would like to include.

CRITERION – 2: TEACHING-LEARNING AND EVALUATION

2.1. Student Enrolment and Profile

2.1.1. How does the College ensure publicity and transparency in the admission process?

Being a Government Aided Institution the admissions to all programmes of the college are through government based on the CET conducted by Karnataka Examination Authority (KEA), Comed-K, and GOI quota. Since the entrance examination is conducted by Government and competent authority, the process is very much transparent and there is no scope for any deviations. KEA offers wide publicity to effect admissions in various colleges/ branches of the state for M. Tech/M.E. and B. Tech/B. E. programmes. KEA announces the examination dates in the newspapers, television channels as well as on internet. The application is distributed and accepted through nationalized banks. Once the applications are accepted, candidates receive the hall ticket through internet from their respective websites. After the examination, the results are also announced in internet and ranks are declared on the basis of II PUC marks as well as CET & Comed-K results (50% PUC+ 50% entrance marks). Next, the candidates desirous of taking the seat are given an opportunity by KEA to choose the colleges of their choice by giving preferences. Seats are allotted by KEA purely on merit basis depending on the availability of the seats in the respective colleges.

The complete admission schedules are advertised in the leading National Dailies, television channels and magazines well in advance and repeating the advertisements two to three times before the counseling sessions. The schedule is also simultaneously displayed on the Website of the KEA and Comed-K. The queries of the aspirants are handled telephonically and through e-mail promptly. The transparency is achieved by displaying the data and results of applicants and those short listed on the KEA and Comed-K Website. Merit lists are also displayed on the Notice Board based on the Counseling conducted online. Full transparency is ensured at levels by the KEA and Comed-K.

2.1.2. Explain in detail the process of admission put in place for UG, PG and Ph.D. programmes by the College. Explain the criteria for admission (Ex. (i) merit, (ii) merit with entrance test, (iii) merit, entrance test and interview, (iv) common test conducted by state agencies and national agencies (v) others followed by the College? **ADMISSION TO THE BE/BTECH PROGRAMME**

KEA announces the examination dates in the newspapers, television channels as well as on internet. The application is distributed and accepted through nationalized banks. Once the applications are accepted, the hall tickets can be downloaded through internet from their respective websites. After the examination, the results are announced in internet and ranks are declared on the basis of II PUC marks as well as CET & Comed-K results (50% PUC+ 50% entrance

marks). After the results the candidates desirous of taking the seat are given an opportunity to choose the colleges of their choice by giving preferences. If his rank within the cutoff percentage of that college, he will get a seat in that college else his second preference will be taken, if he fails to get a seat then their corresponding preferences are chosen and seat is allotted to the candidate.

Admission to UG programmes:

Students to UG programme offering B. E. degree are admitted through following three categories.

Category 1: Admission after passing 12th examination and state level Common Entrance Examination.

The candidate has passed 10+2 or equivalent examination with at least 60% marks (40% for SC/ST candidates) in aggregate of three subjects, namely, Physics, Mathematics and any one subject out of Chemistry, Biology, electronics and Computer Science OR Minimum 60% (55% for SC/ST) marks in a Diploma recognized by AICTE or a state board of technical education of at least 3 year duration

The admission shall be made on the basis of merit of score in CET and Comed-K.

Category 2: Admission through Management Quota.

Candidates should have passed with a minimum aggregate of 50% marks in Physics, Chemistry and Mathematics (PCM) and should have passed these subjects individually. Physics and Mathematics are compulsory subjects along with Chemistry or Biotechnology or Biology or any other Technical vocational courses as one of the optional subjects.

Category 3: Direct admission to Second Year of UG programme for diploma passed students.

The candidate has passed (a) diploma, in relevant discipline, of minimum 3 years duration after matriculation from Polytechnic College/Institute affiliated with State Board of Technical Education/University, or recognized by UGC/AICTE with a minimum of 60% marks (55% for SC/ST) in aggregate or equivalent grade point. The admissions are done through CET based on the merit and rank.

Branch Transfer:

The admissions to second year of a particular branch are exercised by the college for the eligible and desiring students in case there is vacancy due to year down students in the first year examinations. The rules for this is as per the government norms

Admission to M-TECH Programmes

Admission to all the M.Tech programmes shall be made on the basis of valid GATE Score as well as PG-CET score in respective discipline. First preference will be given to GATE qualified candidates. After offering seats to the GATE qualified candidates, for seats remaining vacant (if any), the admission will be made on the merit of the entrance test to be conducted by the University and only those candidates who have qualified in the entrance test shall only be considered for admission. Admission to M.Tech programme will be open to a candidate who obtains at least 60% (55% for SC/ST) marks in the aggregate in the qualifying examination from a recognized University.

Admission to MCA Programme

Recognized bachelor degree of minimum 3 years duration in any discipline with at least 60% marks (55% for SC/ST) in aggregate. Mathematics must be studied at 10+2 level or at graduation level, and has also appeared in the entrance test to be conducted by the university. Admission shall be made on the merit of the entrance test to be conducted by the University across the state.

Admission to MBA Programme:

Admission is through competitive entrance tests KMAT/CMAT. It is open to candidates who have a 3-year bachelor's degree from a recognized university with not less than 50% of the marks in aggregate of all the years of the degree examination. In case of candidates from Karnataka belonging to SC/ST and Category-1, the aggregate percent of the marks of all the years of the qualifying examination shall not be less than 40%.

Admission to M.Sc. (Engg.) by Research Programme

Admissions to M.Sc. Engg by Research Programme are carried out as per rules and regulations stipulated by Visvesvaraya Technological University (VTU), Belagavi. The details about process are available on website: www.vtu.ac.in

Admission to Ph.D. Programme

Admissions to Ph. D. programme are carried out as per rules and regulations stipulated by Visvesvaraya Technological University (VTU) Belagavi. The details about process are available on website: www.vtu.ac.in

A candidate seeking admission to the degree of Doctor of Philosophy must have obtained ME/M.Tech/MPhil/MCA/MSc/MA/MBA/CA or equivalent with minimum CGPA of 6.00 on a 10 point scale or 55% marks in aggregate where marks are awarded or NET (UGC/CSIR) qualified. Candidates are admitted on the basis of merit of Entrance Test and Interview conducted by the University. The candidates who secure qualifying marks in the written exam are only be called for Interview. During interview, a candidate is required to indicate area of research.

2.1.3. Does the College have a mechanism to review its admission process and student profiles annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?

As, the admissions are done through CET and Comed-K, the college has no role to review its admissions and student profiles annually. For the management quota admissions are being made by the management as per merit and choice following the procedure prescribed by the State Government

2.1.4. What are the strategies adopted to increase / improve access to students belonging to the following categories

- SC/ST
- OBC
- Women
- Different categories of persons with disabilities

- Economically weaker sections
- Outstanding achievers in sports and extracurricular activities

The institute takes several proactive steps to improve and increase access to the students of different categories mentioned above. The institute implements many government schemes announced from time to time for scholarships, concession in fees, establishing book bank and relaxation in qualifying examination & entrance examinations. Some of these steps are summarized below in Table 2.1

Table 2.1: Summary of strategies adopted to increase / improve access to students belonging to different categories

SC/ST	Reservation of the seat in admissions, relaxation in % of qualifying examination & entrance examination Introduction of various type of scholarships, grant of concession in fees, to establish book bank in the library to issue books.
OBC	Reservation of the seats in admission as per Government of Karnataka policy.
Women	Separate hostels with foolproof security, girls common room and other administrative help
Persons with varied disabilities	Reservation of the seats in admission as per Government of Karnataka policy.
Economically weaker sections	Fee Concession in many cases and number of merit scholarships.
Outstanding achievers in sports and other extracurricular activities	Reservation of the seats in admission as per Government of Karnataka policy.

2.1.5. Furnish the number of students admitted in the College in the last four academic years.

Table 2.2: UG Programme – Regular Admission

UG Programme	Categories	2015-16		2014-15		2013-14		2012-13	
		Male	Female	Male	Female	Male	Female	Male	Female
Civil Engg.	SC	15	4	12	5	7	1	7	1
	ST	4	0	5	0	1	1	3	0
	OBC	22	8	19	4	18	4	15	1
	General	41	22	36	15	19	6	24	10
	Others	2	0	4	2	0	0	7	0
Mechanical Engg	SC	22	0	17	0	20	2	5	0
	ST	4	0	4	0	5	0	6	0
	OBC	52	0	50	1	64	00	25	2
	General	75	0	77	2	82	2	65	1
	Others	2	0	1	0	0	0	0	0
Electrical & Electronics Engg	SC	4	3	1	6	5	3	4	6
	ST	2	0	1	0	1	0	1	0
	OBC	10	6	10	9	16	6	12	9
	General	20	8	13	11	13	14	15	13
	Others	0	0	0	0	0	0	0	0
Electronics & Commun. Engg	SC	8	14	15	7	11	11	4	4
	ST	3	1	1	2	2	2	2	3
	OBC	28	15	20	18	33	17	15	14
	General	57	33	54	33	58	39	38	27
	Others	0	0	5	1	0	0	8	7
Industrial Engineering and Management	SC	5	3	2	5	4	3	2	0
	ST	1	0	2	0	1	0	0	0
	OBC	14	5	7	5	8	6	3	3



	General	13	8	23	7	24	8	16	6
	Others	0	0	0	0	0	0	0	0
Instrumentation Technology	SC	3	3	2	5	4	1	7	2
	ST	2	0	1	0	1	1	1	0
	OBC	6	7	10	5	9	9	8	7
	General	15	12	9	22	14	18	20	17
	Others	0	0	00	0	0	0	0	0
Computer Science & Engg	SC	7	10	5	9	4	8	7	6
	ST	0	2	2	1	1	1	1	0
	OBC	21	15	12	21	15	21	13	14
	General	66	47	43	54	27	38	42	34
	Others	3	0	12	0	1	0	5	0
Telecommunication Engg.	SC	4	5	1	9	4	1	2	7
	ST	0	1	0	1	0	1	0	1
	OBC	9	14	8	7	9	10	12	8
	General	7	11	9	19	10	24	12	19
	Others	0	0	00	0	0	0	0	0
Information Science & Engg.	SC	1	3	1	2	1	5	2	3
	ST	0	0	2	0	0	1	1	0
	OBC	2	4	2	4	5	5	5	6
	General	20	21	16	19	18	20	22	21
	Others			1	0	0	0	0	0
Medical Electronics	SC	0	0	1	1	0	1	0	1
	ST	0	0	0	0	0	0	0	1
	OBC	0	3	0	2	1	2	1	2
	General	1	5	5	3	7	13	6	15
	Others	0	0	0	0	0	0	0	0
	TOTAL	571	293	521	317	523	305	444	271

Table 2.3: UG Programme – lateral Entry Admission

UG Programme	Categories	2015-16		2014-15		2013-14		2012-13	
		Male	Female	Male	Female	Male	Female	Male	Female
Civil Engg.	SC	2	2	2	0	0	1	2	2
	ST	0	0	2	0	0	0	0	0
	OBC	7	0	3	1	3	2	2	1
	General	10	3	1	1	3	3	5	1
	Others	0	0	1	1	0	0	0	0
Mechanical Engg	SC	4	0	3	0	2	0	3	0
	ST	0	0	0	0	0	0	1	0
	OBC	12	0	4	4	4	1	5	0
	General	24	2	14	0	13	0	12	0
	Others	2	0	0	0	2	0	3	0
Electrical & Electronics Engg	SC	1	0	1	1	1	0	1	1
	ST	1	0	0	0	0	0	1	0
	OBC	2	1	3	0	3	0	0	0
	General	4	8	4	3	1	6	4	2
	Others	0	1	1	0	1	0	3	0
Electronics & Commun. Engg	SC	2	2	1	1	3	1	4	0
	ST	1	0	0	1	0	0	0	0
	OBC	6	6	6	1	7	1	7	2
	General	10	11	8	5	5	7	5	5
	Others	1	0	1	0	0	0	0	0
Industrial Engineering and Management	SC	0	0	1	0	1	0	0	1
	ST	0	0	0	0	0	0	0	0
	OBC	5	0	1	0	1	0	0	1
	General	8	1	1	1	2	1	3	0



	Others	0	0	0	0	0	0	1	0
Instrumentation Technology	SC	2	0	1	1	1	0	2	0
	ST	1	0	0	0	0	0	0	0
	OBC	5	0	3	0	3	1	2	2
	General	2	0	1	4	4	2	5	2
	Others	2	0	1	0	0	0	0	0
Computer Science & Engg	SC	3	3	1	1	1	2	3	0
	ST	1	1	1	0	1	1	1	1
	OBC	3	6	2	4	5	2	5	1
	General	8	8	3	10	7	5	7	6
	Others	0	1	2	0	0	0	0	0
Telecommunication Engg.	SC	1	0	1	2	0	2	1	0
	ST	0	0	0	0	0	0	0	0
	OBC	3	1	2	3	2	1	2	1
	General	3	2	3	2	5	3	1	5
	Others	1	1	0	0	0	0	2	0
Information Science & Engg.	SC	1	1	0	1	2	0	2	1
	ST	1	0	0	0	0	0	0	0
	OBC	0	1	1	3	2	2	3	1
	General	3	4	3	3	3	3	3	5
	Others	0	0	1	0	0	0	0	0
Medical Electronics	SC	0	0	0	1	0	0	0	0
	ST	0	0	0	0	0	0	0	0
	OBC	0	0	0	0	0	0	3	0
	General	1	1	0	1	2	0	4	0
	Others	0	0	0	0	0	0	1	0
	TOTAL	143	67	84	56	90	47	109	41

Table 2.4: Admission to PG Programmes

PG Programme	Categories	2015-16		2014-15		2013-14		2012-13	
		Male	Female	Male	Female	Male	Female	Male	Female
MCA	SC	3	0	0	3	2	2	2	3
	ST	1	0	0	1	0	1	0	0
	OBC	2	3	18	10	13	9	8	8
	General	23	17	8	11	16	14	9	19
	Others	0	0	0	0	0	0	0	0
MBA	SC	4	2	6	2	5	3	2	2
	ST	1	2	0	1	2	0	1	1
	OBC	16	17	13	14	7	5	12	1
	General	5	8	11	10	14	7	21	14
	Others	0	0	0	0	0	0	0	0
M.Tech (Computer Science and SE)	SC	1	2	1	1	0	2	4	1
	ST	0	0	0	0	0	0	4	2
	OBC	3	2	1	9	1	7	7	3
	General	4	7	0	12	7	8	1	3
	Others	0	0	0	0	0	0	0	0
M.Tech (VLSI and Embedded system Design)	SC	0	2	2	0	2	2	6	1
	ST	0	1	0	0	2	1	1	0
	OBC	1	1	3	4	2	2	5	2
	General	4	5	5	3	3	4	2	1
	Others	0	0	0	0	0	0	0	0
M Tech (Power)	SC	2	1	1	0	4	2	1	1
	ST	0	0	1	2	1	1	0	0



Electronic s)	OBC	0	4	3	3	1	2	4	3
	General	3	4	2	3	3	4	1	7
	Others	0	0	0	0	0	0	0	0
M Tech (Digital Commn. & Networki ng)	SC	1	2	1	1	0	3		
	ST	0	1	2	0	1	0		
	OBC	1	1	3	3	0	4		
	General	4	3	3	2	5	5		
	Others	0	0	1	0	0	0		
M Tech (Structura l Engineeri ng)	SC	4	0	2	2	1	1	1	1
	ST	0	0	0	0	1	00	0	0
	OBC	2	0	7	3	5	1	3	0
	General	9	3	3	1	4	5	10	3
	Others	0	0	0	0	0	0	0	0
M. Tech (Machine Design)	SC	2	0	3	0	3	0		
	ST	0	0	0	0	0	0		
	OBC	9	0	8	3	8	0		
	General	10	0	7	0	10	0		
	Others	0	0	0	0	0	0		
M. Tech (Compute r Networki ng)	SC	2	0	1	1	3	0		
	ST	0	0	1	0	0	0		
	OBC	1	2	3	5	2	3		
	General	4	5	3	6	5	11		
	Others	0	0	0	0	0	0		
M.Tech (Electronic s)	SC	0	1						
	ST	0	0						
	OBC	3	2						
	General	5	10						
	Others	0	0						
	TOTAL	130	108	123	116	133	109	105	76

2.1.6. Has the College conducted any analysis of demand ratio for the various programmes offered by the College? If so, indicate significant trends explaining the reasons for increase / decrease.

The admissions to the engineering programs are done centrally through KEA (UG and PG programs) while through the University (VTU Belagavi) entrance examination for Ph.D. Programme The college has only the information about the number of students admitted to UG, PG and Ph.D programs; however no idea about the number of applications received by the corresponding admission authorities. Hence demand ratio cannot be indicated in the following tables. Only the seats filled up and the sanctioned intake, since last 4 years in different branches is as given below in Table 2.5.

Table 2.5: Details of UG and PG Admission

UG Programme								
Academic Year	2015-16		2014-15		2013-14		2012-13	
Programme	Numbe r of Applic ations (Sancti oned intake)	Num ber of stude nts admi tted	Numbe r of applica tions (Sancti oned intake)	Num ber of stude nts admi tted	Numbe r of applica tions (Sancti oned intake)	Num ber of stude nts admi tted	Numbe r of applica tions (Sancti oned intake)	Num ber of stude nts admi tted
Civil Engg.	120	127	120	109	60	64	60	67
Mechanical Engg	180	163	180	159	180	185	120	121



Electrical & Electronics Engg	60	56	60	54	60	60	60	59
Electronics & Commun. Engg	180	171	180	165	180	189	120	132
Industrial Engineering and Management	60	52	60	53	60	54	30	30
Instrumentation Technology	60	51	60	55	60	59	60	62
Computer Science & Engg	180	183	180	168	120	123	120	122
Telecommunication Engg.	60	54	60	55	60	61	60	61
Information Science & Engg	60	54	60	49	60	57	60	61
Medical Electronics	30	11	30	13	30	25	30	26
PG Programme								
Academic Year	2015-16		2014-15		2013-14		2012-13	
	Number of Applications (Sanctioned intake)	Number of students admitted	Number of applications (Sanctioned intake)	Number of students admitted	Number of applications (Sanctioned intake)	Number of students admitted	Number of applications (Sanctioned intake)	Number of students admitted
MBA	60	49	60	51	60	57	60	49
MCA	60	55	60	59	60	43	60	54
MCA (LATERAL ENTRY)	12	12	0	0	0	0	0	0
M.Tech (Computer Science and Engg)	25	19	25	24	25	25	25	25
M.Tech (VLSI and Embedded system Design)	18	14	18	17	18	17	18	18
M Tech (Power Electronics)	18	14	18	15	18	18	18	18
M Tech (Digital Commn. & Networking)	18	13	18	16	18	18	18	17
M Tech (Structural Engineering)	18	18	18	18	18	18	18	18
M. Tech (Machine	24	21	24	21	24	21	0	0



Design)								
M. Tech (Computer Networking)	24	14	24	20	24	24	24	0
M.Tech (Electronics)	30	21	0	0	0	0	0	0
Ph. D/ M. Sc (Engg) Programme								
Academic Year	2015-16		2014-15		2013-14		2012-13	
Department	Sanctioned *	Admitted	Sanctioned*	Admitted	Sanctioned*	Admitted	Sanctioned*	Admitted
Civil Engg.	NA	05	NA	03	NA	03	NA	03
Mechanical Engg	NA	05	NA	04	NA	04	NA	01
Electrical & Electronics Engg	NA	06	NA	03	NA	02	NA	01
Electronics & Commun. Engg	NA	06	NA	02	NA	02	NA	02
Industrial Engineering and Management	NA	04	NA	02	NA	01	NA	01
Instrumentation Technology	NA	02	NA	02	NA	02	NA	02
Computer Science & Engg	NA	06	NA	04	NA	03	NA	01
Telecommunication Engg.	NA	3	NA	2	NA	1	NA	1
Information Science & Engg	NA	03	NA	01	NA	01	NA	01
Medical Electronics	NA	01	NA	01	NA	---	NA	00
MBA	NA	03	NA	01	NA	---		---
MCA	NA	2	NA	---	NA	---	NA	03
Mathematics	NA	02	NA	06	NA	04	NA	04
Physics	NA	---	NA	01	NA	02	NA	01
Chemistry	NA	01	NA	02	NA	02	NA	01

*Sanctioned – Exact number depends on available Ph.D holders in the respective department

2.1.7. Was there an instance of the College discontinuing a programme during last four years? If yes, indicate the reasons.

NO- none of the programmes of the college has been discontinued in last four years. In fact, the number of seats for few UG programmers has been increased while a new PG programmes in ISE, ME and EI has been started since 2013-14.

2.2. Catering to Student Diversity

2.2.1 Does the College organize orientation / induction programme for freshers? If yes, give details of the duration of programme, issues covered, experts involved and mechanism for using the feedback in subsequent years.

YES - the institute organizes a one day orientation/induction programme for all freshers every year immediately after their admission and beginning of the commencement of the academic year. The Head of the Institution addresses the gathering of the freshers and

their parents by welcoming and giving brief details about the vision, mission philosophy, culture and objectives of the institute. The distinctive features of the college as well as teaching-learning methodologies, the various facilities available in the campus to build their personality are explained in detail

Dean (Academic) addresses the freshers about the academic regulations and examination procedures. Orientation/induction programme provides an opportunity for the freshers to find their bearings in a new environment, while being introduced to the nurturing traditions and culture of the campus. Setting up a second home away from their parents can be a daunting experience but orientation/induction programme will ensure that this process is as comfortable as possible

After the above addresses, the fresher in groups (as per department) are taken to various central facilities like Central Library, Centralized Computing Facility, Workshop, Drawing Hall, Sports facility etc. by the members of corresponding Departments. After the visit to central facilities, the students admitted to a program assemble in the department where they are addressed by the Head of the concerned department to inform about the departmental facilities and introduce department faculty members. The students are then taken for round to visit the parent department and the department laboratories.

2.2.2. Does the College have a mechanism through which the “differential requirements of student population” are analyzed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

At the time of course registration, a team of faculty members assigned as mentors interact with the students to get to know the background “of the student and if he/she requires any special attention. The key issues generally identified are:

- Whether he/she come from rural area and medium of his/her school learning. Generally they lack the confidence and clarity while speaking in English. In general, they lack communication skills.
- Some of the students are from economically poor background and have financial problems.
- Some of the students seem to be weak in understanding basic principles associated with engineering courses. This is generally evident from their CET score and the score in Physics, Chemistry and Mathematics

Remedial Actions Initiated:

- To address the problem of English language, and communication skills, one semester course (Mandatory) is included in the curriculum so that students learn technical English and develop communication skills through Language Laboratory.
- As far as financial problems are concerned, students are informed about various government and non-government schemes

(Scholarships, Loan Facility etc.,) and enough guidance is given for applying for financial assistance.

- The academically weak students are given personal attention by the faculty of first year by conducting number of extra lectures and remedial classes so as to improve their understanding.
- The different categories of students admitted in the system like reserve categories, OBCs and minorities are mixed properly in different groups to encourage inclusiveness and overall growth of the students.
- Remedial classes in mathematics and personality development tools are adopted for improving the soft and hard skills of the students.
- Additionally, mentoring is operational, where a mentor is assigned to each student to facilitate counseling and guidance for the students in the institute.

2.2.3. Does the College provide bridge /Remedial /add - on courses? If yes, how are they structured into the time table? Give details of the courses offered, department-wise/faculty-wise?

Bridge Courses/add-on Courses:

YES - The College does provide bridge/add-on courses for the topics having gaps in the syllabus. Generally such gaps are covered by the concerned faculty whenever required (for the Purpose of the continuity of the subject matter) during the regular time table hours. In addition, experts from industry/premier Institutions are regularly invited by all departments to deliver talk/ training on subject domain topics.

Remedial Classes:

- Institution has a very good mechanism for continuous evaluation and monitoring the progress of the students, which helps to identify slow learners.
- Slow learners are given enough assistance during tutorial classes by clarifying their doubts, re-explaining the critical conceptual topics and giving them extra assignment so that these students improve their performance.
- The students remaining absent frequently and hence failing in performance are counseled, their parents are consulted and collective efforts are taken by the parents and the institute to see that students attend the classes regularly.
- National Programme for Technologically Enhanced Learning (NPTEL) Courses is made available to all students, which are accessible through Wi-Fi connectivity from anywhere in the campus.

Table 2.6 gives a sample of few topics being taught by various departments to PG and UG Students. The complete details of such topics being taught by all departments are presented in the evaluative reports of respective departments.

Table. 2.6: Details of bridge /Remedial /add - on courses

Programme	2015 – 16	2014-15	2013-14	2012-13
UG	Android Controlled Robotics Workshop” conducted during 22 nd - 23 rd Feb 2016, by IIT Madras & Wingfotech Ltd by Dept. of EI	Indo-US League 2015” conducted by Technophilia and Robotics and Computer Applications Institute of USA” 28th -29th March 2015 at IIT Bombay, by Dept. of EI	Engineering Mathematics to all UG Programmes	Engineering Mathematics to all UG Programmes
	Mechanics of Materials , Basic Thermodynamic by Dept. of ME	Applied thermodynamics, Heat & mass transfer by Dept. of ME	Fluid mechanics, Basic thermodynamics by Dept. of ME	Turbo dynamics, Mechanics of materials by Dept. of ME
PG	MEMS Design using Intellisuit software by SriDutt Technologies Pvt. Ltd. During 3 rd to 5 th May 2016 by Dept of EI			
	Smart materials by Dept. of ME	Finite elements methods by Dept. of ME	Dynamics & mechanism by Dept. of ME design	--
	Dynamics & mechanism design by Dept. of ME			

Table 2.7 Details of Remedial Classes conducted for UG Programme

Sl. No	Sem	Programme: Civil Engineering
		Courses
1	I	Engineering Mathematics-I
2	II	Engineering Mathematics-II
3	III	
4	IV	Structural analysis-I , Hydraulics and Hydraulic Machines
5	V	
6	VI	Geotechnical Engineering II , Transportation Engineering II
7	VII	
8	VIII	
Sl. No	Sem	Programme: Mechanical Engineering
		Courses
1	I	Computer aided engineering drawing
2	II	Elements of mechanical engineering
3	III	Mechanics of Materials , Basic Thermodynamic
4	IV	Applied thermodynamics, Heat & mass transfer
5	V	Design of Machine elements – I
6	VI	Design of Machine elements – II
7	VII	Automotive engineering
8	VIII	Hydraulic & Pneumatics
Sl. No	Sem	Programme: Electrical & Electronics Engg
		Courses



1	I	Basic Electrical Engineering
2	II	Basic Electrical Engineering
3	III	Analog Electronic Circuits, Network Theory
4	IV	Power Electronics-I, Field Theory
5	V	Signal & Systems, Transmission & Distribution
6	VI	Power System Analysis
7	VII	
8	VIII	
Sl. No	Sem	Programme: Electronics & Commun. Engg
		Courses
1	I	Basic Electronics(EC15)
2	II	Basic Electronics(EC25)
3	III	NIL
4	IV	NIL
5	V	NIL
6	VI	NIL
7	VII	NIL
8	VIII	NIL
Sl. No	Sem	Programme: Industrial Engineering and Management
		Courses
1	I	Engineering Mathematics-I
2	II	Engineering Mathematics-II
3	III	Mechanics of Material
4	IV	Theory of Machine
5	V	
6	VI	Operation Research
7	VII	
8	VIII	
Sl. No	Sem	Programme: Instrumentation Technology
		Courses
1	I	Engineering Mathematics-I
2	II	Engineering Mathematics-II
3	III	Engineering Mathematics-III, Network analysis
4	IV	Engineering Mathematics-IV, Signals and systems
5	V	Digital Signal Processing, Advance Control Systems
6	VI	Communication systems
7	VII	
8	VIII	
Sl. No	Sem	Programme: Computer Science & Engg
		Courses
1	I	Engineering Mathematics-I
2	II	Engineering Mathematics-II
3	III	NIL
4	IV	NIL
5	V	NIL
6	VI	NIL
7	VII	NIL
8	VIII	NIL
Sl. No	Sem	Programme: Telecommunication Engg.
		Courses
1	I	Engineering Mathematics-I
2	II	Engineering Mathematics-II
3	III	Transmission Lines and Waveguides(TE42) Signals and Systems(TE43) HDL(TE45)
4	IV	Digital Signal Processing(TE51), Antenna & Wave Propagation(TE52)

5	V	Digital Communication(TE61)
6	VI	
7	VII	
8	VIII	
Sl. No	Sem	Programme: Information Science & Engg
		Courses
1	I	Engineering Mathematics-I
2	II	Engineering Mathematics-II
3	III	
4	IV	Design and Analysis of Algorithms (IS42)(2015-16) -- SNL Microprocessors (IS45)(2012-13)--SBB
5	V	----
6	VI	Advanced Java Programming (IS61)(2015-16)--SBB File Structures (IS63)(2012-13)---VA
7	VII	
8	VIII	
Sl. No	Sem	Programme: Medical Electronics
		Courses
1	I	Engineering Mathematics-I
2	II	Engineering Mathematics-II
3	III	Network Analysis
4	IV	Signals and Systems, Object Oriented Programming
5	V	Digital Signal Processing
6	VI	NIL
7	VII	NIL
8	VIII	NIL

2.2.4. Has the College conducted a study on the incremental academic growth of different categories of students; - student from disadvantaged sections of society, economically disadvantaged, physically challenged and slow learners etc.? If yes, give details on how the study has helped the College to improve the performance of these students.

YES-, the faculty of the college conducts a study on the incremental academic growth of the students of his/her course by monitoring the performance of the students in the internal tests (CIE), tutorials, Practical classes, End-Semester examinations and also the attendance. The students having poor performance are given assistance as far as their technical doubts are concerned by providing support of text books or literature etc. Remedial classes are conducted to assist such poor performance students/slow learners. The poor attendance students are dealt separately to find out the genuine reasons of absenteeism and appropriate remedial action is taken to see that the student becomes regular.

Economically disadvantaged students are given information about various government and non-government assistance schemes and are assisted by a staff of separate section i.e., scholarship section of the college to apply for such free ships or scholarships.

Physically challenged students are given all assistance as is required by them. Ramp and lift is provided for the main building of the college

2.2.5. How does the institution identify and respond to the learning needs of advanced learners?

The institution adopts the following process to identify the advanced learners:

- Very good performance in CIE and SEE.
- Active participation and learning during lecture and practical sessions.
- Exhibiting willingness to work on independent projects.
- Participation in student workshops, presenting papers in seminars, attending conferences/workshops/seminars organized in the parent institute or other institutes.
- Organizing various technical activities in the department.
- Prizes won in co-curricular and extracurricular activities etc.

Strategies adopted to respond to the requirements of advanced learners are as follows:

- Promoting the skills and knowledge of the advanced learners by allowing them to do research projects beyond the syllabi, trainings by providing their travel grants at national and international level.
- Encourage them to participate in seminars, workshops events organized by the department.
- Guidance to students for GATE, IES, GRE etc.
- Helping them to get internship at industries for their projects or dissertations
- Students are also motivated to make research contributions in their major project at the UG and PG level and publish their results in national and international journals/conferences.
- Providing collection of books for preparing for competitive examination Viz, GATE, CAT, GRE, TOEFL, etc. through the central library

NOTE: All the departments have listed their achievements in this regard in their evaluation report separately

2.2.6. How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

All the facilities as per the norms of State and Central Government are provided to the differently abled students. i.e.:

- Special attention is given to the differently abled students during teaching.
- Support is provided in learning process by providing extra time
- Special arrangements like sitting arrangement, writer if required, extra time of half an hour etc., are made during examinations so that they are comfortable
- Ramp and lifts are provided in the main building
- Medical facility is made available in case of emergency.

2.3. Teaching-Learning Process

2.3.1. How does the College plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan and evaluation blue print, etc.)

Academic Calendar:

The teaching-learning and evaluation process is carried out as per the predefined academic calendar and examination procedures through continuous assessment and a letter grade system. Academic calendar mentions the academic days of delivery, schedule for conduct of CIE and SEE, assessment, submission of attendance defaulter report, declaration of results, other institute level events (co-curricular and extra-curricular) and the holidays. This academic calendar is prepared well in advance and ensures 90 days compulsory class room teaching, Two weeks for a mid-semester Test (CIE-I, CIE-II and CIE-III) and two weeks for End Semester Examination (SEE) for each semester in a session.

Teaching Plan:

For each theory course, lesson plan is prepared by the concerned faculty in the beginning of every semester to ensure uniform teaching throughout the semester. After approval by HOD, the same is maintained in the department office.

Apart from this, all faculty clearly mentions the objectives, and outcomes of the course which students is supposed to achieve at the end of the course.

Mid-Course (oral) and Exit-course feedback is collected from the students and is analysed to orient the teaching in such a way that average student attains the outcomes to an expected level.

Evaluation Blue Print: (UG and PG)

The evaluation of theory courses is kept transparent. After every evaluation (CIE 1, CIE II and CIE III), the answer books are shown to the students and are counselled for their mistakes. Any valid discrepancy reported by the student assessment is rectified before finalizing the marks for any of the evaluations. The Xerox copies of the SEE evaluated papers are given to the students on request by paying prescribed fee to the institute. Also there is a provision for applying for the revaluation of the papers by fee payment.

The students with a minimum of 70% CIE marks but failing to acquire at least 40% SEE marks in any of the courses are declared X grade and are permitted to reappear for makeup examination conducted before the commencement of the next semester. If any student absenting for the SEE examination due to any genuine reason are declared I grade and are also permitted to reappear for makeup examination conducted before the commencement of the next semester. The evaluation of the answer books of such students in both cases are done in the same manner as the usual semester end examination.

2.3.2. Does the College provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?

YES-, the institute provides the course outline and the course schedule to the students prior to commencement of the academic session. Institute provides copy of the syllabus which contains the course outlines and evaluation scheme to all the students and it is also uploaded in the institute's web site. Lesson Plan prepared by the respective faculty for each course presents the plan of delivery of all

topics in syllabus. Preparation work abstract for each subject ensures the delivery as per the planned schedule. Every day it is checked by the Head of the department and the progress of content delivery ensured. The implementation of the process is discussed in the departmental meetings and the effectiveness of the process is ensured.

The curriculum and instructional strategies are reviewed and approved by the academic counsel and its other bodies periodically before release at various levels and stages. Reviews are conducted at defined stages of the curriculum Design, in which faculty members from the concerned area as well as experts from amongst the peer group from within and/or outside the institute/University are associated. Records of the reviews are maintained. Based on the reviews, the curriculum design is updated. The process goes through its checks and balances with the curriculum scheme and syllabus reviewed and recommended by Board of Studies (BOS) followed by the final approval by the academic council.

The effectiveness of the process is ensured by verification of design by comparison of the design with similar courses run by prestigious Universities. Evolved designs are also verified by taking independent opinion of the experts from amongst the peer group from within or outside the University. The curriculum is validated in the initial stages of its introduction by taking a feedback from students and faculty members regarding the effectiveness and applicability of the curriculum, with regard to the documented needs. Necessary changes, if required, are made to ensure that the design conforms to defined needs of the students. Wherever required, additional instructional sessions and allied inputs are arranged for students. Periodic design changes are also effected to offset the obsolescence of the design or if a need for change is realized. All the steps as required for initial design & development are followed for effecting and incorporating changes. Review is carried out and changes are documented. Records of the results of the review are maintained.

2.3.3. What are the courses, which predominantly follow the lecture method? Apart from classroom interactions, what are the other methods of learning experiences provided to students?

For every theory course, class room lecture method is followed supported by Chalk and Board and LCD projectors. Since the college has adopted Outcome Based Education philosophy, the faculty members are orienting the teaching method towards active learning by students than the traditional way of address.

Apart from the class room interactions, Field visits, Industrial visits are also organized by the departments to provide additional learning experience. Online courses from NPTEL, QEEE are offered to students.

2.3.4. How is 'learning' made more student-centric? Give a list of participatory learning activities adopted by the faculty that contribute to holistic development and improved student

learning, besides facilitating life-long learning and knowledge management. :

The entire academic process of planning, delivery and transparent assessment is designed to be student centric. Based on the contents of the topic to be taught in a particular class, the curriculum delivery is a mix of different teaching methods like chalk and talk, interactive, tutorials, demonstrations, laboratory sessions, seminars etc.

The participative learning activities implemented by the faculty include:

- By allotting first 5-7 minutes of the lecture to revise the contents covered in the last lecture by asking some questions to check the understanding levels of the students and to develop a link for the topic of current lecture. Any doubts raised by the students are clarified through re-explanation or by dividing the topic in bits interactively up to a level where student gets his doubt cleared. **(Active Learning)**
- By asking the questions during lecture session based on pre knowledge or provoking students to think critically. **(Active Learning)**
- By calling group discussions on the tutorial problems **(Develops Teamwork, Communication Skills, Thinking skill etc.)**
- By allotting laboratory experiments to conduct to a group of 3-4 students. **(“Learning by Doing” which develops Team work spirit, and professional skills)**
- By allotting group project and mini-projects to a group of 3-4 students under the supervision of a faculty. **(“Learning by Doing” which develops Team work spirit, lifelong learning attitude and professional skills)**
- By asking the students individually to carry out literature/field survey, submit a written report in standard format and then delivering an oral presentation on the same. Such seminars generally on the current issues in relevant engineering disciplines published in any reputed journals. **(Helps to develop lifelong learning attitude and communication skills)**
- Students are given information about the specific websites for accessing E- Material, availability of learning material, and are also exposed to NPTEL, QEEE, etc., material to enable them to learn the topics at their own interest.

Thus, all above mentioned participative learning activities contribute to holistic development and improved student learning, besides facilitating life-long learning and knowledgemanagement.

2.3.5. What is the College policy on inviting experts / people of eminence to provide lectures / seminars for students?

The college encourages the departments to organize expert lectures by inviting faculty from reputed academic institutes and industry experts. The seminars, workshops, conferences also are organized centrally by the institute or separately by each department.

Each department arranges guest lecturers periodically addressed by the eminent persons from Industry, Academic and Research

Institutions. Eminent experts of National / International repute are invited from academia/organization industries for seminar, workshop, conferences etc. On an average, two seminars, two workshops and four expert lectures are organized by each department every year for the benefit of the students.

Table 2.8 gives list of few activities conducted by various departments. Detailed list are given in evaluative reports of respective departments.

Table 2.8: Details of Invited Lectures and Seminars organized for last four years

Sl . N o	Academ ic Year	Programme: Civil Engineering	
		Topic	Activity/Date/Resource person
1	2015-16	Role Of Civil Engineer For Power Generation	Sri C.VENUGOPAL , Executive Director , Karnataka Power corporation Limited
		Challenges in water resource management, rain water harvesting& ground water recharge	A R Shivakumar , IISc (KSCST) Shubha Ramachandran , Biome Environmental Solutions , A S Ravikumar, Water Resource Management, UVCE)
2	2014-15	-	-
3	2013-14	Remote Sensing and its Applications	Dr.LakshmiKantha , Karnataka State Remote Sensing and applications, Bangalore
		Geographical Information System	April 22 nd 2014
		Global Positioning System	May 10 th 2014
		National seminar on recent research and developments in civil Engineering (RRDCE 2014) 27-28 March 2014	Scientists/Eminent Scholars participated Dr. ChandraKishan , Professor, Dept of Civil Engg. IISc
4	2012-13	Rain water harvesting and ground water recharge	DrAmita Prasad, Principal secretary, RDPR,GOK A S Sadashivaiah, Chairman, KSPCB Mr. Shivakumar, PL-RWH, KSCST
Sl . N o	Academ ic Year	Programme: Mechanical Engineering	
		Topic	Activity/Date/Resource person
1	2015-16	SAE Collegiate Club Inauguration	18 Nov 2015,Technical talk by Mr. Datt Prasad & Mr. Purushottam Joshi
2	2014-15	3-days workshop on Engine assembly and Dis assembly vehicle dynamics".	OCT-2014 Technical talk by Mr. Nikhil
		2- Days TEQIP-Phase-2 sponsored National Symposium on "Rotor Dynamics (NSRD)".	Feb12-14-2014 ,Organized by Mechanical Engineering –Bangalore: Invited speakers: Prof. Srinivas, Prof. J S Rao, Prof Shekhar, Prof. Shridhar
3	2013-14	-	-
4	2012-13	-	-
Sl . N o	Academ ic Year	Programme: Electrical & Electronics Engg	
		Topic	Activity/Date/Resource person



1	2015-16	Recent Trends in Industrial & Process Automation	Workshop/21 st to 23 rd April 2016/ R Venugopal, VENJAY Automation.
		Renewable Energy Sources and Energy Conservation for sustainable development	Technical Talk/4 th Feb 2016/ Dr. Nagana Gouda, Director National Centre for Solar, Technology, KPCL
		Energy Auditing	Technical Talk/24 th Jan 2015/ Prof. Bhaskara, Certified Energy Auditor, Rajiv Gandhi Institute of Technology, Bangalore.
		What to be covered in Electronics	Technical Talk/22 nd Jan 2016/ Dr. Muhammad. H. Rashid, Professor, University of West Florida, USA.
		Awareness on Solar Energy 8 Minutes	Technical Talk/7 th Sep 2015/ Harshit Poddar .
		Emerging Trends in Power Transmission System	Technical Talk/21 st Feb 2015/ Dr. Vasudeva, Joint Director, CPRI, Bengaluru.
2	2014-15	Self Healing Grids	Technical talk /11 th Oct 2014/ BindhuMadhava (Senior Scientist F, CDAC-Former Alumnii)
		Philosophy of Ultra High Voltage Engineering	Seminar/28 th Nov 2015
		Math Lab Fundamentals	Workshop/20 th to 22 nd Nov 2014/Kalyan Ram, Electrono Solutions
3	2013-14	Design & Modeling of Drives for Electric Machines	FDP / 26 th Sep to 1 st Oct 2013/
		Hands on Experience-MATLAB/SIMULINK	Workshop/2 nd Nov to 4 th Nov 2013/ Kalyan Ram, Electrono Solutions
		PMU & Wide Area Monitoring Applications	Seminar/5 th Aug 2013
4	2012-13	Insulation & High Voltage Engineering	FDP/11 th June to 15 th June 2013
		DSP fundamentals & Applications to Power Electronics & Drives	FDP / 3 rd to 7 th June 2013
		Engineering and Science Education-Finding Congruence in Diverse Perspectives	Technical Talk / 10 th April 2013/ Srikanth kashyap SW, Director, R&D, JVS Electronics
		Energy Internet-Trends and Challenges	Technical talk / 26 th Sep 2012/ BindhuMadhava(Senior Scientist F, CDAC-Former Alumnii)
SI . N o	Academic Year	Programme: Electronics & Commun. Engg	
		Topic	Activity/Date/Resource person
1	2015-16	VLSI and embedded systems.	Two day workshop , 28 th to 29 th April 2016
2	2014-15	Digital Design using VERILOG	Technical Seminar/ 3 rd & 4 th Nov. 2014/ Industry
		IETE Chapter	Workshop/ 9 th &10 th Mar. 2015



		ARM7	
		emerging trends in Computer communication and Control systems	Technical Symposium/ 23 rd Jan2014
3	2013-14	Image processing using PYTHON	1.Two day workshop , 13 th – 14 th Aug 2013, Dr.AIT.
		Recent advances in power electronics and its applications.	2.Fifteen day short term course from 17-2-2014 to 1 st March 2014
4	2012-13	NIL	
Sl. No	Academic Year	Programme: Industrial Engineering and Management	
		Topic	Activity/Date/Resource person
1	2015-16	Processing application for higher education in foreign countries like USA, UK.	Lecture/4.2.16/John Kurian
		ISO and corporate social responsibility in industry	Lecture/31.1.15/A Sabastian and Prettysha Curtis
2	2014-15	Advanced Composite Materials	Speakers from NAL
3	2013-14	National Seminar in Advanced Materials	Lecture / 6.3.14 / Jagannathan
		Characterization technologies of materials.	Lecture / 6.3.14 / Jagannathan
4	2012-13	Design of Experiments	Composite MaterialsLecture / 1.9.12 / Deepak Madabushi
		Supply Chain management	
Sl. No	Academic Year	Programme: Instrumentation Technology	
		Topic	Activity/Date/Resource person
1	2015-16	MEMS Design using IntelliSuite	Three days Hands-on Training Program/ 3 rd -5 th May2016 / Sripadaraja, Project manager, Sridath Technologies Pvt. Ltd
		Introduction to Nuclear power generation	Technical Talk / 6 th April 2016/ Manivanan, Manjunath Rao, scientists, NPCL.
		Internet of Things	Technical talk ISA student chapter/ 2 nd Feb 2016/ by Mr. AjithKalle
		Medical imaging and image analysis”	Technical talk ISTE student chapter/ 7 th Feb 2016/
2	2014-15	Trends in Industrial Automation	Technical talk ISTE student chapter/ 27 th March 2015/ by Mr. Venugopal from Venjay automation, Bangalore.
		Recent Trends in Automation	Technical talk ISA student chapter/31st Jan 2015/ by Girish Ayya, Industry expert
3	2013-14	-	-



4	2012-13	-	-
Sl • No	Academ ic Year	Programme: Computer Science & Engg	
		Topic	Activity/Date/Resource person
1	2015-16		
2	2014-15	Real Time Hands on Session on Unix Network Programing	Workshop/Mr.Dheerendra/ 2nd Nov to 4 th 2014
		Cloud tool- BlueMix	Mr. Chethan, Chandrashekar, IBM,Bangalore 6 th Nov 2014
		Ethical Hacking and Information Security	Global Tech Promoters,Bangalore 14 and 15th Nov2014
3	2013-14	“QT-GUI Frameworkwith object orientedprograming concepts”	Workshop/Mr.Dheerendra/18/01/14,19/01/14,25/01/14
		“Linux KernalOverview”	Workshop/Mr.Dheerendra/08/03/14
		“Scope & Future inthe field of Robotics”	Mr. Sandeep, CEO, EvoibLtd, Bangalore. 15/03/14
4	2012-13	"Towards an Enjoyable Career in ScientificResearch"	Dr. Sagar Sen, ResearchScientist, Simula ResearchLabs, Oslo, Norway.
		“Introduction toLINUX OS withperspective”	Mr.Sandeep ,SeniorSoftware Engineer, Bangalore
		“Towards an enjoyable career in scientificresearch”	Dr. Sagar Sen , ResearchScientist , Simula ResearchLab , Oslo , Norway
Sl • No	Academ ic Year	Programme: Telecommunication Engg.	
		Topic	Activity/Date/Resource person
1	2015-16	iTrack IoT Platform conducted by Trans Neuron Technologies.	Seminar on 02.03.16 by Dharmendra Saxena.
		Hands on training on QualNet	Industry Institute Interaction Program on 22nd & 23rd September, 2015.
		Servicing of Electronic Equipments	Hands-on-training Program on 25th to 27th Feb 2016 by Mr. J Kasinathan, M.Tech (IIT),ALS Bangalore.
		Two days hands on training onDSP TMS320C6713	Hands on training on 21st and 22nd March 2016 by Mr. Sanjeev Kubakaddi, Managing Director, ITIE Knowledge solutions, Bangalore.



2	2014-15	Space Technology & Satellite Communication	Seminar on 30.01.2015 by Mr. A G Ananth, RVCE
		Introduction to WSN and iSense	Seminars on 20.10.2014 by Mr. Bhargav Raman S & Mr. Vageesh V Adavi, Nihon Communication solutions
		Hands on training on FEKO	Workshop on 7th – 11th April, 2015 by Mr. Yogesh Pandit
		Programming and Application using MSP430G2 Launch Pad	Industry Institute interaction program for students, conducted on 31st March & 1st April, 2015.
3	2013-14	Research methodology and Latex	Workshop on January 23 rd and 24 th 2014 by Dr. Shylaja Shastri.
4	2012-13	Artificial Intelligence	Seminar on 19.11.2012 by Sri Dattatreya.
		Industrial visit to Master Control Facility	On 25.03.2013, Hassan.
		Hands on training on Network Simulator-2(NS-2)	Workshop on 19th to 23rd March 2013 by Dr. Jharna Majumdar, Nitte Meenakshi.
		Real time wireless sensor Networks & Sensor web	Workshop on 9th & 10th April 2013 by Mr. Mukesh Das, TCS Ltd.
		High Frequency Structure	Technical talk on 10.05.2013 by Sri Sarath, Entuple technologies,
SI . N o	Academic Year	Programme: Information Science & Engg	
		Topic	Activity/Date/Resource person
1	2015-16	Cloud Computing	Technical talk was conducted on 7th April 2016 by Jyothi Noronha
2	2014-15	Web Technologies	Technical talk on 21 st November Speaker: Ms. Prafulla Patil, Asst. Prof. Dept of ISE EWIT, Bangalore
3	2013-14	Cognitive Software Defined Radio & Open Software Programming	One day technical seminar on 7/01/2015 by Jayachandra Aradhya, Silicon India Microsystems, Bangalore & Amitec Electronics Ltd., New Delhi
		Robotics	Guest Lecture on 11/11/2013 by "Mr. Ranjith Kumar" from Li2 innovation pvt. Ltd.
4	2012-13	Sentiment Analysis Engine	Guest Lecture on 3/4/2013 :Resource Person- "Trilok Hebbur" from THINK APPZ INC, California
SI . N o	Academic Year	Programme: Medical Electronics	
		Topic	Activity/Date/Resource person
1	2015-16	Opportunities and Challenges for Biomedical Engineers in Aerospace	4-11-2015/Dr. Arvind
		Hands on Training on Electrical Safety & Calibration of Medical Devices	23-11-2015/ Rizwan Khan.
		Talk on Clinical engineering for medical Electronics	06-02-2016/Sthaneshwar
2	2014-15	Net and C-Sharp	11-10-2014/Mallikarjuna.

		Recent Advances in Biomedical Engineering	Recent Advances in Biomedical Engineering
3	2013-14	Brain Computer Interface	13-09-2013/ Dr. Alejandro Reira, Star Labs Barcelona, Spain.
		Bioinformatics and Computational Biology	22-03-2014/Debnath Paul
4	2012-13	-	-

2.3.6. What are the latest technologies and facilities used by the faculty for effective teaching? Ex: Virtual laboratories, e-learning, open educational resources, mobile education, etc.

The latest technologies and facilities used by the faculty for effective teaching are:

- Computer aided teaching methods through power point presentations and LCD projectors
- E-learning material (e-books and e-journals), NPTEL, QEEE
- Digital Library
- ICT usages such as SMART board with data storage facility etc.

2.3.7. Is there a provision for the services of counselors / mentors/ advisors for each class or group of students for academic, personal and psycho-socio guidance? If yes, give details of the process and the number of students who have benefitted.

YES - The institute has developed a unique mentoring system by assigning a faculty member as mentor to a group of 20-30 students. Mentor will be acting as counsellor/mentor/advisor and care taker. The faculty counsels regarding academic, personal and other problems faced by the student. Academic performance of the student in the CIE test, examination and attendance in the ongoing semester is periodically monitored by the mentors. Critical cases are discussed with the HOD, if needed with Principal and parent. Individual mentors (faculty members) routinely spend time with students during and after classes discussing any issues related to the course, student problems, and advise them on all matters as desired related to academic, placement, industrial training and career goals.

The details of these activities are available with each department and will be made available during the visit of the expert committee.

2.3.8. Are there any innovative teaching approaches/methods/ practices adopted/put to use by the faculty during the last four years? If yes, did they improve the learning? What methods were used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?

All the courses include imparting instructions through lecture and tutorial method. The students also learn about a course through Laboratory assessment, Seminars, Projects and other Hands-on-Experience. They are also encouraged to survey the literature about a particular course. They also learn some of the courses through experimentation. Lecture rooms are equipped with multimedia facilities like LCD projectors, audio systems etc., in the institute and most of the faculty members use these facilities to the Benefit

of the students. Students and faculty keep pace with the recent developments in the subjects through IT-enabled education system, Projects, Seminar Assignments and Research Projects. All these efforts have improved the learning processes. The impact of these activities is evaluated by a student response survey in each semester where students give their honest feedback about the teaching approaches/methods/practices adopted/put to use by the faculty. The response is obtained online and is blind. The responses are reviewed by Head of the Department, Dean and the Principal, and corrective action is initiated wherever necessary. The institute has made several efforts in giving the faculty due recognition for innovation in teaching. The institute runs a performance incentive scheme wherein good performance in teaching and research is suitably rewarded. The scheme is implemented since 2016, where a cash prize of ₹ 50,000/- (fifty thousand only) is given.

2.3.9. How does the College create a culture of instilling and nurturing creativity and scientific temper among the learners? Various trainings/competitions/exhibitions etc., - department wise information

Following steps are taken by the college to create a culture of instilling and nurturing Creativity and scientific temper among learners:

- 5 to 20% courses of curriculum deal with Basic sciences, Mathematics and fundamental courses in core engineering disciplines.
- Project work and seminars are made as part of curriculum where students demonstrate creativity and scientific temper among them
- For overall development of the students, the institute has membership of various professional societies like ISTE, ISA, IE etc., Departmental Societies/Clubs/Student Chapters which function under the faculty members as presidents and students. The students have the option to join one or more of these societies to fulfill their creative and scientific needs.
- Under the banner of professional societies /Departmental Societies/Clubs/Student Chapters various student activities like Technical Paper contests/ Project exhibitions,/ Technical Quiz/Puzzles/Circuit Debugging/ seminars/ Conference etc are organized at various levels like inter and intra college and at state/ national levels
- To improve practical knowledge, the students are Encouraged to go for industrial visit and to do internship in various industries & organizations. The students are allowed to visit various premier institutions like IIT'S, NIT'S to participate in Technical Paper Presentations, Modeling, Quiz competitions etc.
- Annual TECH fests are organized for developing creativity and scientific temper among students.
- Student performance for skills and attitude is monitored for NBA Graduate Attributes through Rubric assessment which help

students to understand their weaknesses for specific performance parameters and then to take efforts to overcome those weaknesses.

- To appreciate the talent of the student, every year at graduation day ceremony, outstanding students who achieve remarkable success are honored by giving gold medals.

2.3.10. Does the College consider student projects a mandatory part of the learning programme? If so, for how many programmes is it made mandatory?

- **Number of projects executed within the College**
- **Names of external institutions associated with the College for student project work**
- **Role of the faculty in facilitating such projects department wise information**

YES – Student Projects are mandatory as a part of the programme in the pre-final and final years for all UG & PG Students in all departments.

UG Programmes:

All UG programmes offers mini-project to the tune 2 credit in the third year (6th Sem) and the project work (in two phases: Phase 1 and Phase 2) in the final year (7th and 8th Sem) to the tune of 12 (2 + 10) credits

Table 2. 9 show the number of UG batches those who have executed their final year projects within the college. The policy of sponsoring the students to industry to carry out projects is case by case depending on the quality of the project as well as the industry/organization offering the project work. Overall, only few students' projects have been carried out at External institutions/industries so far.

Table 2.9.a: Number of In-house UG Projects

Academic Year	2015-16		2014-15		2013-14		2012-13	
Programme	No. of Stud ents	No. of Proj ects	No. of Stud ents	No. of Proj ects	No. of Stud ents	No. of Proj ects	No. of Stud ents	No. of Stud ents
Civil Engg.	79	19	71	20	74	18	78	19
Mechanical Engg	80	20	136	34	108	27		
Electrical & Electronics Engg	70	19	62	17	66	17	67	18
Electronics & Commun. Engg	148	40	154	40	144	37	115	30
Industrial Engineering and Management	-	-	04	01	-	-	03	01
Instrumentat ion Technology	56	14	59	15	32	08	27	07

Computer Science & Engg	124	34	126	35	126	35	126	35
Telecommunication Engg.	68	18	75	20	70	19	69	18
Information Science & Engg	64	18	68	18	64	17	59	15
Medical Electronics	22	06	22	07	26	07	26	07

Table 2.9.b: Number of UG Projects carried out in association with industry

Academic Year	2015-16		2014-15		2013-14		2012-13	
Programme	No. of Stud ents	No. of Proj ects	No. of Stud ents	No. of Proj ects	No. of Stud ents	No. of Proj ects	No. of Stud ents	No. of Stud ents
Civil Engg.	-	-	-	-	-	-	-	-
Mechanical Engg	50	13	19	05	40	10		
Electrical & Electronics Engg	-	-	06	02	-	-	05	02
Electronics & Commun. Engg	-	-	-	-	-	-	-	-
Industrial Engineering and Management	29	9	24	11	29	8	22	6
Instrumentation Technology	-	-	-	-	-	-	-	-
Computer Science & Engg	16	04	12	03	12	03	12	03
Telecommunication Engg.	-	-	-	-	-	-	-	-
Information Science & Engg	-	-	-	-	-	-	-	-
Medical Electronics	08	02	08	02	08	02	-	-

PG Programmes:

PG students carry out major project after the end of II semester and continued till their final semester. Some of the student projects are carried out in collaboration with the industries.

Table 2.10.a: Details of In-house PG s projects

Academic Year	2015-16		2014-15		2013-14		2012-13	
Program me	No. of Stude nts	No. of Proje cts	No. of Stude nts	No. of Proje cts	No. of Stude nts	No. of Proje cts	No. of Stude nts	No. of Stu



								den ts
MCA	56	56	45	45	59	59	60	60
MBA	53	53	42	42	57	57	52	52
M.Tech (Comput er Science and Engg)	-	-	24	24	22	22	24	24
M.Tech (VLSI and Embedde d system Design)	18	10	18	13	18	09	18	13
M Tech (Power Electroni cs)	16	14	10	10	17	17	17	11
M Tech (Digital Commn. & Networki ng)	16	15	18	18	17	16	17	17
M Tech (Structur al Engineeri ng)	19	19	18	18	17	17	-	-
M. Tech (Machine Design)	03	03	06	06	-	-	-	-
M. Tech (Comput er Networki ng)	19	19	24	24	-	-	-	-
M.Tech (Electroni cs)	-	-	-	-	-	-	-	-

Table 2.10.b: Number of PG Projects carried out in association with industry

Academi c Year	2015-16		2014-15		2013-14		2012-13	
Progra mme	No. of Stude nts	No. of Proj ects	No. of Stude nts	No. of Proj ects	No. of Stude nts	No. of Proj ects	No. of Stude nts	No. of Stude nts
MCA	56	56	45	45	59	59	60	60
MBA	53	53	42	42	57	57	52	52
M.Tech (Comput er Science and Engg)	24	24	-	-	-	-	-	-

M.Tech (VLSI and Embedded system Design)	18	04	18	04	18	09	18	05
M Tech (Power Electronics)	16	02	-	-	-	-	17	06
M Tech (Digital Commn. & Networking)	16	01	18	00	17	01	17	00
M Tech (Structural Engineering)	-	-	-	-	-	-	-	-
M. Tech (Machine Design)	18	18	15	15	-	-	-	-
M. Tech (Computer Networking)	19	19	-	-	-	-	-	-
M.Tech (Electronics)	-	-	-	-	-	-	-	-

List of the industries in which student projects have been carried out:

- Indian Institute of science
- NAL, Bangalore,
- HAL, Bangalore
- Schneider Electric
- ISRO
- CPRI, Bangalore

Role of faculty in facilitating such projects:

Department generally allocates approximately one or two project and batches for UG and two PG students for dissertation to each eligible faculty member. In case of sponsored projects, the problem is assigned by the sponsor while in case of in-house projects; the problem is defined by the faculty. Faculty encourages students to carry out project on current research areas and real time problems sponsored by industry. Students refer papers from peer reviewed journals like IEEE, ACM, Springer, etc. Faculty guides students for implementing the idea presented in the existing work with some extension. In both cases, the allocated faculty acts as a Guide, monitors the progress continuously, helps in solving their difficulties

throughout project/dissertation phase. Students get support for presenting their work in various competitions, conferences. Facility to carry out the project work is made available to the students at the department or central level. The guide takes the demonstration of the project work and reviews the written reports from time to time. The in-semester work and end-semester work is evaluated by a group of three faculty members, Guide being one of them.

2.3.11. What efforts are made to facilitate the faculty in learning / handling computer-aided teaching/ learning materials? What are the facilities available in the College for such efforts?

Following facilities are made available by the college to facilitate computer aided teaching/learning:

- Each department is provided with sufficient number of computers and few laptops for senior professors with internet facility.
- Each department is provided with LCD and multimedia facility to conduct Guest lecturers or seminars.
- The class rooms of each department are fitted with LCDs.
- A very good Digital Library with on-line access to IEEE, Springer, Elsevier, ASME and ASCE is developed in the college.
- Digital Library has the e-resources like DELNET, N-List, CDs/ISIS, NPTEL Material etc.
- Laboratories are equipped with modern learning software.
- All academic practices (like uploading of syllabus, question bank, attendance, results announcement, etc., are computer based.
- Apart from the facilities available at the college, some orientation courses are conducted for the newly joined faculties. Also college encourages faculty members to participate in workshops organized by other institutes.

2.3.12. Does the College have a mechanism for evaluation of teachers by the students - feedback / alumni? - feedback If yes, how is the evaluation used in achieving qualitative improvement in the teaching-learning process?

YES- College has a mechanism of evaluation of all teachers by students. The feedback form contains the points related to the parameters such as punctuality, preparedness, clarity of speech, knowledge content, presentation skills, and clarity of writing on the board, discipline, encouragement to students, practical examples, problem solving and helping attitude to students.

The feedback forms are filled on line and are analysed for above parameters. The Principal and Dean Academics along with the respective HOD discuss the teaching problems with the faculty having poor feedback report and counsel the faculty to improve it next time.

Outgoing students and Alumni are generally consulted for suggesting modifications in the curriculum as per their experience in field. In yearly alumni meeting, feedback forms are filled by them, suggesting improvements over syllabus content, teaching methodologies etc.

Feedback from employer is taken into consideration for up gradation of syllabus.

2.3.13. Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If yes elaborate on the challenges encountered and the institutional approaches to overcome these.

NO- The institution is not facing any challenges in completing the curriculum within the planned time frame and calendar, as is observed from regular academic audit. In case, if classes are missed due to some sudden unavoidable reasons, faculty engages extra classes on working Saturdays or any other free hours to compensate for the loss.

2.3.14. How are library resources used to augment the teaching-learning process?

The college has a central library with number of volumes of books, periodicals, National & International journals. The details regarding the infrastructure of the Central Library and the facilities provided by Library are presented in Section 4.2. In brief, the library is equipped with around 78,000 books in print form while about 2600 books in non-print form. Besides, the digital library has more than 13,600 e-Books, 8600 e- Journals and facilities like DELNET, INDEST, N-List, OCW of MIT, and NPTEL study materials. The teachers and students use these facilities very often. In addition to main library, all departments have libraries in their departments with adequate material and books to carry out course instruction of the prescribed curriculum. Every year Library adds around 3500 books and Journals as per requirement.

Above listed resources and facilities are used properly and effectively by UG, PG students and faculty members to augment the teaching-learning process.

2.3.15. How does the institution continuously monitor, evaluate and report on the quality of teaching, teaching methods used, classroom environments and the effect on student performance.

The college is adopting following methods to continuously monitor, evaluate and report on the quality of teaching and teaching methods used by faculty:

- Periodic checking of course file of each subject reveals the quality of teaching content and methods adopted for teaching the course.
 - Student feedback at the end of each semester which includes punctuality, preparedness, clarity of speech, knowledge content, presentation skills, and clarity of writing on the board, discipline, encouragement to students, practical examples, problem solving and helping attitude to students.
 - Verification on quality of question papers and assignment questions and student answer scripts by internal quality assessment cell.
 - Periodic review by the HOD, Dean and Principal; on coverage of content and adherence to the schedules.
-

- Student performance in CIEs and the assignments are reviewed by HOD in departmental meetings.

As far as classroom environment is concerned, the maintenance team of the college carries out the regular housekeeping and cleanliness. All the classrooms and laboratories in the college are spacious, with fresh air and sufficient lighting conditions. A large number of big trees outside the buildings help to give green environment for learning throughout the year.

2.4. Teacher Quality

2.4.1. What is the faculty strength of the College? How many positions are filled against the sanctioned strength? How many of them are from outside the state?

The sanctioned faculty strength of the college is 171. However, the filled posts against regular are only 168. Details are given in Table 2.11. Few higher level posts are remaining vacant due to retirement of previous regular faculty and lack of applicants for higher level posts in spite of repeated advertisements through newspapers. To meet the requirement of Professors and Associate Professors (especially for PG teaching), few retired faculty has been appointed. The total faculty (against posts of Professor, Associate Professor and Assistant Professor) filled by the institute under this category is two, making a total of 170 against 171 sanctioned posts. There are total two faculty members from outside the state.

Table: 2.11.a: Faculty Strength as on for latest four Academic years

Faculty Strength	2015-16	2014-15	2013-2014	2012-2013
Sanctioned	253	229	202	206
Filled	253	229	202	206
Outside the state	2	1	1	1

Table 2.11.b: Department wise Regular Faculty Positions during 2015-16 UG

Department	Post	Sanctioned	Filled	Vacant
Institute	Principal	01	--	--
Civil Engineering	Professor	02	01	01
	Associate Professor	06	04	02
	Assistant Professor	21	20	01
Mechanical Engineering	Professor	02	--	02
	Associate Professor	06	04	02
	Assistant Professor	33	32	01
Electrical & Electronics Engg	Professor	01	01	--
	Associate Professor	03	02	01
	Assistant Professor	13	12	01
Electronics & Commun. Engg	Professor	01	--	01
	Associate Professor	04	02	02
	Assistant Professor	25	25	--



Industrial Engineering and Management	Professor	01	01	--
	Associate Professor	02	01	01
	Assistant Professor	08	08	--
Instrumentation Technology	Professor	01	01	--
	Associate Professor	03	03	--
	Assistant Professor	08	07	--
Computer Science & Engg	Professor	01	--	01
	Associate Professor	02	01	01
	Assistant Professor	30	29	01
Telecommunication Engg.	Professor	01	01	--
	Associate Professor	02	02	01
	Assistant Professor	11	11	--
Information Science & Engg.	Professor	01	01	--
	Associate Professor	04	04	--
	Assistant Professor	07	07	--
Medical Electronics	Professor	01	01	--
	Associate Professor	02	02	--
	Assistant Professor	03	03	--
Mathematics	Professor	01	--	01
	Associate Professor	02	01	01
	Assistant Professor	14	12	02
Physics	Professor	01	--	01
	Associate Professor	01	01	--
	Assistant Professor	06	05	01
Chemistry	Professor	01	--	01
	Associate Professor	01	01	--
	Assistant Professor	06	06	--
Humanities and Social Sciences	Professor	--	--	--
	Associate Professor	--	--	--
	Assistant Professor	04	04	--

Table 2.11.c: Department wise Regular Faculty Positions during 2015-16 - PG

Department	Post	Sanctioned	Filled	Vacant
M C A	Professor	01	01	--
	Associate Professor	04	04	--
	Assistant	05	05	--

	Professor			
M B A	Professor	01	01	--
	Associate Professor	03	03	--
	Assistant Professor	05	05	--
M.Tech (Computer Science and SE)	Professor	01	01	--
	Associate Professor	01	03	--
	Assistant Professor	02	--	--
M.Tech (VLSI and Embedded system Design)	Professor	01	01	--
	Associate Professor	01	01	--
	Assistant Professor	01	01	--
M Tech (Power Electronics)	Professor	01	01	--
	Associate Professor	01	--	--
	Assistant Professor	01	02	--
M Tech (Digital Commn. & Networking)	Professor	01	01	--
	Associate Professor	01	01	--
	Assistant Professor	01	01	--
M Tech (Structural Engineering)	Professor	01	--	--
	Associate Professor	01	--	--
	Assistant Professor	01	--	--
M. Tech (Machine Design)	Professor	01	01	--
	Associate Professor	01	--	--
	Assistant Professor	02	02	--
M. Tech (Computer Networking)	Professor	01	--	--
	Associate Professor	01	--	--
	Assistant Professor	02	02	--
M.Tech (Electronics)	Professor	01	--	--
	Associate Professor	01	--	--
	Assistant Professor	03	03	--

2.4.2. How are the members of the faculty selected?

- Recruitment procedures/ Promotional policies for faculty are as per AICTE/Government of Karnataka – KCSCR norms.
- Promotions for teaching staff are effected through Career Advancement Scheme of AICTE/Government of Karnataka – KCSCR Norms.
- The advertisement for filling up the vacant posts along with the eligibility criteria as per AICTE norms is given in the leading National newspapers.

- Applications received are short listed on the merit basis and called for the interview.
- The interviews are held by a duly constituted Selection Committee.
- After interviews, the selected candidates are given appointment orders.

The composition of selection committee is as given below in Table 2.12:

Table 2.12: Composition of Selection Committee

Chairman of the Committee	01
MANAGEMENT	05
Subject Expert	01
Head of the concerned Department	01
DTE Nominee	01
Member Secretary (Head of the Institution	01

2.4.3. Furnish details of the faculty

The qualification details of the regular faculty members are as given in Table 2.13:

Table 2.13: Faculty Qualification Details

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	20	5	3	4	4	1	37
M.Phil.							
PG	1	-	29	7	10	9	56
Un Aided teachers							
Ph.D.	8	3	2	2	4	0	19
M.Phil.							
PG	1	-	6	10	41	83	141
Part-time teachers							
Ph.D.	--	--	--	--	--	--	--
M.Phil.	--	--	--	--	--	--	--
PG	--	--	--	--	--	--	--

Note: The minimum qualification for the Professors and Associate Professors is Ph.D. and for the post of Assistant Professors is M.E./M.Tech.

2.4.4. What percentage of the teachers have completed UGC-CSIR-NET, UGC-NET, and SLET exams? In that what percentage of teachers are with PG as highest qualification?

NET and SLET qualifications are required (Not Mandatory) only for faculty of Basic Sciences, Humanities and Mathematics. Only 1% of the faculties are NET qualified. All faculty members from MBA, MCA and Engineering departments are having PG (i.e. MBA/MCA/M.E./M.Tech.) qualification. i.e.,

- 100% of the faculty are with PG Qualification.
- 35% of the faculty have Ph.D. as the highest Qualification.

2.4.5. Does the College encourage diversity in its faculty recruitment? Provide the following departments-wise details.

YES - the College encourages diversity by recruiting faculty from all the places of the state and also from other states.

Most of the faculty members from Physics, Chemistry, and Mathematics, English MBA, MCA and Engineering departments are from other colleges within the state.

In Engineering Departments 5% faculty members are the product of this institute. Few faculty members have completed their PG/Ph.D from the Indian Institute of Science, Indian Institute of Technology and the institutes outside the state. One faculty completed Post-Doctoral Degree from abroad. Details are given in Table: 2.14

Table 2.14: Diversity in faculty Positions

Department	% of faculty who are product of the same College	% of faculty from other Colleges within the State	% of faculty from other States	% of faculty From abroad
Civil Engg.	12%	88%	--	--
Mechanical Engg	13.88%	86.72%	--	--
Electrical & Electronics Engg	6.6%	93.4%	--	--
Electronics & Commun. Engg	11.11%	88.89%	--	--
Industrial Engineering and Management	30%	70%	--	--
Instrumentation Technology	27.27%	72.73%	--	--
Computer Science & Engg	11.76%	88.24%	--	--
Telecommunication Engg.	15.38%	84.62%	--	--
Information Science & Engg	25%	75%	--	--
Medical Electronics	--	100%	--	--
Mathematics	--	100%	--	--
Physics	--	100%	--	--
Chemistry	--	100%	--	--
HSS	--	100%	--	--
MBA	--	100%	--	--
MCA	--	100%	--	--

2.4.6. Does the College have the required number of qualified and competent teachers to handle all the courses for all departments?

YES - The College has the required number of qualified and competent teachers to handle all the courses for all the departments. 84 faculty members have been appointed during last four years and currently a total of 253 faculty members are on role. Details are given in Table 2.15

Table 2.15 Details of Faculty Recruitment during last four years

Sl. No	DEPARTMENT	PROGRAMME	YEAR			
			2015-16	2014-15	2013-14	2012-13
1	Civil Engg.	UG	06	--	--	--
		PG	--	--	--	--
2	Mechanical Engg	UG	06	02	06	01
		PG	--	02	--	--
3	Electrical &	UG	--	01	03	01

	Electronics Engg	PG	01	--	--	--
4	Electronics & Commun. Engg	UG	03	--	03	02
		PG	--	01	--	--
5	Industrial Engineering and Management	UG	01	--	01	--
6	Instrumentation Technology	UG	--	01	02	--
		PG	03	--	--	--
7	Computer Science & Engg	UG	04	01	06	01
		PG	--	01	--	--
8	Telecommunication Engg.	UG	01	--	--	01
		PG	--	01	--	--
9	Information Science & Engg	UG	--	01	01	01
		PG	--	--	--	--
10	Medical Electronics	UG	--	--	01	--
11	MBA		02	01	--	--
12	MCA		--	01	--	--
13	Mathematics		--	03	02	01
14	Physics		--	02	--	01
15	Chemistry		--	02	--	01
16	HSS		01	01	--	--
	TOTAL		28	21	25	10

2.4.7. How many visiting Professors are on the rolls of the College?

There are three visiting professors on rolls of the college one each in Electrical and Electronics Engineering and One in Mechanical Engineering.

The College extends its support and encourages the faculty to participate in training programmes /workshops/ seminars/conferences/FDPs to update knowledge and develop professional skills.

Research grants:

- The college encourages the faculty to apply for research grants from funding agencies like AICTE, UGC, DST, DRDO, VTU etc.
- The management also provides the financial assistance to carry out the research activities

Study Leave:

The college encourages the faculty to upgrade their qualification by deputing for higher studies as per Government norms.

Nomination to National/International conferences/ Seminars:

The College encourages the faculty to attend National /International conferences/Seminars by providing financial assistance and special casual leave.

In-service training:

The College organizes various Faculty Development Programmes like Induction Training Programmes for newly appointed teachers and subject domain skill development programmes. In addition, all faculty are encouraged by the college to attend training programmes conducted at various institutions/industries to enrich their knowledge by providing the financial assistance to meet the expenditure.

Organizing national/international conferences:

The College encourages all the Departments to organize conferences / seminars/workshops / exhibitions.

Apart from the above strategies, following policies are also followed by the institute to recharge the faculty.

- Arranging regular FDPs/workshops/Training Programmes for all faculty members which can promote skill upgradation and make them informed of the current teaching-learning methodologies
- Encouraging faculty to publish and present papers
- Providing necessary infrastructure to upgrade knowledge and/or skills
- Encouraging Interaction with industry to get acquainted with the latest industry requirements
- Allowing faculty members to pursue PG/ PhD under Quality improvement Programme (QIP)
- Awarding one faculty from the college with the best teacher award
- Reduction in the teaching workload to those faculty perusing PhD

2.4.8. What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, nomination to national/international conferences/Seminars, in-service training, organizing national/international conferences etc.)

The College extends its support and encourages the faculty to participate in training programmes /workshops/seminars/conferences/FDPs to update knowledge and develop professional skills.

Research grants:

- The college encourages the faculty to apply for research grants from funding agencies like AICTE, UGC, DST, DRDO, VTU etc
- The management also provides the financial assistance to carry out the research activities

Study Leave:

The college encourages the faculty to upgrade their qualification by deputing for higher studies as per Government norms.

Nomination to National/International conferences/ Seminars:

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- Encouraging faculty to publish and present papers
- Providing necessary infrastructure to upgrade knowledge and/or skills
- Encouraging Interaction with industry to get acquainted with the latest industry requirements
- Allowing faculty members to pursue PG/ PhD under Quality Improvement Programme (QIP)
- Awarding one faculty from the college with the best teacher award
- Reduction in the teaching workload to those faculty pursuing PhD

2.4.9. Give the number of faculty who received awards / recognitions for excellence in teaching at the state, national and international level during the last four years.

Table: 2.16.a: Total Number of awards / recognitions received by the Faculty

Sl. No	Year	Total Number
1	2015-16	04
2	2014-15	01
3	2013-14	03
4	2012-13	04
5	2011-12	02

Table: 2.16.b: Details of Awards Received by the Faculty

Sl. No	YEAR	Details of Awards/Recognitions (Name of Faculty/Nature of Awards/Recognitions/ date and place
1	2015-16	JNU university national conference / H. Anantharam (Third prize)
		Best Paper Award (Dr. B V Sumangala / Research Paper/ 17 th -19 th Dec 2015, Mandya) – EE
		Shobha Rani, Classification of Vehicles using Image Processing Techniques, National Conference NISE-15, New Horizon College of Engineering, May 12 2012, Bangalore (Best Paper Award) - MCA
		Dr. C.E. Nanjudappa received a cash award of Rs.50000/ (Fifty thousand only) for Best performance from PVP Welfare trust
2	2014-15	Bharathi S, Bag of Features Based Remote Sensing Image Classification Using RANSAC And SVM”, IAENG, Hongkong, China on 12-14 Mar 2014 (Best Paper Award). - MCA
3	2013-14	Dr. B Sivakumar- Best Paper award- International Conference on “Electronics Engg. & Image Processing”, on April 1-2, 2014. - TC
		Dr. B Sivakumar- Best Paper award- First International Conference on Information and Communication Engg. ICICE-2013, 28th & 29th June 2013, Dr.AIT, Bangalore. – TC
		Bharathi S, Automatic Land Use/Land Cover Classification using Texture and Data Mining Classifier”, <i>TENCON IEEE conference, Xian, China</i> on 22-23 Oct 2013 (Best Paper Award). – MCA

4	2012-13	“Effect of acids on strength behavior of non-expansive soil treated with alkalies”, Dr. S. D. Venkatarajamohan and M.N. Ramesh (2012) – CV National conference on recent advances in civil engineering, organized by Cochin institute of science and technology, Cochin university, Nov 29 th Dec 1 st , 2012
		Inter science Scholastic Award (H V GovindaRaju/ Research Paper/ Nagpur, 19 th May 2012) – EE
		P C Shruthi- First Place- National Conference on “Communications and Computations” organized by Dept. of TCE, KSIT Bangalore, held on 29 th September 2012. - TC
		Priya H K- Young Investigator Award - Interscience Scholastic Award for the paper entitled “A Dynamic Watermarking Model for Medical Image Authentication” at the International Conference on Electronics and Communication Engineering (ICECE) held at Bangalore on 1 st July, 2012. – TC
5	2011-12	Best Paper Award (Dr B V Sumangala/ Research Paper/ 21 st -22 nd Dec 2012, Mandya)
		Best Paper Award for the research Paper: M. Meenakshi and M. Seetharama Bhat Lateral Stability Augmentation System for Micro Air Vehicle - Towards Autonomous Flight, IEEE Recent Advances in Intelligent Computational Systems, Trivandrum Sep 22-24, 2011

Apart from the above:

- All Faculty Members are members of at least two Professional Societies like ISTE, IE, ISOI, ISA, ISSS IEEE, IETE, etc

2.4.10. Provide the number of faculty who have undergone staff development programmes during the last four years. (Add any other programme if necessary)

Table 2.17: Number of Faculty Participation in SDP/ FDP in last FOUR years

Academic Staff Development Programmes	Academic Year			
	2015-16	2014-15	2013-14	2012-13
Refresher courses	28	22	0	0
HRD programmes	0	1	6	4
Orientation programmes	0	0	3	0
Staff training conducted by the College	133	24	52	45
Staff training conducted by University/ other Colleges	19	9	23	20
Summer / winter schools, workshops, etc.	227	292	78	324

2.4.11. What percentage of the faculty have

- been invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies
- participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies
- presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies
- teaching experience in other universities / national institutions and others
- industrial engagement
- international experience in teaching

Table 2.18: Number of Faculty as Resource Persons

Sl. No	Department	Total No. of Faculty	No. of Faculty participated as Resource Person	% of faculty
1	Civil Engg.	24	3	12.5%
2	Mechanical Engg	39	05	12%
3	Electrical & Electronics Engg	16	05	31.25%
4	Electronics & Commun. Engg	31	04	12.9%
5	Industrial Engineering and Management	9	1	11%
6	Instrumentation Technology	14	02	14%
7	Computer Science & Engg	33	08	24.2%
8	Telecommunication Engg.	13	2	15.38%
9	Information Science & Engg	14	2	14.28%
10	Medical Electronics	06	01	16%
11	MBA	10	7	70%
12	MCA	11	02	18%
13	Mathematics	13	04	31%
14	Physics	07	02	28.5%
15	Chemistry	07	01	14%
16	HSS	03	01	33%
	TOTAL	250	50	20%

Table 2.19: Faculty Participation in external events

Sl. No	Department	Total No. of Faculty	No. of Faculty participated in external events	% of faculty
1	Civil Engg.	24	20	83.33%
2	Mechanical Engg	39	32	82%
3	Electrical & Electronics Engg	16	16	100%
4	Electronics & Commun. Engg	31	27	87%
5	Industrial Engineering and Management	9	9	100%
6	Instrumentation Technology	14	11	78%
7	Computer Science & Engg	33	25	75%
8	Telecommunication Engg.	13	13	100%
9	Information Science & Engg	14	14	100%
10	Medical Electronics	06	03	50%
11	MBA	10	10	100%
12	MCA	11	11	100%
13	Mathematics	13	04	30.7%
14	Physics	07	02	28.5%
15	Chemistry	07	01	14.2%
16	HSS	03	01	33.3%
	TOTAL	250	199	79.6%

Table 2.20: Faculty Publication details

Sl. No	Department	Total No. of Faculty	No. of Faculty Presented Papers	% of faculty
1	Civil Engg.	24	19	79.17%
2	Mechanical Engg	39	39	100%
3	Electrical & Electronics Engg	16	16	100%
4	Electronics & Commun. Engg	31	30	90%
5	Industrial Engineering and Management	9	9	100%
6	Instrumentation Technology	14	11	78%
7	Computer Science & Engg	33	28	96.55%
8	Telecommunication Engg.	13	13	100%
9	Information Science & Engg	14	14	100%
10	Medical Electronics	06	03	50%
11	MBA	10	10	100%
12	MCA	11	8	72%
13	Mathematics	13	10	76.9%
14	Physics	07	06	85.71%
15	Chemistry	07	07	100%
16	HSS	03	02	66.6%
	TOTAL	250	225	90%

Table 2.21. Teaching Experience in other Universities/ Institutions

Sl. No	Department	Total No. of Faculty	No. of Faculty with teaching experience in other universities/institutions	% of faculty
1	Civil Engg.	24	5	20.83%
2	Mechanical Engg	39	13	33%
3	Electrical & Electronics Engg	16	05	31.25%
4	Electronics & Commun. Engg	31	3	9.67%
5	Industrial Engineering and Management	9	00	00%
6	Instrumentation Technology	14	13	92%
7	Computer Science & Engg	33	00	00%
8	Telecommunication Engg.	13	1	7.69%
9	Information Science & Engg	15	5	36%
10	Medical Electronics	06	03	50%
11	MBA	10	8	80%
12	MCA	11	01	9%
13	Mathematics	13	02	15.3%
14	Physics	07	01	14.2%
15	Chemistry	07	01	14.2%
16	HSS	03	01	33.3%
	TOTAL	250	62	24.8%

Table 2.22. Industrial engagement

Sl. No	Department	Total No. of Faculty	No. of Faculty with Industrial Engagement	% of faculty
1	Civil Engg.	24	2	8.33%
2	Mechanical Engg	39	04	10%
3	Electrical & Electronics Engg	16	03	18%
4	Electronics & Commun. Engg	31	00	00%
5	Industrial Engineering and Management	09	01	15%
6	Instrumentation Technology	14	00	00%
7	Computer Science & Engg	33	00	00%
8	Telecommunication Engg.	13	3	23.07%
9	Information Science & Engg	15	00	00
10	Medical Electronics	06	00	00
11	MBA	10	00	00
12	MCA	11	00	00
13	Mathematics	13	--	00
14	Physics	07	--	00
15	Chemistry	07	--	00
16	HSS	03	--	00
	TOTAL	250	13	5.2%

Table 2.23. International Experience in Teaching

Sl. No	Department	Total No. of Faculty	No. of Faculty with International Experience in Teaching	% of faculty
1	Civil Engg.	24	00	00
2	Mechanical Engg	39	00	00
3	Electrical & Electronics Engg	16	00	00
4	Electronics & Commun. Engg	31	00	00
5	Industrial Engineering and Management	09	00	00
6	Instrumentation Technology	14	00	00
7	Computer Science & Engg	33	01	3%
8	Telecommunication Engg.	13	00	00
9	Information Science & Engg	15	00	00
10	Medical Electronics	06	00	00
11	MBA	10	00	00
12	MCA	11	00	00
13	Mathematics	13	00	00
14	Physics	07	00	00
15	Chemistry	07	00	00
16	HSS	03	00	00
	Total	250	01	0.4%

2.4.12. How often does the College organize academic development programmes for its faculty, leading to enrichment of teaching-learning process?

- **Curricular Development**
- **Teaching-learning methods**
- **Examination reforms**
- **Content / knowledge management**
- **Any other (please specify)**

The College organizes academic development programmes for its faculty on regular basis leading to enrichment of teaching-learning process.

Curricular Development

- Curricular Development and academics is monitored by the Board of Studies (BOS), Departmental Advisory Board (DAB) and Academic Council (AC). The frequency of meeting is minimum one per year for BOS and DAB while minimum one per year for the Academic Council.
- Recently, college has been organized an awareness programme to all faculty on implementation of curricula as per the requirements of Outcome based education and accreditation
- Management encourages the faculty members regularly to attend Faculty development programmes to upgrade the knowledge by providing financial assistance.

Teaching-learning methods

- All Faculty members make use of different methods to ensure effective Teaching – Learning activities apart from conventional teaching methods (chalk & Blackboard). The regular lecture constitutes a major part of the teaching exercise. Additional lectures are also conducted to the students from rural area and also for slow learners. However every teacher follows teaching practices as per the lesson plan made in the beginning of the semester, which make the classes more effective, interesting and student-centric.
- All faculty members maintain their respective course files that includes the course objectives & outcomes, syllabus including prescribed and reference text books, lesson plan, previous question papers, assignments, lecture notes etc.
- Faculty members extensively use modern teaching aids such as LCDs, Interactive Board, and Power Point presentations.
- Regular industrial visits update the skills of faculty as well as the students.
- The Institution motivates the Departments to organize Faculty Development Programmes/Workshops/Seminars/Conferences on a regular basis where the faculty can upgrade their skills.
- The Institution encourages the newly recruited faculty members to attend Induction Training Programmes so as to improve their teaching skills

Examination reforms

Two Board meetings per year. UGC granted Autonomous status to

the college during 2010-11 and there are significant reforms in Examination system have been implemented: The major reforms are as under:

- Absolute grading system is implemented and in practice since 2010-11
- Instead of the initial practice (during 2010-11) of providing only two CIEs (CIE I and CIE II) each of 50 Marks is changed to three CIEs (CIE I, CIE II and CIE III) and to consider any best two CIEs for the award of final CIE marks for a maximum of 50 Marks
- Instead of the previous practice of allotting 50 marks for each CIE followed from 2010-11 till 2013-14, CIE of 25 Marks is being conducted since 2014-15.
- CIE includes descriptive (40 Marks) and Quiz questions (10 Marks)
- Semester End Examination SEE is held for 100 Marks and reduced to 50 Marks
- The authentic photocopy of answer-book of SEE is also available for the student on demand with payment of applicable fees.
- Revaluation answer-book of SEE facility is also available for the student on demand with payment of applicable fees.

Content / knowledge management

- Faculty use cutting edge technology to design projects and communicate with students.
- Faculty members are encouraged to organize and participate in workshops/conferences / seminars etc.
- Faculty are motivated to prepare and submit project proposals to various funding agencies like AICTE, DST, VTU, DRDO etc.
- Motivated to apply acquired knowledge by designing and fabricating working models, developing software tool etc., and applying for patents.
- Encouraged to contribute technical papers / articles on recent developments to journals and conferences.
- Facilities like computer/Laptop and internet are provided to each faculty members for managing the knowledge contents.

2.4.13. What are the teaching innovations made during the last five years? How are innovations rewarded?

As the institution is heading towards 'Outcome Based Education' and the efforts made by the management and the faculty in this direction are considerable. The following are the initiatives taken by the college to achieve the above task to make the teaching – learning environment dynamic innovative and creative.

- Credit based system is introduced.
 - Considerable changes in assessment methodology
 - Well defined home assignments are introduced.
 - Comprehensive individual assignments followed by seminar is introduced for Masters students
 - Class room teaching is made more dynamic.
 - Design based experiments are initiated in each laboratory.
-

- PPT based teaching is done by all departments.

Self-study component to the tune of 4 credits are introduced since the academic year 2012-13

2.4.14. Does the College have a mechanism to encourage

- **Mobility of faculty between institutions for teaching?**
- **Faculty exchange programmes with national and international bodies?**

If yes, how have these schemes helped in enriching quality of the faculty?

Yes- Recently Institution signed MOU with Brott Shaw College, British Columbia, Canada to encourage the faculty mobility between the institutions.

Apart from this many senior faculty members of all the departments are involved with delivering Expert Lectures during seminars & workshops etc., organized by other institutions.

As on today, there is no faculty exchange programme with national and international bodies.

2.5. Evaluation Process and Reforms

2.5.1. How does the College ensure that all the stakeholders are aware of the evaluation processes that are operative?

Every year, college distributes the Academic regulations book to the newly joined students (1stYear) where detailed information of evaluation processes is published. Apart from this, the evaluation process is also published on the institute Information brochure and the institute website. In addition, evaluation processes are displayed in the notice board of the department, examination section, college and college website. Additionally, the mentors of each student briefs the evaluation process and grading policy at the beginning of the semester. The faculty also appraises the students of the complete curriculum / lecture wise blow up in the beginning of the session and throughout the course teaching as well.

2.5.2. What are the major evaluation reforms initiated by the College and to what extent have they been implemented in the College? Cite a few examples which have positively impacted the evaluation management system?

In the beginning of autonomous the evaluation process is followed as per the university process. Later, it decided to go for double valuation i.e., 100% internal and 100% external valuation of the script and if the difference of marks is more than 15 it will be sent for III valuation. Photo copy is provided, revaluation also provided and make up exam is provided as per the Autonomy guide lines of VTU. In the year 2015 Academic council meeting it is decided to go for photo copy and challenging valuation because of double valuation.

2.5.3. What measures have been taken by the institution for continuous evaluation of students and ensuring their progress and improved performance?

Since the institution is free to frame the syllabus and evaluation, the evaluation reforms in compliance with the

affiliating university are followed in the best of the spirit
The evaluation is all fair; the students are satisfied by showing them the evaluated performance in the answer sheets.
Evaluation will be made clear to the students on request/demand.
All records are maintained i.e. answer sheets, award lists etc. mid tests are taken and records are maintained.
The student's performance/awards are shown to the students to encourage them.

2.5.4. What percentage of marks is earmarked for continuous internal assessment? Indicate the mechanisms strategized to ensure rigour of the internal assessment process?

For the continuous internal assessment (CIE), 50 % of the marks are allotted in each subject and the remaining 50% assessment is made by conducting Semester End Examination SEE. Student should score 40% (20 out of 50 Marks) in CIE to become eligible to write SEE examination in theory courses and 50% (25 out of 50 marks) in Laboratory courses. Three CIEs are provided to each subject for a maximum of 25 marks out of which, best two are taken for announcement of final CIE marks. The CIE question paper consists of Descriptive and Quiz Questions with internal choice for 5 marks in case of 2nd, 3rd and 4th year subjects and in case of 1st year subject an additional question for 5 marks is also allotted for self-study component.

The attendance requirement to become eligible to write SEE is 85% for each subject. However, for any genuine reasons, there is a provision for attendance condonation to the extent of 10 % by the principal based on the recommendations of the respective Head of the department.

To clear any subject (Theory/Lab) of any semester, the student shall obtain 40% of 50 marks in SEE. This complements to award the grade for a particular subject.

2.5.5. Does the College adhere to the declared examination schedules? If not, what measures have been taken to address the delay?

Yes, the college strictly adheres to the declared examination schedules and academic calendar. There had not been, so far, any deviation from the declared schedule for examinations. However if any deviation or delay is anticipated or arises unexpectedly few gaps /holidays/two to three additional days are included in schedule itself as per academic calendar.

2.5.6. What is the average time taken by the College for declaration of examination results? Indicate the mode / media adopted by the College for the publication of examination results e.g., website, SMS, email, etc.

The average time taken by the institute for declaration of results is ten days after the last day of examination. The examination results are published on college website and the copies of ledgers containing the details of results of respective department are handed over to department office. The grade cards of individual student are distributed to the students by the Examination section. The examination results are also displayed

on the notice boards of the departments.

2.5.7. Does the college have an integrated examination platform for the following processes?

- **Pre-examination processes – Time table generation, OMR, student list generation, invigilators, squads, attendance sheet, online payment gateway, etc.**
- **Examination process –Examination material management, logistics.**
- **Post examination process – attendance capture, OMR based exam result, auto processing, generic result processing and certification.**

YES. The college has an integrated examination platform i.e. Examination Section. Semester End Examination (SEE) and Continuous Internal Evaluations (CIE) are conducted centrally by Examination section headed by Controller of Examination (COE). Data related to student's registration for theory and laboratory courses is made available to examination section for generating student list for each of course examination. The question paper setting along-with its scheme of evaluation is collected by the examination section from the eligible examiners (both internal and external) and is scrutinized by BOE of respective departments. The seating arrangement for various examinations, Examination Schedule and allotment of invigilation duty to faculty members is done by exam section. Invigilation reports are printed and kept ready along with answer-books. The exam hall tickets for students are distributed to the students.

The Question paper copies for various theory courses sealed in large envelopes are stored in strong room at examination section. Blank answer-books are also stored in strong room. These are taken to examination halls along-with invigilation reports on the day of examination. Written answer-books after the examination are collected by invigilators for submitting to examination section along-with invigilation reports. These answer-books and records are stored at exam section.

All the answer books are assessed twice by internal and external examiners so as to avoid mistakes. If the difference between two assessments of any answer book exceeds 15 marks, then such scripts go to third valuation if needed fourth valuation till the difference between two assessments lies less than 15 marks. Marks are entered question-wise for processing and also to compute attainment of course outcomes using in-house developed software. Grades are allotted and reviewed by COE and chairman Board of Examinations (BOE) reviews and approves the grades and results before declaration or publishing.

2.5.8. Has the College introduced any reforms in its Ph.D. evaluation process?

NO – Ph. D evaluation is carried out at the university level.

2.5.9. What efforts are made by the College to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved process and functioning of the examination division/section?

Examination section has been housed in the main building in a separate floor. The civil infrastructure of the Examination Cell consists of Strong room, Office cabin for controller of examination, Assessment hall for assessing answer-books and working space for supporting staff. Conventional and Wi-Fi net connectivity, adequate number of computer systems and printers as well as a photocopying machine have been provided to Exam Cell for proper and efficient functioning of the exam cell.

Necessary and sufficient manpower has been employed for processing pre-examination, during examination and post examination work and tasks. Details are as given in the organizational structure shown in Fig 2.1.

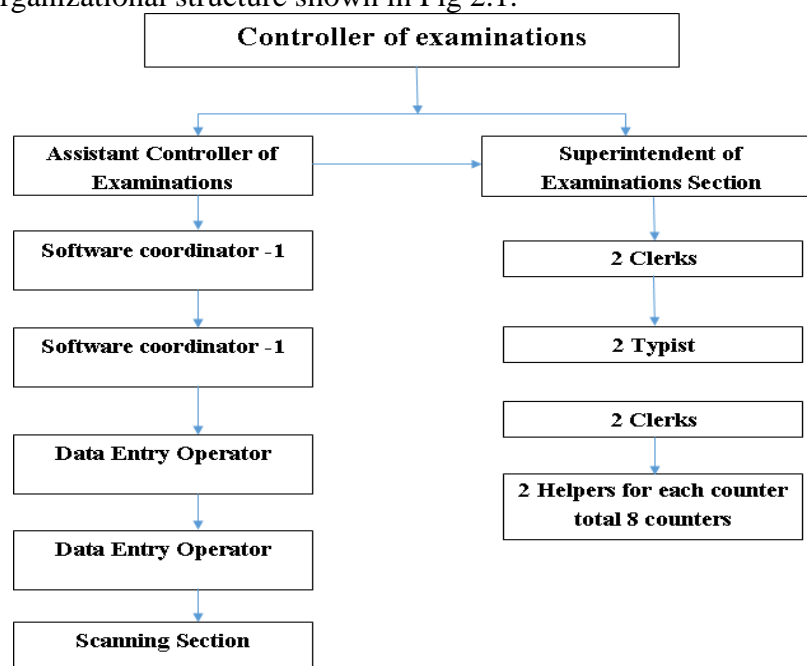


Fig 2.1: Organizational Structure of Examination Section

- In the beginning of autonomous, in the year 2010 Institution had two CIE (Continuous Internal Evaluation) and one improvement test for student for genuine reasons like accident, illness and other problems
- Students were allowed to carry 4 subjects from first year to final year at any point of time during his course of period
- In the year 2013-14 based on the request made by the students, the PEC and academic council approved to give three CIE (continuous internal evaluations) and to consider best of two to announce the final marks.
- In the year of 2015-16 the academic council implemented a condition for the vertical progression of the students from I year to III year and II year to IV year, i.e., the student shall

clear all the subjects of I year and can carry 4 subjects of II year for III year (V semester) and the student shall clear all the subjects of II year and can carry 4 subjects of III year for IV year (VII semester).

- The valuation system in the year 2010 was single valuation and 20% moderation for each packet which contains 10 scripts
 - In the year of 2013-14, double valuation system is introduced to have more transparency in the valuation system i.e., first valuation is done by internal examiner and the second valuation is done by external examiners. If the difference of two valuations of any script becomes more than 15 marks, then such scripts goes to third valuation and is done by external valuer. Considering the the minimum difference between the two among the three assessments will be considered for the announcement of grade.
 - From the beginning of Autonomous 2010, revaluation system was introduced. In the year the 2015-16 challenging valuation system is introduced with photocopy of the requested subject.
 - In the year 2015-16, digital valuation system was successfully introduced for few subject during the summer semester and during odd semester of 2015 for two branches i.e., IEM, ML department as trial.
 - After success of pilot project the Management and Principal decided to go for all 10 under graduate programme for digital valuation system as per the decision the autonomous examination section implemented the Digital Valuation system
 - Later, during the Even semester 2016 DVS is implemented for all 10 under graduate programme and it was successful
 - Due to this the result announcement was made in time, the human intervention is reduced by 20% in the phase I packeting of answer booklets, other security activities like coding and decoding, tearing and pinning of the answer booklet and as per the experience the human intervention can be reduced up to 40% like entering of the marks which are awarded by the valuers and verification of marks and total marks.
 - For issuing of photo copy of answer book to the student was done by manually and the time consuming was more. Due to DVS (Digital Valuation system) the time and the effort made is very less to give photocopy and the student waiting time is reduced drastically.
 - Storing of answer books space in the examination section doesn't require huge space and all the answer scripts are stored in digital form.
 - This will help in NBA analysis for outcome attainment as per outcome based education.
-

2.5.10. What is the mechanism for redressal of grievances with reference to evaluation?

- In case of CIE for all theory courses, the evaluated answer-books are shown to individual student. The corrections/queries raised by students are addressed by the theory Course-teacher. The genuine and legitimate changes or corrections are effected by Course-teacher before entering marks in the mark-list.
- The photocopy of answer-book of SEE is also available for the student on demand with payment of applicable fees. Facility for Revaluation of SEE answer books is available for the student on demand with payment of applicable fees.

2.6. Student Performance and Learning Outcomes**2.6.1. Does the College have clearly stated learning outcomes for its programmes? If yes, give details on how the students and staff are made aware of these?**

YES - , the Institute has clearly stated the learning objectives in terms of Program Educational Objectives- **PEOs** and learning outcomes (in term of Program Outcomes- **POs** and Course outcomes – **COs**) for each program. POs are met through the attainment of course outcomes of all courses concerned with that program PEOs define the capabilities, the graduates of the programme are expected to achieve over a period of three to four years of their graduation while the POs define the capabilities the students of a program are expected to achieve at the time of graduation. Programme Outcomes are in line with the Graduate Attributes (12 Nos) defined by National Board of Accreditation, India Since PEOs describe the career and qualification accomplishment of the graduates, the statements are almost common to all the programs. These statements give emphasis on knowledge, skill and attitude. This is includes:

PEO1: Demonstrate technical competency by applying knowledge to solve problems related to engineering issues.

PEO2: Exhibit skills and appropriate attitude to succeed in their professional career.

PEO3: Display thirst for emerging technologies and quest for innovation with concern to society and environment.

Program outcomes, though in line with Graduate attributes, vary slightly from program to program. The POs of UG program of Electronics and Instrumentation Engineering are presented below as an example.

Course outcomes, the abilities of the students at the end of every semester for each course is defined by the respective course coordinators.

The PEO, POs and COs are reviewed by Board of Studies/ Departmental Advisory Board at the beginning of every academic year and are made available to respective stakeholders by following means:

- Both PEOs and POs are displayed on college website: <http://www.dr-ait.org>

- PEOs, POs and COs for all the courses of every programme are displayed in the curricular book and is distributed to all the students
- The outcomes expected from the students for the programme are displayed at prominent places in the department.
- Apart from this, the outcomes expected from the students are decimated by faculty members in the orientation classes / beginning lecture at every semester.

2.6.2. How does the institution monitor and ensure the achievement of learning outcomes?

The following direct and indirect methods of assessment are identified for assessing the achievement of learning outcomes:

1. Direct method

- Continuous Internal Evaluation (CIE)
- Semester End examinations
- Practical tests
- Project

2. Indirect method

- Employer Survey (Industry Survey)
- Alumni Survey
- Graduate exit survey
- Course end survey

All direct and indirect assessment tools are rigorously used by all faculty members of all programs throughout the semester. The attainment of course outcomes is computed by all faculty members for their respective courses through direct assessment tools with weightage of 80% and Course Exit Survey with weightage of 20%. The Program Coordinator of each program collects this information from Course Coordinators and implements compute attainment of Program Outcomes as mapped to Graduate Attribute.

The attainment of POs for academic year 2013-14 by UG program in Telecommunication Engineering and Computer Science Engineering (as an example) against expected attainment level of 75% for each PO is graphically depicted below (Fig 2.2 and Fig 2.3).

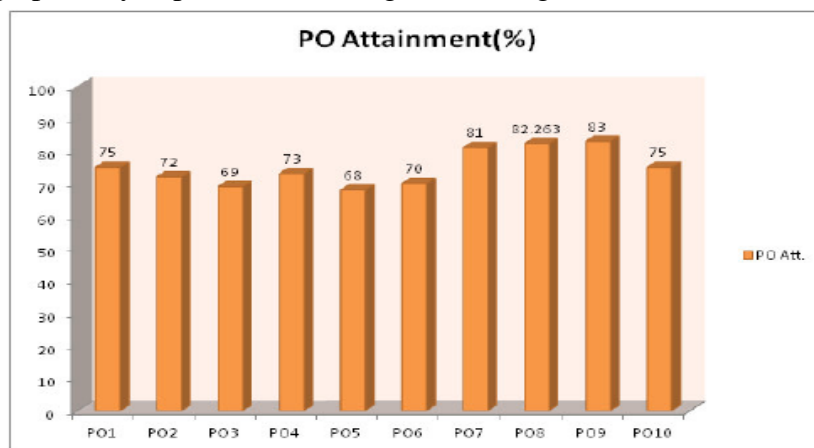


Fig 2.2. PO attainment chart for Telecommunication Engineering during 2013-15

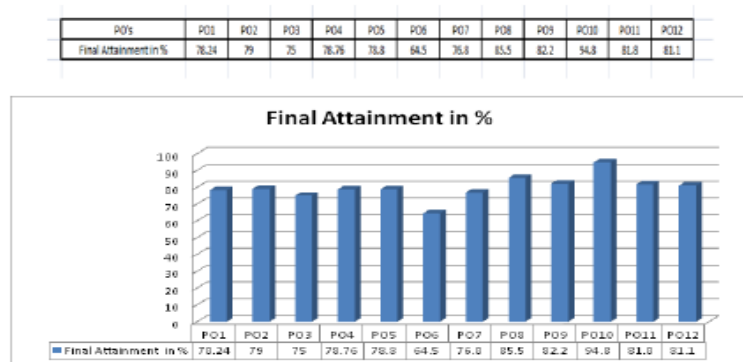


Fig 2.3. PO attainment chart for Computer Science Engineering during 2013-15

Note: Apart from the above methods, the institute encourages the following to attain the learning outcomes:

- Training programmes for continuous update of knowledge by industrial experts/faculty from premier institutions
- Inclusion of theory, projects, assignments and practical for effective learning
- Conducting remedial classes for slow learners.

2.6.3. How does the institution collect and analyze data on student learning outcomes and use it for overcoming barriers of learning?

Section 2.6.2 presents the methods adopted to collect the data required for computation of attainment POs in detail. Few of the additional details are as given below:

- All faculty members collect the academic data of the students in the CIE as well as at the SEE results (Direct assessment)
- The institute also collects the following surveys to assess the attainment of learning outcomes regularly (Indirect assessment):
 - Graduate exit survey (Once per Year)
 - Course exit survey (Once per semester)
 - Alumni survey (Once per Year)
 - Employer survey (Once per Year)
- The attainment of course outcomes is monitored twice in a year using both direct and indirect assessment tools. The course outcome attainment reports are prepared and analysed once per semester by each faculty and are discussed in the department meeting. Proper action is planned with suggestions from BOS/DAB to overcome the shortcomings mentioned in the report for the subsequent semester.
- If there is a discrepancy in the targeted and attained level of outcome as observed by individual faculty or mentioned in the report, a critical analysis is carried out by each concerned faculty to find out the causes.
- Such findings are discussed in the department meeting and common causes for low attainment of outcomes are discussed.
- An appropriate action plan (e.g., conduct of remedial classes, addressing weak students, repeating the difficult topics, inviting guest lectures etc.) with suggestions from BOS/DAB to overcome

the shortcomings mentioned in the report for the subsequent semester is scheduled and executed.

- A close monitoring is done for the implementation of the suggestions to finally crosscheck the improvement in the attainment.

2.6.4. Give Programme-wise details of the pass percentage and completion rate of students.

Table 2.24.a: Pass Percentage and Completion Rate (UG)

Pass percentage and Completion rate of Final Year B. E - All UG Programmes										
Programme	Academic Year	Total No. of Students	No. of students passed	Distinction	First Class	Second Class	Pass	Fail	Pass %	Completion rate (%)
Civil Engg.	2015-16	130	86	76	8	2	86	44	66.1	66.1
	2014-15	79	68	65	3	-	68	11	86.07	86.07
	2013-14	71	71	65	6	-	71	0	100	100
	2012-13	74	69	66	3	-	69	5	93.24	93.24
Mechanical Engg	2015-16	147	147	143	04	-	-	-	100	100
	2014-15	141	141	136	05	-	-	-	100	100
	2013-14	148	148	116	30	2	-	-	100	100
	2012-13	136	131	109	22	-	-	5	96	96
Electrical & Electronics Engg	2015-16	68	65	63	2	-	-	-	95.5	90.2
	2014-15	67	67	58	9	---	67	-	100	100
	2013-14	64	61	54	7	---	61	3	95.3	100
	2012-13	60	60	54	6	--	60	--	100	100
Electronics & Commun. Engg	2015-16	158	124	122	2	0	0	2	98.38	79.11
	2014-15	159	147	145	02	00	00	12	92.4	92.4
	2013-14	150	131	128	03	00	00	19	87.3	90.66
	2012-13	135	119	66	46	07	00	16	88.14	90.3
Industrial Engineering and Management	2015-16	29	27	16	11	nil	nil	2	93	74%
	2014-15	29	27	17	11	1	--	--	93%	
	2013-14	22	22	21	1	--	--	--	100%	
	2012-13	27	27	25	2	--	--	--	100%	
Instrumentation Technology	2015-16	55	53	33	13	07	53	2	96%	98%



	2014-15	56	48	7	1	0	56	0	100	100
	2013-14	33	29	4	0	0	33	0	100	100
	2012-13	27	27	0	0	0	27	0	100	100
Computer Science & Engg	2015-16	137	137	71	63	03	00	00	100	
	2014-15	140	140	110	15	15	140	NI L	100 %	
	2013-14	140	140	100	20	10	140	NI L	100 %	
	2012-13	135	133	119	14	NIL	133	02	98.51	98.51
Telecommunication Engg.	2015-16	68	64	64	Nil	Nil	64	4	94	94
	2014-15	74	72	72	-	-	72	2	97.29	98.65
	2013-14	70	68	68	-	-	68	2	97.14	97.14
	2012-13	69	66	44	22	-	66	3	95.65	98.55
Information Science & Engg	2015-16	64	62	53	9	-	62	2	97	
	2014-15	69	65	50	15	-	65	4	100	
	2013-14	64	64	54	10	-	64	-	100	
	2012-13	74	71	63	8	-	71	3	96	
Medical Electronics	2015-16	22	18	16	2	-	18	4	82	82
	2014-15	22	18	16	02	-	18	04	81	81
	2013-14	21	20	17	03		20	01	95	95
	2012-13	25	22	17	05		22	05	88	88

Table 2.24.b: Pass Percentage and Completion Rate (PG)

Pass percentage and Completion rate of All PG Programmes										
Program me	Academic Year	Total No. of Students	No. of students passed	Distinction	First Class	Second Classes	Pass	Fail	Pass %	Completion rate (%)
MCA	2014-15	45	45	45	-	-	-	-	100	100
	2013-14	59	59	59	-	-	-	-	100	100
	2012-13	60	60	60	-	-	-	-	100	100
MBA	2014-15	42	33	11	22	nil	33	9	79 %	30/43=70 %
	2013-14	57	51	7	43	1	51	6	89 %	54/48=89 %
	2012-13	52	48	9	39	Nil	48	4	92 %	53/59=89 %



M.Tech (Computer Science and SE)	2014-15	22	22	22	NI L	NIL	22	NI L	100 %	100%
	2013-14	25	22	22	NI L	NIL	22	03	88 %	88%
	2012-13	25	25	25	NI L	NIL	25	NI L	100 %	100%
M.Tech (VLSI and Embedded system Design)	2014-15	17	17	17	00	00	00	00	100	100
	2013-14	16	16	16	00	00	00	00	100	100
	2012-13	18	18	18	00	00	00	00	100	100
M Tech (Power Electronics)	2014-15	13	13	13	---	---	13	---	100	100
	2013-14	16	16	16	---	---	16	---	100	100
	2012-13	17	17	17	--	---	17		100	100
M Tech (Digital Commn. & Networking)	2014-15	18	16	16	--	--	16	100	100	88.88
	2013-14	17	16	12	04	--	16	1	100	94.11
	2012-13	17	17	11	06	--	17	--	100	100
M Tech (Structural Engineering)	2014-15	18	18	18	-	-	18	-	100	100
	2013-14	17	17	17	-	-	17	-	100	100
M. Tech (Machine Design)	2014-15	21	21	07	11	02	-	01	99	99
M. Tech (Computer Networking)	2014-15	24	23	23	-	-	-	-	23	100
M.Tech (Electronics)	2015-16	NA								

Any additional information regarding Teaching, Learning and Evaluation, which the institution would like to include.

CRITERION – 3: RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research**3.1.1. Does the College have a research committee to monitor and address the issues of research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.**

YES- . A Committee known as Research Promotion and Review Committee (RPRC) was constituted in 2010 to encourage and monitor the research activities of faculty and students. The committee is presently headed by Dr. Vijay Kumar, Professor, Department of Computer Science and Engineering. All the Heads' of the Department and Ph.D. holders are members of the Committee. Financial assistance is extended to faculty and students for presenting their research papers in national and international conferences. Some of the recommendations of the Committee and their impact:

Recommendations:

- Motivate faculty and students to inculcate research culture
- Motivate faculty to publish quality research papers.
- Motivate faculty to organize seminars/workshops/conferences
- Motivate faculty to obtain R&D Grants from external agencies
- Extending incentives to faculty for obtaining R&D Grants from external agencies
- Performance appraisal of faculty linked to research output
- Motivate faculty and students to patent their novel research ideas.

Impact:

- A marked improvement in the quality of the student's research projects
- A marked improvement in the quantity and quality of the research publications by the faculty.
- A marked improvement in the number of conferences/workshops/seminars organized by the faculty at the college
- A marked improvement in the number of faculty and students participating in conferences/seminars/workshops
- A slight improvement in the number of R&D grants obtained by the faculty from external agencies.
- A marked improvement in the number of faculty pursuing PhD programme.

3.1.2. What is the policy of the College to promote research culture in the College?

The research culture among the faculty and students is promoted in many ways by the college at various levels. Some of the policies are:

- Opening of University recognized Research centers. Now, the College has sixteen R&D centers recognized by VTU Belagavi,

which facilitate various research activities including registration to MSc (By research) and Ph.D degree.

- Conduction of the relevant workshops/training programs to enhance the knowledge on the research activity related to cutting edge technologies.
- Motivating and Encouraging Students in the form of financial assistance to carry out projects with industrial and societal applications.
- Faculty and students are encouraged to present and publish papers at reputed conferences and high impact factor journals with financial support.
- Faculty are encouraged to pursue higher studies at reputed institutions like IISc and IIT
- Encouraging both post graduate and undergraduate students to participate in funded/ research oriented projects

3.1.3. List details of prioritized research areas and the areas of expertise available with the College. – Department wise info

Table 3.1: List of Research areas and expertise available in respective departments.

Sl. No.	Department	Prioritized Research Area	Name of the Expert
1	Civil Engg.	Structural engineering	Dr. M N Hegde, Dr B Shivakumaraswamy H R Srinivasa
		Concrete Technology	Dr B Shivakumaraswamy Dr. S Vijaya
		Environmental Engineering	Dr C Nanjundaswamy Dr K V Lokesh Dr S D Venkatraja Mohan Dr C Chandraasekar R Madhusudan H Antharam
		Water Resources Engineering	Dr K V Manjunath Dr S G Ramachandraiah G P Manjunath
		Geotechnical Engineering	M R Suresh Dr S Vijaya Dr S D Venkatraja Mohan
		Transportation Engineering	T Chandrasekaraiah
2	Mechanical Engg	Studies on Gadolinium Oxide doped Zirconia thermal barrier coating	Dr. L. Chandrasagar
		Experimental Study and Optimization Of Machining Parameters During Turning Of Aluminium Mixed With Anthill Sand.	Dr. H M Somashekhar
		Numerical and experimentation investigation of lower thermal conductivity and thermal barrier coatings	Dr. K M Narayanappa
		Study of polymer materials used as biomaterial	Dr. Gangadhar Shetty
		Control parameters affecting twin roll forming of glass fibre reinforced plastic composite laminate	Dr. Sathish S



3	Electrical & Electronics Engg	High Voltage Engineering	Dr. B V Sumangala
		Power Electronics	Dr. Jyoti P Koujalagi
		Power Systems	Dr. Shankaralingappa
4	Electronics & Commun. Engg	RFID, Embedded system, WSN, Nanodevice simulation	Dr.K.M.Rajanna
		Power Electronics, Embedded System, Renewable Energy	Dr.G.V.Jayaramaiah
		Microstrip Antennas, MSICs, MMICs, VLSI circuits	Dr Jambunath S Baligar
		Digital Communication, Digital Signal Processing, Cryptography and Network Security	Dr Mahalinga V Mandi
		Digital communication, Cryptography & Network Security, VLSI Design	Dr Ramesh.S
		Image processing	Dr.K.Ramesha
5	Industrial Engineering and Management	Welding (manufacturing)	Dr. G. Rajendra
		Composite	Dr. N.Mohan
		Composite	Dr. C.R.Mahesha
6	Instrumentation Technology	Controls, Guidance and Instrumentation, Signal Processing	Dr. M. Meenakshi
		Embedded Systems	Prof. M. Prasannakumar
		Medical Imaging	Prof. Ganapathi V Sagar
		Image Processing	Prof. Sreedevi. N
		Image Processing	Prof. Shubha P
7	Computer Science & Engg	Neural Networks, Wireless Sensor Networks	Dr.Siddaraju
		Internet of Things, Data Science	Dr.S.Gowrishankar
		Wireless Sensor Networks	Dr.Mary Cherian
		Robotics	Dr.M.V.Vijaya Kumar
8	Telecommunication Engg.	Wireless Communication	Dr. B. Sivakumar
		Wireless Sensor Networks	Dr. Yamuna Devi C R
		Image Processing	Dr.Prashanth C.R.
9	Information Science & Engg	VANETs, Cloud Computing	Dr.B.S.Shylaja
		Wireless Sensor Networks Big Data Analytics	Dr. Nandini Prasad.K.S
		Wireless Sensor Networks	Dr.Prabha.R
10	Medical Electronics	Image Processing	Dr.K J. Shanthi

11	MBA	-	-
12	MCA	Software Engineering	Dr .L Manjunath Rao
		Data Mining and image processing	Dr. S Bharathi
		Software Engineering	Dr.Chandra kanth G Pujari
		Networks	Dr.Indumathi
13	Mathematics	Graph Theory and Combinatorics	Dr. Sooryanarayana, Dr. Murali and Dr. Jayalakshmi
		Differential Geometry	Dr. Shivaprasanna
		Magneto hydro dynamics	Dr. Nanjundappa
14	Physics	Nanoscience	Dr. T. Sreenivasulu Reddy
		Nanoscience	Dr. K.N. Anuradha
15	Chemistry	Synthesis of nano metal oxides	Dr. Jahagirdhar
		Green chemistry & Environmental chemistry	Dr. Veena Devi
16	HSS	-	-

3.1.4. What are the proactive mechanisms adopted by the College to facilitate smooth implementation of research schemes/ projects?

- **advancing funds for sanctioned projects**
- **providing seed money**
- **autonomy to the principal investigator/coordinator for utilizing overhead charges**
- **timely release of grants**
- **timely auditing**
- **submission of utilization certificate to the funding authorities**

Advancing funds for sanctioned projects:

Advance is released as seed grant from the college in case of delay in the release of the grants from the sanctioning authority for the funded projects.

Providing seed money:

Seed money is provided for promoting research activity to Principal Investigator (PI), based on the priority of the research.

Autonomy to the principal investigator/coordinator for utilizing overhead charges:

The amount received goes to the Head of the Institution's account, PI can justify and utilize the overhead for research with prior permission of Head of the Institution.

Timely release of grants:

The funds released will be jointly handled by the PI and the head of the Institution. Hence, no delay in release of grants. If required seed money is also provided for satisfactory and timely completion of the projects.

Timely auditing:

Timely auditing is performed both internal and external auditors

Facilitating the timely submission of utilization certificate to the funding authorities:

Principal and PI submit the utilization certificate along with the auditor's report to the funding authorities as per the prescribed format by the funding agencies.

3.1.5. How is interdisciplinary research promoted?

- **between/among different departments of the College and**
- **collaboration with national/international institutes / industries.**
- The Institute appreciates Interdisciplinary research activity and encourages faculty of different Departments to join together for collaborative research projects in the Interdisciplinary areas. Recently The Department of Mechanical Engineering proposed Center of Excellence involving multiple departments like Mechanical Engineering, Electronics and Instrumentation & Electronics and Communication Engineering.
- Being an autonomous Institution, the curriculum of all UG programmes has Interdepartmental and departmental electives through which students are encouraged to choose projects of interdisciplinary nature. Apart from this, the students have access to faculty and all the facilities in other departments apart from their parent department. Some of the UG projects, PG dissertations are interdisciplinary.
- MOUS are signed with leading MNCs to carry out collaborative research activities, students Internships, Students Projects etc.

3.1.6 Enumerate the efforts of the College in attracting researchers of eminence to visit the campus and interact with teachers and students?

- The HODs' and faculty are advised to invite eminent scientists/academicians to deliver guest lectures in their respective departments.
- The HODs' and faculty are advised to invite eminent scientists/academicians to deliver keynote addresses at the conferences/workshops/seminars being organized at the institute, thus creating a platform for the faculty and students to interact with these experts.

3.1.7. What percentage of faculty have utilized sabbatical leave for research activities? How has the provision contributed to the research quality and culture of the College?

Since there is no provision for sabbatical leave, the college encourages the aided faculty to avail the Q.I.P. programme and the un-aided faculty to utilize part time programmes to improve their qualifications (P.G. and PhD). As a result of this, a substantial number of faculties have improved their qualification from P.G. to PhD.

3.1.8. Provide details of national and international conferences organized by the College highlighting the names of eminent scientists/scholars who participated in these events.

Table 3.2: Details of National and International Conferences organized by the college

Sl. No	Organizing Department	Title of the Conference National (N) & International (I)	Period	Name of the eminent participant/Organization
1.	Instrumentation Technology	First National conference on Computational Control Systems and Optimization CCSO 2011	12 th - 13 th April 2011	Dr.M.M.Nayak Dr. Jagadish Dr.K.Rajanna Dr.Ratna
		Second National conference on Computational Control Systems and Optimization CCSO 2013	11 th - 12 th April 2013	Dr.C.P.Ramanarayanan Dr.K.L.S.Sharma
		Third National conference on Computational Control Systems and Optimization CCSO 2015	22 nd - 23 rd April 2015	Dr.M.M.Nayak Prof.M.Sitaram Bhat
2.	TE	Third National Conference On “Wireless Control & Communication Technologies”,(NCWCT-2015)	27th & 28th April, 2015	Sri Ranganath Mahapatra, Associate Vice President, Sasken Communication Technologies, Bangalore Sri Sreenivas S. Director, Solipsys Labs India Pvt. Ltd., Bangalore
		Second National Conference on Wireless Control & Communication Technologies	24th & 25th April 2014	Dr.C.Rao Kasarbada, Advisor, UTL, Bangalore Mr.Muktesh Phadke, Director – NIHON Communications Solutions(Pvt.Ltd.), Ex-Scientist,PRL, ISRO,Bangalore. Sri Babu Atur, CEO,Vitri Systems, Bangalore
		First International Conference on Information and Communication Engineering (ICICE-2013)	28th & 29th June 2013	Mr.K.K.Goswamy, Director – HAL, Edge Technologies (Pvt.Ltd.), Bangalore. Mr.Muktesh Phadke, Director – NIHON Communications Solutions(Pvt.Ltd.), Ex-Scientist, PRL, ISRO, Bangalore. Dr.G.Sainarayanan, HCL Technologies, Chennai
		First National Conference On “Wireless Control & Communication Technologies”, (NCWCT-2011)	27 th - 28 th April 2011	Prof.Dr.H.S.Sheshadri, PES College of Engineering Prof. Dr.Nataraj, SJBIT,Bangalore

3.	Maths	National conference on Graph Coloring”	July 27-28, 2013.	Dr.Kartik , Professor, ISI, Madras Dr. S.A. Choudam, Professor, IIT, Madras R.Balakrishnan , Professor, Anna University E.Sampathkumar , Professor, Mysore university Dr.Vasudev , Professor, SIT, Mangalore Dr.Francis Raj, Professor, Pandicheri University Dr.T.Kavaskar, Professor, Pandicheri University Dr. Hampi holi, Professor, GIT, Belgaum Dr.Sunil Chandra, Professor, IISc., Bangalore Dr. NS Sastry, Professor, ISI, Bangalore
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3.1.9. Details on the College initiative in transferring/advocating the relative findings of research of the College and elsewhere to the students and the community (lab to land).

College supports the faculties in following ways to ensure that the knowledge developed through research is disseminated:

- Support for establishing MoUs with industries so the products can be developed based on research findings.
- Research findings are published in peer-reviewed journals both at the national and international levels.
- Research findings are presented both at the national and international conferences.
- College encourages faculty to innovate and apply for patents.
- UG students are given parts of the research work as projects and are encouraged to innovate and get an experience of working on real-time projects.

3.1.10. Give details on the faculty actively involved in research (Guiding student research, leading research projects, engaged in individual or collaborative research activity etc.)

Table 3.3: Faculty Actively Involved in Research

Sl . N o.	Department	Name of faculty	Guidanc e		No. of Publicat ions	Funde d Resea rch Proje ct	Research Projects/Areas
			M Sc En gg	Ph D			
1	Civil Engg.	Dr C Nanjundas wamy	Nil	02	08	Nil	Nil
		Dr B Shivakuma raswamy	Nil	03	15	VTU	Health Monitoring and Repair and Rehabilitation of Structures



		Dr. M N Hegde	Nil	04	30	VTU	Health Monitoring and Repair and Rehabilitation of Structures
		Dr. S Vijaya	Nil	01	08	VTU	Health Monitoring and Repair and Rehabilitation of Structures
		Dr K V Lokesh	Nil	02	06	Nil	Nil
		Dr S G Ramachandraiah	Nil	01	13	Nil	Nil
		Dr S D Venkatraja Mohan	Nil	02	18	Nil	Nil
		Dr. Chandrasekar	Nil	01	03	Nil	Nil
2	Mechanical Engg	Dr. L. Chandrasagar	-	04	10	04	Materials Characteristics
		Dr. H M Somashekhara		0	15	01	Machine Properties
		Dr. K M Narayanappa		02	15	01	Materials Characterization
		Dr. Gangadhar Shetty		02	10	01	Metal Matrix Composites
		Dr. T N Raju		02	05	01	Metal Matrix Composites
		Dr. Sathish S		01	06	00	Metal Matrix Composites
3	Electrical & Electronics Engg	Dr. B.V. Sumangala	Nil	07	39	1.)10 lakhs 2.)19.34 Lakhs 3.) 20 lakhs	1.High voltage and Insulation 2.Power Electronics
		Dr. Shankaralingappa C B	Nil	07	15	--	Power systems
		Dr. Jyothi P Koujalagi	Nil	07	19	--	Power Electronics
4	Electronics & Commun. Engg	Dr. K M Rajanana	Nil	04	18	Nil	Rfid, Set, Simulating Sensor Networks
		Dr.H Umadevi	Nil	03	19	Nil	Sensor, Ad-Hoc Networks And Antenna
		Dr.G V Jayaramaiah	01	05	19	01	Power Electronics, Embedded Systems, Interfacing Power Electronics Circuits To



							Renewable Energy Technology
		Dr. Mahalinga V Mandi	Nil	02	13	Nil	Spread Spectrum Communication, Cryptography And Network Security
		Dr. S Ramesh	Nil	04	09	Nil	Digital Communication, Cryptography And Network Security
		Dr. K Ramesh	Nil	08	16	Nil	Image Processing, Video Processing, Wireless Communication
		Dr. J S Baligar	Nil	07	14	01	Vlsi And Wireless Communication
5	Industrial Engineering and Management	Dr.G.Rajendra	2	2	2	1	Industrial Engineering Welding Technology
		Dr.N.Mohan	1	4	1	Nil	Tribology on Composite Materials
		C.R. Mahesha		1	1	Nil	Composite materials CFD
6	Instrumentation Technology	Dr. M. Meenakshi	01	05	85	01/VT U Sponsored	Controls Guidance and Instrumentation
7	Computer Science & Engg	Dr.Siddharaju		05	25	01	WSN
		Dr.Vijayakumar		05	50	01	AI
		Dr.S.Gowrishankar		01	04	Nil	Internet of Things, Data Science
		Dr. Mary Cherian		01	17	01	Computer Networks
8	Telecommunication Engg.	Dr. B Sivakumar		Ph D	88	01	Wireless communication, Image Processing
		Dr Prashanth C R		Ph D	10	00	Image Processing
		Dr Yamuna Devi C R		Ph D	07	00	Wireless Sensor Networks
9	Information Science & Engg	Dr. B.S. Shylaja		07	21		
		Dr. Nandini Prasad.K. S		05	64		
10	Medical Electronics	-					
11	MBA	-					
12	MCA	Dr .L Manjunath Rao		10	32	-	-
13	Mathematics	Dr. B. Sooryanarayana	-	16	47	2	Convection in Magnetic Nanofluids and in Dielectric fluids
		Dr. C. E. Nanjundappa	-	12	39	Nil	Nil
		Dr. R. Murali.	-	15	41	Nil	Nil
		Dr.Jayalakshmi M	-	02	Nil	Nil	Nil

1 4	Physics	Dr.K.N.Anuradha	---	04	08	01	Synthesis of Nanomaterials
1 5	Chemistry	-					
1 6	HSS	-					

3.2 Resource Mobilization for Research

3.2.1. What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization for last four years.

Table 3.4: Percentage of Total Budget Earmarked for Research

Item	Budgeted in CFY 2016-17 (₹)	Expenses in CFY till June 2016-17 (₹)	Expenses in CFYm1 2015-16 (₹)	Expenses in CFYm2 2014-15 (₹)	Expenses in CFYm3 2013-14 (₹)	Expenses in CFYm4 2012-13 (₹)
Infrastructure Built-up	--	--	--	--	--	--
Library	3550000	2100	--	--	388181	21943
Laboratory equipment	31172000	1585169	1864705	12311005	1364469	6141831
Laboratory consumables	1902000	160989	542558	1107350	1006518	1655506
Teaching and non-teaching staff salary	4082.85 (in lakhs)	89834884	346484622	278003163	259256073	259255143
R&D	4704000	--	--	--	--	--
Training and Travel	40000	--	3240	--	--	98441
Other, specify	--	--	--	--	--	--

3.2.2. What are the financial provisions made in the College budget for supporting student research projects?

- The Institute supports the student's research projects under the research grant allocation by the management and TEQIP fund.
- Under the research head, students procure the components required for their experimentation work and avail registration fees for attending conferences to present their work.
- In addition student study visits/industrial visits are also supported by the college.

3.2.3. Is there a provision in the institution to provide seed money to faculty for research? If so, what percentage of the faculty has received seed money in the last four years?

There is a provision for seed money for research under TEQIP. In addition, every year, Institute earmarks notable amount of budget allocation under R/D head and current year 47 Lakhs of rupees are earmarked under R/D head. Approximately 20% of the faculty have

availed the facility of seed fund under TEQIP/institute fund in last four years.

3.2.4. Are there any special efforts made by the College to encourage faculty to file for patents? If so, provide details of patents filed and enumerate the sanctioned patents.

YES – The college has encourages the faculty to file for patent by extending the financials assistance. The list of patents filed is given in Table 3.5.

Table 3.5: Patents Filed by Faculty

No.	Title	Department	Persons Involved	Patent No. and Year
1	Artificial Kidney	Medical Electronics	Mr. Budhaditya Chattopadhyaya	01502/CHE/2006
2	An apparatus for purification of Blood and a process thereof (Artificial Kidney)	Medical Electronics	Mr. Budhaditya Chattopadhyaya	PCT/IN2007/000347 29.01.2008
3	A Biofuel Composition and a process thereof	Mechanical	Mr. Harishkumar Raju, Student Mr. Girikumar Kumaresh, Student Dr. P. Martin Jebraj	239957 15.04.2010
4	Filler rod coated and/or parent metal with slurry to introduce reinforcement into welding	Industrial Engineering & Management	Dr. P. Martin Jebraj Dr. G. Rajendra, HOD, IEM	IP10032/CHE/2008 2009-10
5	A Thin metal sheet, a process and an apparatus thereof	Mechanical	Dr. Martin Jebraj	249285 17.10.2011
6	Personalised Air Vehicle	Mechanical	1. Aashirwad Parasar, 2. Abhilash S Baddur, 3. Akshay Khatokar J 4. Kusumitha U 5. Nagappa RB - Students Mech Prof. V. Arun Kumar, Mech	Applied
7	Bearing Comprising smart materials	Mechanical (along with another education institution and Industry)	Prof. V. Arun Kumar, Mech	Applied
8	A remote control system to activate home appliances	CSE/IT	Dr. Siddaraju – Guide Karthik Rao BG – Student Sudhanshu Dixit – Student	Applied
9	Natural Vegetable seed based oil treated for use as Liquid Dielectric Coolant to meet the requirements for both power frequency and high frequency electrical applications	EE	Dr. B. V. Sumangala G. R. Nagabhushana S. Vasudevamurthy V. V. Champa	Under process



			A Narasimha Iyengar Nagashree	
10	A system and method for providing home based healthcare recommendations	CSE	Dr.Siddaraju, Dr.S.Gowrishankar, Damanpreet Kaur	Applied

3.2.5. Provide the following details of ongoing research projects

Table 3.6: Ongoing Research Projects

Sl. No	Name of the Coordinator	Dept.	Title of the Project	Amount (₹)		Funding Agency	Status
				Released (₹)	Sanctioned (₹)		
1	Dr. B V SUMANGALA & ERANNA	EE	INVESTIGATION ON SURGE PHENOMENA IN POWER TRANSFORMERS	10,00,000/-	10,00,000/-	AICTE	In Progress
2	Dr. BV SUMANGALA & VASUDEV MURTHY	EE	INVESTIGATION ON SUSTAINABILITY OF NATURAL VEGETABLE OIL AS DIELECTRIC FLUID IN TRANSFORMER	16,18,000/-	16,38,000/-	VTU	In Progress
3	DR.KN.ANURADHA	PH	SYNTHESIS OF NANO MATERIALS	5,00,000/-	5,00,000/-	VTU	In Progress
4	DR.M.MEENA KSHI	IT	DESIGN AND DEVELOPMENT OF AUTONOMOUS WHEELED ROBOTIC SYSTEM	8,94,000/-	8,94,000/-	VTU	In Progress
5	Dr. JAMBUNATH BALIGAR	EC	DUAL MODE RECONFIGURABLE COMPACT MICROSTIP FILTER	7,84,000/-	12,52,000/-	VTU	In Progress
6	DR.B.SHIVAKUMAR SWAMY & Dr. S VIJAYA	CV	HEALTH MONITARY REPAIR REHABILITATION OF RC STRUCTURAL ELEMENTS	10,74,000/-	10,74,000/-	VTU	In Progress
7	Dr. CE NANJUNDAPPA	MA	THERMAL MAGNETIC CONVENTION	3,05,000/-	4,00,000/-	VTU	In Progress
8	SK JAGADEESH	ME	SOLIDIFICATION OF ALLUMINIUM	9,45,000/-	9,45,000/-	VTU	In Progress
9	Dr. B SHIVAKUMAR SWAMY	CV	HEALTH MONITARY REPAIR.	3,54,000/-	3,54,000/-	VTU	In Progress
10	Dr. G V JAYARAMAIAH	EC	VOLTAGE CONTROLS	22,81,667/-	25,90,965/-	AICTE	In Progress
11	Dr. B. SHIVAKUMAR	TE	HARDWARE IMPLEMENTATION	8,50,000/-	8,50,000/-	AICTE	In Progress



12	DR. BV SUMANGALA	EE	INFRASTRUCTURE STRONGTHEN INH	10,00,000/-	10,00,000/-	DST	In Progress
13	DR. BV SUMANGALA	EE	CELL PHONE CHARGES	40,000/-	40,000/-	DST	In Progress
14	L CHANDRASAGAR	ME	AERONAUTICS R & D	6,10,000/-	31,55,000/-	DRDO	In Progress
15	Dr. B SHIVAKUMAR SWAMY	CV	BUILDING GRANTS	1,79,34,216/-	2,00,00,000/-	SC/ST BUILDING	In Progress
16	DR. SIDDARAJU	CS	SENSOR NETWORK DESIGN FOR DATA GATHERING FOR REAL TIME APPLICATION	8,50,000/-	9,50,000/-	AICTE	In Progress
17	DR. SHYLAJAS	IS	DESIGN AND DEVELOPMENT OF APPLICATION TO OPTIMIZE CLOUD STORAGE FOR CLOUDS USERS	2,10,000/-	2,30,000/-	AICTE	In Progress
18	DR. SHYLAJAS	IS	ENTREPRENEURSHIP DEVELOPMENT CELL	3,50,000/-	5,00,000/-	AICTE	In Progress
19	DR. MEENAKSHI	IT	UPGRADATION OF DIGITAL SIGNAL	8,00,000/-	8,00,000/-	AICTE	In Progress
20	DR. B SHIVAKUMAR	TE	ADVANCED DIGITAL COMMUNICATION SYSTEM DESIGN	7,00,000/-	7,00,000/-	AICTE	In Progress
21	DR. G.V. JAYARAMAIAH	EC	RECENT ADVANCES IN POWER ELLEN	2,25,000/-	2,50,000/-	AICTE	In Progress
22	DR. MANJUNATH HEDGE	CV	RECENT RESEARCH & DEVELOP	1,00,000/-	2,00,000/-	AICTE	In Progress
23	DR. B. SHIVAKUMAR SWAMY & Dr. S VIJAYA	CV	HEALTH MONITARY REPAIR REHABILITATION OF RC STRUCTURAL ELEMENTS	2,04,000/-		VTU	In Progress
24	Dr. BV SUMANGALA & VASUDEV MURTHY	EE	INVESTIGATION ON SUTABILITY OF NATURAL VEGETABLE OIL AS DIELECTRIC FLUID IN TRANSFORMER	2,96,000/-	12,42,000/-	VTU	In Progress

25	Dr. M.V. VIJAYA KUMAR	CS	TO MAKE A CENTER OF EXCELLENCE BY MODERNIZING THE CLASS ROOMS, LABORATORIES, TEACHING AND RESEARCH TOOLS	To be released	500000/-	VISION GROUP ON SCIENCE & TECH., Govt. of Karnataka	Yet to commence
26	Dr. B. SIVAKUMAR	TE	HANDS ON TRAINING AND IMPLEMENTATION OF COMMUNICATION THROUGH MATLAB	7,00,000 /-	7,00,000 /-	AICTE	Yet to commence

3.2.6. How many departments of the College have been recognized for their research activities by national / international agencies

All departments of the college have been recognized by one or the other agencies. The recognizing agencies include AICTE, DST, DRDO, VTU, KSCST, VGST etc.

3.2.7. List details of completed research projects undertaken by the College faculty in the last four years and mention the details of grants received for such projects (funded by Industry/ National/International agencies).

Table: 3.7. completed research projects by Faculty in the last four years

Sl. No	Year wise	Dept	Faculty Name	Title of the Project	Sponsoring Agency	Amount (₹)
1	2015-16	IM		Bearings	AICTE	15 Lakhs
		TE	Dr. B. Shivakumar	Hardware Implementation of Object Recognition and tracking using Image Processing Algorithm	AICTE	9.5 Lakhs
2	2014-15	Nil				
3	2013-14	EEE	Dr. B. V. Sumanagala	Investigations on Suitability of Vegetable Seed Oil for use as Liquid Dielectric. -	VTU	19.34 Lakh
		EC	Dr. J. S. Baligar		VTU	12.75 Lakhs
		IT	Dr. M. Meenakshi	Design and Development of Autonomous Wheeled Robotic system	VTU	12.87 Lakhs
4	2012-13	EEE	Dr. B.V. Sumangala	Investigations on Surge Phenomenon in Power Transformers	AICTE	10.00Lakhs
		IM		Welding of MMC using TIG welding.	AICTE	7.0 Lakhs

3.3 Research Facilities

3.3.1. What efforts are made by the College to keep pace with the infrastructure requirements to facilitate Research? How and what strategies are evolved to meet the needs of researchers?

- The college has initiated many activities to procure equipment and refurbishment works in various departments to facilitate research work.
- Every year college allocates R/D fund and all departments are facilitated to procure equipment, instruments, software etc to carry out R&D at respective research centers.
- Faculty are encouraged to submit research proposals to various funding agencies and project specific equipment have been procured in various departments
- Refurbishment works are carried out to provide required space and environment for the conduct of research activities.
- College has digital library with high speed Internet and access to many reputed National and international journals like Springer, IEEE, and Elsevier.
- Library is added with latest edition of reference books, manuals, periodicals, encyclopedias, e-books and handbooks.
- Wi-Fi facility is available in many parts of college campus. The researchers are provided with the facility of access to DELNET

Strategies adopted to meet the researchers requirements:

- Training need is collected from every faculty member involved in research to facilitate them in enhancing their knowledge in their interested area of research.
- Research Centres recognized by VTU have been setup.
- Interdisciplinary research facility is encouraged.
- Seed money is granted to researchers.
- Travelling and sundry expenditure is born by the college for presentation of project proposals
- Guest lectures are arranged in various upcoming areas of research.
- Industry Institute Interaction has been strengthened through MOUs with multinational companies.
- Experts from R&D organizations are invited to educate faculty on various avenues for research funding.

3.3.2. Does the College have an information resource centre to cater to the needs of researchers? If yes, provide details on the facility.

YES- . Information resource centre exists in the central library to cater the need of researchers. The central library provides facility for Online Public Access Catalogue (OPAC), E-Learning Resources, Science Direct, Springer Link, DELNET and Open Sources through digital library. The research publications by the faculty and students are also available in respective departments. In addition to the central library departmental libraries also cater to the needs of researchers.

3.3.3. Does the College provide residential facilities (with computer and internet facilities) for research scholars and faculty?

NO- Residential facility to the research scholars and faculty is not provided. But on request research scholars given accommodation in the hostel with Wi-Fi Connectivity. College has given very good opportunities to the research scholars to use the Laboratories, Libraries, Digital library at any time.

3.3.4. Does the College have a specialized research centre/ workstation to address challenges of research programmes? If yes, give details.

All the departments has VTU recognized research centers and established good laboratory with well-equipped facilities to carry out R/D activities. There are few specialized and sponsored laboratories like Virtual Instrumentation Laboratory, High Voltage Laboratory, and ARM Laboratory etc. The details of facility available are listed in Table 3.8

Table. 3.8. Specialized laboratories and facilities available

Sl. No	Department	Name of Laboratory	Research facility available
1.	Civil Engineering	Building Materials Testing lab	CTM – 2(100 T, 100 T) UTM- 2(100 T, 40 T), Compressometer with digital dial gauge, Torsion testing machine, Universal Pendulum Impact testing machine (2Nos), Hardness testing machine(Rockwell (02nos), Brinell, Vicker's) Universal Wood testing machine, Fatigue Testing machine, Spring Testing machine, Digital strain indicators, Digital load indicator, Compressometer, Mechanical demontable gauges, Slide calipers, Extensometers, Screw gauges and Dial gauges
		Geotechnical Engg. Laboratory	Consolidation test Apparatus, Direct shear test apparatus, Unconfined compressive strength, Permeability test apparatus, Constant and variable head permeability test apparatus, Triaxial test apparatus, Laboratory vane shear apparatus, CBR apparatus with load frame and accessories, Casagrande liquid limit apparatus, Swell pressure apparatus, Plastic limit apparatus, sand replacement equipment, core cutter accessories, consolidation apparatus 4 gangs, shrinkage limit apparatus, SPT device, muffle furnace, automatic cone penetrometer, infrared moisture meter, moisture content determination (0-25 & 0-50), OMC mould, proving rings, moulds, sieves, electronic weighing balances and all related accessories,
		Highway &	Compression testing Machine



		Concrete Materials Testing Laboratory	(03nos), Benkelman beam equipment, core test apparatus, Los Angeles Abrasion machine, Aggregate Impact testing machine, Ductility apparatus, Standard tar viscometer, Vee-bee Cosistometer, Cement autoclave, Compaction factor apparatus, Slump cone apparatus, Flexural testing machine, Flash and fire apparatus, Marshall test apparatus, Air permeability apparatus, Bitumen penetrometer, impact testing machine including cup and tamping rod, concrete drum mixer, bituminous marshall stability apparatus, cube vibrating machine, compressometer, vicat apparatus, flow table, sieve shaker, briquette testing machine, tile abrasion testing machine, beam, cylindrical and cube moulds, le-chatlier apparatus, Thermostatically controlled oven, north Dakota cone apparatus, test sieves (fine and coarse series), sieve shaker, pycnometers, measuring jars (different cap.), calipers, scales, screw gauges and all related accessories
		Structures lab II	Loading frame, Flexural testing apparatus (10 T), Digital Rebound hammer, Load cell (25, 50, 100T), Air permeability apparatus, J-Ring, L-Box, U-Box, and V-funnel apparatus, Concrete mixer, Concrete mixer (pan mixer), Demec gauges, Hydraulic jaks (25, 50, 100T), LVDT's (100, 150, 200mm), Beam, Cylindrical and Cube moulds, Weighing balance (500 kg cap.)
		Environmental Engg. Laboratory	UV-VIS spectra photometer, conductivity meter, flame photometer, BOD incubator, COD digester, digital pH meter, Hot air Oven, Turbidity meter, muffle furnace, Jar Test apparatus with six blades, water/waste analysis spectrometer, digital nephelometer, scanning visible spectrophotometer, respirable dust sample high volume air sampler, Erma colorimeter, ostra gas analysis, magnetic stirrer, Kjeldhal apparatus, centrifuge with swing out head, flame photometer, gas generator, nessler tubes and stands, suction apparatus filter pump, D.O. meter, digital colony



			counter, compound microscope, distillation unit, electronic digital balance, ice box, inhoff cone, BPL refrigerator, Beakers, Conical flasks, BOD bottles, pipettes and all related accessories.
		Survey	Total Station –Pentax make (07 nos), Sokkia power set series (01) no., With all standard accessories, Autoset levels, Electronic theodolites (06 Nos) with all standard accessories, Transit vernier theodolites, Compasses (prismatic, Surveyor's, Brunton, Liquid), Cross staffs (box, open, octagonal, adjustable), steel band, Ceylon ghat tracer, pantograph, edigraph, subten se bar with accessories, Mirror Stereoscope, Astronomical telescope, Indian pattern clinometers, Desiles's clinometers, Abney level/clinometers, Fot rule clinometers, Optical Square, Prism square, Planimeters, Telescopic alidades, Box sextants, Tilting levels, cushioning's level, automatic level, micro optic theodolite, railway theodolite, chains (metric, gunters, revenue) Tapes (metallic tapes, steel tapes), Ranging rods, arrows, Wooden pegs and all related accessories.
		Hydraulic Lab	Francis, Kaplan and Pelton wheel turbine (02 nos each), multistage Centrifugal pump, single stage centrifugal pump, Reciprocating pump, Impact of Jet on Vanes, Loss of head on pipe fitting apparatus, orifice and venturimeter combined setup, Digital stop watches, Tacheometers, weir apparatus, Pipe friction apparatus (major losses), Orifice and mouthpiece combined setup, Notches experimental setup and all related accessories.
		CAD Laboratory	Desktop computers (I7, Dual core, core i5), Printer and related all accessories
2.	Mechanical Engg. Mechanical Engg. Mechanical Engg.	Advanced Material Testing Lab	1) UTM Computerized 100 Tons 2) 500 N-m Digital Torsion Testing Machine 3) UTM for Testing composite materials in the form of plates



			4) High Precision Fatigue testing machine. 5) High resolution metallurgical microscope. 6) 4 jar ball mill (imported) Retsch Germany. 7) Specimen cutting machine. 8) Specimen polishing machine 9) Jet erosive wear testing machine.
		IC engine lab	1) Computerized 6 cylinder engine coupled with 170 HP water cooled eddy current dynamometer. 2) Computerized single cylinder engine coupled with air cooled eddy current dynamometer. 3) Computerized twin cylinder engine coupled with water cooled eddy current dynamometer. 4) Advanced exhaust gas analyser (MDS 450) AVL make.
		CIM lab	CATIA, NISA, HYPERMESH, ANSYS softwares.
3.	EEE	Insulation Diagnosis Lab	To measure the dielectric properties of solid and liquid insulators
		Transformer Transients analysis	Transients measured for varying switching frequency upto 1 MHz
		Power Electronics and Drives Laboratory	Research in the area of Power electronics – Matrix converters, BLDC etc.
4.	Electronics And Communication Engineering	Project Laboratory	High End Computer Systems, Softwares, Oscilloscopes And Hardware Equipments
5.	Industrial Engineering and Management	Measurement and Metrology Lab	Projection Microscope
		Industrial Engineering Lab and quality engineering lab	Vernier Height gauge
		Simulation, ERP and Statistics lab CAD/CAM Lab	Mini tab, simulation, ERP, ARENA
6.	Electronics and Instrumentation Engineering	ARM-Lab	CORTEX-M3 processors for research
		VI-lab	Simulation software for research
7.	Computer Science and Engineering	Image Processing Lab	
		AI lab	
8.	Telecommunicati	Digital	Qualnet, FEKO tools

	on	Electronics Lab	
		Computer Lab	iSense kits(WSN)
		Communication Lab	Optical and Microstrip Lab
9.	ISE	-	-
10.	Medical Electronics	R&D Lab	i)Power lab(Data acquisition and analysis) ii)Biomedical sensors
11.	Physics	Physics Research Center	Fume hood, High temp. furnace, Spin Coater, Oven, Distilled water plant, Sonicator with titanium tip, pellet press

3.3.5. Does the College have research facilities (centre, etc.) of regional, national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories. YES – Depart wise R/D

The college has 15 research centers recognized by VTU Belagavi. The students registering for their Ph.D programme at any research centre of the institute use research facilities (listed in Table 3.8) available in the laboratories of various departments. The research scholars from other institutes also use the library and laboratory facilities.

3.4 Research Publications and Awards

3.4.1. Highlight the major research achievements of the College through the following:

- major papers presented in regional, national and international conferences
- publication per faculty
- faculty serving on the editorial boards of national and international journals
- faculty members on the organization committees of international conferences, recognized by reputed organizations / societies.

The summary of papers presented and published in conferences are given in Table 3.9.

Table: 3.9.a: Number of papers presented and published in conferences during 2010-2015

Sl. No	Department	Number of Papers presented/published in conferences	
		International	National
1	Civil Engg.	32	59
2	Mechanical Engg	70	100
3	Electrical & Electronics Engg	68	97
4	Electronics & Commun. Engg	71	70
5	Industrial Engineering and Management	30	10
6	Instrumentation Technology	33	81
7	Computer Science & Engg	31	73
8	Telecommunication Engg.	105	54
9	Information Science & Engg	55	91
10	Medical Electronics	27	20



11	MBA	30	43
12	MCA	48	25
13	Mathematics	13	66
14	Physics	15	03
15	Chemistry	14	20
16	HSS	04	07
	TOTAL	646	819

Table 3.9.b: Publication per faculty

Sl. No.	Department	Name of faculty	Number of Publications in			
			Journal		Conference	
			Inter-national	National	Inter-national	National
1.	Civil Engg.	Dr C Nanjundaswamy	5	Nil	3	Nil
		Dr B Shivakumaraswamy	14	Nil	Nil	1
		Dr. M N Hegde	9	2	12	7
		Dr. S Vijaya	5	Nil	Nil	3
		Dr K V Lokesh	1	Nil	4	1
		Dr S D Venkatraja Mohan	2	Nil	2	14
		Dr S G Ramachandraiah	4	Nil	5	4
		Dr K V Manjunath	4	Nil	Nil	4
		M R Suresh	7	Nil	1	3
		T Chandrasekaraiah	4	Nil	Nil	4
		H Antharam	2	2	2	8
		R Madhusudan	Nil	Nil	1	1
		G P Manjunath	Nil	Nil	Nil	01
		Dr. Chandrasekar	02	Nil	Nil	01
		M Krishnamurthy	Nil	Nil	Nil	02
		Dr B Vanappa	Nil	1	Nil	3
		Dr.A K Gupta	2	Nil	2	2
2.	Mechanical Engg	Dr. L. Chandrasagar	05	05	09	05
		Dr.B. Ravindra	01	02	01	02
		Dr.Gangadhar Shetty	02	02	01	01
		Dr.K.M. Purushothama	03	02	01	01
		Dr. T.N. Raju	01	04	01	01
		Dr. H.M. Somashekar	07	02	01	01
		Prof. V. Arunkumar	06	03	01	01
		Dr. K.M. Narayanappa	03	01	01	01
		Prof. S.K. Jagadeesh	02	01	03	02
		Dr. S. Satish	03	02	00	00
		Prof. Pavan Tejasvi .T	03	00	00	01
		M. M. Nataraja	02	02	01	01
		N. Gangadhar	05	04	01	01
		K. Preethi	01	0	0	0
		K. C. Byre Gowda	03	02	0	01
		R. Sunil Dhayal	03	01	0	0
		H. A. Shivappa	03	03	0	01
		S. Tejesh	03	01	0	01
		M. Rajesh	02	01	0	0
		B. Mohan Kumar	02	01	0	0
		S. N. Amith Kumar	02	02	0	01
		C. Ramprasad	01	01	0	0
		Dr. A. S. Prashanth	01	01	01	00
		R. Chandan	02	01	0	0
		Manjunath. H S	02	01	0	0
		Ranjith.V	01	01	0	01
		Aravinda.D	01	01	0	01
		Jayanth Hombalaiah	01	01	0	01
		Sharath Kumar .S.N	01	01	0	01
		Rathika.M	01	01	0	01



3.	Electrical & Electronics Engg	Bhanupratap	01	01	0	01
		Dr. B V Sumangala	19	01	17	21
		Dr. Shankarlingappa C B	7	-	8	-
		Prof. Eranna	3	-	3	10
		Dr. Jyoti P Koujalagi	12	-	7	15
		Prof. T B Dayananda	3	-	3	10
		Prof. H V Govindaraju	3	-	6	2
		Prof. S Vasudevamurthy	4	-	5	2
		Prof. S Nalini	13	-	7	29
		Prof. Mukundaswamy M S	1	-	3	-
		Prof. Arpitha Raju	2	-	8	7
		Prof. Harini V	1	-	-	-
		Prof. Dhanyavathi A	-	-	1	1
		Prof. Deepthi Shastrimath	-	-	-	-
		Prof. Soumya Srinivasan	-	-	-	-
		Prof. G Pankaja	-	-	-	-
4.	Electronics & Commun. Engg	Dr. G V Jayaramaiah	03	0	06	01
		Dr. H Umadevi	12	0	07	0
		Dr. K M Rajanana	09	0	06	03
		R H Vijaya Kumar	02	0	0	1
		Dr. Mahalinga V Mandi	7	0	3	3
		Dr. S Ramesh	05	0	04	0
		Akalpitha L Kulkarni	6	0	6	4
		S Usharani	2	0	2	5
		B S Sudha	5		1	11
		Meenakshi L Rathod	4	0	2	0
		Shivaputra	5	0	2	0
		Mohankumar V	1		1	1
		Girija S	2	0	4	9
		C S Kavitha Devi	3	0	3	7
		Mala Sinnoor	01	0	0	04
		G S Pushpalatha	2	0	2	0
		K N Hemalatha	2		2	6
		Sajidha B Thabassum	2	0	1	3
		Kestara V	1	0	3	1
		Chethan S	4	0	2	0
		Shwetha M	0	0	0	0
		Nithyashree	0	0	0	3
		T N Swamy	04	0	02	0
		Triveni P	0	0	0	0
		Nagarathna H S	2	0	4	1
		Divya A	1	0	1	0
		Madhusudhan M	0	0	0	0
		Dr. K Ramesh	12	0	4	2
		Dr. J S Baligar	10	0	0	5
		Shilpa K C	05	0	02	0
		Siddesh K	05	0	01	0
5.	Industrial Engineering and Management	Dr. G. Rajendra	10	03	5	5
		Dr. N. Mohan	18	Nil	22	03
		S. K. Rajendra	6	Nil	4	02
		Rajeswarie. P	2	2	03	03
		Dr. Mahesha. C. R	8	02	8	01
		Suprabha .R	6	Nil	4	02
		Rajesh. K	4	01	01	01
		Chetahn. N	2	2	Nil	Nil
6.	Instrumentation Technology	Dr. M. Meenakshi	15	02	20	16
		Prof. Devaraju	2	-	3	5
		Prof. Srinath B. S	-	-	-	3
		Prof. M. Prasannakumar	2	-	1	10
		Prof. Ganapathi V Sagar	1	-	1	6



7.	Computer Science & Engg	Prof. Sreedevi N	1	-	1	16
		Prof. P. Shubha	-	-	1	16
		Prof. H. R. Sridhar Kumar	-	-	3	-
		Prof. Nirmal Bai L	2	-	1	2
		Prof. Soumya B.S	2	-	2	2
		Prof. Monikashree T.S	2	-	-	1
		Prof. Hamsarekha S.D	1	-	-	1
		Prof. Sheetal.N	1	-	-	1
		Prof. Seema B.S	-	-	-	2
		Dr. Siddaraju	19		4	
		Asha	4	0	6	3
		Leena Giri G	4	2	2	2
		Asha Rani K P	2	0	0	3
		Suresha D	2	0	1	4
		M V Praveena	0	1	0	6
		Dr. S. Gowrishankar	3	0	1	0
		Dr. Mary Cherian	12	0	3	2
		Smitha Shekhar B	8	0	0	14
		A H Srinivas	3	0	0	9
		Veena Potdar	1	1	1	6
		Harish G	7	0	0	7
		Asha K N	3	0	1	2
		Arathi P	2	0	0	3
		M S Vinutha	2	0	0	3
		Madhu B	1	1	4	0
		Harish Kumar	2	0	3	2
		Uma K M	1	0	0	0
		Jayalakshmi	1	0	0	0
		H Pushpaveni	0	0	0	0
		Vinod Kumar	3	0	1	0
		Rahul M	2	0	0	3
		Rashmi N	2	0	0	0
		Soumya C L	2	0	0	0
		Veena	2	0	0	2
		Lavanya	2	0	0	0
		Sangeetha	7	0	4	2
		Dr. M.V. Vijaya Kumar	20	05	20	05
		Nithya E	12	1	1	3
		K.R. Shylaja	1	5	0	2
		Shamshekhar Patil	6	2	2	2
8.	Telecommunication Engg.	Dr B Sivakumar	25	03	25	08
		Dr Yamuna Devi CR	05	-	05	03
		Dr Prashanth C R	05		05	-
		Vidya H	01	01	02	04
		Sudha T	-	-	03	-
		Mahesan K V	03	-	03	03
		Aravinda H L	03	-	04	08
		Shruthi P C	08	--	07	07
		Chandrakala V	05	-	12	-
		Usha Rani M A		-	07	07
		Praveen K B	04	-	05	04
		Ranjani M N		-	05	03
		Kavitha Narayan B M	04	-	03	02
		Priya H K	01	-	03	02
		Sowmya M		-	-	-
9.	Information Science & Engg	Dr. B.S. Shylaja	10	1	10	-
		Dr. Prabha R	15	-	10	10
		S. Nagalakshmi	7	13	-	-
		Dr Nandini Prasad K.S	15	-	15	34
		Vijayalaxmi R patil	5	-	-	21
		Pushpalatha S	10	-	4	6
		Vidharani H J	3	-	7	8
		Shilpa Biradar	2	-	2	7
		Satish B Basapur	5	2	-	1
		Saritha K R	3	-	2	2



		Vanishree Abhay	3	-	-	1
		Neetha Natesh	1	-	1	-
		Jyothi S	6	-	3	1
		Jyothi B	6	-	1	-
10.	Medical Electronics	Dr.K J. Shanthi	2		5	2
		A. P. Manjunatha	2		3	4
		D K Ravish	3		2	4
		Vindhya K	1		2	3
		Nayana R Shenoy	2		2	4
		Kamala C	2		1	3
11.	MBA	Dr. S.Rupla Naik	03	06	02	03
		Pof. H.G.Devaraj	-	-	-	-
		Dr.S Baskaran.S	12	06	4	6
		M L Shailaja	7	5	6	4
		Susheela Devi B Devaru	7	1	8	6
		Rajeshwari R R	5	1	2	1
		Vidya.R	5	3	1	9
		S V Arundathi	4	4	3	4
		S Kavitha	4	--	2	2
		Leela M H	5	4	2	8
12.	MCA	Dr. L Manjunatha Rao	15	-	12	05
		Prof. Shobha Rani B.R.	04	-	9	1
		Dr. Chandrakanth G.Pujari	08	02	06	-
		Dr. Bharathi S.	03	-	06	02
		Dr. Indumathi SK	03	-	2	-
		Dharani NV	03	-	01	-
		Malathi P.	01	-	05	-
		Anitha J.	-	-	01	05
		Shailaja LK	02	-	01	05
		S Shivaleela	-	-	-	04
		Kavyashree N.	02	-	01	03
		Dr.Thimma Raju S N	02	-	02	-
13.	Mathematics	Dr. B. Soryanarayana	17	9	1	00
		Dr.C.E.Nanjundappa	26	03	1	2
		Dr.R.Murali	35	-	1	3
		Dr. Jayalakshmi.M	5	1	1	8
		Dr.Shivaparsanna	6	3	-	8
		Padma.M.M	1	-	-	-
		Nagarathnamma.H	2	-	-	1
14.	Physics	Dr. K.N.Anuradha	06	---	12	03
15.	Chemistry	Dr. B. Veena Devi	04	----	-----	07
		G.V.Jayashree	----	-----	03	---
		Dr. A.A.Jahagirdar	05	03	03	04
		Mamatha K.M	----	-----	01	02
		Shruthi. B	04	-----	03	04
		Bhagyalakshmi. H	----	-----	02	01
		Dr. S. Soundeswaran	05	03	02	02
16.	HSS	Dr.T.R.Shashipriya		3	4	4
		Padma.s.v		2	1	1
		Geetha.H			2	2

Faculty serving on the editorial boards of national and international journals

Many faculty are serving on editorial boards of national/international

journals. The details are given in Table 3.9.c.

Table 3.9.c: Faculty serving on the editorial board of National/International Journals

Sl. No.	Department	Name of faculty	National/ International Journal
1.	Civil Engineering	Dr. Chandrasekar	Reviewer: ASCE Journal
2.	Mechanical Engg.	Shivappa H A	International Journal of Ignited Minds
3.	Electrical and Electronics Engg.	Dr B.V.Sumangala	Elsevier Journal – Paper Reviewer International Journal of Multidisciplinary Research and Advances in Engineering - Member, Advisory Editorial Board International Journal of Engineering Research and Industrial Applications - Member, Advisory Editorial Board Ascent International Journals - Member, Advisory Committee.
		Dr Jyoti Koujalagi	International Journal of Instrumentation and Innovation Sciences, International Journal of Advancement in Machines International Journal of Electrical and Power System Engineering, International Journal of Advance in Electrical Devices
4.	Electronics And Communication Engineering	Dr. S. Ramesh	IJISME/Bhopal
5.	IEM	Dr. G.Rajendra	Journal of Engineering, project and Production Management
6.	Electronics and Instrumentation Engineering	Dr. M. Meenakshi	Inter National(Associate Editorial of Bioinfo Publications Journals)
7.	Computer Science	Dr.Siddaraju	Strings International Journal of Computer Science and Network (SJCS)
		Dr.S.Gowrishankar	Editorial Board Member for International Journal of Innovative Research in Computer Science & Technology (IJIRCST), Editorial Advisory Board for Elixir International Journal, Board Member for International Journal of Computer and Organization Trends (IJCOT).
8.	Telecommunication Engineering	Dr B Sivakumar	International Journal- ICTACT, International

			conference on electronics engineering and image processing(IISRO), Pataya, International Journal of wireless communication and Networking(IJWCN)
9.	Information Science	Dr. Nandini Prasad.K.S	Institute for Research and Development India (IRD India).
10.	Medical Electronics	-	-
11.	MCA	Dr .L Manjunath Rao	01
12.	MBA	Dr.S.Baskaran	International Journal of Business and Administration Research Review.

Table 3.9.d: Faculty serving on the organization committees of international conferences

Sl. No.	Department	Name of faculty	Title/Place/Date of conference
1.	Civil Engineering	Dr S D Venkatraja Mohan	Session Chairman at Rajarajeshwari College Of Engineering.
2.	Mechanical Engg.	Dr. L Chandrasagar Dr. T N Raju Dr. V. ArunKumar	NSRD, Dr.AIT, Bengaluru Feb12-14-2014
3.	EEE	Dr B.V.Sumangala	Advisory committee - National Conference on “Developments in the domain of electrical engineering – NCDDE 2016”, SSIT campus, Tumkur Advisory committee - National Conference on “Developments in the domain of electrical engineering- NCDDE 2015”, SSIT campus, Tumkur Advisory committee - National Conference on “Developments in the domain of electrical engineering-NCDDE 2014”, SSIT campus, Tumkur Session Chair - International Conference on Emerging Research in Electronics, Computer Science and Technology (ICERECT – 2015), PESCE, Mandya Session Chair - International Conference on Emerging Research in Electronics, Computer Science and Technology (ICERECT – 2014), PESCE, Mandya
4.	ECE	Dr.G.V.Jayaramaiah	Ic/Atria College ,



			Bangalore/20-03-3-2011
		Dr.H Umadevi	ICDSC- 2016/DR.AIT/09.10.16
		Dr. K M Rajanana	
		Dr. Mahalinga V Mandi	
		Dr. S Ramesh	
		Dr.K Ramesha	
		Dr.G.V.Jayaramaiah	
		Dr.K Ramesha	ARTCOM 2009/KOTTAYAM, KERALA
		Dr. Mahalinga V Mandi	CNSA 2011/Chennai, India/ July 15-17, 2011
			NECOM, West, Wimon 2011/ Chennai, India/ July 15-17, 2011
			CCSIT 2012 /Bangalore, India/ January 2-4, 2012
			ACITY/Chennai, India/ July 13-15, 2012
			Peer To Peer Networks And Trust Management/Chennai, India/Jul 26-27,2014
			Innovation In Engineering And Technology/Vijaya Vittala Institute Of Technology, Bangalore/22 nd & 23 rd August 2014
			ADHOC, Sensor And Ubiquitous Computing/Dubai/6-7 November 2015
			Wireless And Mobile Networks/Sydney, Australia/26-27 December 2015
		Dr.S Ramesh	ICPCIT-2015/Bengaluru Rrce/Date: 27th-28th April 2015
			Power,Circuit And Information ICPCIT- 2016/Benagaluru,Rrce/
			Computer Science & Information Technology Sixth International Conference On Computer Science, Engineering And Applications (CCSEA 2016) Dubai, UAE, January 23~24, 2016 AIRCC Publishing
5.	IEM	Dr.G.Rajendra	International Conference on Recent Advances in Engineering Sciences, MSRIT, Bangalore,4 TH TO 5 TH Sept.2014



6.	Electronics and Instrumentation Engineering	Dr. M. Meenakshi	International conference IEEE, IERAICS, Sept. 2011- Programme Committee Member and reviewer
			International conference on Development of smart cities: Interface governance and Technology/Dr.AIT, Bangalore/sept 9-10, 2016- - member organizing council
7.	CSE	Dr. Siddaraju	<i>Advisory Committee Member</i> , “International Conference Novel Issues and Challenges in Science and Engineering (NICSE’16),” Noorul Islam University, Kumaracoil, Thuckalay, Kanyakumari, TamilNadu, India, 28 – 29 July, 2016.
			“Exploration of computation and information technology for disaster management (ECITDM15)”, A multidisciplinary Conference, Technical committee member, 11-12 September 2015.
			Session Chair, International conference on “Engineering, Science, Management And Advanced In Reaserch Technology” held during 29th and 30th April 2015 at T.John Institute of technology.
		Dr.S.Gowrishankar	<i>Advisory Committee Member</i> , “International Conference Novel Issues and Challenges in Science and Engineering (NICSE’16),” Noorul Islam University, Kumaracoil, Thuckalay, Kanyakumari, TamilNadu, India, 28 – 29 July, 2016. <i>Conference Outreach Committee</i> , “International Conference on Applied Science Engineering and Technology (ICASET-16),” Sri Sairam College of Engineering (SSCE), Anekal, Bangalore, Karnataka, India, 6 – 7 June, 2016.

8.	Telecommunication	Dr B Sivakumar	Keynote speaker and Organizing chair- International conference on electronics engineering and image processing pattaya, bangkok April 1st and 2nd 2014.
		Dr Prashanth C R	Session Chair- 11th International Conference on Image and Signal Processing organized by The Society of Information Processing, and University Visvesvaraya College of Engineering, Bangalore, India, 21st -23rd August 2015.
		Dr Yamuna Devi CR	Session Chair- 11th International Conference on Image and Signal Processing organized by The Society of Information Processing, and University Visvesvaraya College of Engineering, Bangalore, India, 21st -23rd August 2015.
9.	MCA	Dr. S Bharathi	Eleventh International Multi Conference on Information Processing 21st to 23rd August 2015 Bangalore, Karnataka, India
10.	Mathematics	Dr.B.Sooryanarayana	National conference on Graph Coloring/Bangalore/ July 27-28, 2013.
11.	Physics	Dr.K.N.Anuradha	Scientific Commetee member, 2 nd Indo-Canadian Symposium held at NIE Mysore from 18-19 Feb. 2016
			Asia-Pacific EPR Society council member 2014-16, Country Representative
			Member of International Advisory Board : Asia Pacific EPR Symposium - 2016. Asia Pacific EPR Symposium to be held in the month of August, 28 th to September 2 nd 2016 at Irkutsk, Russia

3.4.2. Does the College publish research journal(s)? If yes, indicate the composition of the editorial board, publication policies and whether it is listed in international database?

No- Currently College does not publish research journals. However the college publishes quarterly newsletter.

3.4.3. Give details of publications by the faculty:

- **number of papers published in peer reviewed journals (national / international)**
- **Monographs**
- **Chapters in Books**
- **Editing Books**
- **Books with ISBN numbers with details of publishers**
- **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**
- **Citation Index – range / average**
- **SNIP**
- **SJR**
- **Impact factor – range / average**
- **h-index Depart wise**

Publications by all faculty including the details of number of papers published in peer reviewed journals (national / international), Monographs, Chapters in Books, Editing Books, Books with ISBN numbers with details of publishers, number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.), Citation Index – range / average, SNIP, SJR, Impact factor – range / average, h-index is given in evaluation reports of respective departments.

Summary of publications and above details are given in Tables 3.10 to Table 3.16.

Table 3.10.: Total Number of Papers published in peer reviewed journals

Sl. No	Department	Total Number of journal publications	
		International	National
1	Civil Engg.	61	05
2	Mechanical Engg	50	80
3	Electrical & Electronics Engg	30	01
4	Electronics & Commun. Engg	10	00
5	Industrial Engineering and Management	25	3
6	Instrumentation Technology	29	2
7	Computer Science & Engg	97	05
8	Telecommunication Engg.	07	-
9	Information Science & Engg	91	16
10	Medical Electronics	7	NIL
11	MBA	51	30
12	MCA	39	2

13	Mathematics	93	16
14	Physics	06	-
15	Chemistry	18	06
16	HSS	05	-
	TOTAL	619	166

Monographs :

Table 3.11.: Details of Monographs Published

Sl. No	Department	Faculty	Details of Monographs
1	Telecommunication	Dr B Sivakumar	Mobile Computing(under review)-PHi
2	MBA	H.G.Devaraj	Minikit program in Gundlupet taluk pf Mysore district. DPAP in Hiriyur taluk of Chitradurga district.
	TOTAL		03

Book Chapters:

Table 3.12.: Details of Book Chapters Published

Sl. No	Department	Author(s)	Year	Title	Book/Publisher/ Edition/Page No
1	Civil Engg.	--	--	--	--
2	Mechanical Engg	--	--	--	--
3	Electrical & Electronics Engg	S Soumya, Prof Eranna, S.Vasudevamurthy & B.V.Sumangala	2014	Study of Partial Discharges in Pressboards	Lecture Notes in Electrical Engineering, Emerging Research in Electronics, Computer Science and Technology, 248 DOI:10.1007/978-81-322-1157-0_28, @ Springer India PP 263 - 272
		B.Preethi & B.V.Sumangala	2014	Voltage stabilization through reactive power injection at secondary terminals of distribution level feeders – using thyristor switched capacitor	Lecture Notes in Electrical Engineering, Emerging Research in Electronics, Computer Science and Technology, 248 DOI:10.1007/978-81-322-1157-0_56, @ Springer India PP 547 - 556
		Eranna,	2014	Generation	Lecture Notes

		B.V.Sumangala & G.R.Nagabhushana		of high frequency pulses for transient studies	in Electrical Engineering, Emerging Research in Electronics, Computer Science and Technology, 248 DOI:10.1007/978-81-322-1157-0_78, @ Springer India PP 769 - 778
4	Electronics & Commun. Engg	-			
5	Industrial Engineering and Management	Dr.N.Mohan	2012	Contributed a chapter Special issue (Effect of Titanium carbide on the erosive wear behavior of glass-epoxy composite at elevated temperature)	Mc.GrawHil ISBN-978-935-059-046-11
6	Instrumentation Technology	Dr. M. Meenakshi	2012	Novel Stability Augmentati on System for Micro Air Vehicle - Towards Autonomou s Flight,	CRC Press Book, Mobile Intelligent Autonomous Systems, MIAS Taylors and Francis, CRC Press Book, London
			2010	Longitudina l Robust Stability Augmentati on for Micro air Vehicle - Design and Validation,	Quality Management and Six Sigma, ISBN: 978-953-307-130-5 : Sciyo's open access book , Aug.
7	Computer Science&Engg	-		-	-
8	Telecommunicat ion Engg.	Dr B Sivakumar		Mobile Computing	In progress
9	Information Science &Engg	--	--	--	--
10	Medical Electronics	--	--	--	--
11	MBA	--	--	--	--
12	MCA	--	--	--	--
13	Mathematics	--	--	--	--
14	Physics	--	--	--	--
15	Chemistry	Dr.B.Veena Devi	2015	"Chromium Removal	Lambert Academic

				Using Activated Carbon"	publishing
16	HSS	--	--	--	--
	TOTAL				08

Editing Books

Table 3.13.: Details of Books Edited by College Faculty

Sl. No	Department	Author(s)	Year	Title	Book/Publisher/ Edition/ISBN
1	Civil Engg.	--	--	--	--
2	Mechanical Engg	--	--	--	--
3	Electrical & Electronics Engg	--	--	--	--
4	Electronics & Commun. Engg	Prof. Ranjan Bose, Dr. Mahalinga V Mandi	2015	Information Theory, Coding And Cryptography	Tata Mcgraw Hill, 2 nd Edition-2015, Reprint
5	Industrial Engineering and Management	--	--	--	
6	Instrumentation Technology	--	--	--	
7	Computer Science & Engg	--	--	--	
8	Telecommunication Engg.	Dr B Sivakumar	2014	ICICE	ICICE proceedings
9	Information Science & Engg	--			
10	Medical Electronics	--			
11	MBA	--	--	--	
12	MCA	--	--	--	
13	Mathematics	--	--	--	
14	Physics	--	--	--	
15	Chemistry	--	--	--	
16	HSS	--	--	--	
	TOTAL				02

Books with ISBN numbers with details of publishers

Table 3.14.: Details of Books Published by College Faculty

Sl. No	Department	Author(s)	Year	Title	Book/Publisher/ Edition/ISBN
1	Civil Engg.	--	--	--	--
2	Mechanical Engg	--	--	--	--
3	Electrical & Electronics Engg	--	--	--	--
4	Electronics & Commun. Engg	--	--	--	--
5	Industrial Engineering and	Dr. G. Rajendra	2010	Operations Research	I.K. Publication Ltd

	Management				2010/968-93-5014-702-7
6	Instrumentation Technology	M. Meenakshi,	2009	Process Control and Its Automation	under ISTE - WPLP Programme, ISBN No.: 81:89731-16-5, 2009
7	Computer Science & Engg	--	--	--	
8	Telecommunication Engg.	--	--	--	
9	Information Science & Engg	Nandini Prasad.K.S	2014	Principles of Compiler Design	Elsevier Publication/ ISBN: 9789381269473.
		R. D. Sudhaker Samuel, Nandini Prasad.K.S	2013	Logic Design	Elsevier Publication/ ISBN: 9789382291473
		Nandini Prasad.K.S, Dinakar.K.S	2012	System Modeling and Simulation	Elsevier Publication/ ISBN: 9789381269909.
10	Medical Electronics	--	--	--	
11	MBA	Dr.S.Baskaran	2015	Management of Entrepreneurs in Informal Sector	Lambert Academic Publishing ISBN 9783659-354939
		S.V.Arundathi	2015	Economics of HRM	Vrinda, ISBN-978-81-8281-553-7
12	MCA	--	--	--	
13	Mathematics	--	--	--	
14	Physics	--	--	--	
15	Chemistry	--	--	--	
16	HSS	--	--	--	
	TOTAL				07

* number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

* Citation Index – range / average : 1.5 to 375

* SNIP : 1.5 to 30

* SJR :1.5 to 35

* Impact factor – range / average : 01 to 20

* h-index : 2 to 20

Table 3.15.: Details of number listed in International Database

Sl. No	Department	number listed in International Database	Citation Index – range / average	SNIP	SJR	Impact factor – range / average	h-index
1	Civil Engg.	--	--	--	--	--	--
2	Mechanical Engg		1.5-5			1-8	
3	Electrical & Electronics Engg	30	02			0.8 - 5.5028	
4	Electronics & Commun. Engg		20	1.5	1.5	1.5-3	2
5	Industrial Engineering and Management	--	--	--	--	--	--
6	Instrumentation Technology	35				0.1- 6.20	3
7	Computer Science & Engg	--	--	--	--	--	--
8	Telecommunication Engg.	24	15 - 25	1 - 2	1 - 2	1.5 - 3	16 - 20
9	Information Science & Engg	--	--	--	--	--	
10	Medical Electronics	--	--	--	--	--	
11	MBA					0.303 - 5.72	
12	MCA	02	10			2.0	
13	Mathematics	35	375	30	35	2.25	11
14	Physics	--	--	--	--	--	--
15	Chemistry	--	--	--	--	--	--
16	HSS	--	--	--	--	--	--

Table 3.16.: Summary of Publication Details

Sl. no	Details	No.
1.	number of papers published in peer reviewed journals (national / international)	785 (619/166)
2.	Monographs and Chapters in Books	03/08
3.	Editing Books	02
4.	Books with ISBN numbers with details of publishers	07
5.	number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	35
6.	SNIP	1.5 to 30

7.	SJR	1.5 to 35
8.	Citation Index – range / average	1.5 to 375
9.	Impact factor – range / average	1 to 20
10.	h-index	2 to 20

3.4.4. Indicate the average number of successful M.Phil. and Ph.D. scholars guided per faculty.

Table 3.17: M.Phil and Ph.D guidance by faculty on roll

Sl. No.	Department	Name of faculty	Guidance	
			M.Phil	Ph.D
1.	Civil Engineering	Dr C Nanjundaswamy	Nil	02
		Dr B Shivakumaraswamy	Nil	03
		Dr. M N Hegde	Nil	04
		Dr K V Lokesh	Nil	02
		Dr S G Ramachandraiah	Nil	01
		Dr S D Venkatraja Mohan	Nil	02
2.	Mechanical Engineering	Dr. L Chandrasagar		04
		Dr. B. Ravindra		01
		Dr. K.M.Narayanappa		02
		Dr. K M. Purushothama		01
		Dr. B. Gangadhar Shetty		02
		Dr. T N Raju		03
		Dr. Satish S		01
3.	Electrical and Electronics Engineering	Dr. H M Somashekar		03
		Dr B.V.Sumangala	--	07
		Dr Shankara Lingappa	--	07
4.	Electronics and Communication Engineering	Dr Jyothi P Koujalagi	--	07
		Dr.G V Jayaramaiah	Nil	04
		Dr.H Umadevi	Nil	03
		Dr. K M Rajanana	Nil	01
		Dr. Mahalinga V Mandi	Nil	01
		Dr. S Ramesh	Nil	01
5.	Industrial Engineering and Management	Dr. K Ramesh	Nil	03
		Dr. J S Baligar	Nil	07
6.	Electronics and Instrumentation Engineering	Dr.G.Rajendra	2	2
		Dr.N.Mohan	1	5
7.	Computer Science and Engineering	Dr. M. Meenakshi	-	06
8.	Telecommunication Engineering	Dr.Siddaraju		05
		Dr.Vijayakumar		05
		Dr.S.Gowrishankar		01
		Dr. Mary Cherian		01
9.	Information Science and Engineering	Dr B Sivakumar		07
		Dr Prashanth C R		02
9.	Information Science and Engineering	Dr.B.S.Shylaja	-	7
		Dr. Nandini Prasad.K.S	-	5

10.	Medical Electronics	Dr. Shanthi K J		3
11.	MBA	Dr. S Rupla Naik		4
		Dr S Baskaran		3
12.	MCA	Dr .L Manjunath Rao	-	10
13.	Mathematics	Dr.B.Sooryanarayana	-	09
		Dr.C.E.Nanjundappa	-	07
		Dr.R.Murali	-	07
		Dr.Jayalakshmi M	-	02
14.	Physics	--		
15.	Chemistry HSS	Dr. V. Bheema Raju	----	04
		--		165

The average number of completed MPhil and PhD students guided per faculty = $165 / 44 = 3.75 \approx 4$

3.4.5. What is the stated policy of the College to check malpractices and misconduct in research?

Dr. AIT uses the software TURNITIN for checking plagiarism in all R&D related documents. Furthermore the internal disciplinary committees also have the powers to deliberate and act upon possible malpractices and misconduct in research.

3.4.6. Does the College promote interdisciplinary research? If yes, how many inter departmental / inter disciplinary research projects have been undertaken and mention the number of departments involved in such an endeavor.

The college always encourages the faculty to carry out studies and organize programmes in interdisciplinary areas. There are some efforts of interdisciplinary research between mathematics and information Science, Mechanical and Electronics, Mechanical and Instrumentation technology, Electrical and Electronics departments. The college has also organized conferences/workshops in interdisciplinary areas.

3.4.7. Mention the research awards instituted by the College.

There is no separate award instituted by the college for research. However faculty are awarded with “Best Teacher” award every year. Research component is one of the parameters for choosing faculty for this award.

3.4.8. Provide details of

- research awards received by the faculty
- recognition received by the faculty from reputed professional bodies and agencies

Details are found for each faculty in their respective department Evaluation Report.

3.4.9. State the incentives given to faculty for receiving state, national and international recognitions for research contributions

Nil

3.5 Consultancy

3.5.1. What is the stated policy of the College for structured consultancy? List a few important consultancy services undertaken by the College.

The college has a stated policy as to encourage the consultancy and testing services through its various departments. The revenue generated through testing and consultancy assignment is shared in 40% (faculty and staff involved) and 60% (College) proportion after deducting expenses incurred. The testing activities include water, soil, wastewater, etc. Some of the consultancy activities are listed in Table 3.18

Table 3.18: List of consultancy and Testing and assignments

Sl. No.	Department	Consultancy activity	Co-coordinator	Amount (₹)	Year
1.	Civil Engineering	Compressive strength of concrete		3950-00	2010 - 2011
		Load Cell Testing		3600-00	2010 - 2011
		Compressive strength of concrete		2000-00	2010 - 2011
		Compressive strength of concrete & Test on FA & CA		11600-00	2010 - 2011
		Compressive strength of concrete & Test on FA & CA		6500-00	2010 - 2011
		Compressive strength of concrete & Test on FA & CA		8900.00	2010 - 2011
		Load cell testing		8100.00	2011 - 2012
		Soil testing		12000.00	2011 - 2012
		Compressive strength of concrete		1800.00	2011 - 2012
		Test on FA & CA		2200.00	2011 - 2012
		Compressive strength of concrete		1200.00	2011 - 2012
		Load cell testing		26400.00	2011 - 2012
		Compressive strength of concrete blocks		500.00	2011 - 2012



		Compressive strength of concrete blocks		500.00	2011 - 2012
		Compressive strength of concrete		1320.00	2011 - 2012
		Compressive strength of concrete		500.00	2011 - 2012
		Compressive strength of concrete & Test on FA & CA		15500.00	2011 - 2012
		Compressive strength of concrete Cubes		1000.00	2012 - 2013
		Loading Cell Test		1000.00	2012 - 2013
		Compressive strength of concrete Cubes		1000.00	2012 - 2013
		Compressive strength of concrete & Test on FA & CA		5800.00	2012 - 2013
		Compressive strength of Bricks		1200.00	2013 - 2014
		Compressive strength of concrete Cubes		1200.00	2013 - 2014
		Compressive strength of Bricks		1200.00	2013 - 2014
		Loading Cell Test		1000.00	2013 - 2014
		Compressive strength of concrete Cubes		1000.00	2013 - 2014
		Compressive strength of concrete Cubes		1000.00	2013 - 2014
		Compressive strength of concrete Cubes		1000.00	2013 - 2014
		Compressive strength bricks		1000.00	2013 - 2014



		Compressive strength of concrete Cubes		1000.00	2013 - 2014
		Compressive strength of concrete Cubes		1000.00	2013 - 2014
		Compressive strength of concrete Cubes		1000.00	2013 - 2014
		Compressive strength of concrete Cubes		1000.00	2013 - 2014
		Compressive strength of concrete Cubes		3000.00	2014 - 2015
		Compressive strength of concrete Cubes		1000.00	2014 - 2015
		Pre Welded Mesh		1500.00	2014 - 2015
		Compressive strength of concrete Cubes		1000.00	2014 - 2015
		Compressive strength of concrete Cubes		1000.00	2014 - 2015
		Loading Cell Test		1000.00	2014 - 2015
		Loading Cell Test		750.00	2014 - 2015
		Compressive strength of concrete Cubes		1000.00	2014 - 2015
		Compressive strength of concrete Cubes		1000.00	2014 - 2015
		Compressive strength of concrete Cubes		1000.00	2014 - 2015
		Compressive strength of concrete Cubes		1000.00	2014 - 2015



		Compressive strength of Bricks		1800.00	2014 - 2015
		Compressive strength of Concrete blocks		1200.00	2014 - 2015
		Compressive strength of concrete Cubes		1000.00	2015 - 2016
		Compressive strength of concrete Cubes		500.00	2015 - 2016
		Compressive strength of concrete Cubes		500.00	2015 - 2016
		Pre Welded Mesh		1000.00	2015 - 2016
		Pre Welded Mesh		1000.00	2015 - 2016
		Compressive strength of Concrete blocks		1000.00	2015 - 2016
		High Mast Foundation inspection/ Design Verification		10,000.00	2015 - 2016
		L angle and U channel		2000.00	2015 - 2016
		Compressive strength of concrete Cubes		500.00	2015 - 2016
		Compressive strength of Concrete blocks, and Water absorption Test		4800.00	2015 - 2016
		Compressive strength of concrete Cubes		1000.00	2015 - 2016
2.	Mechanical Engineering	Lecture series (M/S Siemens Pvt. Ltd., Baroda)	Sri. N Shashikanth	24000.00	2011
		Rotor dynamic analysis of 35MW	Dr. Chandrasagar L	30000.00	2011

		generator shaft (M/S SRDC, Bangalore,)			
		Testing methodology for Gokart (M/s Dolphin industries, Bangalore	Dr.B. Ravindra	18000.00	2013
		Boiler safety spring problems INS VIRAT	Sri N Shashikanth, Sri Venkatesh Reddy, Dr K M Purushoththam, Dr. T.N.Raju, Dr. L Chandrasagar	50000.00	2013
		Advisory consultancy related to preloading of boiler safety springs	Sri N Shashikanth, Sri Venkatesh Reddy, Dr K M Purushoththam Dr. T N Raju, Dr. L Chandrasagar	25000.00	2013
3	Electrical and Electronics Engineering	Testing & analysis of Transformer oil	Dr.B.V.Sumangal a Eranna S.Vasudevamurthy	3,21,225 /-	2010
		Testing & Evaluation of Partial Discharge in Press boards	Dr.B.V.Sumangal a Eranna S.Vasudevamurthy	1,55,554 /-	2013
		Testing & Evaluation of Partial Discharge in Press boards	Dr.B.V.Sumangal a Eranna S.Vasudevamurthy	33868/-	2014
		Testing of 'Compressibility in air and oil' of Press boards	Dr.B.V.Sumangal a Eranna S.Vasudevamurthy	25000/-	2016
4.	Telecommunication Engineering	Design of Antenna and Microstrip technical consultation services provided- Charan Technologies	Dr B Sivakumar	Only technical assistance, no revenue generated	2014

3.5.2. Does the College have College-industry cell? If yes, what is its scope and range of activities?

YES- the College has Industry-Institute-Interaction Cell associated with TEQIP II as well as Training and Placement activities.

Scope: The scope include:

- Initiation and development of contacts with industries/institutes/organizations

- Identification of student and industry needs and initiation of necessary steps
- Identification of areas of interaction and Enhancement of interactions with industries
- Enhancement of Placement of students

Range of activities: The range of activities include:

- Organization of collaborative activities like training programmes, expert lectures, industrial visits, career guidance programmes, soft skills, aptitude tests, personality development, entrepreneurship etc.
- Interaction with industries for allocating internship to students.
- Guidance to the students for getting sponsored projects.

3.5.3. What is the mode of publicizing the expertise of the College for consultancy services? Mention the departments from whom consultancy was sought.

The college has well-established contacts with government, non-government organizations and industries through MOUs. The college web-site provides details of facilities and expertise available in various departments. On the occasion of every interaction with other institutes and industry/organization, the kind of consultancy and testing activities provided by the college are briefed. Currently, three Departments i.e. Civil Engineering, Mechanical Engineering, and Electrical and Electronics Engineering are the leading departments in consultancy and testing activities.

3.5.4. How does the College encourage the faculty to utilise the expertise for consultancy services?

The college encourage the faculty to utilize the expertise for the consultancy and testing services by paying attractive shares from the revenue generated.

3.5.5. List the broad areas of consultancy services provided by the College and the revenue generated during the last four years.

The broad areas of consultancy services provided by the college and the revenue generated during the last four years are given in Table 3.19.

Table 3.19: List of broad area of consultancy services and revenue generated

Sl. No.	Department	Broad area of consultancy assignment undertaken	Revenue generated in last four years (2012- 2016) (Rs. Lakh)
1.	Civil Engineering	Concrete Testing and Structural Consultancy	0.65 Lakhs
2.	Mechanical Engineering	Lecture series Aug.2011 (M/S Siemens Pvt. Ltd., Baroda, along with Sri. N Shashikanth)	24000.00
		Rotor dynamic analysis of 35MW generator shaft Sept.2011 (M/S SRDC, Bangalore, along with Dr. L Chandrasagar)	30000.00
		Testing of aerospace quality rolling element bearings Oct.2011- mar 2012 (M/S National Aerospace Laboratories, Bangalore)	75000.00
		Consultancy on patent drafting Dec.2011 (M/S K & S partners) Free advise	0.00



		Lubricating system inspection April.2012 (M/S Sothern Lubrication Pvt. Ltd.)	12000.00
		Inter- shaft bearing testing April 2012-Feb2013 (M/S National Aerospace Laboratories, Bangalore) .	120000.00
		VTU lecture series Aug.2012 (M/s VTU regional centre, Bangalore)	18000.00
		Reduction of piping vibrations Aug.2012 (M/S Ncon Turbo Tech Pvt. Ltd.)	15000.00
		Verification of the design analysis of seal test rig Dec.2012 (M/S SRDC, GE, Bangalore)	90000.00
		Testing methodology for Gokart June2013 (M/s Dolphin industries, Bangalore along with Dr.B. Ravindra)	18000.00
		Advisory Consultancy on CFD related issues July 18&19,2013 (M/S SRDC, Bangalore)	10000.00
		Boiler safety spring problems INS VIRAT, Aug.2013 (M/s Tocal Industries, along with Sri N Shashikanth, Sri Venkatesh Reddy, Dr K M Purushoththam, Dr. T.N.Raju, Dr. L Chandrasagar. Additionally, a test rig worth around Rs.75,000 is retained @ Dr. AIT for future R&D)	50000.00
		TEQIP Consultancy, BMSCE, Bangalore, Aug. 2013.	30000.00
		Advisory consultancy related to preloading of boiler safety springs, Oct.2013 (M/S Tocol Industries along with Sri N Shashikanth, Sri Venkatesh Reddy, Dr K M Purushoththam Dr. T N Raju, Dr. L Chandrasagar).	25000.00
		Five days advisory consultancy related to wedge design (Nov-Dec.2013)	25000.00
		TEQIP Consultancy, BMSCE, Bangalore, Sept., Oct., & Nov.,2013	72000.00
		TEQIP Consultancy, BMSCE, Bangalore, Jan. & Feb., 2014	78000.00
		TEQIP Consultancy, BMSCE, Bangalore, Dec. 2013 Mar.,Apr.,May.,2014	162000.00
		General consultancy @ half day a week for 12 weeks Sept. 2014- Dec. 2014	36000.00
		TEQIP Consultancy, BMSCE, Bangalore, Jun. 2014- Sept. 2014	204000.00
		TEQIP Consultancy, BMSCE, Bangalore, Oct. 2014-Dec. 2014	132000.00
		Industrial Consultancy, Ducom, Oct. 2014-Jan. 2015	45000.00
		TEQIP Consultancy, BMSCE, Bangalore, Jan. 2015- April. 2015	160000.00
		TEQIP Consultancy, BMSCE, Bangalore, May 2015- June 2015	80000.00
		Industrial Consultancy, Ducom, Feb 2015- April 2015	45500.00
		TEQIP Consultancy, BMSCE, Bangalore, July2015-Aug 2015	80000.00
		Industrial Consultancy, Ducom, May 2015- Aug 2015	52650.00
		MVJ College of Engineering, Selection committee meeting, 22 Dec 2015	7000.00
		TEQIP Consultancy, BMSCE, Bangalore,Sept 2015-Oct 2015	80000.00
		Industrial Consultancy, Ducom, Sept. 201-Dec 2015	78000.00
3.	Electrical and Electronics Engineering	Insulation and High Voltage Engineering	3,21,225/- (2010-2012)
		Insulation and High Voltage Engineering	2,14,422/- (2012-2016)

-
- 3.6 Extension Activities and Institutional Social Responsibility (ISR)**
- 3.6.1. How does the College sensitize the faculty and students on Institutional Social Responsibilities? List the social outreach programmes which have created an impact on students' campus experience.**
- The college encourages the faculty and students to initiate, participate and implement the programmes which contribute to societal awareness for various issues. Below are the few activities initiated and conducted regularly by the college students and staff members:
- Organizing regular blood donation camps.
 - Tree Plantation
 - Aids Awareness programme
 - Clean Energy
 - Rain Water Harvesting
 - Health (Eye testing)
 - Computer Awareness etc
- 3.6.2. How does the College promote College-neighborhood network and student engagement, contributing to holistic development of students and sustained community development?**
- The students are encouraged and supported to organize/ participate in the events where students have scope for working with others. Under this platform, students foster their talent in a variety of disciplines like host of cultural activities including dramatics, singing, dancing, quiz, debates, music and more. Students participate in various inter-collegiate competitions, showcase their talent and consistently win awards.
- Every year college hosts SANSKRITHI, an inter-collegiate fest, and the event regularly receives participation of over 5000 students from across Karnataka. The event attracts several leading corporate as sponsors and was greatly appreciated by the participants.
- 3.6.3. How does the College promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?**
- NSS is active in the college and many programs have been organized under this platform. The programmes organized include Shramdan for campus cleaning, blood donation camps, Eye check-up camps, HIV and social Awareness programmes, tree plantation, Personality development etc.
- 3.6.4. Give details on social surveys, research or extension work (if any) undertaken by the College to ensure social justice and empower the under-privileged and most vulnerable sections of society?**
- NIL
- 3.6.5. Give details of awards / recognition received by the College for extension activities / community development work.**
- NIL
- 3.6.6. Reflecting on objectives and expected outcomes of the extension activities organized by the College, comment on how they**
-

complement students' academic learning experience and specify the values and skills inculcated?

The involvement of students in these extension activities through organization of/participation in extra-curricular activities has helped students to develop their organizational skill, leadership qualities, understanding and inculcation of societal responsibilities, taking up projects of societal concerns, ethical behavior.

3.6.7. How does the College ensure the involvement of the community in its outreach activities and contribute to the community development? Detail the initiatives of the College which have encouraged community participation in its activities.

- The college has separate book bank in its central library funded by government of Karnataka.
- Numbers of programmes have been organized to address training needs of employed/unemployed/skilled/unskilled persons through TEQIP I and TEQIP II
- Outreach activities conducted for community development by the college include training programmes on wiring, PCB design, Plumbing, maintenance of equipment, computer awareness programme, foundry, Mason's Training, AUTOCAD and welding etc.

3.6.8. Does the College have a mechanism to track the students' involvement in various social movements / activities which promote citizenship roles?

College encourages students for participation in NSS/Extra-Curricular/Co- Curricular activities. There are different Technical clubs/associations/chapters of students coordinated by the faculty in every department. The involvement of the students in social activities is monitored by the Head of the departments through these clubs.

3.6.9. Give details on the constructive relationships (if any) with other institutions in the nearby locality in working on various outreach and extension activities.

Dr AIT is having constructive relationship with PVP Polytechnique managed by PVPWT in the same campus. Good number of programmes like Celebration of Republic day, Ambedkar Jayanthi and Women's day etc. are organized jointly with PVP Polytechnic, and other schools managed by PVPWT

3.6.10. Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

The college is recognized with good ranking in rankings announced by different agencies. The college is recognized institute for World Bank TEQIP II funding due to its best performance in TEQIP phase I.

3.7 Collaboration

3.7.1. How has the College's collaboration with other agencies impacted the visibility, identity and diversity of activities on the campus?

To what extent has the College benefitted academically and financially because of collaborations?

The college has collaborative activities with industries, government and non-government organizations. Impact of it is summarized below:

- Refurbishment of laboratories
- Strengthening of laboratories in terms of equipment
- Exposure of students for real life projects
- Regular interaction of students and faculty with professionals and academicians
- Internship/sponsorship to students.
- Industrial visits

MoU done with Electrono solutions helps our students to learn LABVIEW and its application for real time design and verification. Department of Instrumentation Technology received six Analog kits worth of Rs. 60,000/- from Texas Instruments, and are included in 4th Sem curriculum. Department of Medical Electronics received the equipment's of worth 1.5 Lakhs for the establishment of center of excellence in embedded system development.

Table 3.20 gives the details of MOU signed by the college/Departments with industries / Institutes / Organization

Table 3.20: List of MOUs signed

Sl.No	Name of the Organization	MOUs Entered With	Date
1	M/S RCS EDUCATIONAL PRIVATE LIMITED, BANGALORE	Institute (CSE Dept.)	10-08-2010
2	M/S IGLABS TECHNOLOGIES PVT. LTD., BANGALORE	Institute	02-09-2010
3	M/S UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE	Institute (Mechanical Dept.)	29-08-2011
4	M/S DUCOM INSTRUMENTS Pvt. Ltd., BANGALORE	Institute (Mechanical Dept.)	09-09-2011
5	M/S DYNASPEDE INTEGRATED SYSTEMS Pvt. Ltd., HOSUR, T N	Institute (Mechanical Dept.)	14-09-2011
6	M/S CRANES SOFTWARE INTERNATIONAL Ltd., BANGALORE	I T Dept.	17-09-2011
7	M/S DUCOM INSTRUMENTS Pvt. Ltd., BANGALORE with DEPT. OF I E M	I E M Dept.	17-5-2012
8	M/S Nfotech DIGITAL ENGINEERING (P) Ltd., BANGALORE	Institute (Mechanical Dept.)	27-11-2012
9	M/S POWER RESEARCH & DEVELOPMENT CONSULTANTS (P) Ltd., BANGALORE	Electrical & Electronics Engg dept.	14-12-2012



10	M/S ELECTRONO SOLUTIONS Pvt. Ltd., BANGALORE	Institute	21-03-2013
11	M/S JVS ELECTRONICS LTD., BANGALORE	Electrical & Electronics Engg dept.	10-04-2013
12	M/s GOSHAKTHI RENEWABLE ENERGIES	E & C	26-09-2013
13	M/S MEDINI, an Authorized Training and Certification Centre for Autodesk	Institute	26-09-2013
14	TEMMINOVA TECHNOLOGIES, BANGALORE-560086	MCA	24-10-2013
15	M/S. COREL TECHNOLOGY PVT. LTD.,	I T E	26-11-2013
16	M/S. EAGLE PHOTONICS (THE INDUSTRY)	E&C	23-11-2013
17	M/S CRANES SOFTWARE INTERNATIONAL LTD., BANGALORE (2 MOU'S FOR SETTING 2 LABS)	E & C	18-12-2013
18	M/S CAMOSUN COLLEGE, VICTORIA, BRITISH COLUMBIA, CANADA (EXCHANGE OF FACULTY, CONSULTATION, EXCHANGE OF SCHOLARLY IDEA, ETC.)	Institute	19-12-2013
19	M/S PROVIENCE SYSTEMS INDIA PVT. LTD. (TRAINING INSTITUTE)	Mechanical	07-01-2014
20	M/S PROVIENCE SYSTEMS INDIA PVT. LTD. (TRAINING INSTITUTE)	I E M	12-03-2014
21	M/S NIHON COMMUNICATION SOLUTIONS PVT LTD., BANGALORE	TC	21-04-2014
22	M/S PTHINKS, BANGALORE	CSE / ISE	12-08-2014
23	M/S CONFEDERATION OF INDIAN INDUSTRY (CII)	Institute	27-10-2014
24	M/S FEDERATION OF KARNATAKA CHAMBERS OF COMMERCE & INDUSTRY (FKCCI)	Institute	03-11-2014

3.7.2. Mention specific examples of, how these linkages promote

- Curriculum development
- Internship, On-the-job training
- Faculty exchange and development
- Research, Publication
- Consultancy, Extension
- Student placement

- Any other, please specify

Curriculum development

The benefits of these collaborations have specifically impacted syllabus modification with inclusion of industry related laboratories into core curricula. Also the industrial linkages promoted the quality of the UG/PG projects. Most of the UG projects are carried out for real life problems in all the departments. Maximum students opting for sponsored PG dissertations in industry.

Internship, On-the-job training

UG students are allowed to opt for internship/training during the vacation in industry/organization in all the programmes. For PG programmes, one semester internship is the part of curricula and the various collaborations mentioned above helped the students to get better internship opportunities. Student training is conducted by various companies such as Sri Dutt technologies Pvt. Ltd, Electrono solutions, Texas Instruments etc

Faculty exchange and development

Faculty exchange is also a part of MoU with other academic institutes. Few departments invited industry personals to teach part of UG subjects.

Research, Publication

Number of ongoing R/Ds and publications are increased.

Consultancy, Extension

- The linkage with government and non-government organizations has promoted consultancy and testing activities. Electrical and Civil engineering departments in particular have excelled in these activities.
- Collaborations helped all faculty to get the awareness to state-of-the art technologies and has given exposure for possible consultancy activities and joint programmes with Industries.

Student placement

Collaborations promoted the number of student internships opportunities, which in turn helps the students to get placed in better organizations.

Fromm the placement record, its improvement is visible. More than 80% students are placed every year.

Any other, please specify

NIL

- 3.7.3. Does the College have MoUs nationally / internationally and with institutions of national importance/other universities/ industries/corporate houses etc.? If yes, explain how the MoUs have contributed in enhancing the quality and output of teaching-learning, research and development activities of the College?**

Yes. The college has signed MoUs with reputed institutions, organizations and corporate houses. It has helped to carry out UG projects/internship/PG sponsored dissertations in industries. In addition, MOUs helped to conduct various FDPs/Workshops so as to enhance the knowledge of the faculty and students to the tune of upcoming technologies. MOU with corporate houses has enhanced the interaction of student with industries thereby the quality of



teaching-learning has improved. The sharing of resources (human/laboratory/library etc) with other colleges, and organization of collaborative workshops/seminars/training programmes are also a part of MoU.

3.7.4. Have the College industry interactions resulted in the establishment / creation of highly specialized laboratories / facilities?

YES - Interaction with industry has resulted in specialized laboratories in few departments. For example, interaction with Texas Instruments by the department of Instrumentation Technology, resulted with the establishment of Amnalog IC lab during 2011-12

Any additional information regarding Research, Consultancy and Extension, which the institution would like to include.

Nil

CRITERION – 4: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1. How does the College plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?

The college was established in 1980 with three departments and currently the institute offers 10 UG, 10 PG and PhD Programmes. Since then the adequate availability of physical infrastructure was duly identified and has been planned and constructed accordingly.

The Institute has a total land area of 20.53 Acres of which about 79725.38 sq.m has been constructed with robust structures for various academic purposes including accommodation facilities for students (hostels). Apart from this 80 Class rooms for UG & PG programmes that includes, 3 air conditioned seminar halls, Auditorium, faculty rooms, wide corridor space, good natural lighting and ventilation and open air auditorium with 1000 capacity are available.

For the adequate availability of physical infrastructure and ensure its optimal utilization following steps are followed by the institution:

- Head of the institution takes the responsibility of identifying the adequate requirements.
- Head of the departments and faculty members plan the requirements at the departmental level and submits to the Head of the institution
- Head of the institution with reference to the budget position, puts forward to the finance committee, which in turn recommends to the Board of Management for the approval
- Respective Head of the department headed by Registrar and Principal ensures the approved infrastructural development

Every departments are provided with built up areas as per the requirements of AICTE in the form of class rooms, laboratories, tutorial and seminar rooms, staff rooms, HOD Room, departmental office and library. Cabins for HOD, Professors, Associate Professors and Assistant Professors are available with intercom, internet and computing facilities. In addition to this there are central facilities in the form of library, computing facility, canteen, sports (Playground, Gymnasium and track) facilities, and auditorium. Apart from this, areas in form of hostels and mess cater the need of students. The campus also provides appropriate parking facility for two wheeler and four wheeler vehicles.

Power backup Facilities are provided throughout the college with 250 KVA generator. In addition to this UPS backup in various laboratories are available.

The college has sufficient water facilities from RO water purifiers. The college has buses for transport of the students, faculty and staff. Smart campus facility for end to end campus computerization to achieve greater operational excellence has been initiated. The smart campus facilities comprising modules such as admission management, administrative staff services management,

Examination, Library management etc., and Wi-Fi facilities are available in the campus

4.1.2. Does the College have a policy for creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.

YES – The college management and Administration is of opinion that for effective teaching and learning, adequate and comprehensive infrastructure and effective learning resources are required. With this view, the college administration prepares a plan for creation and enhancement of infrastructure as well as upgrading and updating learning resources at periodic intervals. Few of the recent initiatives are:

- Established smart class rooms with modern aids, internet connectivity and LCD projectors.
- Enhancement of internet connectivity from 100 Mbps to 200 Mbps for students
- Well-equipped laboratories to give practical exposure to students in all departments.
- Construction of new building (SJ Block) housing two departments, Civil Engineering and Mechanical Engineering, Seminar Halls, etc.
- Initiated construction of additional class rooms in D- Block of the main building etc.

4.1.3. Does the College provide all departments with facilities like office room, common room, separate rest rooms for women students and staff?

YES - Every department has its own office and it is under the control of Head of respective department. There is common facility at central level for women students and staff.

4.1.4. How does the College ensure that the infrastructure facilities meet the requirements of students/staff with disabilities?

Following Facilities are provided to meet the requirements of students/staff with disabilities:

Lift: is available in the main building, which connects to all the floors.

Ramp: is made available at the entry point of the main building

Rest Rooms: Separate rest rooms are available for physically challenges students

4.1.5. How does the College cater to the residential requirements of students? Mention

- Capacity of the hostels and occupancy (to be given separately for men and women)
- Recreational facilities in hostel/s like gymnasium, yoga center, etc.
- Broadband connectivity /Wi-Fi facility in hostel/s.

Capacity of the hostels and occupancy (to be given separately for men and women):

The college provides hostel facility for both boys and girls students inside the campus to cater their residential requirement. The capacity and occupancy of various hostels is shown in following table 4.1.

Table.4.1: Details of Hostels

Hostels	No. of rooms	Capacity	No. of students accommodated
Hostel for Boys:			
Ananda Bhavan (1980)	147	422	422
Siddartha (2011)	73	240	228
Ashoka (2014)	25	90	74
Hostel for Girls			
Chethana (2010)	108	372	362

Recreational facilities in hostel/s like gymnasium, yoga centre, etc.:

There is provision of indoor sports facilities such as fully equipped gymnasium, Table tennis, carom, and badminton court are provided. There are additional outdoor sport facilities for cricket, football, volleyball, basketball and running track.

Broadband connectivity / Wi-Fi facility in hostel/s.:

The hostel campus is provided with Secured Wi-Fi Network with 200 MBPS internet speed and is accessible by all students.

4.1.6. How does the College cope with the health related support services for its students, faculty and non-teaching staff on the campus and beyond?

There are leading hospitals are situated within 100 meters of the campus Viz. Fortis hospital and Panecia hospital who provides ambulance services if required. In addition the Govt. run ambulances service is available on call to 108. The college has entered into MOU with Panecia hospital so as to get medical support for any emergency cases related to students, staff and faculty members

4.1.7. What special facilities are made available on the campus to promote interest in sports and cultural events?

The college has independent indoor and outdoor sports facilities and our students are regularly using them for their various sports activities. B.com, M.P.Ed, Qualified Physical Education Director (PED) is looking after the various sports activities.

Outdoor facilities:

- 200Mtrs. Athletic Ground
- Cricket ground (60 Yards)
- Throw Ball
- Foot Ball
- Basket Ball court
- Volley Ball
- Kabbadi
- Kho-Kho Court

Indoor facilities:

- Gymnasium
- Shuttle Badminton
- Carom
- Table tennis

Facilities: Facilities like T.A. and D.A and Entry fee for players of the College team players to participate in any tournaments in India is extended by the college. Track suits are provided to those players who

achieved medals in University, Inter University, National, and International level competitions.

USAGES.

A good number of Students are using the sport facilities in our college like Athletic ground, Cricket ground, Foot Ball ground, Basket Ball, volley Ball, Throw Ball and also indoor games whenever they free.

4.2 Library as a Learning Resource

4.2.1. Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

YES- The central Library of the College have a library committee formed by Principal as Chairman, HOD's & Librarian as committee members. The purpose of library committee is to improve the services and benefit to the users satisfaction and also improvement of the library infrastructure. Library committee plays a vital role in designing policy matters / decisions for smooth running of the Library. Regular meetings are held to discuss the library related issues. Responsibilities of Library Committee are Budget Allocation; Policy Decisions; Forming Rules and Regulations and Controlling its implementation; considering demands received from readers and reviewing library rules as per need; Advising Librarian to solve administrative problems and Book selection in co-ordination with their respective heads of departments

4.2.2. Provide details of the following:

- **Total area of the library (in Sq. Mts.)**
- **Total seating capacity**
- **Working hours (on working days, on holidays, before examination days, during examination days, during vacation)**
- **Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)**
- **Access to the premises through prominent display of clearly laid out floor plan; adequate signage; fire alarm; access to differently abled users and mode of access to collection)**

Table 4.2: Library Details

Total area of the library (in Sq. Mts.)	1778 sq.mtrs.
Total seating capacity	255 No's
Working hours (on working days, on holidays, before examination days, during examination days, during vacation)	Working days : i) Monday to Friday: 9-00am to 10-00pm ii) Saturday: 9-00am to 5-30pm iii) During vacation: 9-00am to 5-30pm
Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)	i). Individual reading in 1 st , 2 nd & 3 rd floor. ii). Ground floor- Circulation section, Newspaper section iii). IT zone for accessing e-resources- 1 st & 3 rd floor

Access to the premises through prominent display of clearly laid out floor plan; adequate signage; fire alarm; access to differently abled users and mode of access to collection)	i).Yes. Library premises floor wise plan displayed ii).Fire extinguisher available in every floor of the library iii).Open access is available in all sections of the library
--	---

4.2.3. Give details on the library holdings Total No.

- **Print (Books, back volumes and thesis)**
- **Non Print (Microfiche, AV)**
- **Electronic (e-books, e-Journals)**
- **Special collection (eg. Text book, Reference books, standards, patents) Librarian**

Table 4.3: Details of Library Holdings

Details	Total No
a) Print (Books, back volumes and thesis)	Books - 78993 Thesis available in the concerned department library
b)Non Print (Microfiche, AV)	CD's - 2650
c)Electronic (e-books, e-Journals)	E-books - 13600 E- Journals - 8611
d)Special collection (eg. Text book, Reference books, standards, patents)	i)Encyclopedia- 09 sets on different disciplines ii) Dr Ambedkar collection

4.2.4. What tools does the library deploy to provide access to the collection? Librarian

- **OPAC**
Yes
- **Electronic Resource Management package for e-journals**
Yes. Following packages are available under VTU Consortium.
Springer Journals
 - IEEE Journals
 - Springer Journals
 - J-GATE
 - K-NIMBUS
 - ASC
 - NPTL
- **Federated searching tools to search articles in multiple Databases**
Yes. (K-NIMBUS)
- **Library Website**
Library link with College web site: www.dr-ait.org
- **In-house/remote access to e-publications**
Yes. (Cloud Based Access, ABSCO)

4.2.5. To what extent is the ICT deployed in the library?

- **Library automation**
Yes. WAN
- **Total number of computers for public access**
25
- **Total numbers of printers for public access**
01
- **Internet band width speed**

150 Mbps

- **Institutional Repository**
D-Space
- **Content management system for e-learning**
NPTEL
- **Participation in Resource sharing networks/consortia (like Infflibnet)**
DELNET/VTU & INDEST-AICTE

4.2.6. Provide details (per month) with regard to. Librarian

- **Average number of walk-ins**
9 to 10 thousands per month
- **Average number of books issued/returned**
15 to 20 thousands per month
- **Ratio of library books to students enrolled**
UG -02 nos. per student per two weeks
PG -03 nos. per student per four weeks
- **Average number of books added during last three years**

Table 4.4: Book Addition to Library

Year	No of books added
2015-16	715
2014-15	2313
2013-14	3276
Total in 3 years	6304
Average per year	2101

- **Average number of login to OPAC**
250 nos.
- **Average number of login to e-resources**
100 nos.
- **Average number of e-resources downloaded/printed**
250
- **Number of information literacy trainings organized**
Yearly

4.2.7. Give details of the specialized services provided by the library Librarian

- **Manuscripts**
Research publications are made available to students and faculty
 - **Reference**
Books will be issued for overnight use
 - **Reprography**
yes- Xerox facility is available
 - **ILL (Inter Library Loan Service)**
Yes - DELNET Service is available
 - **Information Deployment and Notification**
Yes –By mail& Displaying in the Notice board
 - **OPAC**
Access is available
 - **Internet Access**
Available
-

- **Downloads**
Available
- **Printouts**
Available
- **Reading list/ Bibliography compilation**
Available
- **In-house/remote access to e-resources**
Yes
- **User Orientation**
Conducting Regularly
- **Assistance in searching Databases**
Yes. Through library automation software.
- **INFLIBNET/IUC facilities**
Yes. SHODH-SINDU (UGC)

4.2.8. Provide details on the annual library budget and the amount spent for purchasing new books and journals.

Table 4.5.: Annual Library Budget

Year	Budget (₹)	Amount spent for purchasing new books and journals (₹).
2015-16	56,00,000.00	33,39,119.00
2014-15	35,00,000.00	29,00,672.00
2013-14	30,00,000.00	22,08,605.00

4.2.9. Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services.

Yes- Extended the circulation section timings and other section timings without lunch break.

4.2.10. List the infrastructural development of the library over the last four years.

Table 4.6 : Infrastructural Development in Library

Year	Infrastructural Development	Cost incurred (in Lakhs)	Total Cost (in Lakhs)
2015-16	Lift Circulation counter	20.00	Rs.20.00
2014-15	NIL		
2013-14	NIL		
2012-13	NIL		

4.2.11. Did the library organize workshop/s for students, teachers, non-teaching staff of the College to facilitate better Library usage?

Ye - Conducted one FDP Training program in 2013.

4.3 IT Infrastructure

4.3.1. Does the College have a comprehensive IT policy addressing standards on IT Service Management, Information Security, Network Security, Risk Management and Software Asset Management?

YES - the College have a comprehensive IT policy to address standards on IT Service Management, Information Security, Network Security, Risk Management and Software Asset Management

4.3.2. Give details of the College's computing facilities (hardware and software).

- **Number of systems with configuration**

Total Number of system = 985, Dual Core, i5 and i7 with minimum of 4GB RAM, 500GB HDD, Graphic Cards with recommended accessories.

-
- **Computer-student ratio**
1: 4 for PG and 1:6 for UG as AICTE norms.
 - **Dedicated computing facility**
Yes. Every department has its own computer Labs
 - **LAN facility**
YES - whole campus having LAN facility Cat 5 and Cat 6 cable connectivity, Dlink switches, cisco routers etc.
 - **Wifi facility**
Yes. 100 Mbps
 - **Propriety software / Open source software**
YES Microsoft campus licenses.
 - **Number of nodes/ computers with internet facility**
985
 - **Any other**
Dedicated data centre, which cater internet and centralized servers.
- 4.3.3. What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?**
YES – The College has a plan to provide all basic amenities to cater high ended technologies, smart Class rooms, 150 Mbps Internet bandwidth, and 1:1 symmetric internet leased line.
- 4.3.4. Give details on access to online teaching and learning resources and other knowledge, and information provided to the staff and students for quality teaching, learning and research.**
Dedicated digital library providing access to IEEE journals, INDEST, NPTEL learning resources etc. All online journal can be accessed in the campus.
- 4.3.5. Give details on the ICT enabled classrooms/learning spaces available within the College and how they are utilized for enhancing the quality of teaching and learning.**
YES – The college has 10 ICT enabled class rooms (One in each department) having internet connectivity and other accessories, total Cost of which is around 45.00 lakhs.
In addition, all the departments are equipped with multimedia projectors and every classroom is equipped with LCD projector along with wired/wireless internet connection. This facility is used by all faculty for effective course delivery and by the students for their seminar presentations.
- 4.3.6. How are the faculty facilitated to prepare computer aided teaching-learning materials? What are the facilities available in the College or affiliating University for such initiatives?**
Faculty are trained to use ICT enabled equipment's, for PPT presentation online teaching, through internet, etc.
- 4.3.7. How are the computers and their accessories maintained? (AMC, etc.)**
In addition to AMC, the college has its own trained and skilled persons to maintain the IT infrastructure, maintain data center etc. Staff in different departments maintains their own computers through departmental assistance.
-

4.3.8. Does the College avail of the National Knowledge Network connectivity directly or through the affiliating University? If so, what are the services availed of?

YES- the College avails the national knowledge network connectivity through NPTEL, AICTE online journals, VTU online journals QEEE resources etc.

4.3.9. Provide details on the provision made in the annual budget for update, deployment and maintenance of the computers in the College?

Details are given in section 3.2

4.4 Maintenance of Campus Facilities

4.4.1. Does the College have an Estate Office / designated officer for overseeing maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.

YES- the College has maintenance cell comprising a maintenance in-charge, supervisor and workers. In addition to regular staff and labours are contractually employed. The routine maintenance is looked after by this cell. Construction and refurbishment of works at individual departments and central common facilities are planned and executed by Project Engineer.

Most of the open areas are planted with grass and trees. Some of the areas are also landscaped with lawn and ornamental plants. Maintenance of garden is taken care by gardening section

4.4.2. Does the College appoint staff for maintenance and repair? If not, how are the infrastructure facilities, services and equipment maintained? Give details.

Institute appointed housekeeping staff for casual repairs of buildings. Institute appoints contractors for some of works by calling tenders/quotations for the works.

Usually equipment are maintained through AMC with supplier. However if the equipment is need of calibration or repairs any service provider is consulted to set to right. Minor repairs of equipment are done by the respective department's instructors

Any additional information regarding Infrastructure and Learning Resources, which the institution would like to include.



CRITERION – 5: STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support**5.1.1. Does the College have an independent system for student support and mentoring? If yes, what are its structural and functional characteristics?**

YES – The College has independent system for student support and mentoring. The support system functions through several units such as Departmental Mentoring System, Placement and Training Cell, Grievance Redressal Cell, and Committees for all co-curricular and extra-curricular activities. These committees are constituted with Staff and Student representatives and carry out the activities under the supervision of the Principal.

Mentorship is in place since 2010, from the first autonomous batch onwards. A batch of 20 students is assigned to a faculty member and this faculty member acts as a mentor to these students. He/she takes care of the student's academic problems besides counselling and motivating them to participate in co-curricular activities.

5.1.2. What provisions exist for academic mentoring apart from class room work?

The mentors monitor the academic performance of the students assigned to them regularly and advises them regarding registering, withdrawing and dropping of courses depending on their strengths and weaknesses.

Apart from the classroom work, for academic mentoring, following provisions are available:

- Aptitude Training.
- Value Added Course.
- Guest Lecture.
- Work shop.
- Soft skill Training.
- Technical Training.
- Technical Exhibitions etc

5.1.3. Does the College provide personal enhancement and development schemes for students? If yes, describe techniques employed e.g., career counselling, soft skill development, etc.

YES -The College provides personal enhancement and development schemes for the Students through:

- Training and Placement office.
- Student's development cell.
- Entrepreneurship development cell.

Training and Placement office:

T&P office, headed by eminent Placement officer conducts all training and placement activities. Placement officer is assisted with a team of faculty members, one each from all the departments coordinates all placement related activities like conducting career counselling programmes for the pre-final and final year students. The Institution organizes soft skill and aptitude training programmes for the final year students through T& P office.

Soft Skill Development:

College offers communicative skills through the regular curriculum as Functional English and Communication Skills lab and it is offered by the Department of HSS to cater to the need for language development skills.

Student's Technical Club.

Each and every department provides technical talks, training programmes on cutting edge technologies by industry persons so as to enable the students be industry ready at the time of graduation. In addition, through students technical club every department organizes inter college and intra college technical activities every year, through which they interact with academicians, professionals and also learn event management. Students acquire practical knowledge of the subject by Industrial visits. It helps the students to update their knowledge on current affairs.

Entrepreneurship development cell

Dr.AIT-IEDC is established under the sponsorship of AICTE -EDC with a sanction amount of Rs 5,00,000/- for a period of 3 years (2012-2016). This provides a common platform to the students for their professional development and identifies and promotes the entrepreneurship spirit among the students

5.1.4. Does the College publish its updated prospectus and handbook annually? If yes, what are the activities / information included / provided to students through these documents? Is there a provision for online access?

YES- The Institution publishes 'prospectus' and 'academic regulations' annually.

The prospectus contains detailed information about the Trust, Governing Body, Academic Council, Faculty, staff and Institutional resources. The academic regulations book contains comprehensive information about the course registration, withdrawal, dropping, grades, examination rules, course syllabi, student's code of conduct, NFTC conditions etc.,

The prospectus and the academic regulations handbook are hosted on the college website.

5.1.5. Specify the type and number of scholarships / freeships given to students (UG/PG/M.Phil./Ph.D./Diploma/others in tabular form) by the College Management during the last four years. Indicate whether the financial aid was available on time.

NO- the college is aided by government of Karnataka there is no scholarship schemes from the management but the followings are provided:

- The management provides free education to 4 students every year
- Every year Medals are given by the institute to toppers in class and overall topper during the graduation day celebration. Financial assistance is given by the institute to the students to attend and publish research findings/ product demonstration

5.1.6. What percentage of students receives financial assistance from state government, central government and other national

agencies? (e.g., Kishore Vaigyanik Protsahan Yojana (KVPY), SN Bose Fellow, etc.)

College has arranged a number of scholarships for the benefit of students namely:

- National merit scholarship
- Backward classes scholarship
- Scholarship from caste based welfare associations

Details of Financial Assistance from Karnataka Government to Students:

Table 5.1 (a). Details of financial Assistance

S L N o	Cate gory	2011-12		2012-13		2013-14		2014-15	
		No.of stude nts	Amt. of scholar ship	No.of stude nts	Amt.of scholar ship	No.of stude nts	Amt.of scholars hip	No.of stude nts	Amt.of scholarsh ip
1	SC	36	₹ 6,30,85 0	496	₹ 1,26,96, 055	315	₹ 83,69,53 0	336	₹ 1,05,32,9 10
2	ST	62	₹ 5,48,23 0	91	₹ 17,09,9 20	73	₹ 19,72,30 0	58	₹ 20,33,000
3	OBC			951	₹ 1,57,80, 120	562	₹ 87,75,45 0	1067	₹ 2,05,76,0 15
	TOT AL	98		1538		950		1461	

5.1.7. Does the College have an International Student Cell to cater to the needs of foreign students? If so, what measures have been taken to attract foreign students?

YES- International Student Cell was established during the academic year 2015-16 and is headed by an experienced international student admission counsellor. During the current academic year 14 international students have been admitted into various B.E. programmes.

5.1.8. What types of support services are available for

- overseas students
- physically challenged / differently abled students
- SC/ST, OBC and economically weaker sections Admission
- students to participate in various competitions/ conferences in India and abroad Principal/Dean
- health centre, health insurance etc. Principal/Admission
- skill development (spoken English, computer literacy, etc.,)
- performance enhancement for slow learners / students who are at risk of failure and dropouts
- exposure of students to other institutions of higher learning/ corporates/business houses, etc.
- publication of student magazines

Overseas students:

International student's admission counsellor attends to their personal problems, like boarding, lodging etc. so that they can settle down without any hassles. The mentors pay special attention to their academic needs and need based remedial classes are conducted for

these students.

Physically challenged / differently abled students:

Following facilities are provided to physically challenged students:

- Separate toilets
- Ramps with gentle gradient at the entrance of the main building
- Lift facility in the main block.
- Extra time is given for examination of theory paper and labs.

SC/ST, OBC and economically weaker sections

- SC/ST/OBC Scholarship from state government
- SC/ST, OBC and economically weaker Sections are given fee reimbursement provision provided by the Government.
- Social Welfare Department, GOK, book bank scheme is provided to SC/ST students.

Students to participate in various competitions/conferences in India and abroad:

- The Institution extends travel grants and registration fees to the students for presentation of research papers in conferences in India and abroad.
- Students are encouraged with financial assistance to participate in various competitions organized outside the college.

Health Centre, health insurance etc.

- Qualified medical practitioners (on contract) visit the institution regularly to offer medical services to the students of the institute as and when required.
- College has an agreement with Panesia Hospital, (at 1/2 km away from the college campus) to provide medical services.
- Apart from this, first aid kits are available in all the laboratories. Fire extinguishers are placed in strategic locations of the institute and a few staff members have undergone training in the usage of the fire extinguishers.
- Medical insurance is extended to all the students
- Frequent medical check –up and blood donation camps are arranged (At least twice in a year).
- Free Eye check-up camps are organised every year for students and staff members by Vasani Eye Care, Bangalore

Skill development (spoken English, computer literacy, etc.,)

- The institution has full-fledged and well equipped English language laboratory headed by a Doctoral Degree holder in English. The Department of English imparts training to the students to enhance their spoken and written English skills.
- Curriculum is so designed to make students 100% computer literate.
- Add-on programs are conducted on the following areas: Soft Skills, Communication Skills.
- Communication Skills and Language Lab are introduced in the curriculum for all students.

- Students are encouraged to use NPTEL, QEEE and E – Journal facilities.

Performance enhancement for slow learners / students who are at risk of failure and dropout:

Slow learners or academically weak students are identified based on their performance in CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) and remedial coaching classes are conducted in two relatively tough subjects per semester per programme.

Exposure of students to other institutions of higher learning/ corporates/business houses, etc.

- Students are encouraged to participate in seminars/workshops/conferences organized by the college and other institutes.
- State Level Technical Student events are arranged in each department in which the students of other institution participate.
- They are also taken on guided tours to corporate houses and industries.
- Students are encouraged to take internship / sponsored projects at reputed industries, institutions and organizations.
- Industrial visits and expert talk of professionals from industry are arranged for practical exposure.
- Workshops and seminars are organized on recent developments in technology.
- Workshops on entrepreneur development are organized for the students to enhance the business development qualities in students.

Publication of student magazines

- Institute magazine is published. It serves as a platform for the exhibition of the creative potentialities of the students.
- In the College few Departmental newsletters are published every academic year e.g., Zenith from EIE Department.

5.1.9. Does the College provide guidance / coaching classes for Civil Services, Defense Services, NET/SLET and any other competitive examinations? If yes, what is the outcome?

YES - The Awareness is created for Civil Services, Defence Services, and other competitive examinations to inculcate the interest of the students. The college faculty, respective mentors and nearby recognized coaching centres provides guidance for admission tests like GATE, GRE, TOEFL, CAT and other competitive examinations. They train communication, English, Verbal, Non-Verbal, and Reasoning for Campus Placements and other Competitive Examinations

Outcome:

15-20% of students are qualified in GATE/GRE/CAT, 80-85% of students get their employment, and 10-15% of the students admit for higher education in India and abroad, 2 – 3 % students qualified for civil and defence services.

5.1.10. Mention the policies of the College for enhancing student participation in sports and extracurricular activities through strategies such as

- **additional academic support, flexibility in examinations**
- **special dietary requirements, sports uniform and materials**
- **any other**

Additional academic support, flexibility in examinations

The Institute has a huge play ground with a neatly laid athletic track and cricket net practice facilities. Besides this there is one well equipped gymnasium with indoor games facilities. All the sports activities are managed and supervised by a qualified physical education director. Extra-curricular activities like blood donation camps, tree plantation, campus cleaning, green activities are managed and supervised by an NSS coordinator and a Student Welfare Officer. The PED, NSS coordinator and SWO do their level best to motivate the students to participate in sports and extra-curricular activities. In addition:

- 10% condonation in attendance is given to students who participate in approved sports and extra-curricular activities.

Special dietary requirements, sports uniform and materials:

- The College provides sports uniform and sports kit to the students participating in sports.
- T.A. and D.A is provided to the students at the time of their participation in tournaments.
- Students participating in annual athletic meet are provided with refreshments and lunch.

Any other

- Medal winners in inter collegiate, university and state level sports and games activities are suitably rewarded by the institute.
- Annual sport competition is organized every year in even semester and winners are honored by certificate and memento.

5.1.11. Does the College have an institutionalized mechanism for placement of its students? What services are provided to help students identify job opportunities, prepare themselves for interview, and develop entrepreneurship skills?

YES - A full time training and placement officer with an independent office is in-charge of the training and placement activities of the students. The main objective are:

- To provide the students with intense soft skill and aptitude training during their third/ final year of study so that they can face the placement interviews with confidence.
- To plan more industry-institution interactions to benefit students and faculty

Institute has Entrepreneurship Development Cell (EDC), which has been established since last two years. Entrepreneurship awareness program is conducted to the interested students through the outside experts. Students got every detail about entrepreneurship through the

experts from necessary field like finance, marketing research and others.

- 5.1.12. Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus annually for the last four years).

Table 5.2: Details of No. of Companies visited and No. of students placed

Sl. No	Academic Year	No. Of Companies Visited	No. of Students Placed			
			UG		PG	
			Total No. Of Eligible Students	No. Of students Placed	Total No. Of Eligible Students	No. Of students Placed
1	2015-16	28	694	409	115	22
2	2014-15	18	635	355	85	15
3	2013-14	15	584	248	50	16
4	2012-13	15	497	235	44	17
5	2011-12	13	497	330	26	14

Details of on-campus placement during 2010-2011												
Sl. No.	COMPANY	Number of students placed in on campus drive										
		C S	I S	E C	E E	T E	I T	M L	M E	I M	C V	TO TAL
1	TCS	52	12	37	10	25	6		9	3		154
2	HCL Technologies	49	25	65	5	9	9	3	6			192
3	Mindtree	9	4	6		9		3				31
4	TITAN		1							1		2
5	RAMKY INFRASTRUCTURE LTD.(Construction)										6	6
6	SASKEN	4		1								5
7	EUREKA FORBES LTD.											0
8	MPHASIS (HP Company)	3	4	4	2	5						18
	TOTAL	119	46	104	37	50	16	6	29	4	11	422
Details of off-campus placement during 2010-2011												
SL. No.	COMPANY	Number of students placed in off campus drive										
		C S	I S	E C	E E	T C	I T	M L	M E	I M	C V	TO TAL
1	Somaenterprises (Construction Co.)										3	3
2	ACT TV					1						1
3	SYNTEL			1								1
4	ROBERT BOSCH			7		1						8
5	ORACLE	2							1			3
6	YOKOGAWA						1					1
7	L&T ECC										2	2
8	TECH MAHINDRA											0
9	INFOTECH								3			3
	TOTAL	2	0	8	0	2	1		4		5	22



Details of on-campus placement during 2011-2012												
SL. No.	COMPANY	Number of students placed in on campus drive										TOTAL
		C S	I S	E C	E E	T C	I T	M L	M E	I M	C V	
1	TCS	65	30	66	23	20	6	2	21	3	0	236
2	HCL Technologies	20	9	16	8		2					55
3	L&T ECC				1				2		2	5
4	EXETER	2										2
5	SOBHA DEVELOPERS										1	1
6	URC Constructions										4	4
	TOTAL	87	39	82	32	20	8	2	23	3	7	303

Details of off-campus placement during 2011-2012												
SL. No.	COMPANY	Number of students placed in off campus drive										TOTAL
		C S	I S	E C	E E	T C	I T	M L	M E	I M	C V	
1	ROBERT BOSCH			2								2
2	ORACLE	7									1	11
3	SASKEN	6		5		1						12
4	MEIL										11	11
5	HILTI										1	1
6	AQINSIGHTS		2									2
7	INFORMATICA	2										2
	TOTAL	15	2	7		1					13	41

Details of on-campus placement during 2012-2013												
SL. No.	COMPANY	Number of students placed in on-campus drive										TOTAL
		C S	I S	E C	E E	T C	I T	M L	M E	I M	C V	
1	TCS	50	16	46	16	17	6	2	17	3	5	173
2	CEGEDIM	2	1									3
3	L&T Construction			0	0				1		0	1
4	VIRTUSA	1	0									1
	TOTAL	53	17	46	16	17	6	2	18	3	5	178

Details of off-campus placement during 2012-2013												
SL. No.	COMPANY	Number of students placed in off-campus drive										TOTAL
		C S	I S	E C	E E	T C	I T	M L	M E	I M	C V	
1	HCL Technologies	16	7	8	5				11	1		48
2	SASKEN	6	0	2								8
3	L&T INFOTECH											1
4	YOKOGAWA						2					2
5	HP	1	0									1



6	ZINNIA SYSTEMS	1	0									1
7	MUSIGMA	0	0	0	0	1						1
8	JVS ELECTRONICS			1	2							3
9	SAINT GOBAIN								1			1
10	ADISYS SOFTWARE PVT. LTD.											7
11	CUMMINS											1
	TOTAL	2	4	7	1	7	1	2		12	1	74

Details of on-campus placement during 2013-2014												
Number of students placed in on-campus drive												
SL #	COMPANY	C S	I S	E C	E E	T C	I T	M L	M E	I M	C V	TOTAL
1	TCS	38	23	45	0	13	6	0	19	0	1	155
2	ALCATEL LUCENT	2										2
3	TECH MAHINDRA	11	1	6	7	2			4	1	2	34
4	Textron India Pvt. Ltd.	1										1
5	INDIAN NAVY				1				1		1	3
6	PRDC				2							2
	TOTAL	52	24	51	20	15	6	0	24	1	4	197

Details of off-campus placement during 2013-2014												
Number of students placed in off-campus drive												
SL #	COMPANY	C S	I S	E C	E E	T C	I T	M L	M E	I M	C V	TOTAL
1	HP	2		5	1	1						9
2	JOHNSON CONTROLS						1					1
3	CEGEDIM	6										6
4	HEALTH ASYST	1	1									2
5	AIG ANALYTICS								1			1
6	YOKOGAWA						2					2
7	COGNIZANT	1	2	4	2	2	3					14
8	Tele-Brahmma	1										1
9	Amazon.com						1					1
10	Sabre.on											0
11	Eanst& Young											0
12	MEIL										3	3
13	Aryaka Technology	3				2				2		7
14	QUINNOX	1										1
15	RAZOR THINK	3										3
16	INDIAN ARMY					1			1			2
17	Career Net											0
18	Flip Cart					2						2

19	Bosch Rexotech								2				2
20	XL Health							1					1
21	CMC Limited	1		1	1	1							4
22	Manhattan	2											2
23	ALLGO Embeded	2											2
24	Open Text	1											1
	TOTAL	24	3	10	4	9	7	1	4	2	3		67

5.1.13. Does the College have a registered Alumni association? If yes, what are its activities and contributions to the development of the College?

Yes - All the students of BE, MBA and MCA are made to compulsorily enroll themselves in the alumni association soon after the completion of their course. The alumni association organizes alumni meets once every year. The alumni are motivated and exhorted to share their knowledge and expertise for the growth of their alma mater. The departmental Heads' invite eminent alumni to deliver technical lectures for the benefit of the students. One alumni member is made a member of the Departmental Board of Studies.

5.1.14. Does the College have a student grievance redressal cell? Give details of the nature of grievances reported and how they were redressed.

Yes -A six member grievance redressal committee headed by the Principal, with Dean (Academic) as the Member Convener looks into grievances of the students. The Programme HODs' and mentors are instructed to inform their students about the existence and constitution (details of the members) of this cell. The mentors are also instructed to facilitate the students to approach this cell for redressal of their grievances without any apprehension.

Grievances Reported: No serious /major grievances are reported since many years

5.1.15. Does the College have a cell and mechanism to resolve issues of sexual harassment?

A six member sexual harassment prevention cell headed by the Principal, with Dean (Academic) as the Member Convener looks into the grievances of Ladies (Staff & Students)

5.1.16. Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

An anti-ragging committee consisting of all the HODs, senior faculty, administrative staff, wardens, SWO, PED, parent representatives, PRO, local thana SHO and a local social worker is constituted to look into the ragging issues if any. The committee members interact with the senior students and educate them about the undesirability of ragging their juniors. They also interact with the fresher's and advise them to bring any incidents of ragging on and off the campus to the notice of any of the committee members so that suitable punitive and preventive measures can be initiated against the guilty. Though this menace of ragging is prevalent in many

institutions across the state and the country, fortunately it is totally absent in our campus since almost 10 years.

5.1.17. How does the College elicit the cooperation from all stakeholders to ensure overall development of the students considering the curricular and co - curricular activities, research, community orientation, etc.?

The stake holders are students, parents, faculty and management. The measures to be adopted for the holistic development of students are usually discussed in detail in the management - faculty interactions. Accordingly, the institution has created various platforms like, the science and technology Club, the Departmental clubs, RPRC (Research Promotion Review Committee) etc., to nurture and showcase the talents of the students. The Institution also organizes programme wise parent-teacher meet to elicit the opinion of the parents for the all-round development of the institution and hence their wards.

5.1.18. What special schemes/mechanisms are in place to motivate students for participation in extracurricular activities such as sports, cultural events, etc.?

- 10% condonation in attendance
- Incentives for medal winners

5.1.19. How does the College ensure participation of women in ‘intra’ and ‘inter’ institutional sports competitions and cultural activities? Provides details of sports and cultural activities in which such efforts were made?

Women in intra and inter institutional sports competitions and cultural activities are encouraged by providing all necessary facilities with financial assistance to meet the expenditure

5.2 Student Progression

5.2.1. Provide details of programme-wise success rate of the College for the last four years. How does the College compare itself with the performance of other autonomous Colleges / universities (if available)

Table 5.3: Details of Success rate of UG and PG Programme

Sl. No.	Success rate of UG Programme	Academic Year			
		2014-15	2013-14	2012-13	2011-12
1	Civil Engg.	86%	100%	93.24%	89.04%
2	Mechanical Engg	99%	98%	86%	97%
3	Electrical & Electronics Engg	93%	95.8%	98.48%	83.33%
4	Electronics & Commun. Engg	91.7%	92.4%	90.66%	90.3%
5	Industrial Engineering and Management	82%	92%	63%	96%
6	Instrumentation Technology	96%	81%	100%	100%
7	Computer Science & Engg	97%	100%	98%	98%
8	Telecommunication Engg.	100%	94.29%	85.71%	92.75%
9	Information Science & Engg	93.75%	95%	96%	98%
10	Medical Electronics	66%	95%	68%	91%
Success rate of PG Programme					
Sl. No.	Programme	Academic Year			
		2014-15	2013-14	2012-13	2011-12
1	MCA	83%	90%	78%	82%
2	MBA	79%	89%	92%	85%
3	M.Tech (Computer Science and Engg)	100%	95%	100%	92%
4	M.Tech (VLSI and Embedded system	100%	100%	100%	100%

	Design)				
5	M Tech (Power Electronics)	93%	95.8%	98.48%	83.33%
6	M Tech (Digital Commn. & Networking)	100%	88%	100%	100%
7	M Tech (Structural Engineering)	100%	100%	100%	100%
8	M. Tech (Machine Design)	100%	100%	--	-
9	M. Tech (Computer Networking)	100%	100%	-	-
10	M.Tech (Electronics)	N/A	N/A	N/A	N/A

5.2.2. Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the observed trends.

Table 5.4: Percentage of Students Progressing to Higher Education

Sl. No	Department	Student progression	Academic Year			
			2014-15	2013-14	2012-13	2011-12
1	Civil Engg.	UG to PG	2014-15	2013-14	2012-13	2011-12
		PG to M.Phil.	12	8	7	6
		PG to Ph.D.	-	-	-	-
		Employed	2	1	1	1
		● Campus selection				
		● Other than campus recruitment	5	7	5	4
2	Mechanical Engg	UG to PG	8%	--	--	--
		PG to M.Phil.	NA	--	--	--
		PG to Ph.D.	5%	6%	--	--
		Employed				
		● Campus selection	20%	25%	--	--
		● Other than campus recruitment	60%	55%	--	--
3	Electrical & Electronics Engg	UG to PG	6.5 %	12.98 %	8.33 %	7.09 %
		PG to M.Phil.	NIL	NIL	NIL	NIL
		PG to Ph.D.	NIL	NIL	NIL	NIL
		Employed	75.83 %	79.22 %	91.66 %	92.90 %
		● Campus selection	59.50 %	29.22 %	47.50 %	70.21 %
		● Other than campus recruitment	16.33 %	50.00 %	44.16 %	22.69 %
4	Electronics & Commun. Engg	UG to PG	6.5 %	12.98 %	8.33 %	7.09 %
		PG to M.Phil.	NIL	NIL	NIL	NIL
		PG to Ph.D.	NIL	NIL	NIL	NIL
		Employed	75.83 %	79.22 %	91.66 %	92.90 %
		● Campus selection	59.50 %	29.22 %	47.50 %	70.21 %
		● Other than campus recruitment	16.33 %	50.00 %	44.16 %	22.69 %
5	Industrial Engineering and Management	UG to PG		4	4	05
		PG to M.Phil.				
		PG to Ph.D.				
		Employed				



		● Campus selection	01	02	03	03
		● Other than campus recruitment	02	5	08	08
6	Instrumentation Technology	UG to PG	01		03	01
		PG to M.Phil.	NIL	NIL	NIL	NIL
		PG to Ph.D.	NIL	NIL	NIL	NIL
		Employed				
		● Campus selection	13	13	08	16
		● Other than campus recruitment	24	20	18	15
7	Computer Science & Engg	UG to PG	20%	15%	10%	5%
		PG to M.Phil.	NIL	NIL	NIL	NIL
		PG to Ph.D.	2%	1%	NIL	NIL
		Employed				
		● Campus selection	80%	42%	55%	67%
		● Other than campus recruitment	10%	15%	20%	19%
8	Telecommunication Engg.	UG to PG	5	5	3	3
		PG to M.Phil.	-	-	-	-
		PG to Ph.D.	2	-	-	-
		Employed	63	45	36	33
		● Campus selection	38	25	20	21
		● Other than campus recruitment	25	20	16	12
9	Information Science & Engg	UG to PG	3	5	4	6
		PG to M.Phil.	-	-	-	-
		PG to Ph.D.	-	-	-	-
		Employed				
		● Campus selection	35	28	24	41
		● Other than campus recruitment	15	23	5	5
10	Medical Electronics	UG to PG	4	3	2	3
		PG to M.Phil.	-	-	-	-
		PG to Ph.D.	-	-	-	-
		Employed				
		● Campus selection	5	0	2	2
		● Other than campus recruitment	15	21	28	31
11	MCA	UG to PG	52	57	48	60
		PG to M.Phil.	02	01	03	01
		PG to Ph.D.	-	-	-	-
		Employed	50	56	45	59
		● Campus selection	96%	98%	93%	98%
		● Other than campus recruitment	3%	1.7%	6%	1.6%
12	MBA	UG to PG				
		PG to M.Phil.				
		PG to Ph.D.				

		Employed				
		● Campus selection				
		● Other than campus recruitment	90%	90%	90%	90%

5.2.3. What is the Programme-wise completion rate/dropout rate within the time span as stipulated by the College/University?

Table 5.5: Percentage-wise Completion

Sl. No	Department	Students Details	Academic Year			
			2014-15	2013-14	2012-13	2011-12
1	Civil Engg. (UG)	No. of students admitted	110+20	64+12	68+13	66+13
		No. of students dropped out	-	-	-	-
		No. of students declared as NFTC	-	-	-	-
		No. of student completed	-	-	-	79
		Programme completion percentage	110+20	64+12	68+13	66+13
		Programme dropout percentage	-	-	-	-
2	Civil Engg / Structural Engg. (PG)	No. of students admitted	18	18	18	18
		No. of students dropped out	NIL	NIL	NIL	NIL
		No. of students declared as NFTC	NIL	NIL	NIL	NIL
		No. of student completed	18	18	18	18
		Programme completion percentage	18	18	18	18
		Programme dropout percentage	NIL	NIL	NIL	NIL
3	Mechanical Engg (UG)	No. of students admitted	180	180	120	120
		No. of students dropped out	16	02	02	0
		No. of students declared as NFTC	0	0	0	0
		No. of student completed	153	178	110	120
		Programme completion percentage	85%	98%	91%	100%
		Programme dropout percentage	0.08%	0.01%	0.01%	0%
4	Mechanical Engg/ Machine Design (PG)	No. of students admitted	21	21	-	-
		No. of students dropped out	Nil	Nil	-	-
		No. of students declared as NFTC	Nil	Nil	-	-
		No. of student completed	100%	100%	-	-
		Programme completion percentage	100%	100%	-	-
		Programme dropout percentage	0%	0%	-	-
5	Electrical & Electronics Engg	No. of students admitted	72	72	66	72
		No. of students dropped out	05	01		04
		No. of students declared as NFTC				



		No. of student completed	67	71	66	68
		Programme completion percentage	93	97	100	95
		Programme dropout percentage	7	3	0	5
6	Electrical & Electronics Engg/ Power Electronics (PG)	No. of students admitted	16	17	17	17
		No. of students dropped out	2	2	1	0
		No. of students declared as NFTC				
		No. of student completed	8	15	16	17
		Programme completion percentage	57	88	94	100
		Programme dropout percentage	13	12	6	0
7	Electronics & Commun. Engg	No. of students admitted	132+23	147	135	149
		No. of students dropped out	17	10	15	16
		No. of students declared as NFTC	Nil	1	1	1
		No. of student completed	138	136	119	132
		Programme completion percentage	89%	92.5%	88.14%	88.5%
		Programme dropout percentage	10.96%	6.8%	11.1%	10.7%
8	Electronics & Commun. Engg/ VLSI and Embedded System Design (PG)	No. of students admitted	17	18	18	18
		No. of students dropped out	0	0	0	0
		No. of students declared as NFTC	-	-	-	-
		No. of student completed	17	16	17	18
		Programme completion percentage	100	88	94	100
		Programme dropout percentage	0	0	0	0
9	Industrial Engineering and Management	No. of students admitted	28	28	32	26
		No. of students dropped out	07	04	03	09
		No. of students declared as NFTC	---	--	--	--
		No. of student completed	23	26	20	25
		Programme completion percentage	82	92	63	96
		Programme dropout percentage	18	08	37	04
10	Instrumentation Technology	No. of students admitted	59	59	60	59
		No. of students dropped out	09	08	10	03
		No. of students declared as NFTC	NIL	NIL	NIL	NIL
		No. of student completed	N/A	N/A	N/A	56
		Programme completion percentage	N/A	N/A	N/A	100%
		Programme dropout percentage	15%	13%	16%	5%
11	Instrumentation	No. of students	N/A	N/A	N/A	N/A



	Technology / Electronics (PG)	admitted				
		No. of students dropped out	N/A	N/A	N/A	N/A
		No. of students declared as NFTC	N/A	N/A	N/A	N/A
		No. of student completed	N/A	N/A	N/A	N/A
		Programme completion percentage	N/A	N/A	N/A	N/A
		Programme dropout percentage	N/A	N/A	N/A	N/A
12	Computer Science & Engg	No. of students admitted	593	540	556	534
		No. of students dropped out	2%	2%	2%	2%
		No. of students declared as NFTC	NIL	NIL	NIL	NIL
		No. of student completed	98%	98%	98%	98%
		Programme completion percentage	98%	98%	98%	98%
		Programme dropout percentage	2%	2%	2%	2%
13	Computer Science and Engg & Computer Science & Engg (PG)	No. of students admitted	25	25	19	23
		No. of students dropped out	-	01	-	-
		No. of students declared as NFTC	NIL	NIL	NIL	NIL
		No. of student completed	25	22	19	23
		Programme completion percentage	100%	95%	100%	100%
		Programme dropout percentage	NIL	5%	NIL	NIL
14	Telecommunication Engg.	No. of students admitted	74	70	69	66
		No. of students dropped out	-	1	2	2
		No. of students declared as NFTC	-	-	-	-
		No. of student completed	72	70	64	65
		Programme completion percentage	97.3	100	93	98.5
		Programme dropout percentage	-	1.42	2.89	3.00
15	Telecommunication Engg./ Digital Communication and Networking (PG)	No. of students admitted	16	18	17	17
		No. of students dropped out	2	-	-	-
		No. of students declared as NFTC	-	-	-	-
		No. of student completed	Final year	16	17	17
		Programme completion percentage	Final year	88	100	100
		Programme dropout percentage	12.5	-	-	-
16	Information Science & Engg	No. of students admitted	49	57	62	54
		No. of students dropped out	01	-	-	-
		No. of students declared as NFTC	3	-	-	-
		No. of student completed	60	64		
		Programme				

		completion percentage				
		Programme dropout percentage				
17	Information Science & Engg / Computer Networking (PG)	No. of students admitted	20	24	-	-
		No. of students dropped out	1	1	-	-
		No. of students declared as NFTC	-	-	-	-
		No. of student completed	Ongoing	23	-	-
		Programme completion percentage		95.83 %		
		Programme dropout percentage	5%	4.1%		
18	Medical Electronics	No. of students admitted	27	21	30	33
		No. of students dropped out	2	Nil	Nil	Nil
		No. of students declared as NFTC	Nil	Nil	Nil	Nil
		No. of student completed	25	21	30	33
		Programme completion percentage	93%	100	100	100
		Programme dropout percentage	7%	00	00	00
19	MCA	No. of students admitted	52	57	48	60
		No. of students dropped out	02	01	03	01
		No. of students declared as NFTC	-	-	-	-
		No. of student completed	50	56	45	59
		Programme completion percentage	96%	98%	93%	98%
		Programme dropout percentage	3%	1.7%	6%	1.6%
20	MBA	No. of students admitted	58	43	53	59
		No. of students dropped out	1	2	-	4
		No. of students declared as NFTC	-	-	-	-
		No. of student completed	-	32	51	54
		Programme completion percentage	-	78%	94%	100%
		Programme dropout percentage	2%	2.32%	0	5.08%

5.2.4. What is the number and percentage of students who appeared/qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defense, Civil Services, etc.

Table 5.6: Central / State services, Defense, Civil Services, etc.

Sl. No	Academic year	Type of Examination	No. of students appeared	No. of students qualified	% of students qualified
1	2014-15	GATE/CAT/TOFEL/GRE/GMAT/OTHERS	5%	5%	5%
2	2013-14	GATE/CAT/TOFEL/GRE/GMAT/OTHERS	1%	1%	1%
3	2012-13	GATE/CAT/TOFEL/GRE/GMAT/OTHERS	5%	5%	5%



4	2011-12	GATE/CAT/TOFEL/GRE/GMAT/OTHERS	5%	5%	5%
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Academic Year	Programme	GRE/TOFEL		GMAT		GATE		CAT		OTHERS	
		A	Q	A	Q	A	Q	A	Q	A	Q
2014-15	Civil Engg.										
	Mechanical Engg	0	0	0	0	38	4	0	0	0	0
	Electrical & Electronics Engg					6	2				
	Electronics & Commun. Engg	5	5	0	0	0	0	0	0	2	2
	Industrial Engineering and Management					12	05				
	Instrumentation Technology	02	01							08	04
	Computer Science & Engg	15 %	10 %	15 %	10 %	20 %	20 %		NI L		NI L
	Telecommunication Engg.	4	1	-	-	12	1	-	-	7	6
	Information Science & Engg	6	6	-	-	2	1	2	1	-	-
	Medical Electronics									4	4
	MCA	-	-	-	-	-	-	-	-	-	-
	MBA	-	-	-	-	-	-	-	-	-	-
2013-14	Civil Engg.										
	Mechanical Engg	0	0	0	0	123	5	0	0	0	0
	Electrical & Electronics Engg					2	2				
	Electronics & Commun. Engg	4	4	0	0	0	0	0	0	1	1
	Industrial Engineering and Management	02	02			10	03				
	Instrumentation Technology	5	5							10	
	Computer Science & Engg	15 %	10 %	15 %	10 %	20 %	20 %		NI L		NI L
	Telecommunication Engg.	9	4	-	-	10	1	-	-	3	3
	Information Science & Engg	9	6	-	-	-	-	2	0	-	-
	Medical Electronics									3	3
	MCA	-	-	-	-	-	-	-	-	-	-
	MBA	-	-	-	-	-	-	-	-	-	-
2012-13	Civil Engg.										
	Mechanical Engg	0	0	0	0	0	0	0	0	0	0
	Electrical & Electronics Engg					3	3				
	Electronics & Commun. Engg	6	6	0	0	0	0	0	0	0	0
	Industrial Engineering and Management					10	04				
	Instrumentation Technology	4								8	
	10%	15 %	10 %	20 %	20 %		NI L		NI L	15 %	10 %
	Telecommunication Engg.	3	3	-	-	10	1	-	-	4	4
	Information Science & Engg	7	4	-	-	-	-	-	-	2	1
	Medical Electronics									2	2
	MCA	-	-	-	-	-	-	-	-	-	-
	MBA	-	-	-	-	-	-	-	-	-	-
2011-12	Civil Engg.										



Mechanical Engg	0	0	0	0	0	0	0	0	0	0	0
Electrical & Electronics Engg					3	3					
Electronics & Commun. Engg	5	5	0	0	0	0	0	0	1	1	
Industrial Engineering and Management											
Instrumentation Technology	3								10		
Computer Science & Engg	15 %	10 %	15 %	10 %	20 %	20 %		NI L		NI L	
Telecommunication Engg.	4	2	-	-	9	1	-	-	5	5	
Information Science & Engg	5	4							2	1	
Medical Electronics									3	3	
MCA	-	-	-	-	-	-	-	-	-	-	-
MBA	-	-	-	-	-	-	-	-	-	-	-

Note: A: Appeared Q: Qualified

5.2.5. Provide details regarding the number of Ph.D/D.Sc./D.Litt. theses submitted, accepted, resubmitted and rejected in the last four years.

Table: 5.7.a: Details of PhD/DSc/D.Litt Thesis Submission

Sl. No	Academic Year	Ph.D/D.Sc./D.Litt. theses			
		Submitted	Accepted	Resubmitted	Rejected
1	2015-16	03	16	0	0
2	2014-15	08	07	0	0
3	2013-14	11	12	0	0
4	2012-13	09	06	0	0
5	2011-12	05	06	0	0

Table: 5.7.b: Details of PhD/DSc/D.Litt Thesis Submission (Department wise)

Sl.No	Academic Year	Programme	Ph.D/D.Sc./D.Litt. theses			
			Submitted	Accepted	Resubmitted	Rejected
01	2015-16	CV		01		
		ME		01		
		IM	01	02		
		EEE		02		
		IT	01	--		
		EC		05		
		TE		01		
		ML		--		
		CS	01	01		
		IS		02		
		Maths		--		
		Physics		--		
		Chemistry		00		
		MCA		01		
		MBA		--		
02	2014-15	CV				
		ME	0	1	0	0
		IM	01	01		
		EEE	02			
		IT				
		EC	02	02	nil	nil
		TE	3	3		
		ML				
		CS				
		IS				
		Maths				
		Physics				
		Chemistry				
		MCA				
		MBA				
03	2013-14	CV	01	01		
		ME	1	3	0	0
		IM	01	-----		

		EEE	01	01		
		IT	-----	-----		
		EC	02	02	nil	nil
		TE	01	01		
		ML	-----	-----		
		CS				
		IS				
		Maths	03	03		
		Physics	-----	-----	-----	-----
		Chemistry	01	01		
		MCA				
		MBA				
04	2012-13	CV	-----	-----		
		ME	3	0	0	0
		IM	-----	-----		
		EEE	-----	-----		
		IT	-----	-----		
		EC	nil	Nil	nil	nil
		TE	-----	-----		
		ML	-----	-----		
		CS				
		IS				
		Maths	05	05		
		Physics	-----	-----	-----	-----
		Chemistry	01	01		
		MCA				
		MBA				
05	2011-12	CV	-----	-----		
		ME	0	1	0	0
		IM	01	01		
		EEE	-----	-----		
		IT	-----	-----		
		EC	nil	nil	nil	nil
		TE	01	01		
		ML	-----	-----		
		CS				
		IS				
		Maths	02	02		
		Physics	-----	-----	-----	-----
		Chemistry	01	01		
		MCA				
		MBA				

5.3 Student Participation and Activities

5.3.1. List the range of sports and games, cultural and extracurricular activities available to students. Provide details of participation and program calendar.

Sports and Games facilities:

The college has Independent indoor and outdoor sports facilities for students. B.com, M.P.Ed qualified Physical Education Director (PED) is looking after the various sports activities. College has following sports facilities for the students:

Outdoor facilities:

- 200Mtrs. Athletic Ground
- Cricket ground (60 Yards)
- Throw Ball
- Foot Ball
- Basket Ball court
- Volley Ball
- Kabbadi
- Kho-Kho Court

Indoor facilities:

- Gymnasium
- Shuttle Badminton
- Carom
- Table tennis

A good number of Students are using the sport facilities in the college like Athletic ground, Cricket ground, Foot Ball ground, Basket Ball, volley Ball, Throw Ball and also indoor games whenever they free. Also, students participates every year at Zonal/Inter-zonal level in the following events:

- Cricket,
- Kabbaddi
- Volley ball,
- Ko-Ko
- Table Tennis,
- Badminton,
- Chess,
- Basketball etc

Facilities like T.A. and D.A and Entry fee for players of the College team players to participate in any tournaments in India is extended by the college. Track suits are provided to those players who achieved medals in University, Inter University, National, and International level competitions.

Cultural activities:

College organizes various Cultural activities under the supervision of Student Welfare Officer (SWO). Regularly organized activities are:

- Maitri and Sanskruthi - During odd and even semester of every academic year
- kannada rajyotsava functions etc

Curricular and Extracurricular Activities:

Institute encourages various curricular and extracurricular activities through respective Departmental Technical Clubs, Science & Technology Club etc. Apart from this NSS activities are actively carried out under the supervision of NSS officer nominated by the Head of the institution. Students in large number actively participate under the guidance of NSS officer to organize the various programmes like, Awareness regarding cleanliness, health care tree plantation etc. All the above activities are published in the calendar of events in the beginning of every academic semester.

Representation of our students in Inter University, State and National Tournaments:

The details of participation of the students in the zonal sports and their achievements in various sports activities for last four years are given in the following table.

Table 5.8: Representation and achievement of our students in Inter University, State and National Tournaments

Sports students Achievement for the year 2011-2012

Academic Year	Sports activities/ Sub activities	University/ Interuniversity/ State/national/Inter national	Achievements
2011-12	Foot ball	Sate Level	Runner's Place
2011-12	Cricket	V.T.U Inter collegiate	Semi finals
2011-12	Athletics	National Level	Participated
2011-12	Net Ball	National Level	silver
2011-12	Net ball	Inter university	participated
2011-12	Net ball	Inter university	participated

Sports students Achievement for the year 2012-2013

Academic Year	Sports Activity - Sub activity	Level	Achievement
2012-13	Throw ball	university	Quarter finals
2012-13	Wrestling	University	Bronze
2012-13	Badminton	National level (All India Open champion ship. Goa	Winner
2012-13	Net Ball	University	Selected for University team

Sports students Achievement for the year 2013-2014

Academic Year	Sports Activities/ Sub Activities	University/Interuniversity/ State/national/Inter national	Awards won
2013-14	Athletics (110 Hurdles)	University	Silver Medal
2013-14	Foot Ball	University	VI place
2013-14	Kho kho	university	III place
2013-14	Net Ball	University	Selected for V.T.U team

2013-14	NetBall	University	Selected for V.T.U team
2013-14	Net Ball	University	Selected for V.T.U team
2013-14	Yogasana	University	Selected for V.T.U team

Sports students Achievement for the year 2014-2015

Academic year	Sports Activities/ Sub Activities	University/Interuniversity/ State/national/International	Achievements
2014-15	Kho-Kho	University	II place
2014-15	Kabbadi (women)	University	Gold
2014-15	NetBall (women)	University	III Place
2014-15	Yogasana (Men)	University	Silver
2014-15	Body Building	University	Gold
2014-15	Table tennis	University	Runner's
2014-15	Badminton	University	Runners
2014-15	Net Ball and Kabadi	University	Selected for University team
2014-15	Net Ball and Cricket	University	Selected for University team
2014-15	Cricket	University	Selected for University team

Sports students Achievement for the year 2015-2016

Academic Year	Sports Activities/ Sub Activities	University/Interuniversity / State/national/International	Awards won
2015-16	Yogasana	University	participated
2015-16	Kabadi (women)	Inter University	Participated
2015-16	Kabaddi (women)	University (Zone)	Runners
2015-16	Kabbadi (women)	University (Inter zone)	III place
2015-16	taekwondo	State level	Silver medal
2015-16	Badminton (men)	State level (inter collegiate)	Silver medal
2015-16	Athletics (High jump) (Triple jump)	University	Silver medal

5.3.2. Provide details of the previous four years regarding the achievements of students in co-curricular, extracurricular activities and cultural activities at different levels: University / State / Zonal / National / International, etc.

College encourages the students to take part in various co-curricular,

extracurricular & cultural activities. Our college students have excelled in various competitions of university, state, zonal, national, and international. The details are given below in Table: 5.9

Table 5.9: Representation and achievement of students in co-curricular, extracurricular activities and cultural activities at different levels

Achievements of UG Students					
Academic Year	Name of the student	Class	Level (University / State / Zonal / National / International, etc.)	Event	Achievement
2015-16	Students of Dr.AIT	All	College	Independence day Celebration 26 Jan 2016	
	Students of Dr.AIT	All	College	Republic Day Celebration 26 Jan 2016	All the students formed teams under respective branch and march past was carried out successfully. The event was witnessed by around 1500 people.
	Deepa Kulkarni Kajol J Ujwala Rahul	VII	State	Parisara Ustava Jointly organized by BBMP Karnataka Airpollution Board USIRU(NGO) Shrusti International 30 Jan 2016	Participated
	Pranav Jayaram Pragya Pandey Rakesh B V Saifan Sheik	III	National	National level Robotics competition at IIT Madras	Won II place
	Students of Dr.AIT (List attached)	All	National	Idea Contest 2015 17 Oct 2015	Pranav Jayaram was selected for II round of the contest
	Students of Dr.AIT	All	College	Diabetes awareness program	Participation
	Students of Dr.AIT	All	Intra College	mAITri 2015 An intra-college cultural festival for Freshers on 7th November 2015	Participation
	Manju	IV	State	SANSKRUTHI 2016 Dr.AIT 19 March 2015	-II Prize Solo Dance



	Rakshith	VI	State	SANSKRUTHI 2016 Dr.AIT 19 March 2015	-III Prize Solo Dance
	Students from CSE, ECE, Electrical and ML	VI	College	Robotics and Embedded systems and will be conducted by Codex and IITMadras_Shastra 2016 7 Nov 2015	Participation
				Blood Donation Camp 9 Oct 2015 Kidwai Institute of Oncology Narayana Hrudayalaya Bowring Blood Bank Red Cross Blood Bank Lions Blood Bank (Vasanth Nagar) S K Voluntary Blood Bank	More than 500 units of blood were collected from the donors (both staff and students of Dr. Ambedkar Institute of Technology.
	Shriram Abhishel K	III VIII	State	2nd Bharath Electronics Students Trophy (Best 2015) quiz organized by Bharath Electronics Ltd. a navarathna PSU	Participated
	Students of Dr.AIT	All	College	Empowering Youth Organized by JCI Bangalore Horizon 20 Oct 2015	J. Jeyachander, national trainer JCI India delivered a session
2014-15	SHREYAS K.G SHRIRAM K SUHAS KOUSHIK AKARSH DESPAND E AKSHAY KUMAR SHARATH P.M (SHARATH DINESH SKANDA H.R SKANDA B	VI	National	"GO-KART DESIGN CHALLENGE" , organised by the Indian Society of New Era Engineers (ISNEE).	5 Place



	YASHAS S MANOJ B SACHIN RATHOD WEDNSE S.A SATISH KUMAR SANJAY KUMAR NAGARJU NA VAIBHAV A J SRIVATSA SUHAS B.R HARSHA SUMANT H K.S TRILOK NAG				
	Students from all semesters	All	State	VYBHAVA, Kannada Cultural Program by Kannada Mitra Balaga, Dr.AIT, Bangalore 11 April 2014	Participation
	Students of Dr.AIT	All	College	Campus cleaning program from mAITri-14 Team	Participation
	Students of Dr.AIT	All	State	SANSKRUTHI 2015 Dr.AIT 19 March 2015	Participation
	Students of Dr.AIT	All	College	Fund Collection for Jammu Kashmir Relief Fund 25 Sept 2014	A sum of Rs. 12576.50 was collected for this fund on Thursday, 25 th September 2014. Student volunteers of NSS visited the class rooms and laboratories/work shops of Dr. Ambedkar Institute of Technology during this event.
	Students of Dr.AIT	All	College	Clean Campus Initiative 14 Oct 2014	Mayor of Bengaluru City Smt. ShanthaKumari and the Honourable Secretary Shri. S. Shivamallu graced this event A tree plantation programme was



					organized during this event.
	Students of Dr.AIT	All	College	Motivation programme for Blood Donation 10-11-2014	Student volunteers visited the class rooms and laboratories /workshops of Dr. Ambedkar Institute of Technology along with Lions club members to motivate the students about blood donation.
	Students of Dr.AIT	All	College	Blood Donation Camp 12Nov 2014 In association with 1.Lions Blood Bank (Vijayanagar) 2.Lions Blood Bank (Bangalore South) 3.Lions Blood Bank (Asare) 4.Kidwai Blood Bank 5.Sanjay Gandhi Hospital Blood Bank	A total of 500 units of blood were collected from the donors (both staff and students of Dr. Ambedkar Institute of Technology). The following organizations were involved in the blood donation camp
	Students of Dr.AIT	All	College	Free Eye Check up Camp at Dr. AIT Campus 13-14 Nov 2014 in association with R.E.A.M Charitable Trust and Smt. ShakuntalaPatil Eye Hospital, Bangalore.	More than 175 people (staff and students) benefitted from this camp.
	Students of Dr.AIT	All	College	A LIFE SKILLS ADVISORY TALK 31 March 2015	The speaker was Mr. RAGHAVENDRAN, a Life Skills Consultant who will speak on Diagnostics, Communication channels and Corporate Etiquette. About 100 students participated in this programme.
2013-14	17 Students	IV/VI	University/ State	VTU Annual Cultural Fest 3-4 May 2013 Dance Skit Singing	Participation



	Students of Dr.AIT	All	College	mAITri 14 Dr.AIT 18 Oct 2014	Participation
	2 Students	VI/VI II	State	Culutural Programme from Hamsadwani TrustMysore Department of Kannada and Culture Govt. Of Karnataka 7 Feb 2014	Participation
	Smitha	VII	State	Hadire Ragegala: Thogire Deepagala Department of Kannada and Culture Govt. Of Karnataka 23 Nov. 2013	Participation
	1. Manu A G 2. Aishwarya A 3. Amarnath V H m 4. Ashoka Naik K R 5. Divya R 6. Gaddigesh wara M P 7. Gopika S Prakash 8. Kiran Kumar P 9. Linga Reddy Patil 10. Pavan R 11. Akash Kini 12. Puneeth B	VI	University/ State	VTU Inter Collegiate Youth Festival 1 July 2013 Dance Team	Participation
	1.Rajath K 2. Sandeep Kumar B M 3. Smitha Nagaraj 4. Sowmya E 5. Vinod Prasad S	VI	University/ State	VTU Inter Collegiate Youth Festival 1 July 2013 Skit	Participation



	Students of Dr.AIT	All	College	Blood Donation Camp at Dr. AIT Campus in association with 1.Lions Blood Bank 2.Kidwai Blood Bank Indian Red Cross 3.Rashtrathana Blood Bank 4.Shushrutha Blood Bank 5.Bowring Hospital Blood Bank 21 Nov 2013	NSS coordinators and student coordinators of Dr. AIT actively participated in this programme.
	Students/Staff of Dr.AIT	All	College	Health Check up Camp at Dr. AIT Campus (22nd November 2013): A Health Check up camp was organized under the NSS unit of the college on Friday, 22 nd Nov 2013 in association with Columbia Asia Hospitals, Yeshwantpur, Bangalore.	A total of 185 people (staff and students) benefitted from this camp. NSS coordinators and student coordinators of Dr. AIT actively participated in this programme.
	Students of Dr.AIT	All	University	Road Safety Awareness Programme 27 Jan 2014	A total of 60 students from Dr. AIT participated in this rally. NSS coordinators and student coordinators of Dr. AIT actively participated in this programme.
	Students of Dr.AIT	All	University	Rahul Gandhi Interaction Programme 15 Feb 2014 organized by The Higher Education Council, Government of Karnataka	25 students of Dr. AIT were selected (which included UG and PG students).
	Students of Dr.AIT	All	College	Eye Check up Camp at Dr. AIT Campus 20 March 2014 Dr.AIT in association	More than 150 people (staff and students) benefitted from this camp. NSS coordinators and student coordinators of Dr. AIT actively



				with Sum Eye Trust, Bangalore.	participated in this programme.
2012-13	Students of Dr.AIT	All	University/ State	Rally on 150 th Birthday Celebration of Swami Vivekananda, Department of Kannada and Culture Govt. Of Karnataka 16 March 2013	Participation
	Students of Dr.AIT	All	College	College Superstar Selection RAJ Music Channel 17 Nov 2012	Participation
	Students of Dr.AIT	All	College	Organ Donation Program 31 Oct 2012	Participation
	Students of Dr.AIT	All	College	Kannada Culutural Program Dr.AIT, Kannada Mithra Balaga 21 Sept. 2012	Participation
	Students of Dr.AIT	All	State	SANSKRUTHI 2012 Dr.AIT 21 Sept. 2012	Participation
Achievements of PG Students					
2015-16	Manasa B R, Dr.AIT	II Sem	State	SANSKRUTHI 2016 Dr.AIT 19 March 2015	I prize Solo singing
2013-14	Students of Dr.AIT	All	University	Rahul Gandhi Interaction Programme 15 Feb 2014 organized by The Higher Education Council, Government of Karnataka	10 students of Dr. AIT were selected.

The following are the list of students participated in **IDEA 2015 Contest** event

Sl no.	USN	Name of the Student	Semester	Branch
1	IDA14CS128	Sriram	III	Computer Science
2	IDA12ME005	Aman Lavaniya	VII	Mechanical
3	IDA12ME101	Shivaprasad G V	VII	Mechanical
4	IDA13ME073	ManjuKumar	V	Mechanical
5	IDA13ME144	Sharmila	V	Mechanical
6	IDA13 ME118	Rahul Pathak	V	Mechanical
7		Sachin B V	V	Mechanical
8		Basavraj	V	Mechanical

9		Darshan	V	Information Science
10	IDA12CS006	Anand Rathod	VII	Computer Science
11	IDA13CS091	Reshma N	V	Computer Science
12	IDA13CS414	Sachin	V	Computer Science
13	IDA13CS110	Sumera	III	Computer Science
14	IDA14CS421	Vilasini	III	Computer Science
15	IDA14CS403	Divya	III	Computer Science
16	IDA13CS021	Bhaavya	III	Computer Science
17	IDA13CS066	Neethu	III	Computer Science
18	IDA13CS040	Jagruthi	III	Computer Science
19	IDA13CS044	Kaushik Holla	III	Computer Science
20	IDA13CS043	Karthik Karnath	III	Computer Science
21		Pranav Jayaram	III	Computer Science
22		U H Krishnaraj	VII	Mechanical
23	IDA13CS068	Nikil N	V	Computer Science
24		Prem Sagar	V	EC
25		Rakesh	V	EC
26		Prabhu	V	EC
27		Ragini S Murthy	V	EC

5.3.3. How often does the College collect feedback from students for improving the support services? How is the feedback used?

- The Management, Principal, PED, SWO and NSS coordinator interact with the students every year to elicit their views regarding the shortcomings and the measures to be adopted to overcome the same. The feedback used to improve the support services.
- The institution collects feedback from all the students of the UG and the PG programs semester wise through a systematically designed questionnaire on various aspects of the academic programs, teaching and learning resources, teaching and evaluation techniques, evaluation of teachers' performance, the rapport between the staff and the students, curricular aspects, physical facilities etc. The consolidated feedback of the students indicates the good practices of the college. In addition, meetings with all students are conducted at least once in a semester to discuss the difficulties and suggestions of students related to academics, infrastructure, hostel, mess, co-curricular and extracurricular activities.
- The requirements by the students such as improvement in placement activities, Internet facilities, RO Plant for Drinking water etc have been fulfilled by the management over the years.

5.3.4. Does the College have a mechanism to seek and use data and feedback from its graduates and employers, to improve the growth and development of the College?

YES- Graduate **student exit survey** is designed for graduating engineering students for the purpose of obtaining feedback from students with the objective of improving the courses and the programme. Feedback from the graduates is obtained once in a year at the end of the even semester of the academic year

Informal feedback is obtained from the employers during Campus Drives. The institute also gets the feedback during industry visits from the employer.

The programme HODs' and Chairman, Alumni Association interact with the graduates once every year to elicit their views regarding the growth and development of the college. The views and the

requirements of important and bulk employers are taken into consideration while framing the curriculum and chalking out the road map for the training and placement activities.

Infrastructural facilities such as additional laboratories, Wi-Fi at college and hostel premises, extension of library working hours, Sports ground inside the college campus etc are the few provisions done based on the feedback. The needs and expectations of the students are identified and fulfilled.

5.3.5. How does the College involve and encourage students to publish materials like catalogues, wall magazines, College magazine, and other material? List the major publications/ materials brought out by the students during the previous academic session.

- Students are constantly encouraged with financial assistance for preparing technical papers at National level paper presentation contests. Departments encourage the students to prepare and display the working models during the project expo at various levels.
- College conducts technical paper presentation contests, for the students and encourages all the students to participate in conferences & technical fest to present their research & innovative thinking. The students are involved in various committee formed for organizing conference, workshop, guest lectures at institution & departmental level.
- The institution has various publications such as college newsletter, departmental newsletters etc. which are edited by the teachers and students that create a platform for the students' creative thinking. The College encourages its students to publish materials in the form of articles, paintings etc. The college magazine provides a platform to bring out their hidden talents so as to sharpen their imagination.

5.3.6. Does the College have a Student Council or any similar body? Give details on its constitution, major activities and funding.

YES- Many student councils for Cultural activities, NSS activities, Departmental professional societies, like IEEE, International Society of Automation, ISA, Indian Society of Technical Education, ISTE, ISAMPE, etc., Student Societies, like TECHKSHTRA (Dept. of I.T), Power Club (Dept. of EEE) etc., do exist in the Institute. They conduct major inter/intra Institutional events periodically. The source of funding is from Institute and other sponsors.

5.3.7. Give details of various academic and administrative bodies that have student representatives on them. Provide details of their activities.

The student's representatives serve in almost all academic and administrative bodies of the college such as BOG, departmental board of studies, departmental associations and various clubs, student's council, Anti Ragging Committee etc.

Role of Student Representatives

- BOS- Active participation in the departmental Curriculum Design
- BOG- Participation in TEQIP Related Activities



-
- Disseminate the information from the college administration to all students.
 - Organize technical, non-technical and social events.
 - Conduct various technical completions among the students.
 - Organize programs in NSS.
 - To maintain conducive and anti-ragging ambience in hostel and college premises.

Any additional information regarding Student Support and Progression, which the institution would like to include.



CRITERION – 6: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1. State the vision and mission of the College.

Vision Statement of the Institution

- To create Dynamic, Resourceful, Adept and Innovative Technical professionals to meet global challenges.

Mission Statement of the Institution

- To offer state-of-the-art undergraduate, postgraduate and doctoral programs in the fields of Engineering, Technology and Management.
- To generate new knowledge by engaging faculty and students in research, development and innovation.
- To provide strong theoretical foundation to the students, supported by extensive practical training to meet the industry requirements.
- To instill moral and ethical values with social and professional commitment.

6.1.2. Does the mission statement define the College's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, College's traditions and value orientations, vision for the future, etc.?

Yes. Dr AIT vision and mission is streamlined to cater to the needs of society and all the stakeholders. Dr AIT is committed to the establishment of centers of excellence, upgrading the existing infrastructure to global standards, develop innovative teaching techniques and establish linkages with reputed industries.

6.1.3 How is the leadership involved in

- ensuring the organization's management system development, implementation and continuous improvement
- interaction with stakeholders
- reinforcing culture of excellence
- identifying needs and championing organizational development (OD)?

The organization has well structured, decentralized authorities, with defined roles and responsibilities for the smooth management and monitors the overall improvements (Fig 6.1). Policy directions are done in the right way through governing body, academic council, planning & Evaluation Committee board and various committees of the institution.

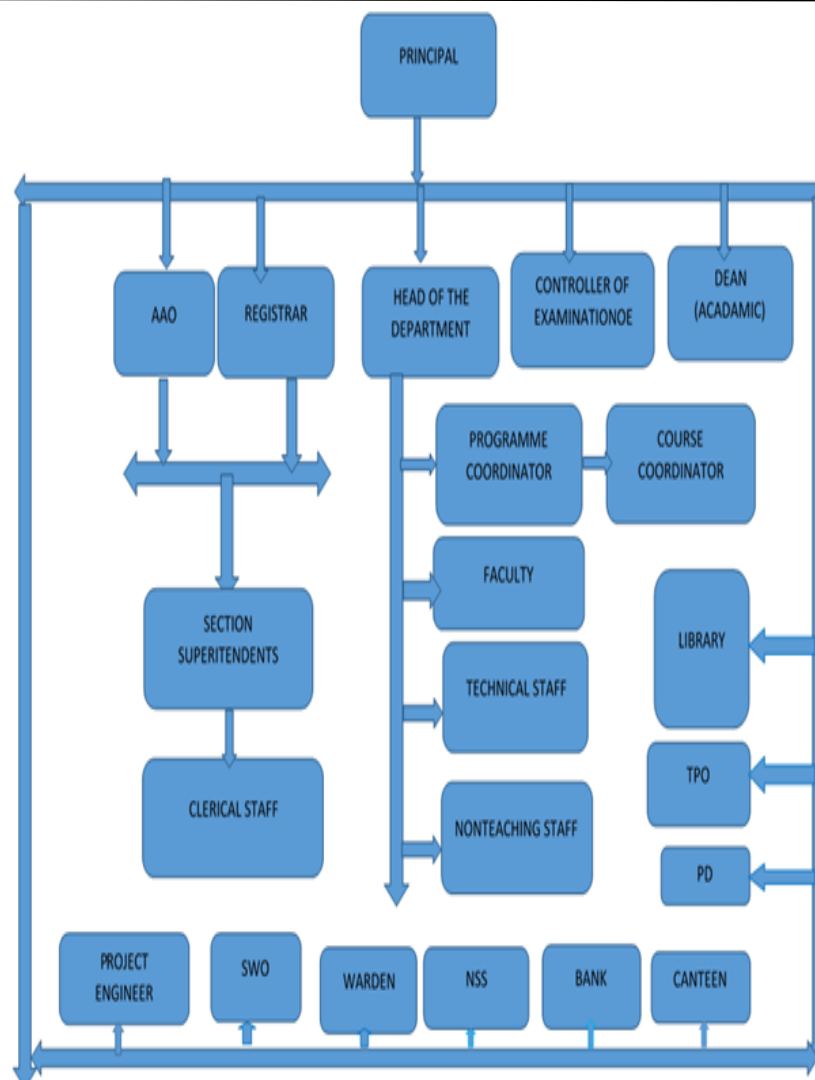


Fig 6.1. Institution Organizational Chart

Interaction with stakeholders:

Members of Management, Principal, and Head of the department are easily approachable and receive Periodic feedbacks from students, parents, alumni, employers etc for enabling overall improvement of the college.

Reinforcing culture of excellence:

After the establishment of the Institution, over the years it has evolved through continual redesigning and refinements in its policies and procedures for catering to increasingly demanding stakeholders, under the leadership of a visionary management. Providing excellent infrastructure, State of art laboratory facilities and upgrading it, merit based recruitment policy, implementation of revised pay scales and encouraging faculty for research and programs for knowledge development ensure commitment to excellence. Some of the good Practices are:

- The institute has become autonomous, received World Bank funding through TEQIP phase I and II
- Best practices such as Mentoring system, Student Activity Clubs and Professional Body Chapters are adopted. Through various

students' Activity students are encouraged to develop their technical/Personality skills.

- The college deputed faculty to the institutes of higher repute for either enabling improve on their academic qualifications or for obtaining wider exposure for best practices.
- Institute/Departments invites experts from industry/organizations of National repute for the academic revamping and refine, academic practices.
- Academic monitoring is periodically carried out by internal and external academic experts.

Identifying needs and championing organizational development (OD):

- Requirements arising at any organizational level in the institute are systematically conveyed with its justifications to the concerned person and decisions are taken towards its fulfillment/implementation.
- Institute provides excellent infrastructure and state of art laboratory facilities and it's up gradation from time to time for uncompromised quality of teaching learning process.
- Training Need Analysis (TNA) has been carried out to enable improve competency of faculty.
- Management Training programmes organized by various IIMs, were participated by many senior faculty members.

6.1.4. Were any of the senior leadership positions of the College vacant for more than a year? If so, indicate the reasons.

No

6.1.5. Does the College ensure that all positions in its various statutory bodies are filled and conduct of meetings at the stipulated intervals?

YES. The institution has constituted the following committees to ensure proper management of academic, financial and general administrative affairs.

- Governing Body
- Academic Council
- Board of Studies
- Finance Committee

All the meetings take places at stipulated intervals and the records of the meetings are maintained.

6.1.6. Does the College promote a culture of participative management? If yes, indicate the levels of participative management.

YES - The College promotes a culture of participative management at various levels.

- Various positions, namely, Dean (Academics), Controller of Examination (COE), NBA Coordinator, TEQIP Coordinator, SWO, TPO, Chairman (Purchase Committee), Project Engineer, Electrical Maintenance In-charge, Water Maintenance In-charge, Hostel wardens, Security In-charge, Canteen In-charge,

Heads of Departments, etc. positions are available and working is very smooth.

- Apart from this, members of the faculty represented in higher managerial bodies such as Governing body and Academic Council of the institute. Meeting of the Members of Management and faculty is organized frequently where suggestions for improvements are discussed.
- The Institution promotes bottom up approach in budget preparation. The budget requirement prepared at the respective department level and is approved at top level of Finance Committee and Governing Body.
- Regularly College Council (CC) meets to discuss various activities including monitoring of various academic activities and resolves various issues in participative manner.
- Matters pertaining to each department are discussed with the staff during department meetings and their collective decisions and opinions are considered in HODs meetings.
- Student's participation is ensured by involving them in various activities at department level as well as college level.
- Feedback from various committees is given significant weightage for future decisions.
- Feedback collected from various stakeholders are considered to improve the overall performance

6.1.7. Give details of the academic and administrative leadership provided by the University to the College?

Academic Leadership: Being an Autonomous institution the University has granted academic flexibility to design our own curriculum and evaluation.

Every academic year, the institution conducts BOS meeting with the members from reputed organizations, Industry, alumni and University Nominee (The composition is as per VTU guidelines) where the suggestions received from various stakeholders are discussed and curriculum will be revised as per as the needs.

Administrative Leadership:

Governing Body: Normally governing body meets atleast twice in a year to:

- Approve new programmes/intake rise of study leading to degrees.
- To plan for the infrastructure development of the institute.
- To approve the budget submitted by the Finance Committee.
- Medals, prizes and certificates to be awarded to the students
- Review admissions and students performance
- Perform such other functions and institute committees, as may be necessary and deemed fit for the proper development, and fulfill the objectives for which the college has been declared as autonomous.

6.1.8. How does the College groom the leadership at various levels?

Faculty members, students and non-teaching personnel with leadership potential are identified by the Head of the Institution, and

they are groomed by delegating them to various leadership programs which helps in fostering their leadership skills. They are also given suitable roles and responsibilities to act upon within the institution as show in the diagram Fig. 6.2.

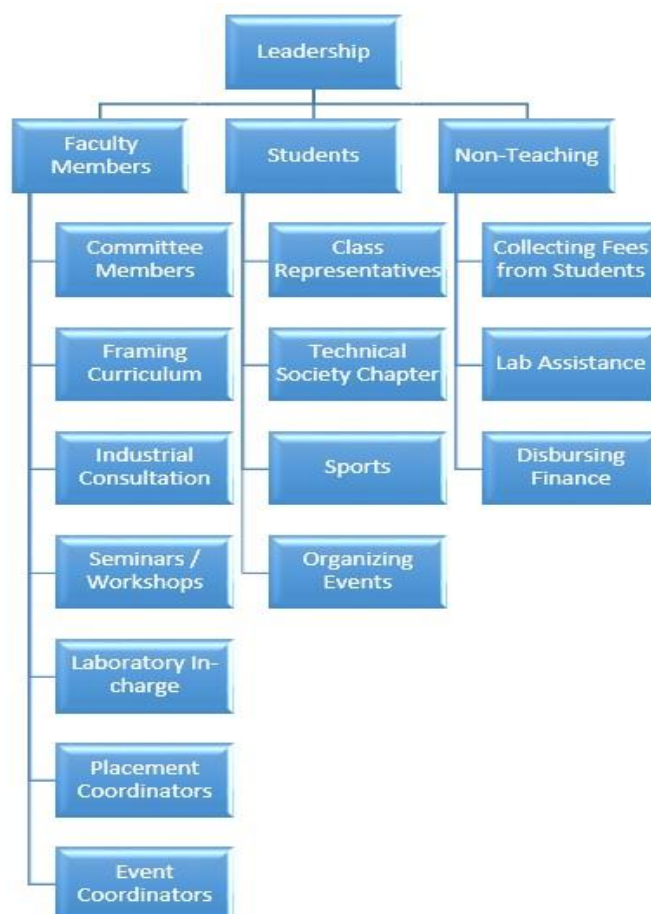


Fig. 6.2. Grooming leadership at various levels

6.1.9. Has the College evolved any strategy for knowledge management? If yes, give details.

YES- The institution has 150 Mbps internet connectivity throughout the campus and students and faculty are able to access the internet as and when they required. Library has provided list of useful links through its subscription to various e-learning sources, journals etc. The college maintains data centre, established through TEQIP Phase I, through which knowledge management is affected.

Apart from this, Expert Talks, Workshops, Seminars, Hands on Training Programs, Project Exhibitions, Technical Competitions, Industrial visits etc are periodically organized at Dr AIT to improve the competency of faculty members as well as students.

Detailed report on various activities organized are given in the Departmental Evaluation Report.

A copy of thesis and research projects carried out by researchers is maintained by their respective department. The Institution has vast collection of books, journals, magazines and e-resources and subscription to IEEE, DELNET, EDUSAT and other scholarly resources.

Research Grants are received from various funding agencies like DST, UGC and AICTE wherein the research findings are published in International Conferences, reputed Journals. Few research findings are resulted with patents.

6.1.10. How are the following values reflected in various functions of the College?

- **Contributing to national development**
- **Fostering global competencies among students**
- **Inculcating a value system among students**
- **Promoting use of technology**
- **Quest for excellence**

Contributing to national development

In line with the vision statement of the college:

- The college runs demand driven curriculum to produce graduates to accept National challenges.
- Funded (AICTE, DST, BARC etc.,) research activities are carried out in the thrust areas of national interest
- Consultancy and testing in few departments serve the purpose of providing Department expertise for national development.
- Participation and organization of national level activities such as conferences, Seminars, workshops as deemed appropriate of national thrust are organized.
- The NSS team of Dr AIT regularly organizes various citizen awareness programs, which include:
 - Blood Donation Camps
 - Swach Bharath Campaign
 - Marathons.
 - Tree Plantation etc
- Support is provided to students from weaker sections of society by waiving of the fees and through scholarships.
- Dr AIT leads by example by implementing various environmental protection schemes like solar energy harvesting, biogas fuels and green cover.
- Independence Day and Republic Day are celebrated with large number of students, faculty members and management which helps in infusing patriotism in the minds of young students.

Fostering global competencies among students

- Global competency among students is nurtured through implementation of student centered learning process and by updation of curriculum in consultation with all the stakeholders as per the guidelines of NBA/ ABET standards.
 - Students are encouraged to showcase their projects at national /International level technological exhibitions/events.
 - Students are encouraged with financial assistance to present/publish their research papers at various International/national level conferences/journals.
 - Industrial - Academia gap among students is bridged through industrial tours and guest lectures in emerging technologies.
-

-
- Soft skills and communication techniques are imbibed for students through curriculum and value added courses to be truly considered as global citizens.

Inculcating a value system among students

Social Science and humanity is offered as part of the curriculum for the students which results in inculcating a value system among students. Intellectuals and Social Scientists share their thoughts and views with students during various events, which will nurture independent thinking among students. Students are also encouraged to associate themselves with many societal activities to make them responsible towards fellow living creatures. Women's day is celebrated in college campus which is exclusively used to showcase the talents of women students and contributes towards sound values among students in terms of gender sensitization. Counselling is given to students whenever dispute arises and is handled with utmost care.

Promoting use of technology

- Laboratory is equipped and upgraded with latest state of the art equipments.
- Usage of latest software tools and best practices is part of curriculum requirement.
- Faculty Development Programs, Workshops and Hands on Training is provided for faculties to equip them with upcoming technologies
- In-House software is developed by the examination section to handle all the examination related data.
- Wi-Fi enabled campus is equipped with 150 Mbps Internet bandwidth.
- Classrooms are equipped with LCD projectors and internet connectivity.
- Employee attendancesystem has been supported with bio metric attendance.

Quest for excellence

Dr AIT is striving towards achieving global excellence by taking following steps:

- Introduction of credit system and Outcome based education.
 - Various departments in the Institute have been accredited with NBA.
 - Institute has MOU's with leading industries which enables Industry personals to share their experience with students.
 - Dr.AIT organizes several International/National Conferences, seminars, workshops, panel discussions and expert lectures in its pursuance for excellence.
 - Awards are instituted to motivate faculties and students in their quest for excellence.
 - Faculty members are encouraged to enhance their knowledge by attending FDP and pursuing MOOC certifications.
 - Research is promoted by encouraging faculty members with incentives.
-

6.1.11. Give details of the UGC autonomous review committee's recommendations and its compliance.

UGC granted Autonomous status to the institution from 2010-11 to 2015-16 academic year. Institution has submitted the Autonomous report to UGC for the review during Dec. 2015 and waiting for the Expert committee for the inspection.

6.2 Strategy Development and Deployment**6.2.1. Does the College have a Perspective Plan for development? If so, give the aspects considered in development of policy and strategy.**

- **Teaching and learning**
- **Research and development**
- **Community engagement**
- **Human resource planning and development**
- **Industry interaction**
- **Internationalization Principal**

The plan has been prepared and is being implemented. Salient features of the plan are as under:

Teaching and learning

- Selected faculty members are deputed to IISc/IIT/Institutes of National repute for completion of their higher studies.
- Faculty members are deputed to IISc/IITs/Industries etc for attending various training programmes / conferences.
- Invite faculties from foreign universities.
- Initiating Skill development centers.
- Excellent curriculum development.

Research and Development

Dr. AIT provides a research and Innovative culture for faculty members. For the Periodic review of R&D activities of all departments a Research Progress Review Committee (RPRC) has been constituted. The initiatives are:

- Steps are initiated to establish center of excellence in core areas in collaboration with Industries.
- Institute provides Seed money for faculty members to undertake their project of interest and Filing of patents.
- Provide publication fees and travel grant for faculty members and students.
- Improved Industry interaction. Many MOUs have been signed with industries for promoting sponsored research projects. Selected students carry out one term internship in industries to complete their project / dissertation work.
- Research Progress Review Committee is responsible to conduct Research and Development meetings at regular intervals wherein experts share their knowledge.

Community engagement

- Institute conducts community programs like Blood Donation, Swach Bharath campaign and marathon is organized to spread the importance of health.
- Institute initiated Adaptation of village and working for its developments.

Human resource planning and development

Being a Government aided institution, the recruitment is as per government (KCSR) norms. The employees of the institution are Encouraged to upgrade their qualifications with all facilities as per Government norms.

For the development of Human resources the following strategies are adopted:

- Recognition for academic achievement at various levels
- Motivating faculty members to attend and organize workshops, seminars and training programmes in specialized areas etc

Industry interaction

Institution promotes industry institute interaction through:

- MOUs with MNCs and internationally recognized universities for Periodic exchange and visits of faculty and industry professional and organizing various academic activities.
- Appointment of adjacent faculty from industry.
- Industry sponsored research fellowship
- Joint R&D Collaboration with Industry in niche fields.
- Participation of Industry Professionals in development of Curriculum etc

Internationalization

- Establishing working alliance and collaboration with reputed International Institutions.
- Establishing a mechanism for mentoring research programs by international renowned experts

6.2.2. Enunciate the internal organizational structure of the College for decision making processes and their effectiveness.

For the effective management, the entire administration structure has been decentralized at various levels as follows:

Administrators/Decision Makers

Head of the Institution : Principal

Head of the Academic Sections : Head of the Departments

List of faculty members who are administrators/decision makers for various assigned jobs

Sl. No	Faculty	Designation
1.	Dr. C. Nanjundaswamy	Principal
2.	Dr. M. N. Hegde	Dean(Academic)
3.	Dr.G. Rajendra	Controller of Examination (COE)
4.	Dr.B. Shivakumaraswamy	HOD CV
5.	Dr. L. Chandrasagar	HOD ME
6.	Dr. B. V. Sumangala	HOD EE
7.	Dr. K. Rajanna	HOD, EC

8.	Dr.G. Rajendra	HOD IEM
9.	Dr. M.Meenakshi	HOD, EI
10.	Dr. Siddaraju	HOD, CSE
11.	Dr. B. Shivakumar	HOD, TE
12.	Dr. B.S. Shylaja	HOD, IS
13.	Dr. K. J. Shanthi	HOD, ML
14.	Dr. S. RuplaNayak	HOD, MBA
15.	Dr. L. Manjunath Rao	HOD, MCA
16.	Dr. T.S. Reddy	HOD, Physics
17.	Dr. B. Veenadevi	HOD, Chemistry
18.	Dr. B. Sooryanarayana	HOD, Mathematics
19.	Dr. T.R. Shashipriya	HOD, HSS
20.	Smt. C.A. Malagan	Librarian
21.	Sr. K. J. Shivakumar	Physical Education Director
22.	Sri. N. Shivappa	AAO
23.	Sri. M. R. Suresh	Registrar
24.	Dr. T. N. Raju	SWO
25.	Dr.S.D.Venkataraja Mohan	Boys Hostel Warden
26.	Dr. Anuradha	Ladies Hostel Warden
27.	Dr. L. Chandrasagar	TEQIP Coordinator
28.	Dr. M. Meenakshi	NBA Coordinator & NAAC Steering Committee Coordinator
29.	Dr. B. Shivakumar	ISO Coordinator
30.	Sri. Shivaram	Project Engineer

The following statutory committees are functioning in the college to look after the administrative and academic procedures as per the norms stipulated by the UGC.

Statutory committees:

- Administrative Council (BoG)
- Academic Council
- Boards of studies

In addition to the statutory committees, the college has the following Non-statutory committees.

- Admissions Committee
- Anti-ragging Committee
- Anti-Sexual Harassment Committee
- Disciplinary Committee
- Purchase Committee
- Grievance Redressal Committee
- Library Advisory Committee
- Student Activities Committee

The above committees are functioning in order to facilitate the successful implementation of autonomy. Each of the committees conducts its meetings regularly.

6.2.3. Specify how many planned proposals were initiated/implemented, during the last four years. Give details.

Several planned proposals were initiated/ implemented during the last four years. Some of them are as follows:

- Building of hostel block: New hostel has been constructed during 2014- 2015 under AICTE Fund
- Grant of proposed World Bank funding through TEQIP phase II.
- M. Tech. programmes were started in Electronics and Instrumentation Engineering, Mechanical Engineering & Information Science Engineering departments
- Student intake is increased in few UG Programmes
- Research centres were started at Medical Electronics, Industrial Engineering and Management Departments
- Several national conferences, workshops, faculty development programs were organized.
- Few Patents are filed and awarded by different departments

6.2.4. Does the College have a formally stated quality policy? How is it designed, driven, deployed and reviewed?

YES - The quality policy is as under:

- The policy has been designed in consultation with college's stake holders. Internal and external stake holders are monitoring and providing feedback to adhere to the policy in its implementation.

6.2.5. How does the College ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder-relationship?

The Institute has constituted the student's Grievance and Redressal Committee to address, understand and resolve grievances of students.

6.2.6. Does the College have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?

- Feedback about faculty members are taken from students at the end of the semester through standard questionnaires in anonymity.
- Performance of each of the faculty is reviewed for satisfactory by the Head of the Department and appropriate measures are taken

through counselling if the performance is found to be unsatisfactory.

- Opinion about infrastructural needs and amenities are obtained from students by the Institution head during Management-student interactions.
- Librarian maintains a logbook to collect the feedback from students which is reviewed by the library committee.

6.2.7. In what way the affiliating University helped the College to identify the developmental needs of the College?

The University nominee, one each in Governing Body and in Academic Council recommend the areas of improvement in the meeting of these bodies. The institute submits its Annual Report to the University. Inspection by committee members of the University, for review of permanent affiliation status provides recommendations for improvements.

6.2.8. Does the affiliating university have a functional College Development Council (CDC) or Board of College and University Development (BCUD)? If yes, In what way College is benefitted.

NO- the affiliating university does not have functional College Development Council or Board of College and University Development.

6.2.9. How does the College get feedback from non-teaching, teaching, parents and alumni on its functioning and how it is utilized.

- The feedback from teaching and non-teaching members are forwarded by Head of the department to the Principal. All the suggestions are analyzed thoroughly and corrective measures are taken to mitigate the problems.
- Parents are encouraged to interact with Faculty during Parent-Teacher meetings and also through phone calls and emails on regular basis to provide their feedback.
- Along with feedback forms, Alumni meeting is conducted once in a year and feedback is collected during the course of meeting.

6.2.10. Does the College encourage autonomy to its academic departments and how does it ensure accountability?

YES- Each department functions in an autonomous manner and the College management doesn't interfere in day to day activities of the department. Entire faculty members in the department work towards achieving the goals of the department.

- Boards of Studies (BOS) meeting is conveyed every year and each department has the liberty to prepare syllabus to cater to the unique needs of the students in the ever changing technology realm.
- Remedial classes are conducted for slow learners.
- Faculty is responsible for the completion of the syllabus and accountable for results.
- Departments have fully autonomy in allowing faculty members to attend workshops, seminars, hands on training and other co-curricular activities.
- Performance appraisal system is conducted every year for faculty members ensuring their accountability.

6.2.11. Does the College conduct performance auditing of its various departments?

YES- College conducts performance auditing to review the progress of its various departments through internal academic audit every year. Head of the institution appoints the committee of internal faculty members to carry out the internal audit effectively. A format has been created in which the data is collected and performance is analysed periodically. Parameters that are regularly scrutinized are student performance in terms of final examination and placement results, and the feedback data collected regularly from students. All the points related to compliance of the audit are communicated to respective department. Each department works towards satisfying a set of quality objectives that have been quantified.

6.3 Faculty Empowerment Strategies**6.3.1. What efforts are made by the College to enhance the professional development of teaching and non-teaching staff?**

Following strategies are initiated by the institute to enhance the professional development of teaching and non-teaching staff members:

- Teaching and Non-Teaching staff are sponsored for higher education to improve their technical skills and capabilities.
- Teaching and Non-Teaching staff are encouraged to attend Trainings and workshops in core areas, International/National level conferences
- Faculty members are encouraged to showcase their skills to the outside world by delivering lectures, organizing skill development programs and writing articles in magazines.
- Faculty members are helped in obtaining Professional Memberships and can take up various roles in Professional societies.
- Senior faculty training for Management skill enhancement
- Non-teaching faculty are encouraged to attend technical development programmers organized by other institutions /industries

6.3.2. What is the outcome of the review of the Performance Appraisal Reports? List the major decisions.

- Performance Appraisals Reports of all the faculties is reviewed by HOD of the respective department.
 - Various criteria like Student feedback, Paper publications, consultation, Generating funds, Workshops conducted and Interaction with outside world are considered.
 - If there is a need for improvement then the same is conveyed to the faculty and actions are taken to improve the performance.
 - Senior faculties mentor junior faculties by assigning and hand holding them through various departmental activities leading to development of their technical as well as extra-curricular skills.
 - Promotions and increments are considered based on the positivity of the Performance Appraisal report according to the college norms.
-

6.3.3. What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

- Being an aided by Government institution, the welfare schemes are implemented to all teaching and nonteaching staff as per the KCSCR norms and are listed below:
- All aided faculty, appointed before 2006 are eligible to get pension after their retirement and an EPF facility is made available by the institution to all unaided faculty members 100 % of staff are benefitted during last 4 years
- Subsidized Transportation facility is availed by both Teaching and non-teaching staff. As the institution has well connectivity by BMTC to all the places, very few staff are utilizing the transportation facility
- Four months Maternity Leave is given to all ladies staff
- Institution has tie-up with Medical Centre which provides all health facilities for teaching and non-teaching staff in need of immediate attention.
- Group Insurance scheme is provided for both Teaching and non-teaching staff.
- Apart from the TEQIP fund Institution provides the financial assistance to the staff members to attend the conferences and publish the research findings. On an average, 40% of staff members are benefitted every year by this facility
- Leave encashment facility is provided to all aided staff members. On an average, 60% staff are utilizing this facility

6.3.4. What are the measures taken by the College for attracting and retaining eminent faculty?

- As this is a Government aided college, the faculty recruitment is strictly carried out as per the state government norms and implemented the salary as per AICTE 6th pay scale
 - All basic amenities like table, chair, PC, Internet Connection, Fan, Light, Almariah are provided for comfortable working environment.
 - Financial assistance for publication fees, air-fare, train-fare etc. are given for faculty members to publish and present their research work in International Conferences/Journals.
 - Institute provides academic freedom to faculty member to experiment with latest technologies and new learning methodologies.
 - To present the projects for funding selection, travel and dearness allowance is provided.
 - Management provides seed money to start short term research projects in latest domains.
 - Laptops are provided for research scholars to pursue their research work.
 - Institute highly encourages faculty members to obtain Ph.D. degree and also on-duty leave is provided for faculty members.
- All these helps attracting and retaining faculty at this college.
-

6.3.5. Has the College conducted a gender audit during the last four years? If yes, mention a few salient findings.

Even though no formal gender audit is conducted, the college, has a rich tradition of providing equal opportunities to both the genders and there is no discrimination in any way based on gender. The state government norms are followed in recruitments.

6.3.6. Does the College conduct any gender sensitization programs for its staff?

- Anti-sexual harassment committee with a senior lady faculty member with head of the institution as the chairperson has been formed by the college. Annually few programmes are organized by the committee for gender sensitization.
- Women's grievance and redressal cell has been constituted to address any issue that may arise.

6.3.7. What is the impact of the University's UGC-Academic Staff College Programmes in enhancing competencies of the College faculty?

Few faculty members are deputed to Academic Staff College in Hyderabad. This helps the faculty members to improve on their competencies. It is found that such faculty members have been improved in their teaching styles.

6.4 Financial Management and Resource Mobilization**6.4.1. What is the institutional mechanism to monitor effective and efficient use of financial resources?**

Institution has separate Finance Committee, as per the UGC guide lines. The committee meets as and when required for the Budget approval, expenditure monitoring, major equipment purchases, balance sheet analysis, college level issues of financial nature etc are well handled by the committee.

Institutional mechanism to monitor effective and efficient use of financial resources involves the following:

- External audit done annually by a registered Chartered accountant
- Transparency in transactions through bills and vouchers.
- All major payments done through Bank.
- All major expenditures incurred are on the basis of inviting quotations from different vendors.
- Department level budgeting and periodic review

6.4.2. Does the College have a mechanism for internal and external audit? Give details.

YES- College has been appointing external auditors to audit all financial transactions. Every year, the external auditing is done by a private company. In addition to this for the grant related fund provided by the state government, separate audit is carried out by the office of the Directorate of Technical Education (DTE) and by "Audit General (AG)" of the state government.

6.4.3. Provide audited income and expenditure statement of academic and administrative activities of the previous four years.

An audited statement of academic and administrative activities the previous four years is in place and will be submitted at the time of committee inspection

6.4.4. Have the accounts been audited regularly? What are the major audit objections and how are they complied with?

YES - Accounts have been audited regularly. There is no major objections by the auditors

6.4.5. Narrate the efforts taken by the College for resource mobilization.

Following are the ways by which college mobilizes resources:

- The majority of the financial resources at the institute are obtained from the tuition fees collected from the students.
- PVPWT provides additional fund for infrastructural development.
- The institute also supplements its resources through grants from sponsored research and development projects from various reputed funding agencies like AICTE, VTU, DST, DRDO, UGC, etc.
- Few departments generate revenue through Consultancy.

6.4.6 Is there any provision for the College to maintain the 'corpus fund'? If yes, give details.

Yes – College has an exclusive corpus fund

6.5 Internal Quality Assurance System**6.5.1. Does the College conduct an academic audit of its departments? If yes, give details.**

The formation of IQAC is a post accreditation process. However, an Internal Quality Assurance Cell (IQAC) of the college has been constituted recently. The Internal Quality Assurance cell is composed of various members selected from various departments as per NAAC guidelines and is given in the Table 6.3.

Table 6.3: Internal Quality Assurance Cell (IQAC) Members

Sl. No	Role	Name & Designation	Designation
1	Chairperson	Dr. C. Nanjundaswamy,	Principal
2	Senior administrative officers	Dr. B. V. Sumangala	Professor and Head, EEE
		Sri. N. Shivappa	AAO
		Sr. M. R. Suresh	Registrar
3	Three to eight teachers	Dr. B. Shivakumar	Professor and Head, TE
		Dr. Siddaraju	Professor and Head, CSE
		Dr. S. Gowrishankar	Associate Professor, CSE
		Dr. T. S. Reddy	Professor and Head Physics
		Dr. Manjunatha Rao	Professor and Head, MCA

		Prof. T. Srinath	Associate Professor, ME
		Dr. Anuradha	Professor, Physics
4	One member from the Management	Dr.M.Mahadeva	Secretary, PVPWT
5	One/two nominees from local society, Students and Alumni	Dr. N.C. Shivaprakash	Professor, IISc Bangalore
6	One/two nominees from Employers / Industrialists/ stakeholders	Dr. C. P Ravikumar	Texas Instruments Bangalore
		Sri. Srinivasa Ramanujan	Head (Academic Solutions), TCS
7	One of the senior teachers as the coordinator/ Director of the IQAC	Dr. M. Meenakshi	Professor and Head, EI

IQAC plays a pivotal role in maintaining and enhancing the quality of the institution. Academic progress of all the departments are reviewed by IQAC on regular basis along with HOD, faculty members and Principal. Any ideas and suggestions that arise out of these discussions are considered and may result in the change of practical modules, redesign of courses and the method of evaluation.

Apart from this, every semester, an academic audit of all departments is through internal academic audit committee appointed by the Head of the Institution. Typically internal academic auditors are faculty chosen from various departments of the college. The schedule of audit is declared in advance. The faculties are provided with parameters of academic assessment. The assessment parameters include, course delivery, in semester evaluation planned and executed, Performance of Engaging lectures, Performance of Attendance of students result analysis etc. The auditors are also provided with evaluation format and it is submitted to Dean (Academic) after assessment for further processing. Dean (Academic) compiles all the evaluations by the auditors and prepares a consolidated audit report which is sent to all departments. Heads of department take necessary corrective measures to address the non-conformities if any.

6.5.2. Based on the recommendations of academic audit what specific measures have been taken by the College to improve teaching, learning and evaluation?

- Lesson plans are prepared by the faculty and reviewed thoroughly by the Department Head.
- Academic schedule is strictly monitored.
- Smart Classrooms with advanced teaching aids are used to provide an immersive teaching experience.

- Laboratories are upgraded with latest equipment and software and preparation of laboratory manual.
- Library is updated with latest Journals, textbooks, magazines and newspapers.
- Curriculum is made relevant to satisfy industry needs and develop overall character of the student.

6.5.3. Is there a central body within the College to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

YES- , the college has Governing body (GB), academic council (AC) and Planning and Evaluation committee (PEC) to monitor teaching learning process. GB and AC has the compositions as per the UGC guidelines and PEC is composed of Dean (Aca), Controller of Examination, (COE) and all Heads of the departments.

PEC meetings chaired by Head of the institute are held as and when required while AC and GB meetings are held once/twice in a year. All the decisions taken in PEC meetings are ratified in academic council meetings.

6.5.4. How has IQAC contributed to institutionalizing quality assurance strategies and processes?

IQAC has been constituted recently and yet to plan the strategies to be adopted to for academic quality assurance.

The present practice of quality assurance has contributed to plan and execute the policies uniformly throughout the college. All quality assurance strategies are applied uniformly throughout the college. For the Quality assurance internal academic audit is carried out through internal audit committee nominated by Head of the Institution.

The college has instituted three committees apart from academic monitoring committee, to undertake monitoring of submissions of various issues related with accreditations. NBA committee, NAAC committee, ISO Committee are the three separate committees. Head of the institution coordinates the activities of these committees.

6.5.5. Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.

YES- IQAC has external committee members as per guidelines of NAAC. This has been framed recently and the activities yet to be initiated

6.5.6. Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?

YES- Institution offers scholarships and waiving of fees for meritorious students. Incremental academic growth of all the students including students from disadvantaged sections of the society is carried out by every department and suitable actions like remedial classes are taken for their improvement. Also, mentors are allotted for each student who is primarily responsible for the student's welfare and growth.

6.5.7. What policies are in place for the periodic review of administrative and academic departments, subject areas, research centres, etc.?

The college maintains record of “Performance Appraisal” forms for individual faculty. This is updated annually. Through this form, faculty’s administrative, academic; research, attitude and other qualities are recorded. Based on this data, a faculty is graded by the Head of the institution and is considered for promotional policies.

There are various council/committees constituted to review the progress of various administrative and academic activities. These include:

- Governing Body
- Finance committee
- Academic council
- Planning and Evaluation committee
- Internal audit committees
- Research Review Progress Committee (RPRC)
- Board of studies (BOS)/ Departmental Advisory Board
- Board of Examination (BOE)

Board of Examination (BOE) for each department is responsible for seeing the quality of question papers.

Boards of Studies (BOS) for each department is responsible for overseeing the quality of Curriculum and to consider the suggestions made by Industry personnel, eminent Professors and others.

Research Review Progress Committee (RPRC) Chairman is mainly responsible to review the R&D activities of every department.

Any additional information regarding Governance, Leadership and Management, which the institution would like to include.



CRITERION – 7: INNOVATION AND BEST PRACTICES

7.1 Environment Consciousness**7.1.1. Does the College conduct a Green Audit of its campus?**

Yes. There is no formal Green audit in the campus. However, the college is taking steps to conduct green audit in its campus. The college has lavish greenery spanned over 13.8 acres of land. All are well aware of the consequences of campus pollution and practice eco-friendly initiatives in as many ways as possible. Few initiatives are:

- The campus is free of plastic cups.
- Repeated instructions are issued from the Principal's office to avoid plastics
- Blowing horn is strictly prohibited inside the campus.
- Appointed Gardeners to take care of the plantation in the institute. Beautiful lawn is maintained in front of the college apart from the trees spread all over the campus
- NSS team help in maintaining greenery and neat environment across the Institute premises.

7.1.2. What are the initiatives taken by the College to make the campus eco-friendly?

- **Energy conservation**
- **Use of renewable energy**
- **Water harvesting**
- **Check dam construction**
- **Efforts for Carbon neutrality**
- **Plantation**
- **Hazardous waste management**
- **e-waste management**
- **any other Principal/Departments**

Energy conservation:

Following measures have been taken for energy conservation:

- Created Awareness among the students and staff on energy by arranging guest lectures and workshops.
 - Switching off all the electrical utilities whenever and wherever they are not required.
 - The Incandescent bulbs are replaced with high efficient CFL bulbs.
 - Food waste from the mess of the hostel are utilized to produce methane gas through the bio gas plant established in the campus. The Methane gas is used along with LPG in the mess for cooking purpose.
 - Use of Air conditioning unit (wherever applicable) is made only when essential. Due to lavish greenery on campus, air circulation is very good. This demands very few rooms only with air conditioning.
 - The buildings are fitted with glass windows for maximum utilization of natural light.
-
-

- Centralized RO/water purification unit has been installed for providing potable water.

Use of renewable energy:

Following measure has been taken for use of renewable energy:

- Solar street light units have been installed on main streets.
- Installation of Solar Water Heater in Hostels.

Water harvesting:

- The institution installed rain water harvesting system in the main building and in the canteen.
- Open terrace is fitted with collection pipes to collect the rain water and send to the ground through the designed drains.

Check dam construction

Nil

Efforts for Carbon neutrality

- Greenery in the form of lawn, gardens and trees are maintained which helps for carbon neutrality.
- Dead leaves and waste papers inside the campus are not allowed to put on the fire. All waste materials are centrally dumped inside the campus.

Plantation

- Tree plantation and gardening is carried out by the gardening section people on regular basis and are properly maintained.
- The institute has planted many varieties of flower trees, ornamental trees, and other trees to keep the campus green and free from pollution

Hazardous waste management

- Paper waste is regularly sold to outside agency.
- The answer sheets are shredded and sold to licensed purchaser.
- College does not produce much of hazardous waste. If any such waste is found, it is destroyed under strict human supervision.
- Adequate exhaust provisions are made in the laboratories, like chemistry to drive out the possible hazardous waste.
- Hazardous vegetable waste in the hostel and canteen are disposed by dumping in the centralized dumping ground.

e-waste management:

As the college is Govt. aided institution, the Electronic and computers/Computer accessories, which are declared “Obsolete” are sold through auction to a licensed vendor on periodical basis with the prior permission from DTE. College also has a scheme of buy, which new equipment are purchased under old buy back scheme (replacement of old with new equipment).

any other:

- Chemical fire extinguishers are changed periodically from outside licensed agency.

7.2 Innovations**7.2.1. Provide details of innovations introduced during the last four years which have created a positive impact on the functioning of the College.****Administrative Innovations:**

The Principal is the administrative Head of the institution who is supported by Dean (Academic), Controller of Examination (COE), Heads of departments and other staff in day to day administration. Principal has delegated powers to various committees, which help in effective functioning of the institution. New committees are formed as and when required for this purpose. For the current academic year the following committees have been formed to share the administrative load of the Principal. The various heads for the teams are also given in the table below (Table 7.1.).

Table 7.1. Various Position and Name of the Head of the Team

Sl. No	Position	Name & Designation
1.	Dean (Academic)	Dr.Manjunatha.N.Hegde
2.	Controller of Examination (COE)	Dr.G.Rajendra
3.	TEQIP Coordinator	Dr.Chandrasagar L
4.	NBA Coordinator	Dr.M.Meenakshi
5.	NAAC Steering Committee Coordinator	Dr.M.Meenakshi
6.	Student Welfare officer (SWO)	Dr.T.N.Raju
7.	Gents Hostel Warden (s)	Dr.Venkataraja Mohan
8.	Ladies Hostel Warden (s)	Dr.Anuradha
9.	Website Development	Dr.Manjunath Rao
10.	NSS	Dr.Murali
11.	Press and Media	Mr.Shivkumar
12.	Alumni Association	Dr.Shylaja
13.	Science club	Dr.T.S.Reddy
14.	Placement officer	Mr.Umesh
15.	ISTE	Dr.K.V.Manjunath
16.	ISA	Prof.Ganapathi V Sagar
17.	IEEE	Prof.Shanthi

Delegation of powers and responsibilities down to bottom line, not only ensures effective administration but also trains the faculty in administration and creates a feeling of oneness in administering the institution.

Every faculty is involved in planning, execution, monitoring, evaluation, feedback and initiates redressal steps. The Principal conducts meetings of HOD's and faculty on a regular basis as well as other stakeholders like parents, alumni, employers, etc., to take feedback of the situation and monitors the growth in every aspect. Student and staff redressal committees have been formed to attend to their problems immediately. Also the students have been given permission to approach respective mentor, any faculty, HOD up to Principal to redress their grievances. These innovative practices have helped in speedy grievances redressal along with creating confidence and integrity in the minds of all concerned.

Academic Innovations:

The need for engineers has enormously increased in the recent past which has manifested into starting of more and more number of engineering colleges opening the doors for higher education in the technical field to average and even below average students. Reduction of the eligibility criteria for the admission (% of PU + CET scored to

40 %) to Higher education by the Government of Karnataka, clearly endorses the above trend.

Under such circumstances the institutions are compelled to take extra efforts to leverage the below average students as well, through innovative teaching learning process which will guarantee a decent degree in the stipulated period. With this in mind the following academic road map was designed to be adopted taking care of slow learners as well as fast learners.

Steps:

- Identification of students with less than 60% score in the respective subjects.
- Conduction of Remedial Classes where intensive training will be given.

Strict implementation and close monitoring of the process indicated above has yielded positive results as expected which is apparent from the year wise pass percentage of various departments.

Apart from this, the followings are instilled to promote the academic and research activities:

- Emphasis is given on Research activities and publication of research papers by students and faculty members.
 - Continuous evaluation and regular monitoring and review of performance of teachers based on feedback system and pass percentage in subjects handled by them.
 - Tutorial courses are conducted to enhance the problem solving skill of the weak and slow learners. In the tutorial practice classes, students are given an opportunity to interact with the teacher to get their doubts clarified.
 - Every faculty member are allotted with 20-30 students. The faculty member acts as a counsellor and mentor for these 20 -30 students.
 - The college has created a robust e-learning facility for the students of all branches through the digital library. Individual lectures or videos by eminent professors from various IITs, NPTEL video lectures and learning materials provided by the affiliating university, VTU Belgaum, are kept available in the digital library. Students of all departments can access this e-learning material through internet.
 - An Academic Audit Committee reviews all the academic activities for further development of the College.
 - Placement oriented training is implemented for all the students from the second year onwards.
 - Extension lectures are conducted on regular basis where experts from different domains of public life and industry interact with the students.
 - In order to bridge the Institution-Industry skill gap, experts from industry, academia and alumni are made members of the BOS and Academic Council.
-

- To promote research attitude among students besides helping them get placements mini projects and major projects are entrusted to them.
- More elective courses are offered as per the curriculum, to meet the varied interest of the students.
- At the time of admission, proper guidance is given by the staff members and HODs to the aspiring candidates about the scope and objectives of various programmes to enable them to choose the programme of their choice.
- Separate SC/ST Book bank facility is established to a set of books to all SC/ST students for better preparation and performance in the exams.

7.3 Best Practices

7.3.1. Give details of any two best practices which have contributed to better academic and administrative functioning of the College.

Format for Presentation of Best Practices

- 1. Title of the Practice**
- 2. Objectives of the Practice**
- 3. The Context**
- 4. The Practice**
- 5. Evidence of Success**
- 6. Problems Encountered and Resources Required**
- 7. Notes**

Title of the Practice

The Institution can proudly proclaim that it has more than two best practices; however the following two best practices have been chosen to show case the achievements of the college:

Best Practice 1. Inculcation of Research Culture among Faculty and Students

Best Practice 2. Placement and Training (Career Development)

Best Practice 1: *Inculcation of Research Culture among Faculty and Students*

Objectives of the Practice

To promote the research and Development activities among the faculty and students, Research Progress Review Committee (RPRC) has been constituted in the college with the following main objectives:

- To inculcate the culture of research among faculty and students
- To identify the emerging and thrust areas of research and disseminate the information to staff and students
- To stimulate the faculty to initiate the work in the chosen area of interest and involve students in the project
- To motivate the faculty to publish/present the findings in reputed journals / National / International Conferences and refine the on-going research work

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- To stimulate the faculty and students to present/publish the research papers in national / international conferences /reputed journals
 - To encourage faculty use this opportunity to work towards a Ph.D.degree
 - To assist the faculty to apply to funding agencies like AICTE, DST and DRDO for promoting their research work.
 - To kindle interest in students for active involvement in short duration and long duration projects.
 - To uplift research work to the level of patenting.

The Context

Gone are the days when academicians can sit in ivory towers and look down upon lesser mortals. The current demand of the society is for the learned to come down to earth and return to the society what they have received in a more beneficial form. To whom is this demand valid for if not the Engineers!

The repute of any educational institution rests on teaching – learning process and R&D activities. R&D as we all know refers to Research &Development – Research therefore is the back bone for the development of the students, teachers and the Institution

The college being conscious of this state of affairs, has been giving dynamic thrust towards developing and augmenting the research activities of the college to keep abreast of the advances in the fields of Engineering &Technology. Inculcating research aptitude in faculty members and students has taken priority almost equal to the teaching-learning process. The competency of the students to face the challenges of the society at the end of their four year tenure will be enhanced not just by their grades and ranks but the ability to apply their knowledge, analyze the problem, synthesize a solution and evaluate the outcome. These skills are developed by working on real time projects during their academic career. In order to direct the students along these lines, the faculty also have to be fully equipped in planning and guiding research. Just as much as the teaching learning process is a partnership between the teacher and the student, so also is the research and development process in which the guide and the researcher have equal role to play.

The outcome of research should be relevant to the societal needs and a section of the society at least should be direct beneficiaries. Therefore, taking up research activities shapes a person with moral responsibility and a value system that enhances his/ her commitment towards fulfilling the needs of the society.

Thus the college wishes to show- case the R&D activities of the college as one of the best practices.

The Practice

The contextualization of the above is effected by the following practices:

- All Faculty members are encouraged to attend and present papers in national and international conferences to get exposed to recent and emerging trends in their fields of interest.
- To facilitate the same, the management extends 100% financial assistance towards TA, DA and registration fee. On duty leave can be availed by the teachers for such participations. These provisions are also extended to students for participations in seminars/ symposia/project contests etc.
- Concession in weekly work load up to two hours is offered to faculty working on funded projects.
- Seed money is provided to carry out work necessary preliminary work to enhance the probability of receiving funding - R&D fund from Management
- Eminent researchers are invited to campus for delivering lectures during National and International seminars/workshops/conferences organized by the various departments in the college to boost the knowledge level of the faculty and the students.
- Faculty can apply to the management for travel, boarding and lodging allowances to visit reputed research laboratories and funding agencies like AICTE, DST and DRDO either to submit their proposals in person or follow up the submitted proposals.
- As a part of the curriculum prescribed, the final students have to take up and complete project work to the tune of 12 credits. Turning this to the advantage of students, quality project works are assigned to the students by the faculty members or by Faculty and /Research Organization/ industry. Such a practice lifts the level of the students to a higher platform of knowledge domain.
- Winners in project contests are rewarded with equal prize money by the management during Ambedkar Jayanthi Celebration Day (14th April Every Year) as recognition to the work of the student and as a motivation to the others to follow suit.
- Memorandums of Understanding have been signed with many industries/agencies and such a practice plays a vital role in interaction of faculty and students with the industries and design projects in collaboration with them.
- The idea of Interdisciplinary projects has been disseminated and this has caught on by the students and faculty.

Evidence of Success

- Fifteen Research centers, (including 10 UG Departments, 3 Basic sciences and 2 Master Degree Departments) under VTU Belgaum are established.
- 25 faculty members have been conferred with Ph.D and 10 MSc Engg in the last five years and 55 faculty members are actively engaged in pursuing the degree.

-
- Funds to the tune 3 crores have been received by different faculty members from various funding agency. Detailed list of funds received are given in criteria 3
 - A noticeable amount of 4 lakhs has been disbursed by the Management as equal prize money for the students who have won prizes in project contests and proto type development in the last five years.

Problems Encountered and Resources Required

- Sustained motivation of students and faculty is always a challenge
- Time constraint is a spoke in the wheel, in planning and execution of research especially during formative and summative assessment processes and when ad hoc responsibilities are assigned.
- More generous seed money/advance from the management for preliminary work or while awaiting funds from agencies is always welcome.
- Prompt reply from funding agencies will be encouraging.
- If the funding agencies can point out the reason for rejecting the proposal or offer suggestions for improvement, it will go a long way in the development to faculty and hence the students.

Best Practice 2: Placement and Training (Career Development)

Objectives of the Practice

To improve the placement opportunities to the graduating engineers, training and placement centre has been established in the college with the following main objectives:

- To motivate the students to possess a sound technical knowledge in the area of study
- To enhance the programming skills of students
- To train the students in time- bound answering of aptitude tests
- To help students excel in language and communication skills
- To prepare the students for different levels of selection process such as group discussions and one-to- one interviews
- To help boost the students' confidence level through soft skills training
- To inculcate the importance of projecting a smart appearance
- To groom the students to the corporate level
- To ensure that all eligible students are employed by the end of the final year of study

The Context

All over the Nation, in recent years, there is a massive inclination towards Engineering Education and the trend has not let off. One of the main reasons behind this is the plenty of employment opportunities the IT and other corporate sectors have been able to offer to fresh graduates with attractive pay packages. With large

number of Government and private Engineering colleges and deemed to be universities offering professional education, if an institution has to find a place of repute, it has to be different and it has to be elite in terms of academics and in terms of training it offers to enable the students graduate successfully with a job offer in hand. If not, the survival of the institution is put under challenge. In this context, it has become imperative for a reputed institution like Dr. AIT, to ensure to the level best, that its primary stake holders are satisfied with respect to their expectations.

Our Management being not new to this aspect of success has had a pointed focus on training the students for campus placement from many years and a placement office has been established with an experienced Placement Officer in charge. Since then the placement process of the college has taken a leap towards successful placement of students.

The Practice

The campus recruitment comes under the control of the placement officer. The placement officer is assisted by a team of Placement coordinators drawn from each department – one faculty member. This team plans and coordinates the activities related to placement training. Intensive placement training is offered to those students eligible for campus recruitment. It is worth mentioning that till the third year all students undergo the common training programs irrespective of their eligibility. Such an approach to the training programs ensures that all students get equipped to employability to a certain extent. The time table for the training activities are made available to the students well in advance. A systematic and scientific approach has been developed for effective training of the students towards campus recruitment.

To augment the training given by the faculty of the college, resource persons of repute are brought in to enhance the skills of the students.

External experts from various reputed MNCs are invited to render soft skill training to the students. Special sessions for General aptitude training are handled by expert trainers from T.I.M.E and other institutions.

The college emphasizes on the dress code of students as part of grooming the students. The students should strictly adhere to the dress code –

Boys – Formal Dress (Shall not wear half pant, T-Shirt with the logos and harsh words). Girls – Formal Dress (Shall not wear half pant, T-Shirts with the logos and harsh words. Shall not wear shorts, transparent, tight fittings, sleeveless)

On all college occasions and definitely at the time of campus recruitment the students are required to wear the formal dresses.

The following should also find a place in this context:

Campus placement includes non IT sector companies – the companies / industries that recruit students, branch wise. The placement cell takes all efforts to place students in core companies and if the companies do not come down to the college, students are taken to pool campus interviews arranged in the centralized places. Also students are attending off campus interviews in industries whenever it is available.

Evidence of Success

All the efforts of the college resulted with a note-worthy improvement in the placement record. The following bar chart picturizes the data. The data for 2015-16 is as on 30.01.16 and is expected to go up.

Problems Encountered and Resources Required

- Number-wise top recruiting companies that come for campus selection demand for Day One and this demand is very difficult to meet.
- Limited placement offers by Core Companies
- Although certain companies are willing to offer week-end internships spreading over two or three months, due to tight academic schedule, financial constraint on the part of the students etc., students are not able to utilize such opportunities
- Personnel with expertise in aptitude tests and in developing soft skills can permanently be employed for continuous training of the students



EVALUATION REPORT OF THE DEPARTMENTS



DEPARTMENT OF CIVIL ENGINEERING

1. Name of the Department & its year of establishment
Department: Department of Civil Engineering
Year of Establishment : 1980
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Civil Engineering
 - PG
Structural Engineering
 - Ph.D.
Recognized Research Center under VTU

Programme	Description
UG Started in 1979-1980	Started with 40 seats in 1980 Intake increased to 80 in 1992 Intake reduced to 50 in 1999 Intake increased to 60 in 2006 Intake from 2007 to 2013 - 60 . Intake increased to 120 in 2014
PG in 2011	Started with 18 seats in 2011 . Intake from 2012 to till date- 18 .
	Accredited by NBA-AICTE in 11.06.2004 for 3 years with effect from 01-07-2004 . Accreditation renewed for 2 years in 28-09-2012 with effect from 01-07-2012 .

3. Interdisciplinary courses and departments involved
9 UG programmes - All Branches of B.E. -Elements of Civil Engineering & Environmental Studies.
Computer Concepts and C Programming Laboratory- Medical Electronics Department.
Interdepartmental Elective- (G.I.S. and Environmental Impact Assessment)
Solar Energy and Industrial Engineering Management By Mechanical Engineering Department.
4. Annual/ semester/choice based credit system
Semester Scheme.
5. Participation of the department in the courses offered by other departments
Solar Energy and Industrial Engineering Management by Mechanical Engineering Department, Electrical and electronics engineering department
6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	2	1
Associate Professors	6	10
Assistant Professors	12	12

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)



Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr.C. Nanjundaswamy	Ph.D/IIT/ Roorkee/ 2000	Professor, 06/12/2006 In-charge Principal.	Environmental Engineering	26 years	02
Dr.B.Shivakumaraswamy	ME, Ph.D/ CEG, Anna university, Chennai 2009	Professor (CAS) 20-08-1990	Structural Engineering And Construction Technology	26 years	03
Prof. R. Madhusudan	ME(PhD)/ UVCE/ 1985.	Assosiate Prof. 03/03/1983	Environmental Engineering	32 years	
Prof. H. R. Srinivas	ME(PhD)/ UVCE/ 1994	AssosiateProf. 03/03/1980	Construction Technology	30 years	
Dr. M. N. Hegde	Ph.D/ IISc/ 2009	Professor(CAS) 13/07/1984	Structural Engineering	30 years	04
Prof. M. R. Suresh	ME(PhD)/ UVCE/ 1985	Assosiate Professor, 01/10/1985	Geo-Tech Engineering	30 years	
Prof. T. Chandrashekaraiiah	M.E/ UVCE 1987	Professor(CAS) 25/02/1986	Highway Engineering	30 years	
Prof. M. Krishnamurthy	B. E./UVCE 1985	Professor(CAS) 21/11/1985		30 years	
Dr. K. V. Lokesh	Ph.D/ Mysore University, 2003	Professor(CAS) 27/02/1986	Environmental Engineering	30 years	02
Dr. K.V..Manjunath	M.E PhD /UVCE 1992	Associate Professor(CAS) 25/02/1988	Water Resources Engineering	28 years	
Prof. H. Anantharam	M.E/ UVCE 1994	Associate Professor(CAS) 07/11/1988	Environmental Engineering	28 years	
Prof. G. P. Manjunath	M.E/ UVCE 1994	Associate Professor(CAS) 01/04/1992	Water Resources Engineering	28 years	
Dr. S. G. Ramachandraiah	Ph.D/ UVCE 2014	Associate Professor(CAS) 01/04/1992	Water Resources Engineering	25 years	01
Dr. S. Vijaya	Ph.D/ UVCE 2010	Professor(CAS) 01/04/1992	Construction Technology	25 years	02
Dr. S. D. Venkataraja Mohan	Ph.D/ UVCE 2011	Professor(CAS) 04/12/1992	Geo-Tech Engineering	23 years	
Prof. Chandrasekar	M.Tech(PhD),Mysore University,199	Assistant Professor 01/04/1999	Environmental Engineering	20 years	
SB Ankesh	M Tech	Asst. Prof.	Environmental Engineering	1 year	
Darshan M.K	M Tech	Asst. Prof	Structural Engineering	6 Months	
Purnima Biranagi	M Tech	Asst. Prof	Structural Engineering	6 Months	
Kavya H.K	M Tech	Asst. Prof.	Structural Engineering	6 Months	
Vaibhavi	M Tech	Asst. Prof.	Structural Engineering	6 Months	

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil

9. Programme-wise Student Teacher Ratio

UG

Students in second year = 130

Students in third year = 74

Students in fourth year = 77

Total number of faculty = 23

Total students = 281

Student teacher ratio = 12.22

PG

Students in first year = 18

Students in second year = 19

Total number of faculty = 7

Student teacher ratio = 5.28

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Filled
1	Technical	06

11. Number of faculty with ongoing projects from

a) national

b) international funding agencies

c) Total grants received.

Mention names of funding agencies and grants received project-wise.

Two Faculty: VTU Sponsored Project, Grants received Rs16.32 Lakhs.

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Nil

13. Research facility / centre with

- state recognition
- national recognition
- international recognition

Ph.D Research center recognized by VTU, government of Karnataka

14. Publications:

- number of papers published in peer reviewed journals (national / international)
10
- Monographs
Nil
- Chapter(s) in Books
Nil
- Editing Books
Nil
- Books with ISBN numbers with details of publishers
One
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare

Database - International Social Sciences Directory, EBSCO host, etc.)

Nil

- Citation Index – range / average

Nil

- SNIP

Nil

- SJR

Nil

- Impact factor – range / average

Nil

- h-index

Nil

Faculty publications

Dr. S. Vijaya, Professor, CED, Dr.AIT, Bangalore 560 056.

Sl.no	Title of the paper	Name of Journal/ Conference	Year of publication/Volume/ Page No.
1.	“Experimental Study on the Performance of Reinforced Sand Beds Under Repeated Loads in Presence of Water”, (Abstract submitted)	Indian Geotechnical Conference. IIT Roorke.	22 to 24 Dec. 2013 IGC – 2013,
2.	Experimental Evaluation of Strengthened Reinforced Concrete T- Joints using GFRP Composite	International Journal of Engineering Research & Technology.	December 2013, Vol.2
3.	Numerical Modeling on Behavior of Reinforced Exterior Beam-Column Joint Retrofitted with Externally Bonded FRP.	National Seminar on Recent Research and Development in Civil Engineering (RRDCE 2014).Dr A.I.T, Bangalore	March 27 -28, 2014.
4.	Green Buildings and Eco-friendly Construction	National Seminar on Recent Research and Development in Civil Engineering (RRDCE 2014). Dr A.I.T, Bangalore	March 27 -28, 2014.
5.	Structural Health Monitoring of RC Structures using Non Destructive Testing	National Seminar on Recent Research and Development in Civil Engineering (RRDCE 2014). Dr A.I.T, Bangalore	March 27 -28, 2014.
6	Study on Soundness of Reinforced Concrete Structures by NDT Approach	National Seminar on Recent Research and Development in Civil Engineering (RRDCE	March 27 -28, 2014.

		2014). Dr A.I.T, Bangalore	
7	Numerical Modeling on Behavior of Reinforced Exterior Beam-Column Joint Retrofitted with Externally Bonded FRP.	International Journal of Research in Engineering And Technology. RRDC 2014	May 2014, Vol. 06
8	Study on Soundness of Reinforced Concrete Structures by NDT Approach	International Journal of Research in Engineering And Technology. RRDC 2014	May 2014, Vol. 06
9	Fesibility Study of RC structure for additional floor using NDT approach- A case study	International Journal of Enggineering Research & Technology. IJERT	July 2014, Vol 3 Issue 7
10	Siesmic pounding Effect In Building	International journal of Advancement in Engineering Technology, Management & Applied Science	July 2014, Vol 1, Issue 2
11	Seismic Analysis of Latticed Shell Tube RC Framed Building	International Journal of Enggineering Research & Technology. IJERT	July 2014, Vol 3 Issue 7
12	Analysis of Telecommunication Tower Subjected to Seismic & Wind loading.	International journal of Advancement in Engineering Technology, Management & Applied Science	July 2014, Vol 1 Issue 2
13	Comparison Of Local Retrofitting Of RC Frames By Linear Static Method For Moderate And Severe Zone On Soft Soil	International Journal of Research in Engineering And Technology. IJRET	May 2015, Vol.04
14	Study on Fresh and Mechanical properties of Coconut Fiber Reinforced SCC enhanced with steel Fibers.	International Journal of Enggineering Research & Technology. IJERT	June 2015, Vol. 04
15	A study on the Properties of SCC using Recycled Aggregate in Fresh and Hardened State	International Journal of Enggineering Research & Technology. IJERT	June 2015, Vol. 04
16	Experimental Study on Light weight concrete using Leca and Cinder as Coarse Aggregates	International Journal of Enggineering Research & Technology. IJERT	July 2015, Vol. 04
17	Development of Light weight concrete by Blending with Leca and Cinder	International Journal for Scientific Research & Development. IJSRD	June 2015, Vol.03

Dr, B. Shivakumaraswamy, Professor, Civil Engineering, Dr. AIT, Bangalore - 56

Sl. No.	Title of the paper	Name of Journal/Conference	Year of publication/Volume/Page No.
1	Influence of Strong Column and Weak Beam Concept, Soil type and Seismic Zone on Seismic performance of RC frames from Pushover Analysis	IJRET- International Journal of Research in Engineering and Technology e-ISSN:2319-1163, p-ISSN:2321-7308 Vol.4, Special Issue 4; ASHCE2015	2015
2	Seismic Response of Buildings with re-entrant corners in different seismic zones.	IJRET- International Journal of Research in Engineering and Technology e-ISSN:2319-1163, p-ISSN:2321-7308 Vol.4, Special Issue 4; ASHCE2015	2015
3	Seismic Retrofitting of RC Frames by Linear Static Method at Severe zone of soft soil.	IJRET- International Journal of Research in Engineering and Technology e-ISSN:2319-1163, p-ISSN:2321-7308 Vol.4, Special Issue 4; ASHCE2015	2015
4	Study on Influence of floor characteristics on seismic performance of soft storey RC frames from Pushover analysis.	IJRET- International Journal of Research in Engineering and Technology Vol.4- Issue 05. e-ISSN:2278-0181	May 2015
5	Comparison of local retrofitting of RC Frames by Linear static method for moderate and severe zone on soft soil.	IJRET- International Journal of Research in Engineering and Technology Vol.4- Issue 05. e-ISSN:2319-1163, p-ISSN:2321-7308	May 2015
6	A Case study on Seismic Response of Buildings with Re-entrant Corners	IJRET- International Journal of Research in Engineering and Technology	May 2015

		Vol.4- Issue 05. ISSN:2278-0181	
7	Comparative study of Regular and Irregular building plan using Non-linear Time History Analysis	National Conference on Futuristic Technology in Civil Engineering for Sustainable Development” (NCFTCES-15) SJBIT	May 9 th 2015
8	Numerical Modeling on Behaviour of Reinforced Concrete Exterior Beam-Column Joint Retrofitted with Bonded Fiber Reinforced Polymer	IJRET- International Journal of Research in Engineering and Technology Vol.3-Special Issue 06. e-ISSN:2319-1163, p-ISSN:2321-7308	May 2014
9	Study on Soundness of Reinforced Concrete Structures by NDT Approach	IJRET- International Journal of Research in Engineering and Technology Vol.3-Special Issue 06. e-ISSN:2319-1163, p-ISSN:2321-7308	May 2014
10	Experimental Study on Strength of Self Compacting Concrete by Incorporating Metakaolin and Polypropylene Fibre	IJRET- International Journal of Research in Engineering and Technology Vol.3- Issue 07. e-ISSN:2278-0181	July 2014
11	Feasibility Study of RC Structures for Additional Floor using NDT Approach – A Case Study	IJRET- International Journal of Research in Engineering and Technology Vol.3- Issue 07. e-ISSN:2278-0181	July 2014
12	Comparative Study on Seismic Behaviour of Multistoried Frames With Different Passive Dampers for Different Zones	IJRET- International Journal of Research in Engineering and Technology Vol.3- Issue 07. e-ISSN:2278-0181	July 2014
13	Study on Soundness of Reinforced Concrete Structures by NDT approach	IJERT- International Journal of Research in Engineering and Technology, e-ISSN:2319-1163, p-	Special Issue 6; May 2014

		ISSN: 2321-7308, Vol 3, Special Issue	
14	Numerical Modelling on Behaviour of Reinforced concrete exterior Beam-Column Joint Retrofitted with externally bonded FRP	IJERT- International Journal of Research in Engineering and Technology, e-ISSN:2319-1163, p-ISSN: 2321-7308, Vol 3, Special Issue	Special Issue 6; may 2014
15	Experimental Evaluation of Strengthened Reinforced Concrete T-Joints using GFRP Composites	International Journal of Engineering Research & Technology (IJERT), Vol.2-Issue12. ISSN:2278-0181	Dec 2013

M R Suresh, Associate Professor, Civil Engineering, Dr. AIT, Bangalore - 56

Sl.no	Title of the paper	Name of Journal/Conference	Year of publication/Volume/ Page No.
1.	Evaluation of performance of Intake Tower Dam for Recent Earthquake In India	IJERT-International Journal of Research in Engineering and Technology-eISSN:2319-1163 pISSN:2319-7308	Nov-2013, pg 41-45.
2.	Seismic Behavior of Intake Tower of Dam	IJERT-International Journal of Research in Engineering and Technology-eISSN:2319-1163 pISSN:2319-7308	Nov-2013, pp46-49.
3.	Rheology of SCC with pond Ash as partial Replacement to Fine Aggregate	ICI-IWC2013-Innovations in Concrete for meeting infrastructure challenge- Proceedings if International Conference on innovations in concrete-Srilanka	2013. Pp261-265.
4.	Correlation of Water retentivity and CBR with Engineering properties of fine grained soils	ICICE-24 National Conference on "Innovations and Challenges In Civil Engineering @ Rajarajeswari College of Engineering-Bangalore	26-27 September 2013.
5.	Absorption limit of soils and its correlation with index and engineering properties , Index properties of soils	ICICE-20- National Conference on "Innovations and Challenges In Civil Engineering @ Rajarajeswari College of Engineering-Bangalore	26-27 September 2013
6.	Time history analysis of Intake Structure of dam for recent earthquake India	ICICE-10- National Conference on "Innovations and Challenges In Civil	26-27 September 2013.

		Engineering @Rajarajeswari College of Engineering-Bangalore	
7.	A study on the behavior of structural systems for tall buildings subjected to lateral loads	ESRSA Publications- IJERT-ISSN-2278-0181	Volume-3, Issue- 7, July-2014.
8.	Development of self compacting concrete by replacing Foundry sand and Granular Blast Furnace slag for sand	IJERT-International Journal of Research in Engineering and Technology	Volume-3, issue, 07, July-2014
9.	Correlation of compaction characteristics with modified plastic limit	International Journal for of transportation Geotechnical Engineering- ELSEVIER	Sept-2014
10.	Optimum location of Shear wall in high Rise R.C. Buildings under lateral loading	International Journal of research in Engineering and Technology	Volume4, Issue6, June 2015.
11.	Influence of outrigger System in RC Structures for different Seismic Zones	International Journal for Scientific Research and Development	Volume3, Issues, July 2015

**Dr, M N Hegde, Professor, Civil Engineering, Dr. AIT, Bangalore
- 56**

Sl. No.	Title of the paper	Name of Journal	Year of publication/Volume/Page No.
1	Residual Life Assessment of Concrete Structures	A Review, International Journal of Engineering and Technical Research (IJETR), ISSN: 2321- 0869,	Volume-3, Issue-3, March 2015, pp.129-134.
2	A Study on Behaviour of Sandwich Panels under Impact Loads	SSRG International Journal of Civil Engineering (SSRG- IJCE)-EFES P-ISSN: 2349- 0918, ISSN: 2348-8352.	April 2015, pp.89-95.
3	Flexural Behaviour of Carbonated Lightly reinforced Geopolymer Concrete Beams using Manufactured Sand	International Conference in Civil Engineering, T John College of Engineering.	April 28-29, 2015
4	Performance Study Of Joints In Honey Comb Sandwich Panels Used In Light Weight Construction	International National Conference on "Emerging Trends in Civil Engineering" (ICETCE- 2014), VNRVJIET, Hyderabad. India.	6-8 Jan 2014,
5	Dynamic Sensitivity Analysis Of	International National Conference on "Emerging	6-8 Jan 2014,

	Structures Under Discrete Damaging Incidents,	Trends in Civil Engineering” (ICETCE-2014), VNRVJIET, Hyderabad. India.	
6	Dynamic Sensitivity Analysis Of Response During Primary-Secondary Structure	International National Conference on “Emerging Trends in Civil Engineering” (ICETCE-2014), VNRVJIET, Hyderabad. India.	6-8 Jan 2014,
7	Experimental Study of Accelerated Carbonation Effects on Lightly Reinforced Geopolymer Concrete Slabs	IJAETMAS: International Journal of Advancement in Engineering Technology, Management and Applied Science, ISSN: 2349-3224, IJB021.pdf, pp. 80-90.	Volume No 1, Issue 2, July 2014
8	Damage Detection in Communication Tower	International Journal of Earth Sciences and Engineering, ISSN 0974-5904,	Vol.7, No. 05, October 2014, pp. 869-874.
9	Investigational Study on Lightly Reinforced Geopolymer Beams Subjected to Carbonation	IJAETMAS: International Journal of Advancement in Engineering Technology, Management and Applied Science, ISSN: 2349-3224, IJB022.pdf, pp. 91-101.	Volume No 1, Issue 2, July 2014,
10	Effects of Carbonation on Lightly Reinforced Concrete Slabs by Accelerated Testing Method	IJAETMAS: International Journal of Advancement in Engineering Technology, Management and Applied Science, ISSN: 2349-3224, IJB023.pdf, pp. 102-110.	Volume No 1, Issue 2, July 2014,
11	Accelerated Testing of Deteriorated Concrete Structures due to Carbonation,	published online in International Journal of Research in Engineering and Technology, IJRET journal e-ISSN:2319-1163, p-ISSN:2321-7308	Vol. 3, Special Issue 6, May 2014,
12	Damage Assessment Of Structures Using Wavelets,	2013 Conference on Computational Mechanics(CCM 2013), Engii Workshop2013 Sanya, China.	Nov.29-Dec.1, 2013,
13	Behaviour Of Reinforced Concrete Beams With Web Openings,	2013 Conference on Computational Mechanics(CCM 2013),	Nov.29-Dec.1, 2013

		Engii Workshop2013 Sanya, China.	
14	Response Sensitivity Of The Structure Using Vibration Based Damage Detection Techniques,	International Conference on Recent Innovations in Civil Engineering (IC-RICE-2013),PDA Gulburga, Karnataka	25-27 October, 2013,
15	Experimental and Analytical Techniques for the Structural Damage Detection	International Conference on Recent Trends in Engineering & Technology, ICRTET2013,	15-16 th March 2013,
16	Performance of Reinforced Concrete Beams with openings of different size, shape and Locations	International Conference on Recent Trends in Engineering & Technology, ICRTET2013,	15-16 th March 2013
17	Health Diagnosis of RC Beams with and without opening of different size, shape, and location,	Regional Conference of the International Network of Women in Science and Engineering (INWES) organized by Women in Science and Engineering – India at New Delhi.	12-13, Oct. 2012

Dr K V Lokesh

1	Study of Water and Soil quality aspects of Manchanbele Reservoir, catchment and command areas, Intl. Meet on Impact of Climate Change and Water Resources	Karunya University, August 17 th and 18 th , 2012, Coimbatore, Tamilnadu	August 17th and 18th, 2012
2	Water Quality aspects of surface & ground Water of Kanva Reservoir catchment and command areas,	Intl. Conference	February 25 to 27, 2012
3	Assessment of quality of water for irrigation use in Jigani, Hennagara and Muthanallur lake catchment and command area, Karnataka	International Conference on Water Resources Management and Climate Change, BITS Pilani, Hyderabad,	5-6 April, 2013.
4	Techno-ecological approaches on management of Lakes and Reservoirs- A case study on Byrmangala Reservoirs, Ramangar District, Karnataka, India".	Minamata International Symposium on Environment and Energy Technology 2013 (Mission 2013), at Kunamoto University, Japan,	Dec. 4-6, 2013. (2013)
5	Water Quality aspects of surface & ground Water of	Intl. Conference	February 25 to 27, 2012,



	Kanva Reservoir catchment and command areas		Gauhati, Assam
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Dr S D Venkatarajamohan

1	Effects of Acids on Strength Behaviour of expansive soil treated with alkalis	National Conference Recent Advances in Civil Engineering RACE-2012 at Cochin University of Science and Technology, Kerala	November 29 th to December 1, 2012
2	Index properties of alkalies treated expansive and non expansive soil contaminated with acids	International Journal of Civil and Mechanical Engineering- International organization of Scientific Research	May 22, 2013
3	Strength Behaviour of Alkalies Treated lateritic soil contaminated with Acids,	Indian Geotechnical Conference IGC-2012 organised by IIT-Delhi & Indian Geotechnical Society	New Delhi during December 13-15th, 2012
4	Noise Pollution and its scenario in west zones of Bangalore city -an overview	National conference on "Innovations and Challenges in Civil Engineerings"	RajaRajeswary college of Engineering, Bangalore , 26 -27, Sept 2013

R Madhusudan

1	Green Building Concepts In India	Inter-national Conference on "Energy,Environment, Eco-friendly Buildings" – ICEEE,	19th to 21st Sep'2013, held at Jain University, Bangalore
2	Impact of Global warming on Environment	National conference on "Innovations and Challenges in Civil Engineerings"	RajaRajeswary college of Engineering, Bangalore , 26 -27, Sept 2013

Dr S G Ramachandraiah

1	An indepth study on two adjoining ungauged sub-catchments in Semi-arid	National conference on hydrology with special emphasis on rain water	Nov. 15-16, 2013.
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	region, kumudavathy river catchment, Karnataka state	harvesting (NCHRW-2013), Jaipur, Rajasthan,	
2	Integrated study on two adjoining catchments in semi-arid region (Dodballapur Taluk, Bangalore Rural district, Karnataka, India.”)	International Symposium on Environment and Energy Technology 2013 (Mission 2013), at Kunamoto University, Japan,	Dec. 4-6, 2013
3	Watershed studies on Melekote and Rajaghatta Dodballapur Taluk, Karnataka (South India),	Intl. Meet on Impact of Climate Change and Water Resources, Karunya University,	August 17 th and 18 th , 2012, Coimbatore, Tamilnadu

T Chandrasekaraiah

1	Impact of Hazardous materials	National conference on "Innovations and Challenges in Civil Engineerings"	RajaRajeswary college of Engineering, Bangalore , 26 -27, Sept 2013
2	Impact of Global warming on Environment	National conference on "Innovations and Challenges in Civil Engineerings"	RajaRajeswary college of Engineering, Bangalore , 26 -27, Sept 2013

H Anantharam

1	Global warming and its on environment	National conference on "Innovations and Challenges in Civil Engineerings"	RajaRajeswary college of Engineering, Bangalore , 26 -27, Sept 2013
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15. Details of patents and income generated

Nil

16. Areas of consultancy and income generated

Consultancy Details -2010-11

Sl No	Company name	Nature of Test	Amount charged
01	DEC Infrastructure & Projects (India) Pvt Ltd	Compressive strength of concrete	3950-00
02	Epoch Instruments & Controls Private Ltd	Load Cell Testing	3600-00



03	RITES-OCCL-PBI-SYSTR	Compressive strength of concrete	2000-00
04	Shonan Engineering works	Compressive strength of concrete & Test on FA & CA	11600-00
05	VISHWA Infrastructure & Services Pvt Ltd	Compressive strength of concrete & Test on FA & CA	6500-00
07	Techno art Constructions (VTU Regional Office)	Compressive strength of concrete & Test on FA & CA	8900.00

Consultancy Details – 2011-12

Sl No	Company name	Nature of Test	Amount charged
01	S R Sensors	Load cell testing	8100.00
02	Sujala Structures	Soil testing	12000.00
03	LIC of India	Compressive strength of concrete	1800.00
04	Sujala Structures	Test on FA & CA	2200.00
05	Sujala Structures	Compressive strength of concrete	1200.00
06	RR Sensors	Load cell testing	26400.00
07	N R Bridges	Compressive strength of concrete blocks	500.00
08	Manjunath (Dr AIT Girls Hostel)	Compressive strength of concrete blocks	500.00
09	Salunke Associates	Compressive strength of concrete	1320.00
10	Sujay	Compressive strength of concrete	500.00
11	Chandrasekar & Vaastu Lavender	Compressive strength of concrete & Test on FA & CA	15500.00

Consultancy Details – 2012-13

Sl No	Company name	Nature of Test	Amount charged
01	Manjunath	Compressive strength of concrete Cubes	1000.00
02	R R Sensors	Loading Cell Test	1000.00
03	Chandrasekar Class I Contractor	Compressive strength of concrete Cubes	1000.00
04	H N Nanjappa Class I Contractor Ashoka Hostel Building	Compressive strength of concrete & Test on FA & CA	5800.00

Consultancy Details – 2013-14

01	H N Nanjappa Class I Contractor Ashoka Hostel Building	Compressive strength of Bricks	1200.00
02	H N Nanjappa Class I Contractor Ashoka Hostel Building	Compressive strength of concrete Cubes	1200.00
03	H N Nanjappa Class I Contractor Ashoka Hostel Building	Compressive strength of Bricks	1200.00
04	ARISE Technologies	Loading Cell Test	1000.00
05	Manjunath	Compressive strength of concrete Cubes	1000.00
06	Manjunath	Compressive strength of concrete Cubes	1000.00



07	Manjunath	Compressive strength of concrete Cubes	1000.00
08	H N Nanjappa Class I Contractor Ashoka Hostel Building	Compressive strength bricks	1000.00
09	H N Nanjappa Class I Contractor Ashoka Hostel Building	Compressive strength of concrete Cubes	1000.00
10	Sai Packaging Company	Compressive strength of concrete Cubes	1000.00
11	H N Nanjappa Class I Contractor Ashoka Hostel Building	Compressive strength of concrete Cubes	1000.00
12	H N Nanjappa Class I Contractor Ashoka Hostel Building	Compressive strength of concrete Cubes	1000.00

Consultancy Details – 2014-15

01	Sai Packaging Company	Compressive strength of concrete Cubes	3000.00
02	Manjunath	Compressive strength of concrete Cubes	1000.00
03	Shonan Engineering Pvt Ltd	Pre Welded Mesh	1500.00
04	Sai Packaging Company	Compressive strength of concrete Cubes	1000.00
05	Sai Packaging Company	Compressive strength of concrete Cubes	1000.00
06	R R Sensors	Loading Cell Test	1000.00
07	R R Sensors	Loading Cell Test	750.00
08	Manjunath	Compressive strength of concrete Cubes	1000.00
09	R B Constructions	Compressive strength of concrete Cubes	1000.00
10	Sai Packaging Company	Compressive strength of concrete Cubes	1000.00
11	R B Constructions	Compressive strength of concrete Cubes	1000.00
12	R E Concrete Bricks	Compressive strength of Bricks	1800.00
13	Ganesh Concrete Block	Compressive strength of Concrete blocks	1200.00

Consultancy Details – 2015-16

1	Manjunath	Compressive strength of concrete Cubes	1000.00	6-4-15
2	Basavashree Associates	Compressive strength of concrete Cubes	500.00	15-4-15
3	Basavashree Associates	Compressive strength of concrete Cubes	500.00	15-4-15
4	Shonan Engineering Pvt Ltd	Pre Welded Mesh	1000.00	2-7-15
5	Sri Venkateshwara Industrial Supply and Engineering works	Pre Welded Mesh	1000.00	6-10-15
6	Ganesh Concrete Block	Compressive strength of Concrete blocks	1000.00	2-11-2015
7	General Electricals & Sports Authority of India	High Mast Foundation inspection/ Design Verification	10,000.00	on 9-11-2015

8	Sri Venkateshwara Industrial Supply and Engineering works	L angle and U channel	2000.00	30-12-15
9	J & G Constructions	Compressive strength of concrete Cubes	500.00	8-1-2016
10	Ganesh Concrete Block	Compressive strength of Concrete blocks, and Water absorption Test	4800.00	As on 28-1-2016

17. Faculty recharging strategies

- Encouraging the faculty to attend Short term courses/faculty development programs at National and International level.
- Encouraging the faculty to attend/participate in National and International conference.
- Encouraging the faculty to publish research papers in peer reviewed journals.
- Encouraging the faculty to pursue higher studies(Ph.D. program)
- Encouraging the faculty to attend Pedagogy Training Programs

18. Student projects

- percentage of students who have done in-house projects including inter-departmental
100%
- percentage of students doing projects in collaboration with industries / institutes
Nil

19. Awards / recognitions received at the national and international level by

- Faculty
 - 1) “Effect of acids on strength behavior of non-expansive soil treated with alkalies”, Dr. S. D. Venkataraja mohan (2012) National conference on recent advances in civil engineering, organized by Cochin institute of science and technology, Cochin university, Nov 29th Dec 1st.2012
 - 2) 2013-14 H.Anantha Ram, Associate professor, Master Tutor for Machine 10X, Wipro Technologies PVT Ltd Bangalore
- Doctoral / post-doctoral fellows
Nil
- Students
Nil

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Sl. No	Academic Year	Programme	
		Topic	Activity/Date/Resource person
1	2015-16	Role Of Civil Engineer For Power Generation	Sri C.VENUGOPAL , Executive Director ,



			Karnataka Power corporation Limited
		Challenges in water resource management, rain water harvesting and ground water recharge	A R Shivakumar , IISc (KSCST) Shubha Ramachandran , Biome Environmental Solutions A S Ravikumar, Water Resource Management, UVCE)
2	2014-15	-	-
3	2013-14	Remote Sensing and its Applications	Dr.Lakshmi Kantha , Karnataka State Remote Sensing and applications, Bangalore
		Geographical Information System	April 22 nd 2014
		Global Positioning System	May 10 th 2014
		National seminar on recent research and developments in civil Engineering (RRDCE 2014) 27-28 March 2014	Scientists/Eminent Scholars participated Dr.Chandra Kishan , Professor,Dept of Civil Engg. IISc
4	2012-13	Rain water harvesting and ground water recharge	Dr Amita Prasad, Principal secretary, RDPR,GOK A S Sadashivaiah, Chairman, KSPCB Mr Shivakumar, PL-RWH, KSCST

21. Student profile course-wise:

2012-13

Name of the Course	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG	66	51	15	100	100



2013-14

Name of the Course	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG	69	53	16	88.68	100

2014-15

Name of the Course	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG	76	59	17	93.22	100

2015-16

Name of the Course	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG	74	51	23	96.07	100

2012-13

Name of the Course	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
PG					
2012-13	17	11	6	100%	100%
2014-15	18	11	7	90.90%	100%

22. Diversity of Students

Name of the Course	% of students from the	% of students from the	% of students from other	% of students from other
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		college	state	States	countries
UG	2012-13	94.03%	94.03%	5.97%	-
	2013-14	93.93%	93.93%	6.07%	-
	2014-15	96.29%	96.29%	3.71%	-
	2015-16	96.09%	96.09%	3.91%	-

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Defense Service : 02

GATE: 05

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	10
PG to M.Phil.	Nil
PG to Ph.D.	05
Ph.D. to Post-Doctoral	Nil
Employed	
• Campus Selection	5 - 10 %
• Other than Campus recruitment	75 %
Entrepreneurs	5 %

25. Diversity of Staff

Percentage of faculty who are graduates	
of the same parent university	20%
from other universities within the State	
From other universities outside the state	

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

One

27. Present details about infrastructural facilities

A. Library

Department library has more than 1000 volumes of books for about 25 subjects.

B. Internet facilities for staff and students

Yes. Department is provided with Wi-Fi facility for staff and students.

C. Total number of class rooms

07 (UG-5, PG-2)

D. Class rooms with ICT facility

01

E. Students' laboratories

09

F. Research laboratories

02

28. Number of students of the department getting financial assistance from College.
- Yes – 14 PG students are getting financial assistance from the college as scholarship of Rs 8000/month per student under TEQIP.
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
- Nil
30. Does the department obtain feedback from
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
- Yes- Utilized for modification of curriculum/syllabus by considering the latest technology and industry need in the BOS meeting annually.
- b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
- Yes – Good response obtained both from faculty and students.
- c) Alumni and employers on the programmes and what is the response of the department to the same?
- Good response from the students.
31. List the distinguished alumni of the department (maximum 10)

Sl No.	Name of the Student	Company
1	Narendraswamy	MLA, Former Minister, Govt. of Karnataka
2	Arun Kumar H,	Assistant professor, EWIT, Bangalore
3	Mamatha A,	Assistant professor, EWIT, Bangalore
4	Ramya KRN,	Assistant engineer, Irrigation department, Chitradurga
5	Roopa G,	Assistant engineer, PWD, Chikkaballapura
6	Sahana Shastri,	Assistant professor, RRCE, Bangalore
7	Mahesh Prasad,	Assistant professor, BIT, Bangalore
8	Meghashree,	Assistant professor, DSCE, Bangalore
9	Shreyasvi	Pursuing PhD at NITK Suratkal
10	Ananthkrishna, MS	pursuing PhD in USA

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

Sl. No	Academic Year	Programme	
		Topic	Activity/Date/Resource person

1	2015-16	Role Of Civil Engineer For Power Generation	Sri C.VENUGOPAL , Executive Director , Karnataka Power corporation Limited
		Challenges in water resource management, rain water harvesting and ground water recharge	A R Shivakumar , IISc (KSCST) Shubha Ramachandran , Biome Environmental Solutions A S Ravikumar, Water Resource Management, UVCE)
2	2014-15	-	-
3	2013-14	Remote Sensing and its Applications	Dr.Lakshmi Kantha , Karnataka State Remote Sensing and applications, Bangalore
		Geographical Information System	April 22 nd 2014
		Global Positioning System	May 10 th 2014
		National seminar on recent research and developments in civil Engineering (RRDCE 2014) 27-28 March 2014	Scientists/Eminent Scholars participated Dr.Chandra Kishan , Professor,Dept of Civil Engg. IISc
4	2012-13	Rain water harvesting and ground water recharge	Dr Amita Prasad, Principal secretary, RDPR,GOK A S Sadashivaiah, Chairman, KSPCB Mr Shivakumar, PL-RWH, KSCST

33. List the teaching methods adopted by the faculty for different programmes.
- Black board / Green Board/ White Board
 - Projectors
 - Smart Classroom
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
- Result analysis
 - Conducting Remedial classes for slow learners.
 - Arranging Technical tour in every semester
 - Conducting Guest lectures

-
- Obtaining feedback from students
35. Highlight the participation of students and faculty in extension activities.
- Students are arranging and participating in cultural programmes
 - Visiting industries
 - Arranging and participating in sports
36. Give details of “beyond syllabus scholarly activities” of the department.
- Arranging technical talk by experts/persons working in the field to get practical knowledge.
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
- Yes – accredited by NBA
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
- Strengths**
- Department has qualified and experienced staff. The faculty members are working in this department continuously from more than 25 years
 - The department has very good infrastructure facilities like laboratories, computer with internet facility, and library with good number of books and classrooms.
- Weaknesses**
-
- Opportunity**
-
- Challenges**
-
39. Future plans of the department.
- Upgrading Structural engineering lab to meet the needs of Global requirements.
 - To convert all the classrooms of the department to Smart classrooms.
 - To increase the volumes in the department library with latest editions/ titles.
 - To establish Training Center for Technical staff
 - To establish Center for rehabilitation of structures.
 - To start PG course in Construction Technology
 - To generate more funds through consultancy.
-

DEPARTMENT OF MECHANICAL ENGINEERING

1. Name of the Department & its year of establishment
MECHANICAL ENGINEERING & 1980
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Mechanical Engineering
 - PG
Machine Design
 - Ph.D.
Recognized Research Center under VTU
3. Interdisciplinary courses and departments involved
 - Solar Energy – ME, CS, EC, CV
 - Operation Research – ME, CS, IS, EC, CV
4. Annual/ semester/choice based credit system
Semester based, absolute grading is adopted. Grade is awarded based on marks scored by the student as per following:

Marks Range	90-100	75-89	60-74	50-59	45-49	40-44	<40
Grade	S	A	B	C	D	E	F

5. Participation of the department in the courses offered by other departments
 - Department – Civil Engineering
Subject – Environmental Impact and Assessment.
6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	5	5
Associate Professors	6	6
Assistant Professors	28	28

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Sl No	Faculty	Designations	Qualifications	Specialization	No of Years of Experience	No of Ph.D Students guided for the last 4 Years
1	Dr. L Chandrasagar	Professor	Ph.D	Machine Design	29	4
2	Dr. NANDEESHAIAH. B M	Professor	Ph.D	Machine Design	30	4
3	Dr. B. RAVINDRA	Professor	Ph.D	Machine Design	28	1
4	Dr. K.M.NARAYANAPPA	Professor	Ph.D	Metal Casting Science & Engg.	22	2
5	Dr. K M. PURUSHOTHAMA	Associate Professor	Ph.D	Machine Design	19	1



6	A. S. JAYARAM	Associate Professor	M.E	Machine Design	27	Nil
7	N. SHASHIKANTH	Associate Professor	M.E	Metal Casting Science & Engg	26	Nil
8	T. SRINATH	Associate Professor	M.E	Metal Casting Science & Engg	26	Nil
9	Dr. B. GANGADHAR SHETTY	Professor	Ph.D	Metal Casting	24	1
10	M CHANDRASHEKAR	Associate Professor	M.E	Metal Casting Science	16	Nil
11	VENKATESH REDDY	Associate Professor	M.E	Metal Casting Science & Engg	26	Nil
12	S. K. JAGADEESH	Associate Professor	M.Tech.	Thermal Science	23	Nil
13	K. DODDANNA	Assistant Professor	M.Tech.	Maintenance Engg.	23	Nil
14	Dr. S. SATHISH	Assistant Professor	Ph.D	CIM	17	1
15	Dr.T.N. RAJU	Assistant Professor	Ph.D	Manufacturing Science & Engg.	17	1
16	M. M. NATARAJA	Assistant Professor	Ph.D	PEST	11	Nil
17	Dr. H. M. SOMASHEKAR	Assistant Professor	Ph.D	Engineering Management	15	3
18	M. MAHADEVA SWAMY	Assistant Professor	M.Tech.	PDM	13	Nil
19	N. GANGADHAR	Assistant Professor	M.Tech.	Manufacturing Science & Engg	3	Nil
20	K. PREETHI	Assistant Professor	M.Tech.	Manufacturing Science & Engg.	6	Nil
21	K. C. BYRE GOWDA	Assistant Professor	M.Tech.	Thermal Science	6	Nil
22	R. SUNIL DHAYAL	Assistant Professor	M.Tech.	Manufacturing Science & Engg.	5	Nil
23	H. A. SHIVAPPA	Assistant Professor	M.Tech.	Machine Design	5	Nil
24	S. TEJESH	Assistant Professor	M.Tech.	Machine Design	2	Nil



25	M. RAJESH	Assistant Professor	M.E	Machine Design	4	Nil
26	B. MOHAN KUMAR	Assistant Professor	M.Tech.	Proceesed Metallurgy	2	Nil
27	T. PAVAN TEJASVI	Assistant Professor	M.Tech.	CIM	3	Nil
28	S. N. AMITH KUMAR	Assistant Professor	M.Tech.	Machine Design	3	Nil
29	C. RAMPRASAD	Assistant Professor	M.Tech.	PDM	15	Nil
30	Dr. V. ARUN KUMAR	Professor	Ph.D	Machine Design	6	2
31	Dr. A. S. PRASHANTH	Assistant Professor	Ph.D	Machine Design	1	Nil
32	R. CHANDAN	Assistant Professor	M.Tech.	Machine Design	3	Nil
33	MANJUNATH. H	Assistant Professor	M.Tech.	Machine Design	3	Nil
34	RANJITH.V	Assistant Professor	M.E.	Thermal Science	0	Nil
35	ARAVINDA.D	Assistant Professor	M.Tech.	Thermal Science	0	Nil
36	JAYANTH HOMBALAIAH	Assistant Professor	M.Tech.	Machine Design	0	Nil
37	SHARATH KUMAR .S.N	Assistant Professor	M.E.	Thermal Science	0	Nil
38	RATHIKA.M	Assistant Professor	M.E.	Machine Design	0	Nil
39	BHANUPRATAP	Assistant Professor	M.E	Thermal Science	0	Nil

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil

9. Programme-wise Student Teacher Ratio

a.	UG	Telecommunication Engineering	1:18
b.	PG	Digital Communication and Networking	1:12

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Sanctioned	Filled
1	Number of academic support staff (technical)	26	26

2	Administrative staff	02	02
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11. Number of faculty with ongoing projects from
a) national
b) international funding agencies
c) Total grants received.
Mention names of funding agencies and grants received project-wise.

Sl No	Project Title	Funding Agency	Amount	Status	Duration
1	Studies on Gadolinium oxide doped Zirconia Thermal barrier coating	Aeronautics R&D Board	31.55 Lakhs	Under progress	From 2012 -2015
2	Simulation studies on solidification of Aluminum based metal matrix composites	VTU, Research Grant scheme.	9.9 Lakhs	Under progress	From 2012-2014
3	Synthesis And Characterization Of New Bio-fuels For Their Use In Automobiles And Diesel Generators	DST, Govt of India	7.4 lakhs	Under progress	From 2015 to 2018

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
1) AR &DB/DRDO Project - 31.5 lacs
2) AICTE Project - 14 lacs
3) DST Project – 74.4 Lacs
13. • Research facility / centre with
• State recognition
VTU
• National recognition
Nil
• International recognition
Nil
14. Publications:
• number of papers published in peer reviewed journals (national / international)
• Monographs
• Chapter(s) in Books
• Editing Books
• Books with ISBN numbers with details of publishers
• Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
• Citation Index – range / average
• SNIP
• SJR
• Impact factor – range / average
• h-index



Sl. No.	Name of the Authors	Title of paper	Name of journal / Conference	Date of publication
1	L. Chandrasagar P. Martin Jebaraj, Parvathi .R S.Seetharamu	Study on the compatibility of "Thermal Barrier Coatings with internal combustion engine component materials	International conference on Advances in surface treatment: research & applications (ASTRA – 2003)	4-6 th Nov 2003 Held at Hyderabad
2	L. Chandrasagar P. Martin Jebaraj, Parvathi .R S.Seetharamu	Thermal Barrier Coatings on Aluminium components for high performance Automotive applications.	International conference on Aluminium (INCAL – 03)	23 – 25 th April 2003 held at New Delhi Page No. 275-283 Vol. 1
3.	L. Chandrasagar P. Martin Jebaraj, Parvathi .R S.Seetharamu	Structure and properties of Thermal Barrier Coatings made on Aluminium substrate	National conference on light metal science and technology (LMST-03)	17 & 18 th May 2003 held at Indian Institute of Science, Bangalore (Poster)
4	Parvathi .R L. Chandrasagar P. Martin Jebaraj, S.Seetharamu	Rare Earth Doped Zirconia Thermal Barrier Coatings and Select TBCs for Diesel Engines	International conference on 7 th heat Treat Show HTS – 2002 and International symposium on thermal spray	2 – 4 th May 2002 held at Bombay ASM International Page No. 243-251
5	L. Chandrasagar P. Martin Jebaraj, Parvathi .R S.Seetharamu	Characterization of 20% Gadolinia Doped Zirconia Thermal Barrier Coating	Paper accepted for oral presentation at International Conference on Materials Science & Technology, to	be held at COBO centre, Detroit on 16-20-2007
6	L. Chandrasagar Mallikarjuna JM Seetharamu S P. Martin Jebaraj	Effect of Ceria Doped Zirconia Thermal Barrier Coating on Diesel Engine Performance	Abstract submitted to International conference on advanced ceramics and coatings (ICACC-08)	Held at Daytona beach conference, Florida on 27-01-2007 to 01-02-2008
7	L. Chandrasagar P. Martin Jebaraj,	Effect of 20 % Ceria Doped Zirconia Thermal Barrier Coating on Multi-cylinder Diesel Engine Performance	SAE Journal	Accepted Under review
8	K.M.Purushothama P. Martin Jebaraj, Shivarudhriah L. Chandrasagar	Study the structural characterization of Praseodymium Rare earth oxide doped Zirconia powders for various calcinations temperature	International conference on Design and advances in mechanical engineering (ICDAAME2001) To be held at SKP Engineering college, Thiruvannamalai DEC-16-17 2011.	Presented



9	K.M.Purushothama P. Martin Jebaraj, Shivarudhrehiah L. Chandrasagar	Advanced Zirconate TBC materials for various high temperature applications	International conference on AMMMT-2010 At SIT,TUMKUR	Date-Nov. 18-19 2010. Page No. 165- 171
10	K.M.Purushothama P. Martin Jebaraj, Shivarudhrehiah L. Chandrasagar	Study the stabilization effect of wet ball milled Lanthanum Zirconate TBC powder	International conference on Recent Advances in Mechanical Engineering	Date- April 20 to 22 2011. Page- 368-375
11	L. Chandrasagar P. Martin Jebaraj	Effect of 20 % Gadonia-80 % Zirconia Thermal Barrier Coating on Diesel Engine Performance	International Conference and exposition to be held Houston, Texas, USA	May-21-24, 2012
12	L. Chandrasagar P. Rajeshwari	Studies on 25% Presodymia doped zirconia thermal barrier coating	(ATSC 202) for presentation at the 6 th Asian Thermal Spray Conference (ATSC-2014) to	be held during 24- 26 th November, 2014 in Hyderabad
13	Sushma Uppinkere Shivramu ^a , Bheema Raju Venkatappa, Chandrasaga r Laxman, Balakrishna Gowda, Rajesh Kumar Kodi Prasanna Koothi Thamaiah, Prashanth Doddappa.	Synthesis and characterization of biodiesel from simarouba glauca	Bio-fuels and Bio- energy International conference and Exhibition	To be held during 23- 25 Feb., 2016 in Bhopal
14	S Bharath kumar Dr.L Chandrasagar	Effect of Exhaust Emissions With Change In Injection Pressure On A 4- Stroke Biodiesel Fueled CI Engine: A Review	International Journal of Multidisciplinary research Academy	International Journal

15. Details of patents and income generated

Patents Filed

1. Origin ID	OR14C34
Application number	3593/CHE/2014
Title	Method to synthesize plasma sprayable gadolinium oxide stabilized/doped zirconia powder by using poly vinyl alcohol (PVA) binder for thermal barrier coating application
Date of priority	23/07/2014
Date of filing	23/07/2014

Jurisdiction	Chennai
2. Origin ID	OR14C37
Application number	3603/CHE/2014
Title	A method to prepare microwave synthesized plasma sprayable gadolinium Oxide stabilized/doped zirconia powder for thermal barrier coating applications
Date of priority	23/07/2014
Date of filing	23/07/2014
Jurisdiction	Chennai

Dr. B. Ravindra

1. Fatigue Life prediction of Gas Metal Arc Welded cruciform joints of AA7075 aluminium, Journal of Non Ferrous metals society, **26**, 6, 2011.
2. Establishing criteria of GTAW Cruciform Joints of AA7075 Aluminium alloy failing, International journal of Emerging Technology, **4**, 2, 2011.
3. Fatigue Life prediction of Gas Metal Arc Welded cruciform joints of AA7075 aluminium, Journal of Indian Welding society, 2010.

Dr. Gangadhar Shetty

1. Investigations on characterization of honge oil based MR-fluids, Journal of Manufacturing Engg., **5**, 1, 2010.
2. Development of MR-fluids based flexible work holding fixture, Manufacturing Technology today, **9**, 5, 2010.
3. Investigations on damping characteristics of a honge oil-based magnetorheological fluid, International Journal Of Vehicle Noise and Vibration, **4**, 7, 2011.
4. Experimental investigations on rheological properties of honge oil based MR-fluid, Defence science journal, **61**, 6, 2011.

Dr. K. M. Purushothama

1. Preparation and characterization of lanthanum and samarium Zirconate powders for TBC, Journal of Manufacturing Engineering, **5**, 4, 2010.
2. Preparation and characterization of lanthanum zirconate TBC powders for diesel engines, World journal of Engineering, **7**, 2, 2010.
3. Study the effect of calcination temperatures of 1630 C on surface structural properties of lanthanum zirconate TBC powders, International Journal of emerging Technology, **4**, 2, 2011.
4. Synthesize and study the effects of sintering on phase transformation and microstructure of lanthanum zirconate

TBC powders, Journal of manufacturing engineering, **8**, 1, 2013.

5. Synthesize and surface characterization of $\text{pr}_2\text{O}_3(20\%)$ and $\text{La}_2\text{O}_3(58.93\%)$ Doped Zr, International journal of Engineering science, **3**, 3, 2011.

Dr. T.N. Raju

1. Influence of aluminium and iron contents on the transformation temperatures of Cu-Al-Fe shape memory alloys, Transactions of The Indian Institute of Metals, **64**, 2011, 165-168.
2. Effect of Ternary Addition of Iron on Shape Memory Characteristics of Cu-Al Alloys, Journal of Materials Engineering and Performance, **20**, 4, 2011, 767-770.
3. Corrosion Behavior of Cu-Zn-Ni Shape Memory Alloys, Journal of Minerals and Materials Characterization, **1**, 2, 2013.
4. Effect Of Alloying On Microstructure And Shape Effect on Cu-Zn-Ni shape memory alloys, Journal of Manufacturing Engineering, **8**, 3, 2013.
5. Microstructure and Shape Memory Effect of Cu-Zn-Ni Shape Memory Alloys, Journal of Minerals and Materials Characterization, **2**, 2014.

Prof. V. Arunkumar

1. Experimental Analysis of Damper Behavior of Squeeze Film Dampers for Gas Turbine, Journal of Engineering for Gas Turbines, **107**, 1, 1985.

Dr. H.M. Somashekar

1. Effective method to measure cutting force during high speed machining of aluminium, International Journal of Advanced Engg., **6**, 2, 2011.
2. An experimental investigation to optimize machinability of aluminium alloy 6061, International Journal of mechanical engineering, **4**, 1, 2011.
3. Computer simulation of the corrosion studies of advanced materials like zinc-al, International Journal of material science, **2**, 1, 2012.
4. Optimizing surface roughness and MRR in turning operation using taguchi's design, International Journal of applied Engg. Research, **7**, 8, 2012.
5. optimisation of turning parameters for machinability using Taguchi Method, IJSAT, **1**, 10, 2011.
6. optimisation of turning parameters for machinability using Anova, IJEST, **4**, 5, 2012.
7. Wear characteristic of chilled Zinc- Aluminium Alloy - Silicon Carbide Particulates, IJAMS(International journal of Advanced Manufacturing Science), **2**, 2, 2011.

Dr. B.M. Nandeishaiah

1. Characterization of analysis of abs submerged pump casing, International journal of Engineering and Technology, **6**, 2, 2013.
-

Dr. K.M. Narayanappa

1. Development and Processing of Wear properties of Functionally Graded Materials, International Journal of Emerging Technology, **4**, 2, 2011.
2. Investigation of Physical properties of Functionally Graded Materials using centrifugal force, World Journal of Engineering, **2**, 2, 2009.
3. Numerical Study of Functionally Graded Materials, Advanced Materials Research, **1**, 2007.
4. Investigation of Physical properties of FGM by centrifugal casting technique, IJ-ETA-ETS, **2**, 4, 2009.

Prof. S.K. Jagadeesh

1. Solidification studies on sand cast Al 6061–SiCp composites, Journal of Alloys and Compounds, **509**, 1, 2011.
2. Prediction of cooling curves during solidification of Al 6061–SiCp based metal matrix composites, Journal of Materials Processing Technology, **210**, 4, 2010.

Dr. B. Narayana

1. Optimization of cryogenic treatment parameters to maximize tool wear of HS tool, International Journal Of Modern Engineering, **2**, 5, 2012.

Prof. Tejesh

1. Operational Mechanism of the flight control surfaces for roll and Yaw control of Flights, International Journal of Engineering Research, **1**, 8, 2012.

Prof. T. Srinath

1. Design and development of multizone conveyor curing furnace for FRP composites, International Journal of scientific and Engineering Research, **3**, 9, 2012.

Dr. S. Satish

1. Corrosion Behavior of Cu-Zn-Ni Shape Memory Alloys, Journal of Minerals and Materials Characterization, **1**, 2, 2013.
2. Effect Of Alloying On Microstructure and Shape Effect on Cu-Zn-Ni shape memory alloys, Journal of Manufacturing Engineering, **8**, 3, 2013.
3. Microstructure and Shape Memory Effect of Cu-Zn-Ni Shape Memory Alloys, Journal of Minerals and Materials Characterization, **2**, 2014

Prof. Pavan Tejasvi .T

1. Presented a paper on “Automated Weld Cell Design for Box Corner” in National Conference on Emerging Trends in Mechanical Engineering NCETME-2011 held at M.S.Ramaiah Institute of Technology, Bengaluru-54.
2. Published a paper on “Design of Clamping Fixture for Manufacturing of Long Turbine Blades on Axis

Machinery” on International Journal of Informative & Futuristic Research, ISSN: 2347-1697.

16. Areas of consultancy and income generated

Consultancies

Sl No.	Particulars	Amount in Rs.
1	Lecture series Aug.2011 (M/S Siemens Pvt. Ltd., Baroda, along with Sri. N Shashikanth)	24000.00
2	Rotor dynamic analysis of 35MW generator shaft Sept.2011 (M/S SRDC, Bangalore, along with Dr. L Chandrasagar)	30000.00
3	Testing of aerospace quality rolling element bearings Oct.2011- mar 2012 (M/S National Aerospace Laboratories, Bangalore)	75000.00
4	Consultancy on patent drafting Dec.2011 (M/S K & S partners) Free advise	0.00
5	Lubricating system inspection April.2012 (M/S Sothern Lubrication Pvt. Ltd.)	12000.00
6	Inter- shaft bearing testing April 2012-Feb2013 (M/S National Aerospace Laboratories, Bangalore) .	120000.00
7	VTU lecture series Aug.2012 (M/s VTU regional centre, Bangalore)	18000.00
8	Reduction of piping vibrations Aug.2012 (M/S Ncon Turbo Tech Pvt. Ltd.)	15000.00
9	Verification of the design analysis of seal test rig Dec.2012 (M/S SRDC, GE, Bangalore)	90000.00
10	Testing methodology for Gokart June2013 (M/s Dolphin industries, Bangalore along with Dr.B. Ravindra)	18000.00
11	Advisory Consultancy on CFD related issues July 18&19,2013 (M/S SRDC, Bangalore)	10000.00
12	Boiler safety spring problems INS VIRAT, Aug.2013 (M/s Tocal Industries, along with Sri N Shashikanth, Sri Venkatesh Reddy, Dr K M Purushotham, Dr. T.N.Raju, Dr. L Chandrasagar. Additionally, a test rig worth around Rs.75,000 is retained @ Dr. AIT for future R&D)	50000.00
13	TEQIP Consultancy, BMSCE, Bangalore, Aug. 2013.	30000.00
14	Advisory consultancy related to preloading of boiler safety springs, Oct.2013 (M/S Tocol Industries along with Sri N Shashikanth, Sri Venkatesh Reddy, Dr K M Purushotham Dr. T N Raju, Dr. L Chandrasagar).	25000.00
15	Five days advisory consultancy related to wedge design (Nov-Dec.2013)	25000.00
16	TEQIP Consultancy, BMSCE, Bangalore, Sept., Oct., & Nov.,2013	72000.00
17	TEQIP Consultancy, BMSCE, Bangalore, Jan. & Feb., 2014	78000.00
18	TEQIP Consultancy, BMSCE, Bangalore, Dec. 2013 Mar.,Apr.,May.,2014	162000.00
19	General consultancy @ half day a week for 12 weeks Sept. 2014- Dec. 2014	36000.00
20	TEQIP Consultancy, BMSCE, Bangalore, Jun. 2014- Sept. 2014	204000.00
21	TEQIP Consultancy, BMSCE, Bangalore, Oct. 2014-Dec. 2014	132000.00
22	Industrial Consultancy, Ducom, Oct. 2014-Jan. 2015	45000.00
23	TEQIP Consultancy, BMSCE, Bangalore, Jan. 2015- April. 2015	160000.00
23	TEQIP Consultancy, BMSCE, Bangalore, May 2015- June 2015	80000.00
24	Industrial Consultancy, Ducom, Feb 2015-April 2015	45500.00
25	TEQIP Consultancy, BMSCE, Bangalore, July2015-Aug 2015	80000.00
26	Industrial Consultancy, Ducom, May 2015-Aug 2015	52650.00
27	MVJ College of Engineering, Selection committee meeting, 22 Dec 2015	7000.00
28	TEQIP Consultancy, BMSCE, Bangalore,Sept 2015-Oct 2015	80000.00
29	Industrial Consultancy, Ducom, Sept. 201-Dec 2015	78000.00
TOTAL TILL DATE		1854150.00

1636500.
00

17. Faculty recharging strategies
Organizing FDP's, Workshops, Symposium, Conferences.
18. Student projects
 - percentage of students who have done in-house projects including inter-departmental
79 %
 - percentage of students doing projects in collaboration with industries / institutes
21 %
19. Awards / recognitions received at the national and international level by
 - Faculty
Nil
 - Doctoral / post-doctoral fellows
Nil
 - Students
Nil
20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Sl No.	Seminars/ Conferences/Workshops	Source of Funding	Details Of Outstanding Participants
1.	Conducted 2- days TEQIP-Phase-2 sponsored National Symposium on “ Rotor Dynamics (NSRD) ”.	TEQIP	200
2.	Vijay Zaveri Centre for Composite	Vijay Zaveri Centre	100
3.	Conducted 3-days workshop on Engine assembly and Dis assembly vehicle dynamics”.	Dr. Ambedkar Institute of Technology	100
4.	Fascinating World of Shock Waves	ISTE	200
5.	SAE INDIA Collegiate Club	Dr. Ambedkar Institute of Technology	200

21. Student profile course-wise:

Name of the Course (refer question no. 2)	Applications received		Selected		Pass percentage	
			Male	Female	Male	Female
UG	I year	165	164	01		
	II year	207	201	06		
	III year	200	195	05		
	IV year	127	124	03		
PG	I year	21	21	00		
	II year	21	18	03		
Ph.D	NA		NA	NA		

22. Diversity of Students

Name of the Course (refer question no.2)			%of the students from the college	%of the students from the state		%of the students from the other states		%of the students from the countries	
UG	I year	164	Nil	149	90.85	11	6.7	04	2.4
	II year	207	Nil	197	95.16	09	4.3	01	0.4
	III year	200	Nil	193	96.5	7	3.5	0	0
	IV year	127	Nil	119	93.70	8	6.2	0	0
PG	I year	21	Nil	21	100	0	0	0	0
	II year	21	Nil	20	95.23	1	4.76	0	0
PhD	NA		NA	NA		NA		NA	

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
NA

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	8 %
PG to M.Phil.	NA
PG to Ph.D.	5 %
Ph.D. to Post-Doctoral	NA
Employed	
• Campus Selection	20
• Other than Campus recruitment	00
Entrepreneurs	07

25. Diversity of Staff

UG

Percentage of faculty who are graduates	
Of the same parent university	14
From other universities within the State	24
From other universities from other States	01

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

One

27. Present details about infrastructural facilities

- Library
NA
- Internet facilities for staff and students
For Staff – 20
For Students - 150
- Total number of class rooms
07 + 01 (Smart Rooms)
- Class rooms with ICT facility
- Students' laboratories

-
- 10
6. Research laboratories
- 02
28. Number of students of the department getting financial assistance from College.
- PG – 18 (Assistantship from TEQIP).
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
- Regular interaction with experts from industries, IIT'S, NIT'S, IISc.
30. Does the department obtain feedback from
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
 - b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
 - c) Alumni and employers on the programmes and what is the response of the department to the same?
- a) Yes, Online Feedback System
 - b) Satisfactory
 - c) Not Applicable
31. List the distinguished alumni of the department (maximum 10)
- 1) Dr. k.S. Sridhar , Principal, PESIT
 - 2) Dr. S. Kakkeri, Professor & HOD, SVCE
 - 3) Mr. M.V.V.S Murthy, Scientist, ISRO
 - 4) Mr. P. Kalyan, Naval Architect, Singapore
 - 5) Mr. Avinash Kampli, Pilot, Singapore Airlines
 - 6) Mr. Sanjay. P, Team Lead, Applied Materials
 - 7) Mr. S. K. Jagadeesh, Associate Professor, Dept of Mechanical Engg
 - 8) Mr. H.S. Satish Kumar, Manager, MICO
 - 9) Mr. Vishwanath Koti, Associate Professor, MSRIT
 - 10) Mr. Raja Hussian, Dubai Industry.
32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
- | Sl No. | Event | Type | Year |
|--------|--|----------------|------|
| 1. | All on Auto
(Engine assembly , disassembly, Vehicular dynamics) | 3 Day Workshop | 2014 |
| 2. | Industrial Expert lecture on materials & semiconductor devices | 1 day lecture | 2015 |
| 3. | SAE INDIA Inauguration | 1 day lecture | 2015 |
33. List the teaching methods adopted by the faculty for different programmes.
- 1) Talk and Chalk
 - 2) OMR sheet presentation
 - 3) LCD presentation
 - 4) Smart class room usage.
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
-

By Continuous discussions in Board of Studies (BOS) and experts from elite institutions, industries yearly.

35. Highlight the participation of students and faculty in extension activities.
36. Give details of “beyond syllabus scholarly activities” of the department.
- Students are involved in professional body activities such as SAE, ICS, and ISAMPAE.
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
- Applied - NBA
 - In progress – NAAC, ISO, NBA
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
- Strengths:
- Advanced research, interdisciplinary and industry oriented infrastructure.
 - High retention of well qualified and motivated faculty.
 - Huge emphasis on holistic learning as evidenced in the quality placement of students.
 - Strong learning process with an emphasis on interdisciplinary learning and flexibility to adapt to changing times.
 - Top rankers joining the program.

Weaknesses:

- Inadequate professional society interactions.
- Technical staff training.
- Converting research into an enterprise.

Opportunities:

- Enhance community contact
- Global initiative
- Exploring huge alumni base.
- Advanced school of mechanical engineering.
- Staff integrated programmes with an insight into research.
- Strengthening industry collaboration – (MOU’s, research, consultancy, training & internships).
- Vibrant, interdisciplinary and sponsored projects.

Challenges:

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39. Future plans of the department.
- Planning for applying for 3 M.Tech programs
 - M.Tech in Nano Technology
 - Thermal Engineering in M.Tech
 - Product Development and Manufacturing (PDM) in M.Tech
 - Planning for Center of Excellence in IC Engines.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

1. Name of the Department & its year of establishment
Electrical and Electronics Engineering, Established in the year-1980
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Electrical and Electronics Engineering
 - PG
Power Electronics
 - Ph.D.
Recognized Research Center under VTU
3. Interdisciplinary courses and departments involved
Industrial engineering and management, Mechanical engineering, Telecommunication, Electronics & communication and computer science and engineering
4. Annual/ semester/choice based credit system
Semester based, absolute grading is adopted. Grade is awarded based on marks scored by the student as per following:

Marks Range	90-100	75-89	60-74	50-59	45-49	40-44	<40
Grade	S	A	B	C	D	E	F

5. Participation of the department in the courses offered by other departments
 - Mechanical Engineering
6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	3	3
Associate Professors	6	6
Assistant Professors	6	

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D Students guided for the last 4 years
Dr.B.V. Sumangala	Ph.D	Professor	High voltage Engineering	32years	2
Prof Keshava Murthy	M.E	Professor	Power system Engineering	43years	--
Dr. Shankaralingappa C.B	Ph.D	Professor	Power system Engineering	20years	0
Dr.Jyoti P Koujalagi	Ph.D	Associate Professor	Power Electronics	26 years	0
Prof.Eranna	M.E	Associate Professor	Power systems	27 years	0

Prof. TB Dayananda	M.E	Associate Professor	Power systems	26 Years	0
Prof. Govinda Raju. H.V	M.Tech.	Associate Professor		26 Years	0
Prof. S vasudevamurthy	ME	Associate Professor	Electrical machines	26 Years	0
Prof. Nalini S	ME	Associate Professor	Power systems	30 Years	0
Prof. Mukunda swamy	M.Tech.	Assistant Professor	Embedded Systems	10 Years	0
Prof. Arpitha Raju B	M.Tech.	Assistant Professor	Power Electronics	6Years	0
Prof. Harini Vaikund	M.S.	Assistant Professor	Microelectronics	4Years	0
Prof. Dhanyavati	M.Tech.	Assistant Professor	CAID	6Years	0
Prof. Soumya S	M.Tech.	Assistant Professor	Power Electronics	4Years	0
Prof. Deepthi SS	M.Tech.	Assistant Professor	Industrial Electronics	3Years	0
Prof. Pankaja HG	M.Tech.	Assistant Professor	Power Electronics	1.5Years	0

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil (No Temporary Faculty in the department)

9. Programme-wise Student Teacher Ratio

a.	UG	Telecommunication Engineering	15
b.	PG	Digital Communication and Networking	12

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Sanctioned	Filled
1	Foreman	1	1
2	Instructor	2	1
3	Assistant Instructor	2	2
4	Mechanic	2	1
5	Helper	6	6
6	Administrative staff	1	1

11. Number of faculty with ongoing projects from

a) national

b) international funding agencies

c) Total grants received.

Mention names of funding agencies and grants received project-wise.

- National: -- ---- Nil
- International: ----- Nil
- State: VTU- "Investigations on suitability of natural vegetable seed oils for use as liquid dielectrics" - Rs 19.34 Lakhs
- Total grant received : Rs 19.34 Lakhs

-
12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
 - AICTE – “Investigations on surge phenomena in power transformers”- 10Lakhs
 - DST - “Establishment of power electronics and Drives laboratory”- 20 Lakhs
 - VTU—“Investigations on suitability of natural vegetable seed oils for use as liquid dielectrics” - Rs 19.34 Lakhs
 - DST- KFIST- A student project entitled - “Solar cell phone charger” – Rs 40000/-
 - KSCST - A student project entitled “Tesla coil”- Rs 4000/-
 13.
 - Research facility / centre with
 - state recognition
Recognized as research centre from VTU, Belagavi.
 - national recognition
 - international recognition
 14. Publications:
 - number of papers published in peer reviewed journals (national / international)
2/71
 - Monographs
Nil
 - Chapter(s) in Books
Two papers entitled “Generation of high frequency pulses for transient studies” and “Study of partial discharge in press Boards”, published in Lecture Notes in Electrical Engineering, Volume248, 2014,By Springer Publications. Editing Books
 - Books with ISBN numbers with details of publishers
Nil
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
Nil
 - Citation Index – range / average
36
 - SNIP
Nil
 - SJR
Nil
 - Impact factor – range / average
0.3 to 3
 - h-index
Nil
 15. Details of patents and income generated
 - 1) A process to extract liquid dielectric coolant from the Rice Bran
-

Oil. –CBR No. 17273

- 2) A process to extract liquid dielectric coolant from the Sesame Oil.
–CBR No. 17271

16. Areas of consultancy and income generated
- Insulation and HV engineering-Amount : Rs 5 lakhs (Approximate)
17. Faculty recharging strategies
- FDP / Workshops/ Seminars/ Conferences
18. Student projects
- percentage of students who have done in-house projects including inter-departmental
90
 - percentage of students doing projects in collaboration with industries / institutes
10
19. Awards / recognitions received at the national and international level by
- Faculty
Nil
 - Doctoral / post-doctoral fellows
Nil
 - Students
Nil
20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Sl. No.	Activity	Date	Title	No. of students	Source of funding
1.	FDP	26 th Sep to 1 st Oct 2013	Design and Modeling of Drives for Electric Machines	50	
2.	workshop	02 nd to 4 th Nov 2013	Hands on Experience-MATLAB/SIMULINK	35	
3.	Seminar	5 th August 2013	“PMU and Wide Area Monitoring Applications”, PRDC, under TEQIP	90	
4.	FDP	June 11 th to 15 th 2013	“Insulation and High Voltage Engineering”	50	TEQIP
5.	FDP	3 rd to 7 th June 2013	“DSP Fundamentals & Applications to Power Electronics & Drives”	70	TEQIP
8.	Workshop	20th to 22nd Nov 2014	Mathlab Fundamentals	50	
9	Workshop	25-27 Aug. 2011.	3 day workshop on, “ Modeling Techniques in Power Electronics, using Matlab”, (Electrono Solutions),	30	
10	Technical talk	26.9.2012	Technical talk-, “Energy Internet-Trends and Challenges”, by Bindhu Madhava(Senior Scientist F, CDAC-Former Alumnii)	80	



11	Technical talk	10.4.2013	Technical Talk, “Engineering and Science Education-Finding Congruence in Diverse Perspectives”, Srikanth kashyap SW, Director, R&D, JVS Electronics	80	
12	Technical talk	28.11.2014	Technical Talk - “Philosophy of ultra high voltage engineering”.	100	
13	Technical talk	11.10.2014	Technical talk- “Self Healing grids”, by Bindhu Madhava (Senior Scientist F, CDAC-Former Alumni)	210	
14	Technical Talk	21-2-2015	Technical Talk - - “Emerging Trends in Power Transmission System”, - Dr. Vasudeva, Joint Director, CPRI, Bengaluru	150	
15	Technical Talk	07.09.2015	Technical Talk -- “Awareness on Solar Energy”, 8 Minutes” – Harshit Poddar	200	
16	Technical Talk	22.01.2016	Technical Talk - "What to be covered in Electronics“, - Dr. Muhammad. H. Rashid, Professor, University of West Florida , USA	200	
17	Technical Talk	24.1.2015	Technical Talk - “ Energy Auditing”, Prof. Bhaskara, Certified Energy Auditor, Rajiv Gandhi Institute of Technology, Bangalore.	150	Institute
18	Technical Talk	4/2/2016	Technical Talk--TEQIP sponsored“ Renewable Energy Sources and Energy Conservation for sustainable development”, Dr. Nagana Gouda, Director National Centre for Solar Technology, KPCL	100	TEQIP
19	Workshop	10/2/2016	Matlab Workshop on “Power Electronics and Drives” ,in collaboration with M/s Electrono Solutions, under TEQIP.		TEQIP
20	Technical Talk	19/2/2016	Technical Talk --“ Lightning Interaction in Avionics”, by Prof. Pradip Kumar Dixit, Professor MSRIT, ISTE sponsored	100	ISTE
21	FDP	21-23 April 2016	“Recent Trends in Industrial Automation”, TEQIP sponsored	60	TEQIP

21. Student profile course-wise:

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage		
		Male	Female	Male	Female	
UG: BE, EEE	Seats filled by State govt., through common entrance test	43	28	95	100	2010-14
		45	24	98	100	2011-15
PG	Seats filled by State govt., through PGCET	47	53	100	100	2010-14
		47	53	100	100	2011-15

22. Diversity of Students

Name of the Course (refer question no. 2)	% of students from the college	% of students from the state	% of students from other States	% of students from other countries	Academic year
UG: BE, EEE	NIL	98	2	NIL	2010-14
		90	10	NIL	2011-15
PG:M.Tech Power Electronics	NIL	100	00	NIL	2012-14
		100	00	NIL	2013-15

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

- GATE- 02

24. Student Progression

Student progression	Percentage against enrolled		
UG to PG	2010- 14	2011- 15	2012- 16
PG to M.Phil.	Nil	Nil	Nil
PG to Ph.D	Nil	Nil	Nil
Ph.D. to Post-Doctoral	Nil	Nil	Nil
Employed	54	49	54
Campus selection			
Other than campus recruitment	8	12	---
Entrepreneurs	NIL		

25. Diversity of Staff

Percentage of faculty who are graduates	
of the same parent university	37.5 (6/16)
from other universities within the State	56.3 (9/16)
from other universities from other State	6.2 (1/16)

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.
Two
27. Present details about infrastructural facilities
- Library : (Department) – total Number of books – 1416
 - Internet facilities for staff and students : Internet facility provided for all faculties with BSNL, 100 Mbps Broad band connectivity and Wi-Fi enabled campus.
 - Total number of class rooms : 5
 - Class rooms with ICT facility : 1
 - Students' laboratories : 13
 - Research laboratories : 2
28. Number of students of the department getting financial assistance from College.
15
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
No, Both UG and PG programmes are affiliated to VTU, Belagavi.
30. Does the department obtain feedback from
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
 - b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
 - c) Alumni and employers on the programmes and what is the response of the department to the same?
- a) Yes, Feedback from the faculties are taken and incorporated during the Board of studies meeting.
 - b) Yes,
 - (i) Course wise feedback- If the student feedback is poor, Teacher will be counseled.
 - (ii) Student members are involved in BOS – students inputs are considered in curriculum design
 - c) Yes
 - (i) Suggestions from alumni and employers are considered for revision of curriculum in the BOS meeting.
31. List the distinguished alumni of the department (maximum 10)
- 1) Bargav Ram – Ph.D, Germany
 - 2) Pradeep L- KPCL
 - 3) Sunil Kumar- Indian Army
 - 4) Chandrashekhar – USA
 - 5) Shilpa Krishna- USA
 - 6) Manjula- Australia
 - 7) Roopa Prakash- IISc., Bengaluru
 - 8) Anand MS- USA
 - 9) Mahesh DM – Bengaluru Metro

-
- 10) Prakash – BESCOM
32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
- Dr. Mohammad Rashid – Professor from University of Florida, USA, delivered a lecture on What to teach in Power Electronics!
 - Dr. Bindu Madhava- CEO of CDAC, Bengaluru region, delivered a lecture on Self Healing Grids
 - Dr. Nagana Goud- Director, NTCST, Bengaluru, delivered a lecture on Renewable Energy
 - Dr. Vasudev – Joint Director CPRI, Bengaluru, delivered a lecture on Recent Trends in HV and Insulation
 - Dr. Pradip Kumar Dixit- Professor, MSRIT, Bengaluru, delivered a lecture on Lightning Interaction in Avionics
33. List the teaching methods adopted by the faculty for different programmes.
- Conventional Black Board
 - Power Point Presentation
 - Smart Class Room
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
- Program Assessment Committee (PAC): This committee consists of HOD and senior faculty members of the department. Committee verifies the Course attainments, attainment of programme outcomes, gap analysis between target and attained POs and other academic (curricular and co-curricular) activities which helps to attain POs, PEOs and mission of the department. Committee meets twice in a year.
 - Department Advisory Board (DAB): This committee consists of HOD, Industrialist, faculty from reputed Institute (IISc/ IIT) and senior faculty members of the department. The main focus of the DAB is to improve overall growth of the department including research and placement. Committee meets once in a year.
35. Highlight the participation of students and faculty in extension activities.
- 1) Participation in state and National Level Technical Competitions (Project Exhibition/ Paper presentation):
- Priyadarshini J Patil- M.Tech, Project Exhibition for Hybrid Bicycle (State Level)
 - A Batch of IV semester students have participated in State Level Project Exhibition - "Anveshana 2016", and won the prize for the project entitled "Water purifier using Renewable sources" at Vishweshwaraiah Museum, Bengaluru.
 - A Batch of Final Year students-2015, were granted KFIST grants of Rs Forty Thousand to carry out their innovative project entitled "Spybug".
- 2) Participation in College, University, state and National Level Sports events
-

-
- Vasu Naik VI Sem Badminton (College Level)
 - Naveen VI Sem Badminton (College Level)
36. Give details of “beyond syllabus scholarly activities” of the department.
- Innovative student Projects
 - Establishment of Research Facility in the Department
 - BOS – members for other Universities and Colleges
 - UPSC/KPSC- Examiners/ Paper setters
 - Faculty members of the department participate in PhD and M.Tech Thesis evaluation from different universities
 - Faculty members of the department participate in National/International Conferences as Author/Chairperson
 - Faculty members of the department participate as Resource person for guest lectures/workshops/FDPs at different Institutions/Universities
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
- Yes
- Accredited by NBA - 2007-09 and 2012-14
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
- Strengths**
1. Qualified and Experienced Faculty and Technical staff with good staff retention
 2. State of the art Research facility in the area of High Voltage and Power Electronics Engineering.
 3. Good number of Publications in peer reviewed journals
 4. Testing and Consultancy services in the area of power systems and insulation
 5. Patentable research-2 patents applied
- Weaknesses**
1. Improvement in placement activities
 2. Constraint of faculty recruitments due to state government policies
- Opportunities**
- 1) Faculty/student exchange program is possible through MOU with various Universities/Institutions/ Companies
 - 2) Institution in the vicinity of Industrial and IT hub leading to more opportunities for industry interaction and placement
- Challenges**
- 1) To emerge as lead institution in the state.
 - 2) Recognition of the department as QIP Research Centre.
39. Future plans of the department.
- Encouragement of Interdisciplinary research activities.
 - Strengthening of research in diversified areas.
 - Providing solutions to real time problems of industry.
-



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

1. Name of the Department & its year of establishment
Electronics and Communication Engineering and 1982
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

<i>Program Description</i>	
UG in Electronics and Communication Engineering	<ul style="list-style-type: none">• Started with 40 seats in the year 1982• Intake increased to 90 in the year 1992• Intake increased to 120 in the year 2006• Intake increased to 180 in the year 2013
PG in VLSI Design and Embedded Systems	<ul style="list-style-type: none">• Started with 18 seats in the year 2004
Ph.D	<ul style="list-style-type: none">• Recognized Research Center under VTU

3. Interdisciplinary courses and departments involved

<i>Sl. No</i>	<i>Interdisciplinary Courses (Title)</i>	<i>Subject Code</i>	<i>Semester</i>	<i>Department Involved</i>
1	Constitution of India and Professional Ethics	10CI18	I	MBA
2	Environmental Studies	10EV28	II	CIVIL
3	Management and Entrepreneurship	HSO3	V	MBA
4	Human Resource and Management	HS05	VII	MBA
5	Intellectual Property Rights	HS04	VIII	MBA
6	English	EN19/29	I/II	Humanities and Social Sciences
7	Kannada	KA19/29	I/II	Humanities and Social Sciences
8	Engineering Mathematics – I	MA11	I	Mathematics
9	Engineering Mathematics – II	MA21	II	Mathematics
10	Engineering Mathematics – III	MA31	III	Mathematics

11	Engineering Mathematics – IV	MA41	IV	Mathematics
12	Engineering Chemistry	CH12/22	I/II	Chemistry
13	Engineering Chemistry Lab	CHL17/27	I/II	Chemistry
14	Engineering Physics	PH12/22	I/II	Physics
15	Engineering Physics Lab	PHL17/27	I/II	Physics
16	Linear Algebra	EC62	I/II	Mathematics
17	Computer Concepts and C programming	CS13/23	I/II	Computer science and engineering
18	CCP Lab	CPL16/26	I/II	Computer science and engineering
19	Computer Aided Engineering drawing	CED24	I/II	Mechanical engineering
20	Elements of Civil Engineering & Engineering Mechanics	CV13/23	I/II	Civil engineering
21	Elements of Mechanical Engineering.	ME14/24	I/II	Mechanical engineering
22	Basic Electrical Engineering	EE15/25	I/II	Electrical and Electronics Engineering
23	Workshop Practice	MEL16/26	I/II	Mechanical engineering
24	ARM Processor	ITE01	VIII	Instrumentation technology and engineering
25	Real Time Operating Systems	TEE02	VIII	Telecommunication and engineering
26	DSP Algorithm and Architecture	TEE03	VIII	Telecommunication and engineering
27	Operation Research	MEE02	VIII	Mechanical engineering
28	Solar Engineering	MEE03	VIII	Mechanical engineering
PG-MTECH				
	Nil			

4. Annual/ semester/choice based credit system
Semester based, absolute grading is adopted. Grade is awarded based

on marks scored by the student as per following:

Marks range	90-100	75-89	60-74	50-59	45-49	40-44	<40
Grade	S	A	B	C	D	E	F

For: PG -MTech in VLSI Design and Embedded Systems
Semester based (As per VTU guidelines)

5. Participation of the department in the courses offered by other departments

Core subject Intellectual Property Rights is handled by Department of Humanity Sciences.

Students of final year (7th and 8th semester) enroll for various Interdepartmental Electives offered by other departments.

- Operation Research (Mechanical Engineering) MEE01
- Elements of Solar Engineering (Mechanical) MEE02
- Nano Technology (Mechanical) MEE03
- Ecology and Environmental impact assessment (CVE03) Civil engineering.

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

UG Program

	Sanctioned	Filled
Professors	1	1
Associate Professors	8	8
Asst. Professors	18	18

PG Program

	Sanctioned	Filled
Professors	1	1
Associate Professors	1	1
Asst. Professors	2	2

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. K M Rajanna	Ph. D.	Associate Professor	Industrial Electronics	21	2
Dr. G V Jayaramaiah	Ph. D	Professor	Computer science	23	07
Dr. H. Umadevi	Ph. D	Associate Professor	Electronics	21	2
Dr. K. Ramesha	M. Tech	Professor	electronics	21	4
Dr. Jambunath S Baligar	Ph. D	Associate Professor	Physics	16	4
Dr. Mahalinga V. Mandi	Ph. D	Associate Professor	Industrial electronics	24	2
Dr. Ramesh S	Ph. D	Associate Professor	Industrial electronics	23	2
S Usharani	M. Tech	Associate Professor	Industrial electronics	28	NIL
Akalpita L. Kulkarni	M. Tech	Associate Professor	Applied electronics	23	NIL



B S Sudha	M. Tech	Associate Professor	Industrial electronics	23	NIL
Shivaputra	M. Tech	Assistant Professor	VLSI design & embedded system	13	NIL
Meenakshi L Rathod	M. Tech	Assistant Professor	VLSI design and embedded systems	13	NIL
Kavitha Devi C S	M. Tech	Assistant Professor	CSE	11	NIL
Swamy Tn	M. Tech	Assistant Professor	VLSI design and embedded systems	06	NIL
Mala Sinnor	M. Tech	Assistant Professor	Electronics	12	NIL
Sajidha Thabassum B	M. Tech	Assistant Professor	Digital electronics	10	NIL
Shilpa K.C	M. Tech	Assistant Professor	DEC	09	NIL
Siddesha K	M. Tech	Assistant Professor	DEC	05	NIL
Nagarathna H S	M. Tech	Assistant Professor	Digital electronics and communication	06	NIL
Girija.S	M. Tech	Assistant Professor	Computer science	12	Nil
Shwetha M	M. Tech	Assistant Professor	Digital communication & Networking	3	NIL
Hemalatha K.N	M. Tech	Assistant Professor	VLSI and embedded system	09	NIL
Divya	M. Tech	Assistant Professor	Digital electronics	3	NIL
Nithyashree S	M. Tech	Assistant Professor	DCN	3	NIL
Triveni	M. Tech	Assistant Professor	DCE	06	NIL
G S Pushpalatha	M. Tech	Assistant Professor	VLSI and embedded systems	09	NIL
Kesthara V	M. Tech	Assistant Professor	Digital communication	05	NIL
R H Vijayakumar	B.E.	Associate Professor	VLSI design & embedded system	30	NIL
Mohankumar.V	M. Tech.	Assistant Professor	Computer science	12	NIL

8. Percentage of classes taken by temporary faculty – programme-wise information
NIL
9. Programme-wise Student Teacher Ratio
UG → 21.85 (770/27 for the current year 2015-16)
PG → 9:1 (32/ 4)
10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Supporting staff	Sanctioned	Filled
Foreman (Technical)	1	1
Instructors (Technical)	2	2
Assistant Instructors (Technical)	2	2
Mechanics (Technical)	1	1
Helpers (Non-Technical)	6	6
Clerk (Administrative)	1	1

11. Number of faculty with ongoing projects from
a) national
b) international funding agencies
c) Total grants received.

Mention names of funding agencies and grants received project-wise.

No. of Faculty : 02

National : 02

Dr. G.V. Jayaramaiah

Dr. J. S. Baligar

<i>Sl. No.</i>	<i>Funding organization</i>	<i>Project Title</i>	<i>Amount</i>
1.	VTU	Dual mode Reconfigurable Micro Strip Filters . (Dr. J S Baligar)	12.5 Lakhs
2	AICTE (2012-13)	Voltage Controllers for standalone systems using induction generator. (Dr. GV Jayaramaih)	22.5 Lakhs
Total Grants Received : Rupees in Lakhs			37 Lakhs

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Dr. G.V. Jayaramaiah

Dr. J. S. Baligar

<i>Sl. No.</i>	<i>Funding organization</i>	<i>Project Title</i>	<i>Amount</i>
1.	VTU	Dual mode Reconfigurable Micro Strip Filters	12.5 Lakhs
2	AICTE (2012-13)	Voltage Controllers for standalone systems using induction generator	22.5 Lakhs
Total Grants Received : Rupees in Lakhs			37 Lakhs

13. Research facility / centre with

- state recognition
R&D Centre recognized by VTU, Belgaum, Karnataka
- national recognition
Nil
- international recognition
Nil

14. Publications:

- number of papers published in peer reviewed journals (national / international)
- Monographs
- Chapter(s) in Books
- Editing Books
- Books with ISBN numbers with details of publishers

- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Citation Index – range / average
- SNIP
- SJR
- Impact factor – range / average
- h-index

Name of the faculty	2015		2014		2013		2012		2011	
	NC/I NC	NJ/I NJ	NC/I NC	NJ/I NJ	NC/I NC	NJ/I NJ	NC/I NC	NJ/I NJ	NC/I NC	NJ/I NJ
Dr. K M RAJANNA	INC 01		INC 01	INJ 02	INC 01			INJ 03	INC 05	INJ 03
DR. G V JAIRAMAI AH		INJ 03					INC 02 NC 01	NJ 01		
DR. H UMADEVI		INJ 01		INJ 02	NC 01			INJ 03	NC 04 INC 01	INJ 01
DR. M V MANDI				INJ 02	INC 02			INJ 01	NC 01	
R H VIJAY KUMAR		INJ 02								
S USHARANI		INJ 01		INJ 01	INC 01				NC 01	
AKALPITA KULKARNI		INJ 01		INJ 02	INC 01`		INC 01	INJ 01	NC 01	INJ 01
DR. S RAMESH		INJ 02	INC 01	INJ 02	INC 03			INJ 01		
B S SUDHA		INJ 02	NC 01	INJ 01	NC 01 INC 01	INJ 01	NC 01	INJ 01	NC 02	
SHIVAPUT RA		INJ 03					INC 03			
MEENAKS HI L RATHOD		INJ 02	INC 01	INJ 01			NC 02	INJ 01	NC 06 INC 01	
MOHAN KUMAR V										
GIRIJA S		INJ 01	NC 01 INC 01	INJ 01	INC 02				NC 07	
KAVITHA DEVI C S	NC 01		INC 01	INJ 01	INC 01			INJ 01	NC 05	
MALA SINNOR	NC 02	INJ 01			INC 01		NC 01			

PUSHPALA THA G S				INJ 01						
SAJIDHA TABASSU M	NC 02	INJ 01			IC 01				NC 01	
K N HEMALAT HA		INJ 01		INJ 01	INC 01				NC 05	
CHETAN S					INC 03	INJ 01	INC 01			
KESTHARA V	INC 01	INJ 01			INC 01		NC 01			
SIDDESH K										
DIVYA A	INC 01					INJ 01				
SWAMY T N		INJ 01				INJ 01		INJ 01		
SHWETHA M										
NITHYASH REE	NC 01 INC 01			NJ 03						
H S NAGARAT NA					INC 01		INC 02 NC 01	INJ 01		
TRIVENI										
MADHUSU DAN										
Dr.K.Rames ha		02		02		02		02		01
Dr.J.S.Balig ar		02		02		03		01		01
Smt. Shilpa K.C		01		01		01		01		01
Mr.Siddesha K		02		02		01		0		0

15. Details of patents and income generated
Nil
16. Areas of consultancy and income generated
Nil
17. Faculty recharging strategies
 - Faculties are permitted to attend training programs, workshops, conferences conducted by other departments in the same college and other colleges also.
 - Industry visits are organized regularly for students and faculties.
 - Seminars by subject experts are conducted on syllabus related topics as well as beyond syllabus topics.
18. Student projects

- percentage of students who have done in-house projects including inter-departmental
 - percentage of students doing projects in collaboration with industries / institutes
 - Percentage of students who have done in-house projects including inter-departmental -- 90%.
 - Percentage of students doing projects in collaboration with industries / institutes -- 10%.
19. Awards / recognitions received at the national and international level by
- Faculty
 - Doctoral / post-doctoral fellows
 - Students
- Faculties of the department have received best paper awards in various conferences.

- *Faculty :*

Sl. No	Faculty Name	Awards/recognition	National & International level details
1	Dr. Umadevi	Best paper in 2011, Nov ICM-2ST-II ,Jaipur	National

- *Doctoral / post-doctoral fellows*

Sl.No	Faculty Name	Awards/recognition	University
1	Dr.K.M.Rajanna	Ph.D in 2014	Jadavpur
2.	Dr.H.Umadevi	Ph.D in 2014	Bangalore
3	Dr.Mahalinga V Mandi	Ph.D in 2013	MGR
4.	Dr.S Ramesh	Ph.D in 2013	MGR
5	Dr.K.Ramesha	PhD in 2014	JNTU Hyderabad

- *Student :*

Sl.No	Student Name	Awards/recognition	National & International level details
1	Nagarjun, Kiran Kumar ,Kiran & Nagendra	Best paper award in 2014	International conference

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Sl. No.	Description	Period	Source of funding
1	Two days workshop on “ VLSI and embedded systems” , Conducted for staff and students.	28 th to 29 th April 2016	TEQIP II
2	Two week faculty development programme on “ Recent advances in power electronics and its applications”,	17 th Feb – 1 March 2014	AICTE



3	Two day work shop on “ Image processing using Python” , Conducted for staff and students.	13 th to 14 th Aug. 2013.	TEQIP II
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21. Student profile course-wise:

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B.E	159	91	68	77/91 =84.61%	61/68 =89.70%
MTech (VLSI Design and Embedded Systems)	18	9	9	9/9=100%	9/9=100%

22. Diversity of Students

Name of the Course (refer question no. 2)	% of students from the college	% of Students from the State	% of students from other States	% of students from other countries
B.E in ECE	NIL	95.32 % (163/171)	4.67 % (08/171)	0 %
M.Tech VLSI and Embedded Systems	NIL	100 % (17/17)	0%	0 %

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Sl No	Name	Higher study pursuing	University
1	V.Biradar	SLET	Passed in 2015

24. Student Progression

Student progression (Year 2014-2015)

Student progression	Percentage against enrolled
UG to PG	10/153 = 6.5 %
PG to M. Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed	91/153 = 59.5 %
<ul style="list-style-type: none"> Campus selection Other than campus recruitment 	20/153 = 13 %
Entrepreneurs	NIL

Student progression (Year 2015-2016)

Student progression	Percentage against enrolled
UG to PG	NIL
PG to M. Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed	77/130 = 59.23 %
<ul style="list-style-type: none"> Campus selection Other than campus recruitment 	00/130 = 00 % 6/18=33% (PG)
Entrepreneurs	NIL

25. Diversity of Staff

Percentage of faculty who are graduates			
		Total	Percentage of graduates
of the same parent university	VTU	15	48.39%
from other universities within the State	Other than VTU but in Karnataka	16	51.61%
from other universities from other States	Other than Karnataka	0	0%

1. From parent university (VTU) :

Sl No	Name of the faculty	Designation	Year of Graduation	University
1.	PUSHPALATHA.GS	Asst..Prof	2007	Visveswaraiah Technological University, Belgaum
2.	NAGARATHNA H S	Asst..Prof	2005	
3.	TRIVENI	Asst..Prof	2005	
4.	MOHAN KUMAR.V	Asst..Prof	2004	
5.	KAVITHA DEVI.CS	Asst..Prof	2003	
6.	HEMALATHA K N	Asst..Prof	2004	
7.	SHILPA.K.C	Asst..Prof	2007	
8.	CHETAN.S	Asst..Prof	2007	
9.	KESTHARA.V	Asst..Prof	2008	
10.	SHWETHA.M	Asst..Prof	2008	
11.	SIDDESHA.K	Asst..Prof	2008	
12.	DIVYA A	Asst..Prof	2010	
13.	NITHYASHREE S	Asst..Prof	2008	
14.	SWAMY T N	Asst..Prof	2009	
15.	MADUSUDHAN B	Asst..Prof	2012	

2. From other universities within the State (Other than VTU but in Karnataka) :

Sl No	Name of the faculty	Designation	Year of Graduation	University
1	Dr. G.V.JAYARAMAIAH	Professor	1990	Bangalore University, Bangalore
2	Dr. RAJANNA.K.M	HOD & Asso.Prof	1992	Mysore University, Mysore
3	Dr. RAMESHA .K	Professor	1993	Gulbarga University, Gulbarga
4	Dr. UMADEVI.H	Asso.Prof	1994	Mysore University, Mysore
5	Dr. MAHALINGA V MANDI	Asso.Prof	1990	Mysore University, Mysore
6	VIJAYAKUMAR.R.H	Asso.Prof	1984	Bangalore University, Bangalore
7	USHARANI.S	Asso.Prof	1984	Mysore University, Mysore
8	Dr. RAMESH.S	Asso.Prof	1994	Gulbarga University, Gulbarga
9	Dr. JAMBUNATH S BALIGAR	Asso.Prof	1992	Karnataka University, Darawad
10	AKALPITA L KULKARNI	Asso.Prof	1988	Gulbarga University, Gulbarga
11	SUDHA.BS	Asso. Prof	1991	Mysore University, Mysore
12	SHIVAPUTRA	Asst..Prof	2002	Bangalore University, Bangalore
13	MEENAKSHI L RATHOD	Asst..Prof	2001	Gulbarga University, Gulbarga
14	MALASINNOOR	Asst..Prof	2002	Karnataka University, Dharwad
15	SAJEEDHA THABASSUM.B	Asst..Prof	1998	Gulbarga University, Gulbarga
16	GIRIJA.S	Asst..Prof	1996	Bangalore University, Bangalore

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.



Sl. No.	Faculty Name	Ph.D.	year
1	Dr. M.V. Mandi	PhD from MGR University	2013-14
2	Dr. S. Ramesh	PhD from MGR University	2013-14
3	Dr. K.M. Rajanna	PhD from Jadhavapura University	2014-15
4.	Dr. H. Umadevi	PhD from Bangalore University	2014-15
5.	Dr.K.Ramesha	PhD from JNTUUniversity, HYD	2013-14

27. Present details about infrastructural facilities

A. Library

List of Journals available in the library

- IEEE (ieeexplore.ieee.org)
- ASME (asmedl.org)
- ASCE (<http://ascelibrary.org>)
- SPRINGER (<http://link.springer.com>)
- J-GATE (<http://jgateplus.com>)
- Knimbus (<http://www.knimbus.com>)
- EBSCO (<http://search.ebscohost.com>)

Number of books in Department Library:

- From main library - 208 books
- Donated by students - 906 books
- Books procured under TEQIP - 30 books
- Donated by HOD - 58 books

Total number of books - 1202 books

B. Internet facilities for staff and students

Yes

C. Total number of class rooms

7 Nos.

D. Class rooms with ICT facility

01

E. Students' laboratories

12 Laboratories (6 lab Halls).

F. Research laboratories

1 Laboratory

28. Number of students of the department getting financial assistance from College.

- 1 PhD. Scholar from TEQIP II

Ph.D. - 2015	(TEQIP-II)
1. Naveen K N	Development and Performance Analysis of Ranging Algorithms for OFDMA Systems
M tech – 2014 (4 th sem)	(TEQIP-II)

1. Kiran D K 2. Anuradha C 3. Basava Sandhesh B N 4. Divya D 5. Kavya T D 6. Sunil Kumar 7. Sapna Murugesh Adhali	7 students
M tech – 2015 (2 nd sem) (TEQIP –II)	
1. Diwakar K R 2. Harshaveni 3. Shilpa N 4. Nethravathi G Nelogal 5. Asha P 6. Krishna G Kurthakoti 7. Mohan P V S	7 students

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

No

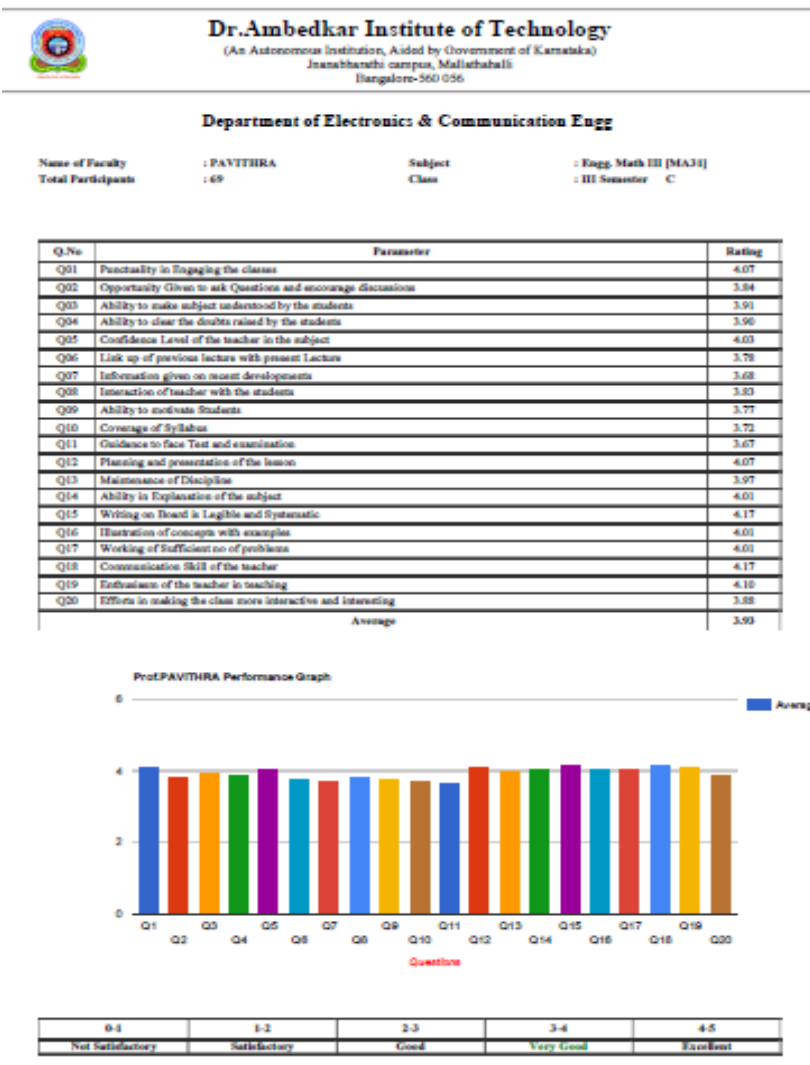
30. Does the department obtain feedback from

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

- Yes, the department obtains feedback from faculty on curriculum by conducting BOS meetings and based on the feedback the academic year curriculum will be framed and approved by the chair persons consisting of all the department faculties, HOD, students, alumni and members from other autonomous institutions and industries.
- PG: MTech course will come under VTU so VTU rules and regulations are applicable to PG course.

b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

Yes, the department obtain feedback from students on staff, curriculum as well as teaching-learning-evaluation by framing a set of questions and the rating is done based on the students evaluation as shown in the example below:



The response of the department to the same: If the feedback rating from the students is not satisfactory then that particular faculty will be advised from the higher authority.

Curriculum : Example:

STUDENTS COURSE COMPLETION SURVEY

Dear students, we are interested in gaining your feedback regarding the course completion, please participate and spend few minutes to fill this form.

Subject Title: Network Theory

Subject Code: EC33

Note: This is a confidential survey and no student names are recorded or known.
Thanks.

Section I: Please Provide General Information

Semester:

Section:



Section2: Please specify the level of satisfaction that most accurately reflects your opinion about this course.

Course Outcomes		Level of Satisfaction				
		1	2	3	4	5
CO1 :	Recognizing electrical active and passive elements, defining Resonance parameters, two port network parameters and topological terminologies, and studying initial and final conditions in electrical circuits.					
CO2 :	Explaining electrical circuit analysis techniques and circuit theorems.					
CO3 :	Applying electrical circuit theorems and initial and final conditions to simplify and evaluate electrical circuit parameters.					
CO4 :	Analyzing the dynamic behavior of electrical circuits using initial and final conditions.					
CO5 :	Modeling the electrical circuits using different types of Two Port Network parameters.					
CO6 :	Assess better theorem and techniques to analyze the electrical circuits.					

Section3: Please fill this questionnaires

1. Would you recommend this course to others—YES/NO
2. How do you rate the overall support provided by the department(Tick appropriate cell)

1	2	3	4	5
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3. Any other comments/suggestions about this course-----

Note:

1. Level of satisfaction

1	Poor	2	Satisfactory	3	Good	4	Very good	5	Excellent
---	------	---	--------------	---	------	---	-----------	---	-----------

4. Please give reason if level of satisfaction is poor.

STUDENT SIGNATURE

Based on the CO's rating of the respective subjects, the feedback from the students will be taken and will be improved if required.

c) Alumni and employers on the programmes and what is the response of the department to the same?



- Yes, the department obtain feedback from alumni and employers on the Programmes as shown below:

Alumni's Survey Form

1. Name :
2. USN :
3. Year of Graduation :
4. Current Address :
5. Contact information : Phone/Mobile No. _____ e-mail ID _____
6. Name and Address of the Company where you employed :
7. Name and Contact details of employer (Your immediate head) :
8. What is your current career status? (Say Yes/No)

Employed			
	Government :	Private Sector:	Self-employed:
Unemployed			
Pursuing higher Education (if yes specify)			

9. What is the range of your Annual Income? (Specify)
10. What is the highest degree/professional qualification that you currently hold other than Bachelor's degree?
11. Have you appeared for any competitive exam for admission to higher studies / employment?
- ☐ Yes ☐ No If Yes, specify: _____
12. Specify the number of Publications made in Journals / Conferences; Seminar / Workshop / Training Program attended or served as resource person; Diploma / Certificate courses completed: _____
13. Please rate the following program educational objectives. These objectives are statements that describe the



expected accomplishments of graduate after graduation. Rate each item with respect to your knowledge and experience gained.

[5]-is the highest rating and [1]-is the least rating

Programme Educational Objectives	5	4	3	2	1
PEO1: To produce graduates with a solid foundation in electronics and communication engineering.					
PEO2: To produce technically competent graduates with ability to analyze, design, develop and implement electronic systems.					
PEO3: To produce graduates with sufficient breadth in electronics and its related fields so as to enable them solve general engineering problems.					
PEO4: To produce graduates with a professional outlook who can communicate effectively and interact responsibly with colleagues, clients, employers and the society.					
PEO5: To produce graduates who will engage in life - long learning and to keep themselves abreast of new developments in their fields of practice.					

14. As a graduate of Dr AIT, where do you place yourself on the following Graduate Attribute Grid?

	Agree	No Opinion	Disagree
1 Communicate Effectively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Function effectively as an individual and as a member / leader in-diverse teams.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Commit to professional and ethical responsibilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Apply knowledge on mathematics, science and engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Apply engineering techniques and skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Identify, formulate, and solve problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Conduct investigations and provide valid conclusions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Analyze and interpret data.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Design / develop solutions meeting their requirements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 Understand societal impact of engineering solutions & Issues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11 Use modern engineering equipment, software, tools or technology for design and development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12 Recognize the need for lifelong learning and stay relevant in the profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. Please suggest the course(s) which may be added to strengthen and make graduates more competent:

16. Please suggest the laboratory course(s) may be added to strengthen and make graduates more competent and skilled:

17. Any other Suggestions:

Signature



Dr. Ambedkar Institute of Technology, Bangalore-56.
(An Autonomous Institution Affiliated to VTU, Belgaum)
Department of Electronics and Communication Engineering

Employers Survey Form

As part of our evaluation about the ECE department in Dr. Ambedkar Institute of Technology, Bangalore-56, we would like you to take a few minutes to complete this brief questionnaire. We are looking for your opinion in the following areas. Your participation is greatly appreciated.

Name of the Organization :

Employer Details

Name :

Designation :

The graduates of Dr AIT, Bangalore-56, ECE Department are well prepared to:

		Agree	No Opinion	Disagree
1	Communicate Effectively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Function effectively as an individual and as a member / leader in diverse teams.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	Commit to professional and ethical responsibilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	Apply knowledge on mathematics, science and engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	Apply engineering techniques and skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6	Identify, formulate, and solve problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Conduct investigations and provide valid conclusions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Analyze and interpret data.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	Design / develop solutions meeting their requirements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	Understand societal impact of engineering solutions & Issues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	Use modern engineering equipment, software, tools or technology for design and development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Recognize the need for lifelong learning and stay relevant in the profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Signature with date & Seal

Mobile No :

Email :

31. List the distinguished alumni of the department (maximum 10)

Nil

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.



Academic Year 2015-16				
SL.NO	EVENTS	DATE	VENUE	AUDIENCE
1.	Industrial visit to Keltron Controls	20 th to 22 nd Feb 2016	DR.AIT	Students
2.	Industrial visit to Kwaliti Photonics Pvt Ltd.,	1 st and 2 nd March 2016	DR.AIT	Students
3.	Workshop on Android Application Development	18 th MARCH 2016	DR.AIT	Students
4.	Industrial visit to BMRCL	22 nd MARCH 2016	DR.AIT	Students
5.	VLSI & Embedded systems	28 TH -29 TH APRIL 2016	DR.AIT	Students
Academic Year 2014-15				
SL.NO	EVENTS	DATE	VENUE	AUDIENCE
1.	Technical Seminar on Digital Design using VERILOG	3rd& 4th Nov. 2014	Dr.AIT	Students
2.	IETE Chapter	17th Nov. 2014	Dr.AIT	Students
3.	Two Days Hands on workshop on ARM7	9th -10th Mar. 2015	Dr.AIT	Students
4.	Electro Tech Fest-2015	4th Sept. 2015	Dr.AIT	Students
5.	Industrial visit to ISRO.	28th Oct. 2015	Dr.AIT	Students
Academic Year 2013-14				
SL.NO	EVENTS	DATE	VENUE	AUDIENCE
1.	TEQIP-II Sponsored Technical Symposium on emerging trends in Computer communication and Control systems	23rd Jan2014	Dr.AIT	Students
2.	Electro Tech Fest-2014	10th April 2014	Dr.AIT	Students
Academic Year 2012-13				
SL.NO	EVENTS	DATE	VENUE	AUDIENCE
1.	Industrial visit to MSC Shankarpura, BSNL, Bangalore.	15th April 2013	BSNL	Students with staff

33. List the teaching methods adopted by the faculty for different programmes.
The following Course Delivery methods are adopted in the department by faculty:

-
- Regular Lectures - During regular lectures black board and chalk are used. Also for coverage of elaborate topics power point presentations are used by the staff.
 - Practical - hands on experience given to the students in the laboratory to understand better way.
 - Tutorials – Where applicable for subjects with more problems, two hours tutorials are incorporated in the syllabus to make them understand and work more number of problems.
 - Assignments – The students are given assignments to make them refer more books related to topic so as to give them enough exposure to the subject. Projects and
 - Seminars – The students are encouraged to search for the topics of Seminars which are of state of art so that students become familiar with state of art technology and research work going on in the relevant field. Also advised to bring in innovative ideas for their projects and made to carry out projects with feasible resources and financial constraints.
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

1. Programme Educational Objectives :

Program Educational Objectives (PEOs) of the Program: Electronics and Communication Engineering.

PEO1: Prepare graduates with a solid foundation in electronics and communication engineering.

PEO2: Develop technically competent graduates with ability to analyze, design, develop and implement electronic systems.

PEO3: To produce graduates with sufficient breadth in electronics and its related fields so as to enable them to solve general engineering problems.

PEO4: To train the graduates with a professional outlook who can communicate effectively and interact responsibly with colleagues, clients, employers and the society.

PEO5: To make graduates who will engage in life - long learning and to keep themselves abreast of new developments in their fields of practice.

1.1 The process for establishing the PEOs:

The fundamental process by which PEOs are reviewed is straight forward: the faculty, visiting committee, advising staff use input from stakeholders to ensure that the PEOs are consistent with their needs. Generally the frequency of review is four years and with ongoing data gathering on an annual basis.

The objectives should help in fulfilling the mission of the department and the students graduating from the programme are expected to lead a fruitful and meaningful life in the society. Hence it is necessary that these objectives should be met to the extent possible with the current research in the relevant field of engineering and with the needs of the relevant industry. The research is best judged by the faculty members through research publications. The industry needs are

gauged by the feedback received by the companies when they come for campus placement and is available in the Training and Placement Office (TPO). In addition the industry scenario has a specific relationship with research and hence faculty is somewhat competent to assess the needs of industry.

1.2 To Establish consistency of the PEOs with the Mission:

The following correlation mapping between PEOs and the mission of the department indicates the consistency of the defined PEOs and the mission statement

Consistency between PEOs and Mission of the Department:

Mission	PEOs				
	PEO1	PEO2	PEO3	PEO4	PEO5
Learning	√	√	√	√	√
Real world applications for the benefit of Society	√	√	√		√
Skill development, Research and Innovation	√		√	√	

1.3 Achievement of Programme Educational Objectives

Contributions of the Programme Curriculum towards attainment of the PEOs:

Course Component	Credit Range as Per VTU Guide Line (200) Curriculum Content (% of total number of credits of the Program)	Total number of contact hours	Actual Credit Allocation	PEOs
Humanities and social sciences (Kannda, English, CIP, IPR, M&E)	10-20 credits 8	156	08 credits (4%)	PEO4
Basic Sciences	30-40 credits	364	28 credits(14%)	PEO1, PEO2
Engineering Sciences	30-40 credits	351	27 credits (13.5%)	PEO1, PEO2
Professional Subject core	60 -80 credits	1261	97 credits(48.5%)	PEO1, PEO2, PEO3, PEO5

Professional Subject Elective	20-30 credits	208	16 credits (8%)	PEO1, PEO2, PEO3, PEO5
Other Elective – Interdepartmental	10 -20 credits	104	08 credits (4%)	PEO1, PEO2, PEO3,
Project Work + Seminar	20-30 credits	208	16 credits (8%)	PEO1, PEO2, PEO3, PEO5
Total No. of Credits		2652	(100%)	

1.4 Ensuring the attainment of the PEOs:

There are three committees responsible for management and administration of the department which helps in ensuring the achievements of the PEOs

1. Departmental Academic Committee

This committee of faculty members looks after the development of curriculum based on various inputs from stakeholders.

2. Board of Studies (BOS)

This committee of faculty members of the department along with external BOS members from other Institutes, Industries and Alumni students discusses and ensures the relevance of the curriculum and syllabi with the mission and PEOs.

All the major decisions concerning the department are taken by the BOS constituted as per the University act.

Apart from the above committees, the department handles the administration of academic activities through the following.

- Time Table committee provides the time table of lectures and lab sessions
- Students section provides the list of eligible and non eligible students for enrolment in particular semester. Also distribution of admission tickets to eligible students for examinations.
- Board of Examiners (BOE) committee oversees the conduction of both theory and lab examinations
- Library committee provides books, magazines, CDs, non technical books to students for reference.
- Sports activities are organized for students for their overall development.
- Various cultural programmes are conducted for students.
- Placement training is provided for students and optimized efforts are being done for their placements.

1.5 Assessment of the attainment of Programme Educational Objectives

1.5.1 Tools and processes used in assessment of the attainment of the PEOs:

The assessment process for the Program Educational Objectives relies on several tools that seek feedback from students, Faculty, Alumni, and Department Advisory Board etc. The inputs obtained are evaluated by the department and the proper corrective actions are taken wherever necessary.

PEOs	Assessment Tool	Frequency	Administered By
PEO1	Employer Satisfaction Survey	Yearly	Department/Institute
PEO2	Alumni Survey	Yearly	Department/Institute
PEO3	Result Analysis	Yearly	Department
PEO4	Employer Satisfaction Survey	Yearly	Department/Institute
PEO5	Visitors Feedback	Yearly	Department
	Higher study Record		

1.5.2 Evidences for the Achievement of PEOs:

PEOs	Assessment Tool	Goal (%)	Evaluation (%)	Overall Evaluation
PEO 1	Employer Satisfaction Survey , Alumni Survey Result Analysis	80%	60%	65 / 80
PEO 2	Alumni Survey	80 %	70%	
PEO 3	Result Analysis	90%	85%	
PEO 4	Employer Satisfaction Survey, Alumni Survey	80%	60%	
PEO 5	Higher study Record, Alumni Survey	70%	50%	

Result analysis is done for all the subjects in each semester. These are properly documented and maintained in the department.

For PG (MTech in VLSI Design and Embedded systems):
Programme Educational Objectives (PEOs):

PEO1: The graduates of VLSI Design and Embedded Systems will be able to meet the present industry requirements and technical competence.

PEO2: The graduates who would attain professional competence through life-long learning such as advanced degrees, professional registration, and other professional activities.

PEO3: The graduates will be able to function effectively in a multi-disciplinary environment and individually, within a global, societal, and environmental context.

PEO4: Our graduates will be able to take individual responsibility and to work as a part of a team towards the fulfilment of both individual and organizational goals by maintaining professional ethics.

The Framework of defining PEOs

The Programme Educational Objectives (PEO) are actually the broad statements of the objectives for which the programme is run. In the first place, these objectives should help in fulfilling the mission of the department. Secondly, the students graduating from the programme are expected to lead a fruitful and meaningful life in the society by being useful in its progressive development. Thus it is necessary that these objectives should be in consonance, to the extent possible, with the current research scenario in the relevant field of engineering and with the needs of the relevant industry. The research scenario is best judged by the faculty members through research publications. The industry needs are gauged through the feedback, mostly verbal, received in the Training and Placement Office (TPO) when companies come for campus placement. In addition, the industry scenario has a specific relationship with research and hence faculty is somewhat competent to assess the needs of industry. Moreover, the alumni who have gone to industry or to institutes of high reputation are able to reflect whether the objectives are adequate.

STEP 1. The needs of the Nation and society are identified through scientific publications, industry interaction and media. (This is done by the VTU BOS committee)

STEP 2. Taking the above into consideration, the PEOs are established by the Coordination Committee / BOS commit of the VTU

STEP 3. The PEOs are communicated to the alumni and their suggestions are obtained.

STEP 4. The PEOs are communicated to all the faculty members of the VTU colleges and their feedback is obtained.

STEP 5. The PEOs are then put to the Board of Studies of the VTU for final approval.

- Justification for the academic factor involved in achievement of PEOS



Course Component	Credit Range as Per VTU Guide Line (100)Curriculum Content (% of total number of credits of the Programme)	Total number of contact hours	Actual Credit Allocation 94 credits	PEOs
Engineering Sciences	12 credits	4 hrs/week /subject	12 credits	PEO1, PEO2
professional Subject core	26 credits	4 hrs/week /subject	26 credits	PEO1, PEO2, PEO3,
Professional Subject Elective	12 credits	4 hrs/week /subject	12 credits	PEO2, PEO3
Other Elective – Interdepartmental	-	-	-	-
Project Work + Seminar +internship	44 credits	3 hr/week	44 credits	PEO2, PEO3

PEO ATTAINMENT CALCULATION FROM PO'S2013 BATCH

35. Highlight the participation of students and faculty in extension activities.
- Faculty members and students are encouraged to upgrade themselves in various cutting edge technologies under TEQIP and management sponsorship.
 - Students take part in various technical events and other extracurricular activities like sports, cultural events etc. at National and International levels.
 - Student's feedback is given importance for framing autonomous syllabus to the industry and research standards in BOS meeting.
 - In-house Subject Experts along with resource persons from IIT's and various reputed organizations are involved in BOE.
 - Faculty members actively organize and participate Seminars/Workshops/ Conferences at National and International levels.
 - Faculties are encouraged to apply for research proposals under funding agencies like AICTE, DRDO, VTU etc.
 - Faculties and students visit Industries across India under Industry Institute Training program under TEQIP.
36. Give details of "beyond syllabus scholarly activities" of the department.

Academic Year	
	1. Two day workshop on 'VLSI and embedded

2015-16	systems", Date 28 th to 29 th April 2016. Conducted for staff and students.
	2. One day workshop on " Android applications development" , date : 18 th march 2016. Conducted for students.
	3. Industrial Visit to Metro, "Bangalore Metro Train" , Date : 22 nd March 2016. For 8 th sem. students.
	4. Industrial Visit to KELTRON, Karakulam, Kerala, Date : 20 th Jan 2016. For 6 th sem. students.
	5. Industrial Visit to Srihari Kota, ISRO, Date: 28 th Oct. 2015. For 5 th Sem. Student.
	6. Industrial Visit to "Quality Photonics" Hyderabad, Date: 1 st and 2 nd march 2016. For 6 th sem students.
2014-15	Nil
2013-14	1. Two day work shop on " image processing using Python" , Date : 13 th to 14 th Aug. 2013. Conducted for staf and students.
	2. Two week faculty development programme on " Recent advances in power electronics and its applications", Date : 17 th Feb to March 1 2014
2012-13	1. One day " Electro tech fest", April 2013.

37. State whether the programme/ department is accredited/ graded by other agencies. Give details.

- Accredited by NBA in 2005 for 3 years.
- Accredited by NBA in 2012 for 2 years.

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths

- Versatile and talented faculty.
- Very good faculty retention.
- Good laboratory infrastructure with state of art hardware and software tools.
- Modern and up-to-date syllabus which is at par with the syllabus followed at IIT's and NIT's
- Large number of aspirants for admissions. There is a huge demand for course.

Weaknesses

- Little student involvement in Department co-curricular activities.
- Not enough spacious faculty Staff rooms and seminar rooms.
- Staff Students Ratio is not satisfied.
- No. of student in each class is large.

Opportunity

- Department can strive to receive grants for research/ consulting project from bodies like UGC, AICTE, etc.
- Incorporating technology into courses (video, pod cast, smart classes etc.)
- Collaboration with universities in India and Abroad

-
- Industry tie-ups and joint research
 - Faculty and students exchange programmes can be started

Challenges

- To deepen the knowledge and skills of the students on the basic concepts, theories and practical that will equip them in their professional work involving analysis, systems implementation, operation and maintenance of the various applications in the field of Electronics and Communications Engineering
 - Constant changes to technology- electronics and communication technology is changing fast so the department has to update itself continuously
 - How to generate Revenue from alternative sources.
 - Making the students industry-ready
39. Future plans of the department.
- Motivate faculty to receive funded projects
 - Setting up industries collaborates laboratory
 - Addition of PG Course in the department of Electronics and Communication Engineering.
 - To obtain Patents
 - To increase consultancy activities
 - Possibilities to take advantage of foreign collaboration for faculty and student exchange
 - Have more MoUs with reputed organizations
 - Conduct more Industry linked job-ready training programs for students
 - Establish industry attached laboratories
 - To undertake cross-disciplinary collaboration (research, teaching, service) within and beyond the department.
-



DEPARTMENT OF INDUSTRIAL ENGINEERING AND MANAGEMENT

1. Name of the Department & its year of establishment
Department : Industrial Engineering and Management
Year of Establishment : 1984
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Industrial Engineering and Management
 - PG
Nil
 - Ph.D.
Nil
3. Interdisciplinary courses and departments involved
Operations Research: EC, EE, TE, ISE and CSE
Engineering Economy: EC, EE, CSE
4. Annual/ semester/choice based credit system
Semester system (credit system)
5. Participation of the department in the courses offered by other departments
Mechanical Engineering, Computer science and Engineering, Medical Electronics
6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	1	1
Associate Professors	2	2
Assistant Professors	4	4+2

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. G.Rajendra	Ph.D	Professor and HOD	Welding (manufacturing)	29 years	2 Ph D 2 M.Sc. By Research
Dr. N.Mohan	Ph.d	Professor	Composite		3 Ph.D 1 M.Sc by research
S.K.Rajendra	M.E (Ph.D)	Assoc. Professor	Composite		
Rajeshwari. P	M.E (Ph.D)	Asst. Prof.	Thermal barrier coating		
C.R.Mahesha	M.E Ph.D Viva Voca Completed	Asst. Prof.	Composite		
R Suprabha	M.E	Asst. Prof.			
N. Chetan	M.E (Ph.D)	Asst. Prof.	Rotatory motion		
K.Rajesh	M.E (Ph.D)	Asst. Prof.	Composite		
S.P. Sarvamangala	M.E	Asst. Prof.			

8. Percentage of classes taken by temporary faculty – programme-wise information
NA
9. Programme-wise Student Teacher Ratio

Sl.	Semester	No	of	No.	of	Student
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No.		students	Faculty	teacher ratio
1	IV	52	9	1:14
2	VI	45		
3	VIII	29		

As per Intake:

Sl. No.	Semester	No of students	No. of Faculty	Student teacher ratio
1	IV	60	9	1:20
2	VI	60		
3	VIII	60		

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Sanctioned	Filled
1	Technical	6	2
2	Helper	3	2
3	Administrative		

11. Number of faculty with ongoing projects from

- national
- international funding agencies
- Total grants received.

Mention names of funding agencies and grants received project-wise.

One national level project jointly with Mechanical Engineering : 16 Lakhs

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
Nil

13. Research facility / centre with

- state recognition
- national recognition
- international recognition

State Recognition

14. Publications:

- number of papers published in peer reviewed journals (national / international)
40
- Monographs
Nil
- Chapter(s) in Books
2
- Editing Books
Nil
- Books with ISBN numbers with details of publishers

Sl. No.	Title of the Book	Publisher	Year	ISBN No.
---------	-------------------	-----------	------	----------

1	Manufacturing process -II	Subhas Publication	1999	--
2	Manufacturing process -III	Nirali Prakashan	2001	--
3	Human Resources Management & Industrial Relations	Himalaya Publishing House	2001	81-7866-167-5
4	Total Quality Management	New Age International Publishers	2006	81-224-1799-X
5	Engineering Economy	New Age International Publishers	2007	81-224-1909-7
6	Operations Research (question bank)	I.K. Publication Ltd	2008	
7	Operations Research	I.K. Publication Ltd	2010	9789380578941

- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

Nil

- Citation Index – range / average

10

- SNIP

Nil

- SJR

Nil

- Impact factor – range / average

2.0

- h-index

Nil

15. Details of patents and income generated

Sl. No.	Title of the Patent	Publication
1	Welding filler wire of MMC	Indian patent journal published
2	Thermal barrier coating	Two patent applied for Indian patent

16. Areas of consultancy and income generated

In the area of Nano tubes about Rs.5000/-

17. Faculty recharging strategies

- Attending refresher courses
- Seminars through industry institute interaction
- Attending Workshop of the concerned area
- Short term courses
- Conferences and other training programmes
- Leadership and Administrative training programme for faculty.

18. Student projects

- percentage of students who have done in-house projects including inter-departmental
- percentage of students doing projects in collaboration with industries / institutes

All the projects under graduates' students of industrial Engineering and management are done in industries to solve the live problems and students are benefited from the live problems.(100%)

All min projects are done in industry as well as in-house projects like in rearrangement of machine shop, shelving of books in library and other places. (90% industry and 10% in-house)

19. Awards / recognitions received at the national and international level by
- Faculty
Nil
 - Doctoral / post-doctoral fellows
Nil
 - Students
Nil
20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Sl. No.	Title of seminar /conferences /workshops organized (National / international)	Date	Expert member	Company
1	Talk on personality development ethics, body language and dress code	4-12-2006	1. K.S. Satish 2. Bharath Katta	EMC ² IFB Auto live
2	Basic needs for placement for students	19-5-2007	K.S Yaseg	EMC ²
3	Theory of constraints	23-5-2007	Shijith Kumar	TCS
4	Demonstration of CNC machines	5-2-2008	M/s Young India Films	
5	Seminar on composites and smart materials	17-4-2009	Sathya	Vijay zaveri center for composites
6	Composite materials	9-4-2010	Dr. B.R. Somashekar	Vijay zaveri center for composites
7	New challenges in application of advanced composites in aer o spaces applications	26-4-2012	Dr. Vijaya raju	ISAMPE
8	Characterization techniques of materials demonstration of producing CNTs.	6-3-2014	Jagannathan	IIT, Madras
9	ISO and corporate social responsibility sustainability in industry	31-1-2015	A Sebastain Prettysha curtis	Akzo nobel india limited
10	Expert lecture on international education like for PG courses (for higher educatin) Ph.D course	1-2-2016	John Kurian	ELS International Education

21. Student profile course-wise:

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female

22. Diversity of Students

Name of the Course (refer question no. 2)	% of students from the college	% of students from the state	% of students from other States	% of students from other countries

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Sl. No.	Year	GATE qualified	Remarks
1	2011	3%	
2	2012	10%	
3	2013	5%	
4	2014	5%	
5	2015	3%	

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	10%
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	3%
Employed	
• Campus Selection	6 %
• Other than Campus recruitment	80 %
Entrepreneurs	1-2 %

25. Diversity of Staff

Percentage of faculty who are graduates	
of the same parent university	3%
from other universities within the State	2%
From other universities outside the state	

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

- 2 Nos and one viva voce completed and one submitted in the year 2015-16

27. Present details about infrastructural facilities

-
- A. Library
Yes
- B. Internet facilities for staff and students
Yes
- C. Total number of class rooms
3 class rooms (A309, A 313, A322)
- D. Class rooms with ICT facility
1 Smart Classroom
- E. Students' laboratories
03
- F. Research laboratories
3 Laboratories (M & G Lab, IE Lab, computer lab)
28. Number of students of the department getting financial assistance from College.
Nil
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
Yes
- Scope of the new program
 - Placement in the market
 - Infrastructure
 - Faculty
 - Space for class room and faculty
 - Lab space and equipment requirement
 - Funds
 - Other related activities
30. Does the department obtain feedback from
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
Yes
- Through this faculties can overcome their weakness, if the feedback is satisfactory in the assessment done by student during the feedback.
 - The faculty and the student will be met separately by the HOD to overcome the weakness.
- b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
- Student will be made part of BOS meeting and discussed about the syllabus and feedback is taken to improve the teaching-learning – evaluation.
- c) Alumni and employers on the programmes and what is the response of the department to the same?
- Alumni and employers feedback is taken in the form of graduate exit survey, employers survey the student who have joined five years back and analyzed as per that students are updated it may be syllabus or any other thing.
31. List the distinguished alumni of the department (maximum 10)
-

Sl. No.	Name of the Alumni	Company
1	Hema G	Agriculture university
2	Sebistatin	Consultant
3	Vyshali	Defense
4	Manish srivastana	Industrial Engineering, Nepal
5	Poornima	Academics field
6	Sangeetha B N	Titan Watch
7	Satish Dutta	Toyota
8	Niramal raj	Entrepreneurs
9	Shijith kumar P M	TCS
10	Naresh Kumar Mehtha	TCS
11	Soumy Sugathan	Infosys

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
- Recent trends in Industrial Engineering
 - Information on manufacturing technologies
 - Composite materials
 - Design of Experiments
 - Soft skills training
 - Industrial visit
 - Other related areas of industrial Engineering
33. List the teaching methods adopted by the faculty for different programmes.
- PPT on subjects
 - Online information beyond syllabus
 - Flip flop classes
 - Seminar presentation by the students
 - Surprise quiz
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
- Continuous internal evaluation
 - Semester end examinations
 - Lecturers by experts by industry
 - Discussion with employer about the employed alumni
 - Getting information by alumni during alumni meet
35. Highlight the participation of students and faculty in extension activities.
- Students were motivated to participate in the paper presentation
 - Asked attend seminar on the beyond the syllabus
 - Students for internship during vacation period
 - Faculty were asked to attend faculty development program, seminars, workshop, training program in industry and informed to make industry institute interaction and to do collaboration research work with industry
36. Give details of “beyond syllabus scholarly activities” of the department.
- Industrial tour
 - Industrial visit based on subject like foundry, manufacturing
 - Experts lecturers were arranged to know new technology
-
-

-
- development
- Entrepreneur were called to give lecturer how to start the business
 - Alumni were called to significance of the branch
 - Guest lectures from alumni is arranged for students
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
- Three time accredited by NBA up to Jan 2016
 - Applied for NBA accreditation during March 2016
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
- Strengths**
- All the faculty are M.Tech in their field and registered for Ph.D.
 - Three faculty have obtained Ph.D. and one submitted thesis for Ph.D. award
 - Good results
 - Good number of publications
- Weaknesses**
- Lack of space
 - P.G courses
 - Students admission with high rank
- Opportunity**
- Given to start P.G Courses
 - Sponsored projects from outside agency like AICTE, Science and technology and DST
- Challenges**
- If chance given to do any work
39. Future plans of the department.
- All the faculty to obtain Ph.D. in five years from now
 - To start P G programme
 - To publish more no of publication in reputed journal
 - To conduct one international and national conference within in one to two years.
 - To motivate students to involve in research area of their interest it may be interdisciplinary and internship during
 - Student to be encouraged to attend paper presentation conducted various college and as well as in house
-

**DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING**

1. Name of the Department & its year of establishment
Department: **Electronics and Instrumentation Engineering**
Year of Establishment : 1985
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

Sl.No	Programme	
1.	UG: Instrumentation Technology	<ul style="list-style-type: none"> Started with 40 seats in 1985 Intake decreased to 30 seats in 1992 Intake Increased to 60 seats in 2011-12 Instrumentation Technology – nomenclature has been changed to Electronics and Instrumentation Engineering by the University in 2014-15
2.	PG: M.Tech in Electronics	<ul style="list-style-type: none"> Started from 2015-16 with 30 seats
3.	Ph.D.	<ul style="list-style-type: none"> Recognized Research Center under VTU, Belagavi in 2009

3. Interdisciplinary courses and departments involved

Sl.No	Interdisciplinary courses		Departments
	Subject code	Subject Title	
1.	IT71	ARM Processor	Electronics and communication, Telecom engineering, Electrical engineering
2.	IT654	Micro and Smart System Technology	Electronics and communication, Telecom engineering, Electrical engineering
3	MAXX	Mathematics	All departments
4	PHXX	Physics	All departments
5	CHXX	Chemistry	All departments
6	MEXX	Mechanical	All departments
7	CAXX	Civil	All departments
8	KAXX	Kannada	All departments
9	HSXX	Humanities	All departments

4. Annual/ semester/choice based credit system
Semester based Credit System
5. Participation of the department in the courses offered by other departments

Sl.No	IDE		Department
	Subject code	Subject Title	
1.	MEE01	Operation Research	ME
2.	TEE01	Internet Engg and Applications	TE
3.	TEE02	Real Time Operating System	TE



4.	EEE03	Advanced Control System	EE
5.	15ECE03	Theory of CDMA	ECE
6.	15ECE04	Electromagnetic Interference and Compatibility	ECE
7.	15CSE03	Internet of Things	CS
8.	15CSE04	Object Oriented Modeling and Design	CS
9.	ISE05	Ad HOC Networks	IS
10	MLE03	Bio Medical Signal Processing	ML

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	01	01
Associate Professors	03	02
Asst. Professors	08	08
Posts [PG]	Sanctioned	Filled
Professors	01	NIL
Associate Professors	01	NIL
Asst. Professors	03	03

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	Number of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. M Meenakshi	Phd	Professor and Head	Control, Guidance and Instrumentation, Signal Processing, Real time Systems	29	05
G Devaraju	M.Tech	Assoc. Professor	Electronics	28	
B S Srinath	M.Tech	Assoc. Professor	electronics	27	
Prasanna Kumar M	M.Tech	Asst. Professor	System Analysis & computer Application	17	
Ganapathi V Sagar	M.Tech	Asst. Professor	Bio-medical signal processigng	16	
Sridevi N	M.Tech	Asst. Professor	Industrial electronics	16	
Shubha P	M.Tech	Asst. Professor	computer science & Engg	11	
Sridhar Kumar H R	M.Tech	Asst. Professor	Instrumentation Technology	07	
Nirmala Bai	M.Tech	Asst. Professor	Power electronics	03	



Soumya B S	M.Tech	Asst. Professor	Digital Electronics & communication	5, 1.2(Industry experience)	
Monikashree T S	M.Tech	Asst. Professor	VLSI design & Embedded System	2.5	
Hamsarekha S.D	M.Tech	Asst. Professor	Power Electronics		
Sheethal N	M.Tech	Asst. Professor	Power Electronics	1.4(Industry experience)	
Seema B.S	M.Tech	Asst. Professor	VLSI design & Embedded System	1.8(Industry experience)	

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil

9. Programme-wise Student Teacher Ratio

Course	No. of students in 2 nd year	No. of students in 3 rd year	No. of students in 4 th year	Teachers	Student Teacher Ratio
UG	58	51	57	11	1:15
PG	No. of students in 1 st Year	-	-		
	21	21		03	1:7

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Sanctioned	Filled
1	Technical	07	06
2	Administrative	Nil	Nil

11. Number of faculty with ongoing projects from

a) national

b) international funding agencies

c) Total grants received.

Mention names of funding agencies and grants received project-wise.

NAME OF FACULTY	NATIONAL	INTERNATIONAL	NAME OF FUNDING AGENCIES	TOTAL GRANTS RECEIVED
Dr.M.Meenakshi & P. Shubha	National	-	AICTE, New Delhi (MODROB)	8.0Lakhs
Dr.M.Meenakshi	Yes	No	R/D-01 VTU Belgaum	8.97 lakhs

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Nil

13. Research facility / centre with

- state recognition
- national recognition

-
- international recognition
Established VTU, Belagavi Recognized Research centre in 2009
14. Publications:
- number of papers published in peer reviewed journals (national / international)
2/34
 - Monographs
Nil
 - Chapter(s) in Books
04
 - Editing Books
Nil
 - Books with ISBN numbers with details of publishers
01-ISTE WPLP Programme
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
60
 - Citation Index – range / average
35
 - SNIP
Nil
 - SJR
Nil
 - Impact factor – range / average
2.0
 - h-index
3.0
15. Details of patents and income generated
Nil
16. Areas of consultancy and income generated
Nil
17. Faculty recharging strategies
- Faculty training programs/FDP/Workshops etc
 - Industry interaction
 - Research activities
18. Student projects
- percentage of students who have done in-house projects including inter-departmental
98%
 - percentage of students doing projects in collaboration with industries / institutes
2%
19. Awards / recognitions received at the national and international level by
- Faculty
02
 - Doctoral / post-doctoral fellows
Nil
-

- Students

12

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Sl No	Events name	Event	Date	source of funding	Achievement
1.	Computational Control Systems and Optimization(CCSO-2015)	3 rd National Conference	23 rd and 24 th April 2015	TEQIP-II	i) Prize in Paper Presentation ii) 1 st Prize in mini Project Exhibition
2.	Computational Control Systems and Optimization(CCSO-2013)	2 nd National Conference	10 th - 11 th may 2013	TEQIP-II	Students and faculty participated
3.	Computational Control Systems and Optimization(CCSO-2011)	1 st National Conference	12 th - 13 th May 2011	TEQIP-II	Students and faculty participated

21. Student profile course-wise:

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B.E	51	27	24	63%	83%
M.Tech	21	08	13	37%	45%

22. Diversity of Students

Name of the Course (refer question no. 2)	% of students from the college	% of students from the state	% of students from other States	% of students from other countries
B.E	N/A	98.12%	Nil	1.88%
M.Tech	Nil	95.24%	4.76%	Nil

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

PGCET: Every year 10%

GRE & TOFEL: Every year 3- 5%

24. Student Progression



Student Progression	Percentage against enrolled
UG to PG	04(PGCET) (2015) 01(GRE)
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil
Employed	
• Campus Selection	13 %
• Other than Campus recruitment	05 %
Entrepreneurs	Nil

25. Diversity of Staff

SL NO.	of the same parent university	from other universities within the State	from other universities from other States
UG	07	04	NIL
PG	03	02	NIL

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Nil

27. Present details about infrastructural facilities

A. Library

B. Internet facilities for staff and students

C. Total number of class rooms

D. Class rooms with ICT facility

E. Students' laboratories

F. Research laboratories

SI No	name	Details
1.	Library	Departmental library
2.	Internet facilities for staff and students	Provided in lab and staff rooms
3.	Total number of class rooms	03
4.	Class rooms with ICT facility	01
5.	Students' laboratories	03
6.	Research laboratories	Merged with dept. library

Sl. No.	Faculty Rooms	Shared/ Exclusive	Facilities Available	Space	Discussion/Counseling Room with students
1	Professor	Exclusive	Computer, Laptop, Internet, White Board	27sqmts	10 sqmts
2	Associate	Exclusive	Laptop, Internet, White Board	10 sqmts	

	Profess or				
3	Associa te Profess or	Exclusi ve	Laptop, Internet White Board	10 sqmts	
4	Assista nce Profess or	Shared	Laptop, Internet White Board	27 sqmts	
5	Assista nce Profess or	Shared	Laptop, Internet, White Board	27 sq.mts	
6	Assista nce Profess or	Shared	Laptop, Internet, White Board	27 sqmts	
7	Assista nce Profess or	Shared	-	27 sqmts	
8	Assista nce Profess or	Shared	-	27 sqmts	

28. Number of students of the department getting financial assistance from College.

PG Students: 08 From TEQIP Fund

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

YES - Industry survey has been carried out before selecting the new course on M.Tech Electronics

30. Does the department obtain feedback from

a) faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

Yes.

- At the end of the course feedback is collected from the faculty to evaluate whether course outcomes are met. CIE Questions are framed accordingly to meet the course outcomes.
- Seminars, tutorials and assignments are assessed.
- Remedial classes are provided as required.
- Based on the feedback obtained the subjects are reviewed and updated and new subjects are also proposed during the BOS meetings.

b) students on staff, curriculum as well as teaching-learning-evaluation

and what is the response of the department to the same?

- At the end of course Course-End-Survey forms are collected and the same is discussed in BOS
- Teaching-learning-evaluation is done by setting course objectives and evaluating course outcomes
- After the feedback from the student regarding the faculty is obtained, the faculty is counseled if required.

c) alumni and employers on the programmes and what is the response of the department to the same?

Alumni Survey:

This survey is done for the purpose of evaluating the achievement of the Programme Educational Objectives (PEOs), which is one of the major components in adopting and implementing Outcome Based Education (OBE) concept.

Employer Survey:

Feedback regarding our alumni whom the employer is supervising is collected. The purpose of this survey is to help assess the effectiveness of our program and is not intended to solicit specific commentary on a single person.

31. List the distinguished alumni of the department (maximum 10)

Sl no.	Alumini Name	Year of Graduation
1	Shashank R Bhat	2008
2	Parikshitha	2009
3	Ramya R Madhyastha	2013
4	Bhavika I	2012
5	Aravinda V	2012
6	Pavan B.R	2012
7	Shivaraj Hiremath	2012
8	Madhu H M	2010
9	Sudanshu Dixit	2010
10	M S Raghu	2010
11	Amulya	2010

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

Sl no	Events name	Event	Date	Organized under	Achievement
1	Technical talk through Teckshetra	Talk on "Introduction to Nuclear power generation"	06/04/2016	Teckshetra Dept. of IT	Organized and participated by staff and students
2	Techkshetra 2016	Student events	06/04/2016	Techkshetra account	Students and faculty Participated
3	Workshop Android controlled Robotics	National level competition	4 th -6 th march 2016	IIT, Madras, Tamil nadu	Students Participated

4	Workshop on Android controlled Robotics	Zonal level competition	22 nd and 23 rd Feb 2016	Dept. of IT, Dr. AIT	Students Participated
5	Technical talk ISA student chapter	"Internet of Things"	02/02/2016	Dr.AIT	Students and faculty Participated
6	Technical talk ISTE student chapter	"Medical imaging and image analysis"	07/02/2016	Dr.AIT	Students and faculty Participated
7	Computational Control Systems and Optimization(CCSO-2015)	3 rd National Conference	23 rd and 24 th April 2015	Dept of IT	i) Prize in Paper Presentation ii) 1 st Prize in mini Project Exhibition
8	Visited Keltron electronics pvt ltd	Industry visit	17-19 th October 2015	Dr. AIT	Students organized and Participated
7	Student activity(Technical Talk)	ISA student chapter	30-01-2015	Dr.AIT	Students organized and Participated
8	TECH-BUZZ	Inter-Departmental Technical competition	29-03of Jan 2015	Dr.AIT	Students organized and Participated
9	TECHKSHETRA	Inter-college Technical competition	25-26 of march 2015	Dr. AIT	Students organized and Participated
10	Student activity (Technical Talk)	ISTE	27-03-2015	Dr. AIT	Students organized and Participated
11	Technical talk	Trend in Industrial Automation	27-03-2015	ISTE student chapter, Dept. of IT	Students organized and Participated
12	Technical Talk	Recent Trends in Automation	31-01-2015	ISA student Chapter	Students organized and Participated

33. List the teaching methods adopted by the faculty for different programmes.
- Usage of Digital board with smart classroom facility
 - Projectors for Power point presentation in all calssrooms
 - Industry visit for the students
 - Arranging for remedial classes if required
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
- Syllabus Reviewed by BOS committee members
 - Course end survey feedback forms collected for the individual subject
35. Highlight the participation of students and faculty in extension activities.



Sl. No	Events name	Event	Date	Organized under	Achievement
	Industry Institute interaction program	3-day workshop on automation	21 st -23 rd april 2016	Dept. of EE	Attended by the faculty
	Industry Institute interaction program	2 days Hands-on-Training on “DSP TMS320C6713”	21 st and 22 nd March, 2016	Dept. of TE	Attended by the faculty
	Computational Control Systems and Optimization(CCSO-2015)	3 rd National Conference	23 rd and 24 th April 2015	Dept of IT	i) Prize in Paper Presentation ii) 1 st Prize in mini Project Exhibition
	Visited Keltron electronics pvt ltd	Industry visit	17-19 th October 2015	Dr. AIT	Students and faculty organized and Participated
	Student activity(Technical Talk)	ISA student chapter	30-01-2015	Dr.AIT	Students and faculty organized and Participated
	TECH-BUZZ	Inter-Departmental Technical competition	29-03of Jan 2015	Dr.AIT	Students and faculty organized and Participated
	TECHKSHETRA	Inter-college Technical competition	25-26 of march 2015	Dr. AIT	Students and faculty organized and Participated
	Student activity (Technical Talk)	ISTE	27-03-2015	Dr. AIT	Students and faculty organized and Participated
	Technical talk	Trend in Industrial Automation	27-03-2015	ISTE student chapter, Dept. of IT	Students and faculty organized and Participated
	Technical Talk	Recent Trends in Automation	31-01-2015	ISA student Charter	Students and faculty organized and Participated

36. Give details of “beyond syllabus scholarly activities” of the department.

Sl. No.	Activities
1.	Open ended question included in the practical lab
2.	Seminar on IEEE papers for final year students 02 credit
3.	Mini-project for third year students 02 credits
4.	Participation of students in inter as well as inter-collegiate competition under technical forms

37. State whether the programme/ department is accredited/ graded by other agencies. Give details.

Programme	Agency: NBA New Delhi
Instrumentation Technology	2004 : Accredited for 3 Years 2012: Accredited for 05 Years

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths

- Experienced, dedicated faculty and staff members
- Expertise in the fields of Controls Guidance and Instrumentation, Embedded Systems, Signal and Image Processing, Real Time Systems.
- Notable industry institute Interaction through MOUs
- Outcome based education focused on employment and entrepreneurship development.
- Better retention of faculty

Weaknesses

- Students, being from rural area, are striving to meet national and global standards in technical Education and facing language barriers.
- Poor Industry supported laboratories
- Preparing students for competitive exams and also providing distant education.
- Poor placement in the core industries
- Involvement of faculty in research is limited due to non-availability of residential campus and fullpledged infrastructure

Opportunity

- Faculty and students are sponsored to present papers, visit industries, conduct workshops/conferences under TEQIP-II and also conduct / participate in inter-college events under technical clubs.
- Management encourage faculty to take up full-time and part-time PhD.
- Due to autonomous status, the curriculum is revised in BOS meetings to meet the industry requirements.
- Training related to recent trends in technologies like, MEMS & Nanotechnology to staff and students.
- Extending the role of engineering and technology for development of nation by participating in technical competitions.

Challenges

- To provide placement to all to students.
 - To obtain the consultancy work from the faculty.
 - To get more MOUs signed and have a long term industry interaction.
 - Maximize our potential to compete with other autonomous colleges and International Universities.
 - Attract the quality students by Providing Fellowships
-
-



-
39. Future plans of the department.
- To facilitate all faculty to complete Ph.D
 - More Projects being funded AICTE, KSCST,DST,DRDO etc.
 - Motivating quality UG students to join PG Programme
 - To provide the platform to demonstrate the latest technologies on control guidance, Instrumentation applied to Industrial Robots and Process Control.
 - Guide the students and motivate towards entrepreneurship.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1. Name of the Department & its year of establishment
Name : Department of Computer Science and Engineering
Established: 1987
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Computer Science and Engineering
 - PG
Computer Science and Engineering
 - Ph.D.
Recognized Research Center under VTU

3. Interdisciplinary courses and departments involved

Sl No.	Course Code	Course Title	Department
1	MA11/21	Engineering Mathematics	Maths
2	MA31CS	Discrete Mathematics	Maths
3	MA41CS	Probability, Queuing Theory and Reliability	Maths
4	HS03	Management and Entrepreneurship	MBA
5		IDE	

4. Annual/ semester/choice based credit system
Semester based, absolute grading is adopted. Grade is awarded based on marks scored by the student as per following:

Marks Range	90-100	75-89	60-74	50-59	45-49	40-44	<40
Grade	S	A	B	C	D	E	F

5. Participation of the department in the courses offered by other departments

Sl No	Course Code	Course Title	Department
1	CS13/23	Computer Concepts and C Programming	ME, IEM, EC, CV, CSE
2	CSL16/26	Computer Concepts and C programming Lab.	ME, IEM, EC, CV, CSE
3		IDE	

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	1	1
Associate Professors	4	3
Assistant Professors	1	1

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D Students guided for the last 4 years
Dr.Siddaraju	Ph. D.	Professor	Computer Science & Engg.	20	5
Asha	M.Tech	Associate	Computer	25	--



		Professor	Science & Engg.		NIL--
Leena Giri G	M.Tech	Associate Professor	Computer Science & Engg.	25	-- NIL--
Asha Rani	M.Tech	Assiatant Professor	Computer Science & Engg.	8	-- NIL--
Suresha D	M.Tech	System Analyst (Associate Professor)	Computer Science & Engg.	16	-- NIL--
Praveena M V	M.Tech	Programmer (Assistant Professor)	Computer Science & Engg.	17	-- NIL--
Dr.S. Gowrishankar	Ph. D.	Associate Professor	Computer Science & Engg.	8	1
Dr. Mary Cherian	Ph. D.	Associate Professor	Computer Science & Engg.	30	-NIL-
Smitha Shekar B	M.Tech	Associate Professor	Computer Science & Engg.	15	-- NIL--
Srinivas A. H.	M.Tech	Associate Professor	Computer Science & Engg.	12	-- NIL--
Veena Potdar	M.Tech	Associate Professor	Computer Science & Engg.	8	-- NIL--
Harish G	M.Tech	Associate Professor	Computer Science & Engg.	8	-- NIL--
Asha K N	M.Tech	Assiatant Professor	Computer Science & Engg.	14	-- NIL--
Arathi P	M.Tech	Assiatant Professor	Computer Science & Engg.	14	-- NIL--
Vinutha M S	M.Tech	Assiatant Professor	Computer Science & Engg.	11	-- NIL--
Madhu B	M.Tech	Assiatant Professor	Computer Science & Engg.	11	-- NIL--
Harish Kumar	M.Tech	Assiatant Professor	Computer Science & Engg.	10	-- NIL--
Jayalakshmi K	M.Tech	Assiatant Professor	Computer Science & Engg.	19	-- NIL--
Uma K M	M.Tech	Assiatant Professor	Computer Science & Engg.	8	-- NIL--
Pushpaveni H P	M.Tech	Assiatant Professor	Computer Science & Engg.	4.5	-- NIL--
Soumya C L	M.Tech	Assiatant Professor	Computer Science & Engg.	2	-- NIL--
Vinod Kumar K P	M.Tech	Assiatant Professor	Computer Science & Engg.	5	-- NIL--
Rahul M	M.Tech	Assiatant Professor	Computer Science & Engg.	3	-- NIL--
Chidanandan V	M.Tech	Assiatant Professor	Computer Science & Engg.	2	-- NIL--
Rashmi N	M.Tech	Assiatant Professor	Computer Science & Engg.	2	-- NIL--

Lavanya Santosh	M.Tech	Assiatant Professor	Computer Science & Engg.	2	-- NIL--
Veena A	M.Tech	Assiatant Professor	Computer Science & Engg.	3	-- NIL--
Harpritha K M	M.Tech	Assiatant Professor	Computer Science & Engg.	1.5	-- NIL--
Sangeetha G M	M.Tech	Assiatant Professor	Computer Science & Engg.	3	-- NIL--
Dr.M.Vijayakumar	Ph.D	Professor	Computer Science & Engg.	17	5
Nithya.E	M.Tech	Associate Professor	Computer Science & Engg.	14	-- NIL--
K.R.Shylaja	M.Tech	Associate Professor	Computer Science & Engg.	16	-- NIL--
Shamshekhhar Patil	M.Tech	Associate Professor	Computer Science & Engg.	16	-- NIL--

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil (**No Temporary Faculty in the department**)

9. Programme-wise Student Teacher Ratio

16:1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Sanctioned	Filled
1	Academic support Staff	9	7
2	Administrative Staff	2	2

11. Number of faculty with ongoing projects from

a) national

b) international funding agencies

c) Total grants received.

Mention names of funding agencies and grants received project-wise.

Faculty	Name of the Project	Funding Org.	Grants Received
Prof. Siddaraju and Prof. Mary Cherian	Sensor Network Design for Data Gathering for Real-Time Applications	AICTE	9.5 L

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Same as Above

13. • Research facility / centre with

• state recognition

Yes

• national recognition

Nil

• international recognition

Nil

14. Publications:

- number of papers published in peer reviewed journals (national / international)
1/27
- Monographs
Nil
- Chapter(s) in Books
Nil
- Editing Books
Nil
- Books with ISBN numbers with details of publishers
Nil
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
Nil
- Citation Index – range / average
Nil
- SNIP
Nil
- SJR
Nil
- Impact factor – range / average
Nil
- h-index
27% (Prof.SRJ)

15. Details of patents and income generated

Sl. no	Title	Guide	Date
1	Low Powered Rural Digital Education System.	Dr.Siddaraju	13-Sept-2014
2	A System to the Activities at Home.	Dr.Siddaraju	13-Sept-2014
3	A system and method for providing home based healthcare recommendations	Dr.Siddaraju, Dr.S.Gowrishankar, Damanpreet Kaur	19-Aug-2016

16. Areas of consultancy and income generated

Nil

17. Faculty recharging strategies

Faculty Participation in:

- Regular trainings, workshops, seminars
- Faculty development programmes
- Industrial visits
- Industry Attachments

- Department retreats
- 18. Student projects
 - percentage of students who have done in-house projects including inter-departmental
70%
 - percentage of students doing projects in collaboration with industries / institutes
5%
- 19. Awards / recognitions received at the national and international level by
 - Faculty
Nil
 - Doctoral / post-doctoral fellows
Nil
 - Students
Nil
- 20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Sl.No	Organizers Name	Workshop	Place	Date	Source of Funding
1.	Dr.Siddaraju, Prof. Leena Giri G, Prof. Veena Potdar, Prof. Madhu B.	Organized Karnataka, Department of Youth Empowerment and Sports sponsored 30-days workshop on “High Skill Training On Information Security And Secure Coding” for SC/ST Students	Dr.AIT, Bangalore.	24 th March 2015 To 24 th April 2015	GOK
2.	Dr.Siddaraju, Prof. Praveena M V, Prof. Rashmi K, Prof. Rashmi N, Prof. Sowmya C L.	Organized TEQIP-II Sponsored 3-day workshop on “Industry Readiness in Engineering Education (IREE-2015)”- An Industry-Institution Interaction	Dr.AIT, Bangalore.	23 rd To 25 th April 2015	TEQIP-II
3.	Dr.Siddaraju, Prof. Nithya E,	Organized TEQIP-II Sponsored One - day Hands on Workshop on	Dr.AIT, Bangalore	27 April 2015	TEQIP-II



	Prof. Sham Shekar Patil, Prof. Praveena M V, Prof. Srinivasa A H.	"Automated Software Testing with UFT".			
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21. Student profile course-wise:

Name of the Course UG BE/Computer Science and Engineering	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
2014-2015	593	279	314		
2013-2014	540	260	280		
2012-2013	556	281	275		
2011-2012	534	262	272		

22. Diversity of Students

Name of the Course (refer question no. 2)	% of students from the college	% of students from the state	% of students from other States	% of students from other countries
B.E. (CSE)	-NIL-	80%	20%	15% (NRI Quota)

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Sl. No	Competitive Exam	No. of students who cleared the exam
1	Civil Services	NIL
2	Defense Services	NIL
3	NET	NA
4	SLET	NA
5	GATE	20%
6	GRE/GMAT/TOEFEL	10%

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	30 %
PG to M.Phil.	Nil
PG to Ph.D.	2%
Ph.D. to Post-Doctoral	Nil
Employed • Campus Selection	80%

• Other than Campus recruitment	10%
Entrepreneurs	0.1%

25. Diversity of Staff

% of Faculty	Graduates
83%	of the same parent university
6%	from other universities within the State
11%	from other universities from other states

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

One

27. Present details about infrastructural facilities

1. Library – Department Library Facility with 2000 Text Books

2. Internet facilities for staff and students –Available with 100Mbps

3. Total number of class rooms -08

4. Class rooms with ICT facility -07

5. Students' laboratories -07

6. Research laboratories -01

28. Number of students of the department getting financial assistance from College.

Nil

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

Yes.

- Academic council meetings
- Board of studies meetings.

30. Does the department obtain feedback from

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

Yes, the department head conducts a meeting along with faculty and student members to participate and provide feedback on the curriculum as well as teaching learning methods. This feedback is forwarded to the Board of Studies for approval.

b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

Online Feedback System is used by the department to collect student feedback and the collected feedback is forwarded to the HOD for discussion with the faculty(s) concerned.

c) Alumni and employers on the programmes and what is the response of the department to the same?

The department collects feedback under the Graduate Exit Survey and the Employer Exit Survey to study the changes to be incorporated in the curriculum to make it more state of the art.

31. List the distinguished alumni of the department (maximum 10)
1. Prof. Sagar Sen
 2. Prof. Mahesh G
 3. Mr. Sandeep Krishnamurthy
 4. Mr. Chetan C.
 5. Ms. Nayana Rao
 6. Ms. Sugandhi
32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

2011-12:

Sl. No.	Name of the Invited Scholar with full Address	Title of the Lecture delivered	Area of Specialization	Date of Lecture
1.	Organized one day Seminar on at Dr. AIT under Science and Technology Club	"Cyber Crimes & Ethical Hacking"	Cyber Security	18th Feb 2012

2012-13:

Sl. No.	Name of the Invited Scholar with full Address	Title of the Lecture delivered	Area of Specialization	Date of Lecture
1.	Dr. Sagar Sen, Research Scientist, Simula Research Labs, Oslo, Norway.	"Towards an Enjoyable Career in Scientific Research"	Automatic Testing of Model Transformations	7th Jan 2013
2.	Mr. Sandeep, Senior Software Engineer, Bangalore	"Introduction to LINUX OS with perspective"	System programming	16-02-2013.
3.	Dr. Sagar Sen, Research Scientist, Simula Research Lab, Oslo, Norway	"Towards an enjoyable career in scientific research"	Robotics	07-01-2013.

2013-14

Sl. No.	Name of the Invited Scholar with full Address	Title of the Lecture delivered	Area of Specialization	Date of Lecture
1.	Mr. Dheerendra, CEO, Pthinks, Bangalore.	"QT-GUI Framework with object oriented programing concepts"	System programming	18/01/14, 19/01/14, 25/01/14
2.	Mr. Dheerendra, CEO, Pthinks Ltd, Bangalore.	"Linux Kernal Overview"	System programming	08/03/14
3.	Mr. Sandeep, CEO, Evoib Ltd, Bangalore.	"Scope & Future in the field of Robotics"	Robotics	15/03/14

2014-15:

Sl. No.	Activity	Speakers	Date
1.	3 days workshop on “Real Time Hands on Session on Unix Network Programing” Held at Dr. AIT,Bangalore	Mr. Dheerendra, PThinks Pvt. Ltd., Bangalore	2nd Nov to 4th Nov 2014
2.	Technical Talk on “Cloud tool- BlueMix” Held at Dr. AIT,Bangalore	Mr. Chethan Chandrashekar, IBM, Bangalore	6th Nov 2014
3.	ISTE sponsored 2-Day state level workshop on “Ethical Hacking and Information Security”	Global Tech Promoters, Bangalore	14th and 15th Nov 2014

33. List the teaching methods adopted by the faculty for different programmes.
- Tutorial, discussions, interactions and remedial coaching
 - Personal, academic and social counseling as a mentor
 - Concept clarifications and problem solving exercise
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
- By monitoring the student feedback and the employer exit survey regularly.
35. Highlight the participation of students and faculty in extension activities.
- Students organize an annual event called “Interrupt x.0” which includes a technical topic presentation from an expert in the relevant field and inter-college technical competition of various events like coding, debugging etc., the department faculty actively participate by becoming judges and providing expert advice to the participating students.
36. Give details of “beyond syllabus scholarly activities” of the department.
- Workshops are conducted by inviting eminent resource persons for the benefit of both faculty and students.
 - Seminars are conducted on recent research areas by inviting eminent resource persons for the benefit of both faculty and students
 - Invited Lectures: Well-paced alumni and eminent resource persons from the academia and industry are invited to deliver guest lectures.
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
- NBA:
- Granted for 2 years in 2006
- Granted for 2 years in 2013
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths:

- Well qualified and dedicated staff.
- Accreditation by NBA
- Good Infrastructure

Weaknesses:

- Lack of consultancy work.
- Less number of funded projects.
- Less interaction of faculty with outside world/Industry

Opportunities:

- Funding opportunities through TEQIP and AICTE
- High career opportunities for graduates.
- Excellent opportunities for interdisciplinary research.
- Excellent time to consider new programs

Challenges:

- Keeping pace with the rapid change in technology
- Generation of funds for upgradation of infrastructure
- Devote more time for research within the hectic schedule

39. Future plans of the department.

- Establishment of incubation centers.
- Establishment of Center for Excellence.
- MoU with Foreign/ other Universities.
- Strengthening of Industry-institute interaction.
- To get more number of PhDs.
- Strengthening R&D activities.
- To get more number of funded projects.

DEPARTMENT OF TELECOMMUNICATION ENGINEERING

1. Name of the Department & its year of establishment
Telecommunication Engineering Department, Year of establishment 1991
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Telecommunication Engineering
 - PG
Digital Communication and Networking
 - Ph.D.
Recognized Research Center under VTU

3. Interdisciplinary courses and departments involved

UG					
Sl.No	Subject Title	Subject Code	Prerequisite	Department Involved	Teaching Department
1	Internet Engineering and Applications	TEE01	Knowledge of Computer Concepts, Computer Networks	ECE/CSE/ISE/EEE	TE
2	Real Time Operating Systems	TEE02	Knowledge of Computer concepts, computer architecture	ECE/CSE/ISE/EEE	TE

PG					
Sl.No	Subject Title	Subject Code	Prerequisite	Department Involved	Teaching Department
1	Advanced Mathematics	14ELD11	Knowledge of UG level mathematics	TCE	Mathematics

4. Annual/ semester/choice based credit system
Semester based, absolute grading is adopted. Grade is awarded based on marks scored by the student as per following:

Marks Range	90-100	75-89	60-74	50-59	45-49	40-44	<40
Grade	S	A	B	C	D	E	F

5. Participation of the department in the courses offered by other departments
Core subject Intellectual Property Rights is handled by Department of Humanity Sciences. Students of pre-final and final year enroll for various Interdepartmental Electives offered by other departments.
 - Operation Research (Mechanical Engineering.) MEE01
 - Elements of Solar Engineering (Mechanical) MEE02
 - Nano Technology (Mechanical) MEE03
 - Electromagnetic interference (ECE04) Electronics
 - Ecology and Environmental impact assessment (CVE03) Civil engineering.

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

UG		
Post	Sanctioned	Filled
Professors	1	1
Associate Professors	4	4
Assistant Professors	7	7
PG		
Post	Sanctioned	Filled
Professors	1	1
Associate Professors	1	1
Assistant Professors	1	1

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D Students guided for the last 4 years
Dr. B. Sivakumar	ME Ph.D	Prof. & Head	Information & Communication Engineering	Dr. B. Sivakumar	ME Ph.D
Dr. Yamuna Devi C R	MS, Ph.D	Assoc. Prof.	Wireless Sensor Networks	Dr. Yamuna Devi C R	MS, Ph.D
Vidya Hongatikar	ME (Ph.D)	Assoc. Prof.	Wireless Sensor Networks	Vidya Hongatikar	ME (Ph.D)
Sudha Thimmaiah	ME (Ph.D)	Assoc. Prof.	Wireless Sensor Networks	Sudha Thimmaiah	ME (Ph.D)
Maheshan K V	M.Tech (Ph.D)	Assoc. Prof.	Image Processing	Maheshan K V	M.Tech (Ph.D)
Shruthi P C	M.Tech (Ph.D)	Asst. Prof.	Optical Communication	Shruthi P C	M.Tech (Ph.D)
Aravinda H L	M.Tech (Ph.D)	Asst. Prof.	Image Processing	Aravinda H L	M.Tech (Ph.D)
Usha Rani M A	M.Tech (Ph.D)	Asst. Prof.	Wireless Communication	Usha Rani M A	M.Tech (Ph.D)
Praveen K B	M.Tech (Ph.D)	Asst. Prof.	Digital Signal Processing	Praveen K B	M.Tech (Ph.D)
Kavitha Narayan B M	M.Tech	Asst. Prof.	Power Electronics	Kavitha Narayan B M	M.Tech
H K Priya	M.Tech	Asst. Prof.	Digital Electronics	H K Priya	M.Tech
Sowmya M	M.Tech	Asst. Prof.	Computer Science	Sowmya M	M.Tech

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil (No Temporary Faculty in the department)

9. Programme-wise Student Teacher Ratio

a.	UG	Telecommunication Engineering	14.4 : 1
b.	PG	Digital Communication and Networking	12 : 1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Sanctioned	Filled
1	Technical	10	10
2	Administrative	1	1



Name of the technical Staff	Designation	Pay Scale	Exclusive/Shared Work?	Date of Joining	Qualification		Other Technical Skills gained?	Responsibility
					At Joining	Now?		
Ajay Simha	Foreman	VI Pay Scale	Exclusive	19-09-1992	Diploma	B.E	Microcontrollers, digital electronics, computer H/W networking	Maintenance of the stock books and records. Smooth functioning of lab classes and practical exams
Rajgopal	Instructor	VI Pay Scale	Exclusive	20-09-1991	ITI	---	EPABX and intercom telephone maintenance	Communication and microwave lab maintenance
Suresh	Instructor	VI Pay Scale	Exclusive	01-02-2007	Diploma	--	MCSE, radar and TV servicing	Maintenance, repairs and installation of the equipment in computer lab
Nagaraju K	Instructor	VI Pay Scale	Exclusive	15-12-2011	Diploma	(B. Tech)	IT Essentials, Computer Graphics Design	Maintenance, repairs and installation of the equipment in Digital lab
Siddalingaih	Mechanic	VI Pay Scale	Exclusive	09-09-1988	7 th	---	Digital electronics	Maintenance of digital lab



Varadhara ju	Mechan ic	VI Pay Sca le	Exclusi ve	01- 04- 199 2	PUC	---	Analog electronics training in Govt. ITT center and PC maintenance	Maintenance of communicati on labs and microwave labs, telephone repair.
Yahodha K	Mechan ic	VI Pay Sca le	Exclusi ve	10- 03- 200 4	ITI	---	PC maintenance	Maintenance of project lab and other work
Kumar	Helper	VI Pay Sca le	Exclusi ve	01- 04- 199 2	PUC	---	PC maintenance training in Govt ITI center	Communicat ion and microwave lab. Issue and return of components
Anand	Helper	VI Pay Sca le	Exclusi ve	01- 04- 199 2	PUC	---	Analog electronics training in Govt ITI center. Maintenance of PCs	Office /HOD chamber assistant
Ramkrish na	Helper	VI Pay Sca le	Exclusi ve	10- 03- 200 4	PUC	---	Electrical wiring training	Computer lab maintenance.

11. Number of faculty with ongoing projects from

- a) national
- b) international funding agencies
- c) Total grants received.

Mention names of funding agencies and grants received project-wise.

Principal Investigator / Coordinators	Title of R/D Project	Funded Agency/ Sanctioned letter details	Grants received	Status
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Dr.B.Sivakumar	MODROBS - Advance Digital Communication Lab	AICTE- MODROBS Ref: 12/AICTE/RIFD/MOD(Policy-IV)Govt-26/2012-13 dt- July 22 nd 2013	7,00,000/-	Completed
Dr.B.Sivakumar Aravinda H L Usha Rani M A	Hardware Implementation of Object Recognition and tracking using Image Processing Algorithm	AICTE-RPS Ref: 20/AICTE/RIFD/RPS(Policy-IV) 20/2012-13 dt- March 16,2013	9,50,000/-	Ongoing
Dr.B.Sivakumar	SWSS Scheme	AICTE – SWSS Ref: No.F.24-05/RIFD/WSS/Policy 1/ 2014-15 dated 13-1-2015	7,00,000/-	Ongoing

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Sl. No.	Year wise	Number	Name of the Project	Name of the funding agency/ Industry	Total grant received	Status
1	2013-2016	1	Hardware Implementation of Object Recognition and tracking using Image Processing Algorithm	AICTE	9,50,000/-	Completed
2	2013-2014	1	MODROBS- Advance Digital Communication Lab	AICTE	7,00,000/-	Ongoing
3	2015	1	SWSS Scheme	AICTE	7,00,000/-	Ongoing

13. • Research facility / centre with
• state recognition
• national recognition
• international recognition

Research facilities available in the department:

1. Wireless Sensor Network equipments - iSense sensors modules.
2. A unique Lab is setup in the Department (Optical & Microstrip).
3. FEKO & QUALNET software is procured for Research Scholars & P.G. Students.
4. “Object Tracking using Image Processing Techniques”, MATLAB software with Signal toolbox, Communication toolbox, Image

Processing toolbox, Image Acquisition toolbox, Computer vision toolbox is procured and set up with PTZ(PAN, TILT, Zoom) camera.

14. Publications:

- number of papers published in peer reviewed journals (national / international)
- Monographs
- Chapter(s) in Books
- Editing Books
- Books with ISBN numbers with details of publishers
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Citation Index – range / average
- SNIP
- SJR
- Impact factor – range / average
- h-index

Name of the faculty	2015		2014		2013		2012		2011	
	a	b	a	b	a	b	a	b	a	B
Dr B Sivakumar	2	1	33	7	24	4	2	0	11	2
Yamuna devi C R	0	1	4	3	-	-	2	0	0	0
Vidya Hongatkar	1	0	1	1	1	0	2	0	4	0
Sudha Thimmaiah	1	0	1	0	1	0	4	0	3	0
Maheshan K V	-	-	0	1	1	0	1	1	3	1
Shruthi P C	-	-	3	0	-	-	2	0	1	0
Aravinda H L	0	1	1	0	1	0	0	1	5	0
Usha Rani M A	1	-	3	0	-	-	3	0	3	0
Praveen K B	1	0	2	0	5	0	1	0	4	0
Kavitha Narayan B M	1	0	-	-	2	0	2	0	1	0
H K Priya	2	-	1	0	1	1	2	0	-	-

a: Number of Research papers produced in National/International conferences

b: Number of Research articles published in National/International Journals

15. Details of patents and income generated

Name: Dr. B. Sivakumar

Title: A system and method for sending bulk messages

Ref. No/ Application No: 905/CHE/2014

App. Number: 905/CHE/2014

Status: Ongoing

16. Areas of consultancy and income generated
Wireless Sensor Modules, Microstrip. Only technical assistance. No IRG.
17. Faculty recharging strategies
 - Faculties are permitted to attend training programs, workshops, conferences conducted by other departments in the same college and other colleges also.
 - Industry visits are organized regularly for students and faculty.
 - Seminars by subject experts are conducted on syllabus related topics.
 - Faculties attend lectures arranged by QEEE with students.
18. Student projects
 - percentage of students who have done in-house projects including inter-departmental
 - percentage of students doing projects in collaboration with industries / institutes
 - Percentage of students who have done in-house projects including inter-departmental :
 - UG - 100% – All the projects are carried out in the institute.
 - PG - 25%
 - Percentage of students doing projects in collaboration with industries / institutes :
 - UG – Nil
 - PG – 100 %

Students of M. Tech are provided with resources to carry out their project in collaboration with Nihon Communication Solutions Ltd.

19. Awards / recognitions received at the national and international level by
 - Faculty
 - Doctoral / post-doctoral fellows
 - Students

Faculty

Three faculties of the department have received best paper awards in various conferences. Details to be included

Sl. No.	Faculty Name	Awards/ Recognitions	National and International level details
1	Dr. B Sivakumar	Best Paper award	International Conference on “Electronics Engg. & Image Processing”, on April 1-2, 2014.



2	Dr. B Sivakumar	Best Paper Award	First International Conference on Information and Communication Engg. ICICE-2013, 28th & 29th June 2013, Dr.AIT, Bangalore.
3	P C Shruthi	Won Third Prize	National level conference on “ Modern Trends in Communication” organized by Dept. of TCE, Vemana Inst. Of Tech. Bangalore on 15 th -16 th October, 2008
4	P C Shruthi	First Place	National Conference on “ Communications and Computations” organized by Dept. of TCE, KSIT Bangalore, held on 29 th September 2012.
5	Priya H K	Young Investigator Award	Interscience Scholastic Award for the paper entitled “ A Dynamic Watermarking Model for Medical Image Authentucation” at the International Conference on Electronics and Communication Engineering (ICECE) held at Bangalore on 1 st July, 2012.

Doctoral/Post doctoral fellows :

1. Dr.B.Sivakumar- PhD from Anna University
2. Dr.Yamunadevu-PhD from Bangalore University

Students

	Type of Award/ Recognition	Activity Details
CAY (2015-16)	Paper Contest	Rajashekar M, student of 6 th semester has presented and won first place for paper presentation in Technical Fest- DISC- 2K16 on 8 th February, 2016 at Dr. AIT , Dept of ISE.
	Achievements	The Team "Exceptionals!" of Dr.AIT comprising of Subramanya, Raksha, Spoorti, Aishwarya emerged out as winners for the project- "Guidance for Visually Impaired", EnginX 2015 - Engineering the Next Generation is a TCS Engineering Design Innovation contest organized by Tata Consultancy Services (TCS) for Engineering Students to show up the new and innovative products developed by the young Engineers. The Grand Finale was held in TCS Siruseri, Chennai on 19th August, 2015
		Mr. Balakrishna R G, Mr. Bindu Prasad T V, Rajashekar M, Ms. Sahana & Mr. Santhosh G, participated in the technical fest SPARK'16, at VIT, Vellore from 4 th to 6 th March 2016.
		Mr. Balakrishna R G, Mr. Bindu Prasad T V, Rajashekar M & Ms. Sahana participated in iACT'16 (ISA Bangalore Automation & Control Tech Day) a technical event, at VIT, Vellore from 4th to 6th March 2016.
CAYm1 (2014-15)	Achievements	Pramath Nivarthi, Student selected for Inter University Yoga Competition.
CAYm2 (2013-14)	Paper Contest	Mr. Chethan C.M & Ms. Vidya Pai of 2010-14 batch, has presented a paper titled “Design of baseband transmitter for human body communication” at 3 rd International conference on Engineering & Technology – ICET, 2014 organized by IRD-India, held at Bangalore 11.05.2014.
		Mr. Chethan C.M of 2010-14 batch has presented a paper titled “CAN & LIN protocol based bus architecture for intra-satellite communication”. at 3 rd International conference on Engineering & Technology – ICET, 2014 organized by IRD-India, held at Bangalore 11.05.2014.

		Ms. Sowmya N of 2010-14 batch has presented a paper titled "Reduction of BER in Optical CDMA based Radio fiber network" at 3 rd International conference on Engineering & Technology – ICET, 2014 organized by IRD-India, held at Bangalore 11.05.2014.
		Ms. Gowthami Hegde has participated in the event "Amateur Robotics Workshop" conducted by Credence Robotics on 26.01.2013.
		Mr. Puneeth S of 2010-14 batch has attended Certified Ethical Hacking Expert (Level 1) workshop at SJBIT Bangalore organized by Tech Defence Pvt. Ltd., Ahmedabad.
		Shruddha Bhat, Gowtami Hegde, Samarth Maiya & Ajay C J presented a paper titled "Simple, Practical, and Effective Opportunistic Routing for Short-Haul Multi-Hop Wireless Networks" at International Conference on Circuits, Controls and Communications (CCUBE)
		Renji Nair presented a paper titled "Reduction of BER in Optical – CDMA Based Fiber Network" at 3rd International Conference on Engineering and Technology- ICET, 2014, 11th May 2014
		Hemalatha S G & Archana M presented a paper titled, "CORIC ALGORITHM : An Alternative to LUT approach" at TEQIP-II Sponsored Second National Conference on "Wireless Control & Communication Technologies(NCWCT-2014)
	Achievements	Indian Patent held by UG student Raghavendra D C, Title: A system and method for sending bulk messages. Ref. No/ Application No: 905/CHE/2014 App. Number: 905/CHE/2014
		Pramath Nivarthi, Student won Bronze medal in State Level Intra University Yoga Competiton, VTU, Belgaum
CAYm3 (2012-13)	Achievements	Pramath Nivarthi, Student selected for National Level Inter University Yoga Competition representing VTU.
		Ms. Archana M has secured secured FIRST position in zonal rounds of RoboTryst-2013, a national level robotics championship, held during 26 th – 27 th November 2012 organized by Robosapiens Technologies Pvt. Ltd in association with Tryst IIT-Delhi.

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Sl. No.	Description	Period	Source of funding
	Industry Institute Interaction Program(IIIP) "Two days hands on training on DSP TMS320C6713"	21st and 22nd March 2016	TEQIP II
	Industry Institute Interaction Program(IIIP), Staff Development Program (SDP) 3 days Hands-on-training Program "Servicing of Electronic Equipments "	25th to 27th Feb 2016	TEQIP II
	Two days workshop on "Hands on training on QualNet", an Industry Institute Interaction Program	22nd- 23rd September, 2015	TEQIP II



	Third National Conference On “Wireless Control & Communication Technologies”,(NCWCT-2015)	27th & 28th April, 2015	TEQIP
	Five days workshop on “Hands on training on FEKO”, for Research Scholars and Students	7th – 11th April, 2015	TEQIP
	Two days workshop on “Programming and Application using MSP430G2 LaunchPad”, an Industry Institute interaction program for students	31st March - 1st April, 2015.	Dr.AIT in collaboration with EdGate Technologies.
	One day Seminar on “Space Technology & Satellite Communication”, by A G Ananth, RVCE	30th January, 2015	Dr.AIT in collaboration with ISTE.
	Two Days Second National Conference on Wireless Control & Communication Technologies	24th & 25th April 2014	TEQIP
	Two days workshop on “Research methodology and Latex”	January 23 rd and 24 th 2014	TEQIP
	First International Conference on Information and Communication Engineering(ICICE-2013)	28th & 29th June 2013	TEQIP
	3 days Hands on training on “Cloud Computing”, Le-Meridian, Bangalore	17th to 19th June 2013	TEQIP
	Training cum workshop on “ Real time wireless sensor Networks & Sensor web” Hotel Abhimani Vasathi, Bangalore	9th & 10th April 2013	TEQIP
	TEQIP-II sponsored one day seminar on “Research challenges in wireless networks and applications”	22 nd Feb 2013	TEQIP
	2 days workshop on Rapid Simulation using QualNet. Conducted by NIHON Communication Solutions Pvt. Ltd at Hotel Atria	20th & 21st Feb -2013	TTF
	3 day workshop on “3G Technology essentials and radio network planning” by Beamform Communication Pvt. Ltd.	31/3/2011 to 2/4/2011	TTF

21. Student profile course-wise:

Year	Male	Female	Total	Pass %						
				Male				Female		
				No. of appeared	pass	%		No. of appeared	pass	%
2011-12	27	34	61	I	27	10	37.03	34	26	76.47
	27	34	61	II	27	27	100	34	34	100
	36	40	76	III	36	31	86.11	40	36	90
	36	40	76	IV	36	34	94	40	36	90
	36	39	75	V	36	35	97.22	39	39	100



	36	39	75	VI	36	35	97.22	39	39	100
	36	38	74	VII	36	36	100	38	38	100
	36	38	74	VIII	36	36	100	38	38	100
Year	Male	Female	Total	Pass %						
				Male			Female			
				No. of appeared		Pas s	%	No. of appeared		pas s
2012-13	26	35	61	I	26	24	92.30	35	31	88.57
	26	35	61	II	26	23	88.47	35	33	94.28
	38	33	71	III	38	33	86.8	33	27	81.8
	38	33	71	IV	38	28	73.68	33	29	87
	37	31	68	V	37	33	89	31	31	100
	37	31	68	VI	37	37	100	31	31	100
	37	31	68	VII	37	33	89.18	31	30	96
				VIII	YET TO TAKE EXAM					
Year	Male	Female	Total	Pass %						
				Male			Female			
				No of appeared		Pass	%	No of appeared		Pas s
2013-14	23	38	61	I	23	18	78.26	38	36	94.73
	23	38	61	II	23	20	86	38	37	97
	29	41	70	III	29	25	86	41	37	90
	29	41	70	IV	29	26	89	41	39	95.12
	29	42	71	V	29	27	93.10	42	38	90.47
Year	Male	Female	Total	Pass %						
				Male			Female			
				No of appeared		Pass	%	No of appeared		Pass
2014-15	18	36	54	I	18	17	94	36	34	94
	18	36	54	II	18	16	88	36	32	88
	31	32	63	III	31	10	32.25	32	28	87.5
M.Tech										
Year	Male	Female	Total	Pass %						
				Male			Female			
				No of appeared		Pas s	%	No of appeared		Pas s



2011-12	10	7	17	I	10	8	80	7	7	100
	10	7	17	II	10	8	80	7	6	85.7
	10	7	17	III	10	10	100	7	7	100
	10	7	17	IV	10	10	100	7	7	100
Year	Male	Female	Total	Pass %						
				Male				Female		
				No of appeared		Pas s	%	No of appeared		Pas s %
2012-13	6	11	17	I	6	4	66	11	7	63
	6	11	17	II	6	5	83	11	8	72
	5	11	16	III	5	5	100	11	11	100
	5	11	16	IV	5	5	100	11	11	100
Year	Male	Female	Total	Pass %						
				Male				Female		
				No of appeared		Pas s	%	No of appeared		Pas s %
2013-14	6	12	18	I	6	4	66	12	12	100
	6	12	18	II	6	2	33	12	9	75
	6	12	18	III	6	6	100	12	12	100
	6	12	18	IV	6	4	66	12	12	100
Year	Male	Female	Total	Pass %						
				Male				Female		
				No of appeared		Pas s	%	No of appeared		Pas s %
2014-15	10	6	16	I	10	7	70	6	6	100
	9	6	15	II	9	8	88	6	5	83
	9	6	15	III	Waiting for Results					
	9	6	15	IV						

22. Diversity of Students



Name of the Course (refer question no.2)	% of students from the college	% of students from the state	% of students from other States	% of students from other Countries
B.E Telecommunication Engineering	NIL	93 % (233/62x4)	0.81 % (2/62x4)	0 %
M.Tech Digital Communication & Networking	5.5% (4/18x4)	91 % (66/18x4)	2.7% (2/18x4)	0 %

UG

Year	No of students from state	From other state	Other countries
2011-12	61	0	0
2012-13	59	2	0
2013-14	59	0	0
2014-15	54	0	0

PG

Year	No of students from state	From other state	Other countries
2011-12	17	0	0
2012-13	16	1	0
2013-14	18	0	0
2014-15	15	1	0

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Batch 2010 -2014

Sl No	Name	Higher study pursuing	University
1	Shashank K S	M S	University of Texas, Dallas
2	Ajay J	M S (GRE score card)	
3	Bhoomika Hegde	M S	Arizona State University
4	Ravikiran B S	M S	University of South Florida, Tampa
5	Vidya M C	M S	
6	Chethan	M tech (PGCET)	RNSIT, Bangalore
7	Venu	M tech (PGCET)	Oxford Institute of Technology, Bangalore
8	Soumya N	M tech (PGCET)	Siddaganga Institute of Technology, Tumkur

Batch 2011 -2015

Sl No	Name	Higher study pursuing	University
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1	Pragathi	M S	
2	Chaitra	M tech (PGCET)	Dr. AIT, Bangalore
3	Darshan Patel	M tech (PGCET)	Dr. AIT, Bangalore
4	Sandeep N	M tech (Gate Score)	MSRIT, Bangolre
5	Basava raju D R	M tech (PGCET)	RVCE, Bangalore
6	Sindhuja R	M tech (PGCET)	Global Institute of Technology

Batch 2009 -2013

Sl No	Name	Higher study pursuing	University
1	Yeshaswini R	M tech (PGCET)	EWIT, Bangalore
2	Sanjana G	M tech (PGCET)	PESIT, Bangalore

Batch 2008 -2012

Sl No	Name	Higher study pursuing	University
1	Mohan R	M S	
2	Harish babu	M tech (PGCET)	SSIT, Tumkur
3	Ranjith	M tech (PGCET)	PESIT, Bangalore
4	Sandeep bhat	M tech (Ph.D)-Gate Score	IISC, Bangalore

Batch 2007 -2011

Sl No	Name	Higher study pursuing	University
1	Thejus P	M S	Illinois Institute of Technology
2	Manjunath N	M tech (PGCET)	EWIT, Bangalore
3	Gokul	M tech (PGCET)	SJBIT, Bangalore

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	2
PG to M.Phil.	nil
PG to Ph.D.	3
Ph.D. to Post-Doctoral	NA

Employed <ul style="list-style-type: none">• Campus Selection• Other than Campus recruitment	Details provided in the following table.
Entrepreneurs	nil

Placement Details:

Batch	Placed	Campus Selection	Other than campus recruitment
2008-12	33	21	12
2009-13	34	18	16
2010-14	35	24	11
2011-15	53	36	17

25. Diversity of Staff

UG

Percentage of faculty who are graduates	12/12 = 100%
Of the same parent university	5/12 = 41%
From other universities within the State	6/12 = 50 %
From other universities from other States	1/12 = 9%

PG

Percentage of faculty who are graduates	3/3 = 100%
Of the same parent university	1/3 = 33 %
From other universities within the State	Nil
From other universities from other States	2/3 = 67%

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

One

27. Present details about infrastructural facilities

- A. Library
- B. Internet facilities for staff and students
- C. Total number of class rooms
- D. Class rooms with ICT facility
- E. Students' laboratories
- F. Research laboratories

Library**List of Journals available in the library**

- IEEE (ieeexplore.ieee.org)
- ASME (asmedl.org)
- ASCE (<http://ascelibrary.org>)
- SPRINGER (<http://link.springer.com>)
- J-GATE (<http://jgateplus.com>)
- Knimbus (<http://www.knimbus.com>)

- EBSCO (<http://search.ebscohost.com>)

Number of books in Department Library:

- From main library - 208 books
- Donated by students - 906 books
- Books procured under TEQIP - 30 books
- Donated by HOD - 58 books
- Total number of books - 1202 books

Internet facilities for staff and students

Yes

Total number of class rooms

UG: 03 class rooms - (C403, C405 and C322) & One Tutorial Room

PG: 01 classroom - (C410) –Smart Class Room

Class rooms with ICT facility

C410 with LCD Project, Smart board, Audio System

Student's laboratories

Laboratory	Room No.	Semester
Communication Lab	A112	3 rd , 4 th , 5 th , 6 th , 7 th , 8 th
Computer Lab	B203	1 st , 4 th , 5 th , 7 th , 8 th
Digital Electronics & Microcontroller Lab	C406	1 st , 3 rd , 4 th , 8 th

Research laboratories

Room No. C406 - iSense Wireless Sensor Network Modules, Softwares-FEKO, QUALNET, MATLAB 2014, NS-2, Microstrip Antennas, Antenna Kit

28. Number of students of the department getting financial assistance from College.

1) Name : Raghavendra D C (Student of 2010-14 Batch)

Dr. B. Sivakumar (Co-inventor)

Title: A system and method for sending bulk messages

Ref.No/ Application No: 905/CHE/2014

App.Number: 905/CHE/2014

Patent filing fee funded by college

2) Rajashekar M., Ongoing project on "Sixth sense technology"

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

A survey of post-graduate programs related Communication Engineering offered by various premier institutes was done. Job opportunities after completion of various courses were also considered. After survey applied and got sanction of M.Tech (Digital Communication & Networking).

30. Does the department obtain feedback from

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

YES

- All faculty members are involved in curriculum framing.
- BOS committee includes 1 VTU nominee, 3 subject experts from academia, 3 industrial experts and 1 distinguished PG alumnus with six internal subject experts.
- Pre-BOS meetings will be held in the department before syllabus is put forward in the BOS meeting.

- b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
Yes.

Feedback from all semester students at the end of each semester is taken and necessary action if required is taken by the higher authorities.

- c) Alumni and employers on the programmes and what is the response of the department to the same?

Yes.

Alumni and Employers Survey is conducted every year and their suggestions are incorporated for the improvement in Academic matters.

31. List the distinguished alumni of the department (maximum 10)

UG

Sl.No.	USN	Name	Email
1	1DA08TE046	Sandeep Bhat(Research Scholar , IISc)	sandeepbhat.1202@gmail.com
2	1DA08TE045	Sagar N Simha (Research Assistant , IISc)	sagar.abhay.simha@gmail.com
4	1DA10TE043	Hemalatha S.G. (working in Helwett Packard)	hema0503@gmail.com
5	1DA10TE008	Anjana Devi (working for Huawei Technologies)	anjanadevigs4@gmail.com
6	1DA08TE024	Harshitha (working for CISCO)	harshitha.bm19@gmail.com
7	1DA10TE050	Shraddha Bhat (working for TCS)	shrudhabs@gmail.com
8	1DA08TE011	Ayoush Surana (IMS Health India Pvt Ltd)	ayoushsurana@gmail.com
9	1DA10TE038	Raghavendra D.C. (working for TCS,applied for Patent)	dc.ragu@gmail.com
10	1DA05E018	Narasimha Kaushik (working for Path-Partner)	narasimha.kaushik.n@gmail.com

PG

Sl. No	USN	NAME	Placed	Phone. No	Email
1	1DA10LDN 04	LAXMI BHASKAR	Assistant Proffessor BNMIT,Bsk 2nd Stage	948058 8134	sakhimythri@gmail.com
2	1DA10LDN 06	NAGARAJ HANCHINMANI	Assistant Lecturer E&C Department, Government polytechnic bankapure haveri dist	953864 0108	nagarajhanchinamani@gmail.com
3	1DA10LDN 10	PRAVEEN KUMAR	Network Consultant Intel Security	888426 0397	Praveeniit21p@yahoo.com



		PATTA R			
4	1DA10LDN 15	SOWN DESHW ARI	Assistant Professor Sambram Institute of Technology	998669 7134	sowndeswari@yahoo.c om
5	1DA10LDN 08	NITYA SHREE	Assistant Professor Dr.Ait	812396 3980	Nityashree.26@gmail.c om
6	1DA11LDN 03	GUJAN AHATT I RUDRA PPA	Assistant Proffesor Kle Dr Msscet	996449 4571	
7	1DA11LDN 11	MADH USHRE E T S	TCS Akruti Business Port Gateway Park Road No13 Mumbai-400 093	805010 4405	tsmadhushree@gmail.c om
8	1DA12LDN 05	JYOTHI R	Software Engineer Infinera India Private Ltd	974289 3915	Jyothi.reddy386@gmail .com
8	1DA12LDN 14	SHRUT HI U P	Programming Analyst Trainee,Cogniza nt Technology Solutions	909213 2654	Up.shruthi@gmail.com
9	1DA12LDN 17	SUSHM A M	Assistant Professor Global Academy of Technology	953821 9904	msushmahema@gmail. com
10	1DA13LDN 12	MALLA NNA	Assisstant Professor Shri Vittal Education And Research Instiute College Of Engineering Pandharpur,Mah arastra-413 304	953584 4150	Mallanna.sugur@gmail. com
11	1DA13LDN 17	SHRIJA R	TCS, Akruti Business Port Gateway Park Road No13 Mumbai-400 093	782986 5822	srijarsreddy@gmail.co m
12	1DA13LDN 18	YOGES HWARI	Assistant Professor P.E.S Engineering College	966398 9165	yogeshwariramesha@g mail.com

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

Sl. No.	Description	Period
1	Five days workshop on “Hands on training on FEKO”, for Research Scholars and Students	7th – 11th April, 2015
2	Two days workshop on “Programming and Application using MSP430G2 LaunchPad”, an Industry Institute interaction program for students	31st March - 1st April, 2015.
3	One day Seminar on “Space Technology & Satellite Communication”, by A G Ananth, RVCE	30th January, 2015
4	3 day workshop on “3G Technology essentials and radio network planning” by Beamform Communication Pvt. Ltd.	31/3/2011 to 2/4/2011

33. List the teaching methods adopted by the faculty for different programmes.

- Power Point Presentations
- Usage of Smart Boards
- Usage of Black & White boards
- Weblinks & Edusat Programmmes

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

Mapping the course outcomes of each subject with Programme outcomes

35. Highlight the participation of students and faculty in extension activities.

Students:

- Students take part in various technical events under TTF and other extracurricular activites like sports, cultural events etc.
- Students provide their suggestions in the preliminary BOS meetings about curriculum.
- Faculty members are involved in BOS and BOE.
- Faculty members actively organize and participate Seminars/Workshops/Conferences.

Faculty:

Dr.B.Sivakumar, Professor & HOD is

AICTE committee member

Anna University Doctoral committee member

Reviewer for International Journals IJWCN, ICTACT

Editor for journal ICTACT,IISRO

BOE member for PESCE, Mandya

BOS Member for PSG Institute of Technology, Coimbatore.

Nodal officer for TEQIP (World Bank Project)

AICTE and VTU Coordinator for the institute

Academic Council Member

Planning & Evaluation Committee Member

Expert talk delivered at SJBIT, Bangalore during February 2016.

36. Give details of “beyond syllabus scholarly activities” of the department.

- Conducting conferences
- Technical talks
- Department has a technical forum by name Telecommunication

Technical Forum (TTF).

- QEEE Programme
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
Yes.
- Accredited by NBA in July 2012 for 2 years.
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
- Strengths :**
- Very good faculty retention
 - All the faculty possess PG degree and most of the faculty are pursuing their Ph.D.
 - Ongoing research projects and funded projects, Paper/Journal publication in peer reviewed
 - Organizing Conferences/FDP Programmes/Workshops regularly
 - Wireless Sensor Network Lab and Antenna Design Lab
 - Patents
- Weaknesses :**
- Consultancy work leading to Internal Revenue Generation is lacking
 - Centre of Excellence
 - Campus placement need to be improved
 - MoUs with foreign universities
 - Collaboration with leading Institutes
- Opportunities :**
- Prime location of the college
 - Good infrastructure & Facility
 - Job opportunities in both core and software because of city being IT hub
 - Exposure to industry & research development
 - Access to latest technical media
- Challenges :**
- Premium institutes nearby the campus which are potential competitors for campus placement
 - Competition from Deemed universities
 - Making the students industry-ready
 - Arranging Finishing school/Soft-skill training
 - Innovative Product design oriented programmes to be increased
39. Future plans of the department.
- To set up consultancy services in the area of Wireless Communication and Networks, Image Processing, Video and Audio encoders, Antenna Design, and Optical Communication and Networking.
 - Centre of Excellence in Wireless Communication.
 - To set up Testing and Training Centre in the area of Communication Field.
-



-
- To create a platform for full placement and motivation to initiate start-up companies.
 - To organize IEEE sponsored International Conference in Information and Communication Engineering.
 - To have Memorandum of Understanding with MNCs and other Universities and Government organizations.



DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

1. Name of the Department & its year of establishment
Department: **Information Science and Engineering**
Year of Establishment: **1992**
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Information Science and Engineering
 - PG
Computer Network Engineering
 - Ph.D.
Recognized Research Center under VTU

3. Interdisciplinary courses and departments involved

	Interdisciplinary courses	Semester	Dept. Involved
1	Mathematics-I, II	I,II	Mathematics
2	Engineering Physics	I/II	Physics
3	Engineering Chemistry	I/II	Chemistry
4	Functional English I,II	I/II	Humanities
5	Elements of Civil Engineering	I/II	Civil
6	Computer Aided Engineering Drawing	I/II	Mechanical
7	Basic Electrical Engineering	I/II	Electrical
8	Constitution of India and Professional Ethics	I/II	Humanities
9	Kannada	I/II	Humanities
10	Elements of Mechanical Engineering	I/II	Mechanical
11	Environmental Studies	II	Humanities
12	Probability and Statistics	III	Mathematics
13	Management and Entrepreneurship	VI	MBA

4. Annual/ semester/choice based credit system
Semester based, absolute grading is adopted. Grade is awarded based on marks scored by the student as per following:

Marks Range	90-100	75-89	60-74	50-59	45-49	40-44	<40
Grade	S	A	B	C	D	E	F

5. Participation of the department in the courses offered by other departments

	Subject	Course Offered by other Department
1	Artificial Intelligence	CSE
2	Operation Research	ME
3	Solar Energy	CV
4	Renewable Energy Sources	CV
5	Real Time Operating System	TE
6	Cloud Computing	CSE
7	Environmental Impact Assessment	CV

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	2	1
Associate Professors	5	3
Assistant Professors	8	8

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D Students guided for the last 4 years
Dr. Shylaja.B.S	M.S, Ph.D	Professor	VANETs	27	Guiding 7 students
Dr. Prabha.R	M.E, Ph.D	Associate Professor	Networks	25	-
Prof. Nagalakshmi. S	M.Tech, (Ph.D)	Associate Professor	Networks	21	-
Dr. Nandini Prasad. K.S.	M.Tech, Ph.D	Associate Professor	Networks	14	Guiding 5 students
Prof. Vijayalaxmi.R.Patil	M.Tech, (Ph.D)	Assistant Professor	Computer Networks	20	-
Prof. Pushpalatha.S	M.Tech, (Ph.D)	Assistant Professor	Computer Networks	11	-
Prof. Vidyarani.H.J	M.Tech, (Ph.D)	Assistant Professor	Computer Networks	11	-
Prof. Shilpa Biradar	M.Tech, (Ph.D)	Assistant Professor	Neural Networks	10	-
Prof. Satish.B. Basapura	M.Tech, (Ph.D)	Assistant Professor	Networks	12	-
Prof. Saritha K R	B.E	Assistant Professor	Computer Science	5	-
Prof. Vanishree	M.Tech	Assistant Professor	Computer Science	5	-
Prof. Jyothi B	M.Tech	Assistant Professor	Computer Science	1	-

8. Percentage of classes taken by temporary faculty – programme-wise information
NA
9. Programme-wise Student Teacher Ratio
17:1
10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Sanctioned	Filled
1	Technical	4	5
2	Administrative	1	1
3	Supportive Staff	4	4

11. Number of faculty with ongoing projects from
 - a) national
 - b) international funding agencies
 - c) Total grants received.

Mention names of funding agencies and grants received project-wise.

 - a) National: 02
 - b) International funding agencies: NIL
 - c) Total grants received: 02

Mention names of funding agencies and grants received project-wise:

 1. AICTE funded RPS on “Design and development of application package to optimize cloud storage for cloud users” with Dr.B.S. Shylaja as principle investigator approved by AICTE from 7/5/2013-7/5/2016. (Rs.2.30 Lakhs)

-
2. Fund of Rs. 5 lakhs was received from AICTE for setting Entrepreneurship Development Cell in 2012 with Dr. B. S. Shylaja as principle investigator.
 12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
 - Fund of Rs. 4,000 received from KSCST in 2015 for student project on “Robotic Arm” under guidance of Prof. Satish. B. Basapura.
 - Fund of Rs. 3,000 received from KSCST in 2016 for student project on “Design and Management of Response System For Vehicle Collision” under guidance of Dr. Nandini Prasad K S.
 - Fund of Rs. 3,000 received from KSCST in 2016 for student project on “Smart (Parking) System using IoT” under guidance of Dr. Nandini Prasad K S.
 13.
 - Research facility / centre with
 - state recognition
1
 - national recognition
Nil
 - international recognition
Nil
 14. Publications:
 - number of papers published in peer reviewed journals (national / international)
17
 - Monographs
Nil
 - Chapter(s) in Books
Nil
 - Editing Books
Nil
 - Books with ISBN numbers with details of publishers : 03
 1. Nandini Prasad K S: Principles of Compiler Design, 3rd edition, Elsevier Publication, 2014, ISBN: 9789381269473.
 2. R D Sudhaker Samuel, K S Nandini Prasad: Logic Design, 1st edition for CSE/ISE, Elsevier Publication, 2013, ISBN: 9789382291473.
 3. Nandini Prasad K S, Dinakar K S: System Modeling and Simulation, 1st edition, Elsevier Publication, 2012, ISBN: 9789381269909.
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
Nil
 - Citation Index – range / average
Nil
 - SNIP
-

-
-
- Nil
- SJR
- Nil
- Impact factor – range / average
- Nil
- h-index
- Nil
15. Details of patents and income generated
- Nil
16. Areas of consultancy and income generated
- Nil
17. Faculty recharging strategies
- Faculty members are encouraged to attend faculty development programs, conferences, workshops and other academic programs to enhance their technical skills.
 - Various faculty have attended workshops/seminars/conferences to upgrade their skills. Faculty are sponsored for pursuing higher studies.
18. Student projects
- percentage of students who have done in-house projects including inter-departmental
 - percentage of students doing projects in collaboration with industries / institutes
 - Project is divided into two phases: Phase I and Phase II.
 - Percentage of students doing projects in collaboration with industries / institutes: 30% with industry and 70% in-house.
19. Awards / recognitions received at the national and international level by
- Faculty
 - Doctoral / post-doctoral fellows
 - Students
 - Faculty: One Best paper awards at international conference by Dr. Nandini Prasad K S). Also, one faculty (Dr. Nandini Prasad K S) is awarded with 'Bharat Jyothi Award' in 2012.
 - Students: One Best Paper award at National Conference and one at international conference. One student batch have bagged 2nd place in project presentation (2015 pass out batch). This project was funded by KSCST.
20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Details of Seminars/ Conferences/Workshops	Source of Funding
One day technical seminar on "Cognitive Software Defined Radio & Open Software Programming" organized at Dr. AIT, Bangalore on 7 th January 2015 in association with Amitec Electronics Ltd, New Delhi and Silicon Microsystems, Bangalore.	Department Technical Club (DISC)
Three days workshop on "Android Application Development" in association with Li2 Innovations, Bangalore on 26 th – 28 th , March, 2015 at Dept. of ISE, Dr.AIT.	Department Technical Club (DISC)



One day "Industry Visit to TCS", Bangalore on 20th, January, 2015	TEQIP-II
One day "Industry Visit" to Tejas Networks, Bangalore" on 27th, November, 2015.	TEQIP-II
Two days workshop on "Application Development using Android" in association with Inventure TECH, Bangalore on 17th& 19th October, 2015, at Dept. of ISE, Dr.AIT.	Department Technical Club (DISC)

21. Student profile course-wise:

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B.E- ISE (UG)	54	24	30	100	100
M.Tech (CNE)	23	10	13	100	100

22. Diversity of Students

Name of the Course (refer question no. 2)	% of students from the college	% of students from the state	% of students from other States	% of students from other countries
B.E- ISE (UG)	NA	80%	20%	-
M.Tech (CNE)	NA	95%	5%	-

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Name	USN	Exam Cleared
Sanjeet Mishra	1DA10IS044	GRE
Vinod V	1DA11IS056	GRE
Sunil Venkatesh	1DA11IS047	GRE
Harshitha C	1DA11IS010	GRE
Navaneeth	1DA11IS017	GRE
Poornima Jadav	1DA10IS034	GRE
Annapoorna K S	1DA11IS004	GATE
Gagan	1DA12IS404	GRE
Saransh Malhotra	1DA11IS038	Defense Services

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	10 %
PG to M.Phil.	--
PG to Ph.D.	--
Ph.D. to Post-Doctoral	--
Employed <ul style="list-style-type: none">• Campus Selection• Other than Campus recruitment	--
Entrepreneurs	3

25. Diversity of Staff

Percentage of faculty who are graduates:

of the same parent

university: 41.66%

from other universities within the State:

41.66%

from other universities from other States:

16.66%

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

02

27. Present details about infrastructural facilities

1. Library

2. Internet facilities for staff and students

3. Total number of class rooms

4. Class rooms with ICT facility

5. Students' laboratories

6. Research laboratories

- Library: Department library comprises of books on various subjects as per curriculum and few research related books.

- Internet facilities for staff and students: 4 Mbps leased line available for both students and staff.

- Total number of class rooms: 03

- Class rooms with ICT facility : 01

Room Description	Usage	Shared / Exclusive	Capacity	Rooms Equipped with PC, Internet, Book rack, meeting space, etc.
Room no. A213	Class room for 1 st year	Exclusive	70 Students	White board, Black board, Chalk, Duster
Room no. D108	Class room for 2 nd year	Exclusive	70 Students	White board, Green board, Chalk, Duster, Projector
Room no. D109	Class room for 3 rd year	Exclusive	70 Students	Virtual Classroom with Interactive white board,



(Smart Classroom)				LED TV, white board, Projector, Camera & Speakers
Room no. D004	Class room for 4 th year	Exclusive	70 Students	White board, Green board, Chalk, Duster,
Room no. D110	Tutorial room	Exclusive	70 Students	White board, Green board, Chalk, Duster.
Faculty room D003: 6 individual cabins.	Faculty room, Academic work, coordination activities and student interactions	Shared	6 Staffs	Desktops/Laptops, Internet connection, Almirah.
Faculty room A120: 4 individual cabins.	Faculty room, Academic work, coordination activities and student interactions	Shared	4 Staffs	Desktops/Laptop, Internet Almirah
Faculty room A219: 3 individual cabins.	Faculty room, Academic work, coordination activities and student interactions	Shared	3 Staffs	Laptop/Desktop, Internet, Almirah
HOD room: D102	Academic work, coordination activities and student interactions	Exclusive	1 Staff	Laptop, Desktop, Internet, Laser Printer-Scanner, Almirah, White board, Notice board.
Seminar Hall: S001	For Seminars/ Workshops, Students Project Presentations, Seminars Presentation, Guest Lectures etc.	Shared	100	PC, Internet, A/C, White board, Audio System, Projector.
Meeting Room: D002	Staff meetings.	Exclusive	15	PC, Internet (Wi-Fi)
Department Library: D002	Library Books,	Exclusive	15	PC, Internet, Book rack, Books, Reading Tables
Mentoring room: D002	Student Mentoring / counseling	Exclusive	15	PC, Internet, Book rack, Reading Tables
UPS Room: D105	Uninterrupted Power Supply for laboratories and Class rooms	Exclusive	4	UPS and Inverters
ISE Office room: D106	Administration, Academic work	Exclusive	2	PC, Internet, Almirah, Intercom, Printer.
No. of auditorium	For conducting Conference/Seminar/ Workshops	Shared	600	Equipped with PC, Audio & Mike system, AC, Internet, Meeting space, Projector screen/TV, Furniture etc.

• Students' laboratories: 03

Laboratory description in the curriculum	Exclusive use/ Shared?	Space, number of Students	Size of laboratory	Number of experiments	Quality of instruments	Lab manuals
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Data Structures lab - 3 rd sem in Sir Amartya Sen Lab	Exclusive	25	54 Sq.mt.	15	Excellent	Available
LD lab - 3 rd sem in Sir M. Visvesvaraya Lab 1	Shared	25	60 Sq.mt.	12	Excellent	Available
USP lab-3 rd sem in Sir M. Visvesvaraya Lab 2	Exclusive	25	60 Sq.mt.	11	Excellent	Available
CCP Lab- 1 st /2 nd sem: JPN Lab	Exclusive	25	54 Sq.mt.	20	Excellent	Available
File structures Lab - 6 th sem Sir M. Visvesvaraya Lab 1	Exclusive	25	60 Sq.mt.	15	Excellent	Available
Microprocessors -4 th sem in Sir M. Visvesvaraya Lab 1	Exclusive	25	60 Sq.mt.	15	Excellent	Available
OOPS Lab - 4 th sem in Sir Amartya Sen Lab	Exclusive	25	54 Sq.mt.	15	Excellent	Available
DBMS LAB1 - 5 th sem in Internet Lab	Exclusive	25	54 Sq.mt.	6	Excellent	Available
ADA Lab - 5 th sem in Sir Amartya Sen Lab	Exclusive	25	54 Sq.mt.	15	Excellent	Available
JAVA Lab - 5 th sem in Sir M. Visvesvaraya Lab 1	Exclusive	25	60 Sq.mt.	14	Excellent	Available
System Software Lab - 6 th sem in JPN Lab	Exclusive	25	54 Sq.mt.	15	Excellent	Available
CN LAB - 7 th sem in Sir M. Visvesvaraya Lab 1	Exclusive	25	60 Sq.mt.	15	Excellent	Available
WEB Programmin g Lab - 7 th sem Sir Amartya Sen Lab	Exclusive	25	54 Sq.mt.	15	Excellent	Available
Python lab 7 th sem Sir M. Visvesvaraya Lab 1	Exclusive	25	60 Sq.mt.	10	Excellent	Available
Project Lab - 8 th sem-	Exclusive	25	60 Sq.mt.	-	Excellent	Not Applicable

Sir M. Visvesvaraya Lab 2						
Research lab: Sir M. Visvesvaraya Lab 2	Exclusive	25	60 Sq.mt.	-	Excellent	Not Applicable
Mini Project lab: Sir Amartya Sen Lab	Exclusive	25	54 Sq.mt.	-	Excellent	Not Applicable

- Research laboratories: 01

28. Number of students of the department getting financial assistance from College.
08 students (in 2015 PG pass out students) and 08 students (in 2016 PG students) are being provided with student assistanceship from TEQIP-II.
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
No
30. Does the department obtain feedback from
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
 - b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
 - c) Alumni and employers on the programmes and what is the response of the department to the same?
- a) Yes. Teaching-Learning-Evaluation includes:
- Course end feedback is taken from faculty to ensure if course outcomes are met. CIE's questions are based on course outcomes. Questions are framed by considering Bloom's taxonomy.
 - Semester end feedback is also considered in order to improve course curriculum.
 - Based on the feedback from faculty, laboratory and theory hours/inclusion of new subjects are incorporated in curriculum.
 - By considering the above mentioned points, curriculum is updated yearly in Board of Studies (BOS).
- b) Yes.
- Feedback is taken every semester for each subject handled by faculty. Faculty with average feedback is advised by HOD to improve their teaching methods. They are also encouraged to attend workshops and seminars (FDPs).
 - Few students are included in internal BOS conducted in the department and their respective feedbacks are taken to improvise the curriculum.
 - After completion of the course, feedback is obtained from students for the newly introduced courses. Students are encouraged to apply the skills learnt from these new courses for various applications.
- c) Yes.

- Alumni are included for syllabus framing in BOS. Alumni inputs are considered for updating the syllabus as per current industrial requirements. They also provide feedback for improvising infrastructure in the department.
- Alumni survey and Employers survey are obtained on yearly basis and their suggestions are incorporated for curriculum development.

31. List the distinguished alumni of the department (maximum 10)

Sl. No.	Name	Organization
1	Trilok H G	ThinkAppz, Bangalore
2	Kavya P	Robert Bosch
3	Bindupriya	Huawei Technologies
4	Ankitha K Shetty	Cognizant Technologies
5	Kusuma C	Alcatel Lucent India
6	Megha Singh	TCS
7	Pallavi N	Accenture
8	Pooja A	Citrix
9	Pooja S	Infosys
10	Swathi Upadhya	RBEI

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

- Three days workshop on “Android Application Development” in association with Li2 Innovations, Bangalore on 26th – 28th, March, 2015 at Dept. of ISE, Dr.AIT.
- Two days workshop on “Application Development using Android” in association with Inventure TECH, Bangalore on 17th & 19th October, 2015, at Dept. of ISE, Dr.AIT.

33. List the teaching methods adopted by the faculty for different programmes.

- Lesson plan is prepared as per the calendar of events for the courses assigned for the respective faculty.
- Notes of lesson are prepared by the faculty which includes soft copy and hard copy.
- Video lessons (QEEE, NPTEL) are made available to the students.
- HOD monthly monitor’s faculty lesson plan and work abstract.
- Guest lectures are organized by inviting eminent persons from industry/institute.
- Students are encouraged to present and publish paper at National/International conferences.
- Students are able to access e-journals and e-books.

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

- Department ensures students to try different methods of analyzing and solving problems. Hands on experience are provided to students in the lab by giving extra programs.
- Students are encouraged to carry out their project works as per industry requirements. Further, on completion of project the students are guided by faculty to prepare and present technical paper.

-
- Department conducts workshops/seminars/technical talks on cutting edge technologies.
35. Highlight the participation of students and faculty in extension activities.
- Department level technical fest is organized to facilitate the students to enhance their knowledge and to present their projects.
 - Industrial visits are organized for the students.
 - Students also participate in inter-departmental and inter-college technical fests.
36. Give details of “beyond syllabus scholarly activities” of the department.
- Industrial visits are organized for the students.
 - Students also participate in inter-departmental and inter-college technical fests.
 - Dr. AIT Techno Exhibition is conducted every year to encourage students to exhibit their projects.
 - Students are mentored to improve their academic records and remedial classes are conducted for slow learners.
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
- Department of ISE was accredited by NBA in 2004 and 2012.
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths

- The faculty of ISE department has got experience between 4 to 26 years. The ISE faculty have high retention rate of 15 years.
- We have Post graduation programme 2013 [CNE] and Research centre established in 2012 under VTU.
- ISE department is in-charge of IEDC Cell and QEE for the college.
- ISE department is having three Ph.D. holders and 6 faculty are pursuing Ph.D.
- Faculty get sponsorships for presenting papers, Industry visits and also conducting workshops etc. under TEQIP-II.

Weaknesses

- Though the curriculum is industry oriented when it comes to practical experience most of the industries are not able to accommodate many students because of space and time constraints for projects and internships.
- Preparing students for various competitive examinations.

Opportunities

- The college management encourages faculty to take up Fulltime/ part-time PhD and Post-Graduation.
 - Each faculty/students can avail the opportunities for presenting papers and conferences both at National and International level through college sponsorship.
 - Since we are in autonomous, we have the opportunity to enhance our curriculum as per the state of art requirement of industry.
 - The students are getting more opportunities because of the location of our college.
-

Challenges

- Autonomous colleges around our region are increasing.
 - To obtain consultancy work.
 - To have more MOUs with reputed industries.
39. Future plans of the department.
- All faculty to complete their Ph.D. by 6 years.
 - To take up consultancy work.
 - To emphasize innovative projects by students by improving Industry-Institute Interaction.
 - To obtain funded projects from AICTE, DST, VGST, DRDO etc.
 - To have collaboration with foreign universities.
 - To conduct International conferences with IEEE, Springer, Elsevier etc and to encourage students to publish papers in good conferences/ journals.
 - To motivate students towards Entrepreneurship and set up incubation centre.
 - To promote students to contribute to their fields or professions and to excel them in professional ethics and leadership qualities and to create enthusiasm for life-long learning.

**DEPARTMENT OF MEDICAL ELECTRONICS**

1. Name of the Department & its year of establishment
MEDICAL ELECTRONICS, 1999
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Medical Electronics
 - PG
Nil
 - Ph.D.
Nil
3. Interdisciplinary courses and departments involved
Nil
4. Annual/ semester/choice based credit system
Semester based, absolute grading is adopted. Grade is awarded based on marks scored by the student as per following:

Marks Range	90-100	75-89	60-74	50-59	45-49	40-44	<40
Grade	S	A	B	C	D	E	F

5. Participation of the department in the courses offered by other departments
 - Restricted to IDE, Final Year Project
6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	1	1
Associate Professors	2	2
Assistant Professors	3	3

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D Students guided for the last 4 years
Dr. Shanthi KJ	Ph.D.	Prof & Head	Electronics (Medical Imaging)	25	2

8. Percentage of classes taken by temporary faculty – programme-wise information
Nil (**No Temporary Faculty in the department**)
9. Programme-wise Student Teacher Ratio
1:15
10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Sanctioned	Filled
1	Foreman	1	1

2	Instructor	1	1
3	Assistant Instructor	1	1
4	Helper	2	2

11. Number of faculty with ongoing projects from
a) national
b) international funding agencies
c) Total grants received.
Mention names of funding agencies and grants received project-wise.
Nil
12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
Nil
13. • Research facility / centre with
• state recognition
• national recognition
• international recognition
• State Recognition - Yes
14. Publications:
• number of papers published in peer reviewed journals (national / international)
--
• Monographs
Nil
• Chapter(s) in Books
2
• Editing Books
Nil
• Books with ISBN numbers with details of publishers
Nil
• Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
--
• Citation Index – range / average
--
• SNIP
--
• SJR
--
• Impact factor – range / average
--
• h-index
--
15. Details of patents and income generated
Patent: 1. Artificial Transplantable Kidney
Income: Nil
16. Areas of consultancy and income generated
-
-

- Development of physiological signal processing algorithm.
 - Income generated : Nil
17. Faculty recharging strategies
Faculties attend and organize Workshops, seminars, conferences and industrial visit to update their subject skills
18. Student projects
- percentage of students who have done in-house projects including inter-departmental
 - percentage of students doing projects in collaboration with industries / institutes
- percentage of students who have done in-house projects including inter-departmental : **60%**
percentage of students doing projects in collaboration with industries / institutes : **40%**
19. Awards / recognitions received at the national and international level by
- Faculty
 - Doctoral / post-doctoral fellows
 - Students
-
20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Workshop Details

Sl.No	Workshop Title	Funded By	Duration
1	Introduction To Python Programming	TEQIP-II	18/3/2013
2	Research Challenges In EEG Signal Analysis & Application	TEQIP-II	25 th & 26 th June-2013
3	Imparting Designing Skills In Computer Graphics For Supporting Staff	TEQIP-II	1 Week 1 st To 7 th August-2013
4	Android Applications And Development By: Finland Labs New Delhi	IEEE Student Chapter	10 th & 11 th Feb-2013
6	Cardiac Care Week	Self funded	5/1/2015 to 10/1/2015.
7	EDA Tools: TINA and CCS	TEQIP-II	9 th to 14 th Jan 2015.
8	Web Design	TEQIP-II	31/03/15 & 07/04/2015
9	JAVA Lab(Industry Component)	TEQIP-II	29.8.2015. 10.9.2015.
10	Android Applications	MESA	30 th & 31 st Oct-2015

**Technical Talk Details:**

Sl.No	Topic	Organized Date	Funded By	Duration
1.	Brain Computer Interface	13 th Sept 2013	TEQIP-II	One Day
2.	Introduction to Bioinformatics and Computational Biology	22 nd March 2014	TEQIP-II	One Day
3.	.Net and C- Sharp (Technical Talk I)	11/10/14.		One Day
4.	Recent Advances in Biomedical Engineering.	6 th Feb 2015	TEQIP-II	One Day
5.	.Net Hands on training (Talk II)	6/3/2015		One Day
6.	Opportunities and Challenges for Biomedical Engineers in Aerospace By Dr. Arvind	4/11/2015	TEQIP-II	One Day
7.	Hands on Training on Electrical Safety & Calibration of Medical Devices	23.11.2015	Self funded	One Day

21. Student profile course-wise:

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Medical Electronics	2011-12	5	14	100	100
	2012-13	7	19	80	89
	2013-14	8	17	85	88
	2014-15	6	7	83	100

22. Diversity of Students

Name of the Course (refer question no. 2)	% of students from the college	% of students from the state	% of students from other States	% of students from other countries
Medical Electronics	100	100	nil	nil

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
Nil

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	30
PG to M.Phil.	Nil
PG to Ph.D.	2
Ph.D. to Post-Doctoral	0.5%
Employed	
• Campus Selection	2016 5 2015 5 2014 0
• Other than Campus recruitment	2013 3 2016 2015 2014 20 + 5 Higher Studies 2013 20 + 2
Entrepreneurs	Nil

25. Diversity of Staff

Percentage of faculty who are graduates	
of the same parent university	UG 20 PG 80
from other universities within the State	
from other universities from other States	UG 80 PG 20

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Nil

27. Present details about infrastructural facilities

A. Library

--

B. Internet facilities for staff and students

Available 100MBPS/Wi-Fi

C. Total number of class rooms

03

D. Class rooms with ICT facility

03

Room Description	Capacity	Room Equipped with
Class Room No.A 302	60	Desks, Black Board, Podium Wi fi connectivity
Class Room No. B 311	40	Desks, Black Board, Podium, LCD Projector, Internet connection
Class Room	40	Desks, Black Board, Podium

No. B 312	Wi fi connectivity
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E. Students' laboratories

Sl.No.	Laboratory description in the curriculum
1	Computer Fundamentals & C Programming Lab
2	Analog Electronic Circuits
3	Microcontroller Lab
4	Logic Design Lab
5	Communication Lab
6	DSP Lab
7	Medical Electronics Lab I
8	VHDL Lab
9	Signal Processing lab using LabVIEW
10	Object Oriented Programming with C++ Lab
11	Medical Electronics Lab II
12	ADSP Lab
13	Project work

F. Research laboratories

Room Description	Room Equipped with
B303	Computer, Power Lab (Biosignal Acquisition system with physiological sensors and related softwares) Digital Signal Oscilloscope (50microvolts to 1KVolt, 4MHz).Signal generator, power supply. Circuit designing workstation.

28. Number of students of the department getting financial assistance from College.

15

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

BOS (Board of Studies)

30. Does the department obtain feedback from

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

- Remedial Classes
- Mentoring
- Counselling

b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

Online feedback system.

- Evaluation report
- Self Assessment by faculty.
- c) Alumni and employers on the programmes and what is the response of the department to the same?
- BOS

- Feedback from the employer and the alumni accordingly incorporating the changes in the curriculum.

31. List the distinguished alumni of the department (maximum 10)

Sl.No	Alumni Name
1	Prasanna
2	Avin Agarwal
3	Rizwan Khan
4	Priyanka
5	Padmashree
6	Deepa Hegde
7	Anusha Nayak
8	Buddhadithya Chattopadhyaya
9	Greeshma Agasthya
10	Subramanya

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

Sl.No	Workshop Title	Funded By	Duration
1	Introduction To Python Programming	TEQIP-II	18/3/2013
2	Research Challenges In EEG Signal Analysis & Application	TEQIP-II	25/06/13& 26/06/2013
3	Android Applications And Development By: Finland Labs New Delhi	IEEE Student Chapter	10/02/2013& 11/02/2013
4	EDA Tools: TINA and CCS	TEQIP-II	9/01/2013 to 14/01/2015.
5	Web Design	TEQIP-II	31/03/15 & 07/04/2015
6	JAVA Lab(Industry Component)	TEQIP-II	29/8/2015 to 10/9/2015.
7	Android Applications	MESA	30/10/2015& 31/10/2015
8	Calibration and Servicing of Electronic Equipments	TEQIP-II	08/02/16 to 12/02/2016

Sl.No	Topic	Funded By	Duration
•	Brain Computer Interface	TEQIP-II	13/09/2013
•	Introduction to Bioinformatics and Computational Biology	TEQIP-II	22/03/2014
•	.Net and C- Sharp (Technical Talk I)		11/10/2014.
•	Recent Advances in Biomedical Engineering.	TEQIP-II	6/02/2015
•	.Net Hands on training (Talk II)		6/3/2015

•	Opportunities and Challenges for Biomedical Engineers in Aerospace	TEQIP-II	4/11/2015
•	Hands on Training on Electrical Safety & Calibration of Medical Devices	Self-funded	23/11/2015
•	Prospects in clinical engineering for biomedical professionals	TEQIP-II	06/02/16
•	Lecture series in Medical Science	TEQIP-II	22 nd & 23 rd April 2016

33. List the teaching methods adopted by the faculty for different programmes.
- Instruction Lectures
 - Practicals
 - Presentations
 - Demonstration
 - Quiz
 - Assignments
 - Industrial Visit
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
- Continuous Internal Evaluation(CIE)
 - Semester End Examination(SEE)
 - Course End Survey
 - Alumni Survey
 - Employer Survey
35. Highlight the participation of students and faculty in extension activities.
- Paper Presentation
 - Project Exhibition
 - Seminars
 - Sports
 - Cultural
36. Give details of “beyond syllabus scholarly activities” of the department.
- Open End Projects
 - Simulation software
 - Online courses
 - Proficiency courses
 - Internship
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
- Accredited during year 2007-2010
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
- Strength**
- Good Governing team with a long term progressive growth plan
 - Academic Autonomy offers liberty to continuously explore and improve

-
- Excellent support from all the faculty and staff to achieve the long term Vision and Mission
 - MoU with Medical College Hospitals for hospital visit and training
 - Availability of top class hospitals with the state of art equipments

Weaknesses

- Lack of Faculty with PhD
- Lack of quality students
- Timing and Funding constraints for faculty to involve in R&D work
- Inadequate expertise and infrastructure in the department for industry consultancy

Opportunities

- Wide network of available industries to promote industry interaction
- To achieve 100% placement and promote entrepreneurship as Bangalore is an important industrial hub in the country

Challenges

- Decline in the number of students seeking admission to the course

39. Future plans of the department.

- Strengthen the student placement
- Thrust on Industry Association and Industry exposure to students
- Industry sponsored projects and consultancy
- MoU with Indian and foreign universities



DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

1. Name of the Department & its year of establishment
Department: Master of Computer Applications
Year of Establishment: 1999
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - PG
Master of Computer Applications
 - Ph.D.
Recognized Research Center under VTU
3. Interdisciplinary courses and departments involved
NA
4. Annual/ semester/choice based credit system
Semester based.
5. Participation of the department in the courses offered by other departments
NA
6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	1	1
Associate Professors	2	4
Assistant Professors	9	6

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D Students guided for the last 4 years
Dr. L Manjunatha Rao	MCA, M.Phil, MBA, Ph.D.	Professor	Software Engineering E-Governance	16	Guiding 6 students
Prof. Shobha Rani B.R.	MCA	Associate Professor	Image Processing	14	Pursuing Ph.D
Prof. Chandrakanth G.Pujari	MCA	Associate Professor	Software Engineering	18	Pursuing Ph.D
Dr. Bharathi S	Ph.D	Associate Professor	Data mining and image processing	17	Ph.D Awarded During Sep 2015
Smt. Indumathi SK	MCA	Associate Professor	Computer Networks	15	Pursuing Ph.D
Smt. Dharani NV	MCA	Assistant Professor	Computer Networks	10	Pursuing Ph.D
Smt. Malathi P.	MCA	Assistant Professor	Computer Applications	15	-
Smt. Anitha J.	MCA	Assistant Professor	Computer Applications	12	-
Smt. Shailaja LK	MCA	Assistant Professor	Computer Applications	8	-
Smt. Shivaleela	MCA	Assistant Professor	Software engineering	5	Pursuing Ph.D
Smt. Kavyashree N.	MCA	Assistant Professor	Computer Applications	5	

8. Percentage of classes taken by temporary faculty – programme-wise information

NA

9. Programme-wise Student Teacher Ratio
1:16
10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Sanctioned	Filled
1	Technical	3	3
2	Administrative	1	1
3	Supporting Staff	3	3

11. Number of faculty with ongoing projects from
- a) national
Nil
- b) international funding agencies
Nil
- c) Total grants received.
Nil
- Mention names of funding agencies and grants received project-wise.
Nil
12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
Nil
13. Research facility / centre with
- state recognition
 - national recognition
 - international recognition
- Ph.D Research center recognized by VTU, government of Karnataka
14. Publications:
- number of papers published in peer reviewed journals (national / international)
11
 - Monographs
Nil
 - Chapter(s) in Books
Nil
 - Editing Books
Nil
 - Books with ISBN numbers with details of publishers
Nil
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
Nil
 - Citation Index – range / average
10
 - SNIP
Nil
 - SJR

-
- Nil
- Impact factor – range / average
2.0
 - h-index
Nil
15. Details of patents and income generated
Nil
16. Areas of consultancy and income generated
Nil
17. Faculty recharging strategies
Faculty members are motivated to attend faculty development programs, conferences, workshops and other academic programs to enhance their technical skills.
18. Student projects
- percentage of students who have done in-house projects including inter-departmental
 - percentage of students doing projects in collaboration with industries / institutes
- All students are doing their academic projects in collaboration with industries i.e. 100%
19. Awards / recognitions received at the national and international level by
- Faculty
Two Best paper awards at international conference.
 - Doctoral / post-doctoral fellows
Nil
 - Students
One Best Paper award at National Conference
20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.
Nil
21. Student profile course-wise:

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
2012	30	16	14	100%	100%
2013	35	14	16	80%	100%
2014	40	15	15	75%	75%
2015	35	18	12	90%	80%

22. Diversity of Students
-

Name of the Course (refer question no. 2)	% of students from the college	% of students from the state	% of students from other States	% of students from other countries
2012	0	95%	5%	0
2013	0	94.5%	5.5%	0
2014	0	100%	0	0
2015	0	100%	0	0

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
Nil

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	Nil
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil
Employed	
• Campus Selection	8 %
• Other than Campus recruitment	90 %
Entrepreneurs	1 %

25. Diversity of Staff

Percentage of faculty who are graduates	
of the same parent university	45%
from other universities within the State	27%
From other universities outside the state	27%

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

One

27. Present details about infrastructural facilities

A. Library

Yes

B. Internet facilities for staff and students

Yes

C. Total number of class rooms

03

D. Class rooms with ICT facility

03

E. Students' laboratories

03

F. Research laboratories

Yes

28. Number of students of the department getting financial assistance from College.

Nil

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

No

30. Does the department obtain feedback from

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

Yes

- To improve the academic quality of the department.

b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

YES

- Counseled the staff members on teaching learning evaluation

c) Alumni and employers on the programmes and what is the response of the department to the same?

- Periodic feedbacks are collected from alumni and employers, the same feedback is used for the development of the department.

31. List the distinguished alumni of the department (maximum 10)

Sl No.	Name of the Student	Company
1	Nitin Agrawal	Nokia Siemens
2	Shalini	Nusys
3	Nandan	HP
4	Manohar	Mind tree
5	Karthik Kumar	Focus Framework
6	Uttam Kumar	Cerner
7	Lokesh B P	Toshiba
8	Lokesh N P	Target Technologies
9	Anoop R	JiffleNow
10	Jaideep	Avaali Solutions Pvt Limited

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

- A one day workshop on **Android based Mobile Application** on 21st August 2015

- A One day seminar on "End-to-End Data warehouse" was held on March, 7th, by Mrs. Lokesh N P working at Target Technologies as Business Analyst.

- A one day seminar on **Building Applications using Ruby on Rails** by Anoop R working at JiffleNow on April 2015.

- A one day seminar seminar on **C Compilation process** by Suresh Babu in April 2015

33. List the teaching methods adopted by the faculty for different programmes.

- Regular class room teaching with chalk and board, seminars,

-
- assignments and power point presentations with LCD projectors, software tools etc. are the regularly used teaching methods. Practical, Projects, assignments, quiz.
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
- Internal Tests are conducted regularly
 - discussion in class room
 - Presentations and project work.
35. Highlight the participation of students and faculty in extension activities.
- Participation of students in Seminars, workshops and intercollege fests.
 - Faculties are encouraged to publish the paper in the peer viewed journal, conferences.
 - The students take part in various software development work of the dept.
36. Give details of “beyond syllabus scholarly activities” of the department.
- The MCA Students periodically participate and present paper, involve in the other activities in the academic seminars organized by other Universities as well as colleges. The research scholars participate in national & international conferences and present their research work and hence interact with follow researchers from other leading institutions. Further our faculty members also present papers in such meeting
 - Industry institute interaction
 - Students also take part in various activities of the universities, i.e. in sports and cultural programmes.
 - Soft skill training for Placement activities
 - The Department invites experts from software industry deliver talks and inspire the students to excel in their life and for better employment
 - Faculty and student trainings are conducted in a regular basis like: Java, Python, Cloud Computing etc., for understanding the latest technology
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
- Nil
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
- Strengths**
- One of pioneer departments in the state of Karnataka
 - Faculty with rich experience and qualifications
 - Affiliated to technical university
 - State of the art infrastructure
 - Department with VTU recognized research center.
- Weaknesses**
- Increase collaborative research/projects among the faculty member.
-

-
- Not many strong publications.
 - Student admissions based on IT trend
 - Less number of students eligible for placements
 - Students intake from different streams

Opportunity

- Syllabus par with industry requirements
- Students are exposed to the research and development
- Industry institute interaction through visits, projects and internships
- Being technical institution job opportunities are more
- Well connected to IT hub

Challenges

- Balancing teaching quality with research
- Not much participation of students in faculty research
- Due to frequent syllabus updating, faculty need to be constantly upgraded as per industry requirements
- More number of takers for engineering stream due to lesser eligibility criteria
- Internships and placement opportunity need to be improved

39. Future plans of the department.

- To establish strong linkages & partnership with industry, R&D organizations & other higher learning centres at National & International Level for mutual benefits to facilitate all round development of students.
- Strengthening placement activity
- To adopt progressively new technologies in teaching and learning process.
- Enhance research activity by adding more research labs & obtaining research grants from funding agencies.



DEPARTMENT OF MASTER OF BUSINESS ADMINISTRATION

1. Name of the Department & its year of establishment
Department : Master of Business Administration
Year of Establishment: 2001
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - PG
Master of Business Administration
 - Ph.D.
Recognized Research Center under VTU
3. Interdisciplinary courses and departments involved
Nil
4. Annual/ semester/choice based credit system
Semester based.
5. Participation of the department in the courses offered by other departments
 - Management and Entrepreneurship- HS03
6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	1	1
Associate Professors	2	2
Assistant Professors	5	6

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D Students guided for the last 4 years
DR. S. RUPLA NAIK	MBA, M.Phil,Ph.D	HOD	Marketing		
Prof. DEVARAJ. H.G	MA	Faculty	Economics		
Dr. BASKARAN.S	MBA, M.Phil,Ph.D	Associate Professor	Finance		
Ms. SHAILAJA. M.L	M.com, MBA, M.Phil, (PhD)	Associate Professor	Finance		
Ms. SUSHEELA DEVI B DEVARU	MBA, M.Phil, PGDHRM,(Ph.D)	Associate Professor	Marketing		
Ms. RAJESHWARI. R.R	MBA, M.Phil,	Assistant Professor	Human Resource		
Ms. VIDYA. R	MBA, M.Phil	Assistant Professor	Finance		
Ms. ARUNDATHI. S.V	MBA	Assistant Professor	Human Resource		

Ms. KAVITHA. S	MBA	Assistant Professor	Marketing		
Ms. Leela M.H	MBA, M.Phil, (Ph.D)	Assistant Professor	Finance		

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil

9. Programme-wise Student Teacher Ratio

1:15

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Type	Sanctioned	Filled
1	Technical	1	1
2	Administrative	1	1
3	Supporting Staff	2	2

11. Number of faculty with ongoing projects from

a) national

b) international funding agencies

c) Total grants received.

Mention names of funding agencies and grants received project-wise.

Nil

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Nil

13. • Research facility / centre with

• state recognition

• national recognition

• international recognition

Research center recognized by VTU, Government of Karnataka (State/National)

14. Publications:

- number of papers published in peer reviewed journals (national / international)

39/49

- Monographs

2

- Chapter(s) in Books

3

- Editing Books

Nil

- Books with ISBN numbers with details of publishers

2

- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

30

- Citation Index – range / average

-
- SNIP
Nil
 - SJR
Nil
 - Impact factor – range / average
0.303 to 5.72
 - h-index
Nil
15. Details of patents and income generated
Nil
16. Areas of consultancy and income generated
Nil
17. Faculty recharging strategies
Nil
18. Student projects
- percentage of students who have done in-house projects including inter-departmental
 - percentage of students doing projects in collaboration with industries / institutes
- Research center recognized by VTU, Government of Karnataka (State/National)
19. Awards / recognitions received at the national and international level by
- Faculty
 - Doctoral / post-doctoral fellows
 - Students
- Nil
20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.
Nil
21. Student profile course-wise:

Name of the Course (refer question no. 2)	Year	Applications received	Selected		Pass percentage	
			Male	Female	Male	Female
	2014-15	32+26=58	32	26		
	2013-14	28+15=43	28	15	16 (57%)	10(67%)
	2012-13	36+18=54	36	18	32 (89%)	18(100%)
	2011-12	34+25=59	34	25	31(91%)	24(96%)

22. Diversity of Students

Name of the	Year	Total Admission	% of students	% of students	% of students	% of students
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Course			from the college	from the state	from other state	from other countries
	2015-16	55	-	96%	4%	-
	2014-15	58	-	97%	3%	-
	2013-14	43	-	98%	2%	-
	2012-13	54	-	98%	2%	-

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Nil

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	--
PG to M.Phil.	--
PG to Ph.D.	--
Ph.D. to Post-Doctoral	--
Employed	
• Campus Selection	--
• Other than Campus recruitment	90 %
Entrepreneurs	10 %

25. Diversity of Staff

Percentage of faculty who are

- graduates of the same parent University - 30%
- from other universities within the State - 10%
- from other universities from other States - 60%

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Nil

27. Present details about infrastructural facilities

A. Library

Central library- Air conditioned reference hall, adequate volumes of books, periodicals to facilitate research.

B. Internet facilities for staff and students

Campus Wi-Fi

C. Total number of class rooms

2 Regular Class rooms + 2 tutorials

D. Class rooms with ICT facility

Nil

E. Students' laboratories

Nil

F. Research laboratories

Nil

28. Number of students of the department getting financial assistance from College.

Nil

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
Nil
30. Does the department obtain feedback from
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
- Regular discussion on teaching –learning evaluation is carried out and appropriate actions are taken.
- b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
- Yes, feedback is collected from the students on staff, curriculum as well as teaching-learning-evaluation and suitable measures are taken.
- c) Alumni and employers on the programmes and what is the response of the department to the same?
Nil
31. List the distinguished alumni of the department (maximum 10)
- | Sl.No | Name of the Student | Company Name | Designation |
|-------|---------------------|-------------------|------------------------|
| 1 | Varun Brahmananda | Nielson | Research Analyst |
| 2 | Nagashree | Senior Recruiter | Wipro |
| 3 | Richard Roy | Senior Manager | Columbia Asia Hospital |
| 4 | Sharath Babu | Risk manager | Deutsche Bank |
| 5 | Madhu | Karnataka Bank | Manager |
| 6 | Sumanth | Karnataka Bank | Field Officer |
| 7 | Santhosh Kumar | HUL | Area Brand Manager |
| 8 | Manikandan Nambiar | Colors- Viacom 18 | Regional Manager |
| 9 | Shashikiran.E.S | Audit Analyst | PWC |
| 10 | Geetha .B | E&Y | Tax Analyst |
32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

Guest Lectures Organized during 2015

1. A lecture was delivered by Mr. Satesh Kumar. K, Senior QA Engineer, Fidelity Investments, Bangalore, for II semester students on the topic “Challenges and Opportunities for MBA students” on 21st February, 2015.
2. A SEBI sponsored Programme on “Promising Investment Alternatives in Indian Capital Market” by Mr. J. Prakash Rao, an Empanelled Resource Person, SEBI was organized by the Department of MBA for the II Semester MBA students on 27th February, 2015.
3. “Developing the Communication Skill and Interview Techniques for MBA Students” a talk by Dinesh Thomas and Vinesh Sukumaran on 18th March , 2015.
4. A Guest Lecture on was organized on “HR Practices and Welfare Facilities” by Mr. Ashok Kumar. R.S Faculty , RNSIT, Bangalore on 22nd April, 2015.
5. A Guest lecture by Praveen Govindappa on “SAP and Career Opportunities for HR” on 28th April, 2015.
6. A talk by Prabhu Swamy On “Opportunities in HR for MBA Students” on 28th April, 2015.

-
7. Ms. Sunita Varma, Zonal Manager, ICICI, Securities Ltd, Bangalore, delivered a lecture on “Stockmind” on 16th October, 2015.
 8. “Application of Information Technology in Banking Sector” a guest Lecture by Abhishek Srivastava , Manager , IT, Corporation Bank, Bangalore on 4th November, 2015.
 9. A talk on “Leaders in Entrepreneurs- Motivational Talk on Entrepreneurship” by Kiran, Manager from Inventure Tech Company on 18th, November, 2015.

Workshops organized during 2015

1. A workshop by Mrs. Jayashree Mukharjee Bangalore on “Body language and Interview skills” on 10th April, 2015.
 2. One day workshop on “Savings and Investment” by Mr. Prakash Rao . J from Securities, Exchange Board of India, Bangalore on 17th April, 2015.
33. List the teaching methods adopted by the faculty for different programmes.
- Chalk and talk
 - LCD with speakers.
 - Students are assigned to present on Current topics.
 - Assignments are been given on the current specialized areas
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
- Three internal tests are conducted.
 - Periodic evaluation and mentoring.
 - Internship work.
 - 4. Industrial visits.
35. Highlight the participation of students and faculty in extension activities.

Students participate in

- Intra and inter college management fest.
- Sports activities.
- Seminars, workshops etc.
- Industrial visits

Faculties participate in

- Seminars, workshops, Guest lecture, conferences, FDP, etc.
 - Industrial Visit
 - Delivering lecture.
36. Give details of “beyond syllabus scholarly activities” of the department.
- Students are encouraged to present papers in Conferences and seminars.
 - Teachers are encouraged to publish papers in the leading Journals, Institution also supports for advanced research activities.
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
- Nil
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
-

Strengths

- Adequate number of faculty having expertise in various specialized fields
- Industry institute interaction
- Innovative teaching methods
- Adequate infrastructural facilities.
- Value added programmes.

Weaknesses

- Non utilization of available resources.
- Lack of awareness among general public regarding course availability at the college.
- Lack of competency among students.
- Redundancy in advanced technology.
- Non-existence of sponsored or funded projects.

Opportunities

- Opportunity for global competency.
- Provision for increase in admission through various activities.
- MOU with national and international universities.
- Expanding markets for MBA programme like Executive MBA course, Evening MBA programme etc.
- Opportunity for research Excellency through sponsored projects.

Challenges

- Increasing Competition among domestic and Foreign Universities.
 - New courses developed by other Universities
 - Volatility in the job market.
 - Huge competition for sponsored projects.
 - Resistance to change viz., technology, skill
39. Future plans of the department.
- Focus towards sponsored research projects.
 - Emphasize on quality education.
 - Industry Institute interaction
 - To promote consultancy services.



DEPARTMENT OF MATHEMATICS

1. Name of the Department & its year of establishment
Department: Mathematics
Year of Establishment: 1980
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Common
 - PG
Common
3. Interdisciplinary courses and departments involved
Not Applicable
4. Annual/ semester/choice based credit system
Semester based.
5. Participation of the department in the courses offered by other departments
NA
6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	01	03
Associate Professors	02	--
Assistant Professors	04	10

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No of Years of Experience	No. of PhD Students guided for the last 4 years
Dr. B. Sooryanarayana	M.Sc., M. Tech., PhD	Professor	Graph Theory, Lattice Theory, Operations Research	27	07
Dr. Nanjundappa	M.Sc. PhD	Professor	MHD	27	04
Dr. Murali R	M.Sc., PhD	Professor	Graph Theory	25	07
Dr. Jayalakshmi M	M.Sc., M. Tech, PhD	Assistant Professor	Graph Theory	19	NIL
Dr. Shivaprasanna	M.Sc., M. Tech, PhD	Assistant Professor	Geometry	07	NIL
Ms. Padma MM	M.Sc., M. Tech	Assistant Professor	Graph Theory	08	Nil
Ms. Prabhavathi G Angadi	M.Sc., M. Tech	Assistant Professor	Geometry	10	Nil
Ms. Nagarathna	M.Sc., M. Tech	Assistant Professor	MHD	06	Nil
Ms. Sunitha Kulkarni	M.Sc., M. Tech	Assistant Professor	Graph Theory	12	Nil
Ms. Ashwini R	M.Sc., M. Tech	Assistant Professor	MHD	05	Nil
Ms. Pavithra A	M.Sc., M. Tech	Assistant Professor	MHD	03	Nil
Ms. Savitha Y.L.	M.Sc., M. Tech	Assistant Professor	MHD	07	Nil
Ms. Bhavya	M.Sc.	Assistant Professor	MHD	02	Nil

8. Percentage of classes taken by temporary faculty – programme-wise information
Nil
9. Programme-wise Student Teacher Ratio
10. Number of academic support staff (technical) and administrative staff: sanctioned and filled
01
11. Number of faculty with ongoing projects from
 - a) national
Name: Dr. C. E. Nanjudappa,
Funding Agency: VTU
Title: Thermomagnetic Convection in Magnetic Nanofluids under Microgravity Effects in Space Processing
Total grants received: 4 Lakh.
 - b) international funding agencies
Nil
 - c) Total grants received.
NilMention names of funding agencies and grants received project-wise.
Nil
12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
Nil
13. Research facility / centre with
 - state recognition
 - national recognition
 - international recognition--
14. Publications:
 - number of papers published in peer reviewed journals (national / international)
137
 - Monographs
Nil
 - Chapter(s) in Books
Nil
 - Editing Books
Nil
 - Books with ISBN numbers with details of publishers

Sl. No.	Author	Title of the book	Subject/Reference/Edited Books	Publisher and ISSN/ISBN No.
1.	Dr. B. Sooryanarayana	A Text book of Probability and Statistics	Statistics	S.Chand and Company, New delhi, ISBN 81-219-2234-8
2.	Dr. B. Sooryanarayana	A textbook of Engineering Mathematics - I	Mathematics	S.Chand and Company, New delhi, ISBN 81-219-2252-5

3.	Dr. B. Sooryanarayana	A textbook of Engineering Mathematics – II	Mathematics	S.Chand and Company, New delhi, ISBN 81-219-2276-3
4.	Dr. B. Sooryanarayana	A textbook of BCA Mathematics – I	Mathematics	S.Chand and Company, ISBN: 81-219-2014-3
5.	Dr. B. Sooryanarayana	A textbook of BCA Mathematics - II	Mathematics	S.Chand and Company, ISBN 81-219-2080-9
6.	Dr. B. Sooryanarayana	A Textbook of Computer oriented Numerical Methods and Linear Programming	Mathematics	S.Chand and Company, ISBN 81-219-2137-6
7.	Dr. B. Sooryanarayana	A textbook of graph theory and its applications	Mathematics	S.Chand and Company, ISBN: 81-219-2089-2
8.	Dr. Jayalakshmi M	A textbook of B.C.A MATHEMATICS (B.U 2007-scheme)	Mathematics	Subhas Publications Bangalore
9.	Dr. Jayalakshmi M	A textbook of Numerical Methods and Statistical Methods(B.U 2007-scheme)	Mathematics	Subhas Publications Bangalore
10.	Dr. Jayalakshmi M	A textbook of Discrete Mathematical Structures(B.U 2007-scheme)	Mathematics	Subhas Publications Bangalore
11	Dr. Jayalakshmi M	A textbook of MATHEMATICS (B.U 2008-scheme)	Mathematics	Subhas Publications Bangalore

- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

Nil

- Citation Index – range / average

Nil

- SNIP

Nil

- SJR

Nil

- Impact factor – range / average

Nil

- h-index

Nil

15. Details of patents and income generated

Nil

16. Areas of consultancy and income generated

Nil

17. Faculty recharging strategies

Faculty members are motivated to attend faculty development programs, conferences, workshops and other academic programs to enhance their technical skills.

18. Student projects
- percentage of students who have done in-house projects including inter-departmental
 - percentage of students doing projects in collaboration with industries / institutes

NA

19. Awards / recognitions received at the national and international level by

- Faculty

Sl. No	Awarding professional body	Purpose of the award	Year
1	Govt. of Karnataka, VGST of Science and Technology, Dept. of Information Technology, Biotechnology, Science and Technology. Bangalore	AWARD FOR BEST RESEARCH PUBLICATION (2011-2012) with Cash Prize Rs 25,000/-	2012

- Doctoral / post-doctoral fellows

Nil

- Students

One Best Paper award at National Conference

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Title: “National conference on Graph Coloring” held on July 27-28, 2013.

Name of the eminent scientists/scholars who participated:

- Dr.Kartik , Professor, ISI, Madrass
- Dr. S.A. Choudam, Professor, IIT, Madrass
- R.Balakrishnan , Professor, Anna University
- E.Sampathkumar , Professor, Mysore university
- Dr.Vasudev , Professor, SIT, Mangalore
- Dr.Francis Raj, Professor, Pandicheri University
- Dr.T.Kavaskar, Professor, Pandicheri University
- Dr. Hampi holi, Professor, GIT, Belgaum
- Dr.Sunil Chandra, Professor, IISc., Bangalore
- Dr. NS Sastry, Professor, ISI, Bangalore

21. Student profile course-wise:

Common

22. Diversity of Students

Common

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Nil

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	

PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed <ul style="list-style-type: none">• Campus Selection• Other than Campus recruitment	
Entrepreneurs	

25. Diversity of Staff

Percentage of faculty who are graduates	
of the same parent university	
from other universities within the State	
From other universities outside the state	

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Nil

27. Present details about infrastructural facilities

A. Library

NA

B. Internet facilities for staff and students

Yes

C. Total number of class rooms

Common

D. Class rooms with ICT facility

Common

E. Students' laboratories

NA

F. Research laboratories

NA

28. Number of students of the department getting financial assistance from College.

Nil

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

No

30. Does the department obtain feedback from

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

Yes

- To improve the academic quality of the department.

b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

YES

- Counseled the staff members on teaching learning evaluation

-
- c) Alumni and employers on the programmes and what is the response of the department to the same?
- Periodic feedbacks are collected from alumni and employers, the same feedback is used for the development of the department.
31. List the distinguished alumni of the department (maximum 10)
Common
32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
NA
33. List the teaching methods adopted by the faculty for different programmes.
NA
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
NA
35. Highlight the participation of students and faculty in extension activities.
NA
36. Give details of “beyond syllabus scholarly activities” of the department.
NA
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
Nil
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
NA
39. Future plans of the department.
NA
-

**DEPARTMENT OF PHYSICS**

- Name of the Department & its year of establishment
Department: Physics
Year of Establishment: 1980
- Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Common
- Interdisciplinary courses and departments involved
Not Applicable
- Annual/ semester/choice based credit system
Semester based.
- Participation of the department in the courses offered by other departments
NA
- Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	01	00
Associate Professors	01	01
Assistant Professors	04	02

- Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No of Years of Experience	No. of PhD Students guided for the last 4 years
Dr. T. Sreenivasulu Reddy	Ph.D	Professor	Ultrasonics	28	1
Dr.K.N.Anuradha	Ph.D	Professor	EMR studies on Nanomanganites	28	3
Kencharappa	M.Sc	Associate Professor	Solid State Physics	27	Nil
Dr.Rajshekhar Ghogge	Ph.D	Associate Professor	Materials Science	15	Nil
M.V.Hemantha Reddy	M.Sc (Ph.D)	Assistant Professor	AstroPhysics	5	Nil
Madana Kumara H.	M.Sc	Assistant Professor	Solid State Physics	3	Nil
Meti Bharathi	M.Sc, M.Phil	Assistant Professor	Nuclear Physics	12	Nil

- Percentage of classes taken by temporary faculty – programme-wise information
Nil
- Programme-wise Student Teacher Ratio
- Number of academic support staff (technical) and administrative staff: sanctioned and filled
04 Sanctioned Filled 04
- Number of faculty with ongoing projects from
 - a) national

-
- Nil
- b) international funding agencies
- Nil
- c) Total grants received.
- Nil
- Mention names of funding agencies and grants received project-wise.
- Nil
12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
- Nil
13. Research facility / centre with
- state recognition
 - national recognition
 - international recognition
-
14. Publications:
- number of papers published in peer reviewed journals (national / international)
04
 - Monographs
Nil
 - Chapter(s) in Books
Nil
 - Editing Books
Nil
 - Books with ISBN numbers with details of publishers
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
Nil
 - Citation Index – range / average
Nil
 - SNIP
Nil
 - SJR
Nil
 - Impact factor – range / average
Nil
 - h-index
Nil
15. Details of patents and income generated
- Nil
16. Areas of consultancy and income generated
- Nil
17. Faculty recharging strategies
- Faculty members are motivated to attend faculty development programs, conferences, workshops and other academic programs to
-

enhance their technical skills.

18. Student projects

- percentage of students who have done in-house projects including inter-departmental
- percentage of students doing projects in collaboration with industries / institutes

NA

19. Awards / recognitions received at the national and international level by

- Faculty
- Doctoral / post-doctoral fellows

Nil

- Students

One Best Paper award at National Conference

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Nil

21. Student profile course-wise:

Common

22. Diversity of Students

Common

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Nil

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed <ul style="list-style-type: none">• Campus Selection• Other than Campus recruitment	
Entrepreneurs	

25. Diversity of Staff

Percentage of faculty who are graduates	
of the same parent university	
from other universities within the State	
From other universities outside the state	

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

01 – Dr.Rajshekhar Ghogge

-
27. Present details about infrastructural facilities
- A. Library
Yes
 - B. Internet facilities for staff and students
Yes
 - C. Total number of class rooms
Common
 - D. Class rooms with ICT facility
Common
 - E. Students' laboratories
02
 - F. Research laboratories
01 -> NanoSynthesis Lab
28. Number of students of the department getting financial assistance from College.
Nil
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
No
30. Does the department obtain feedback from
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
Yes
 - To improve the academic quality of the department.
 - b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
YES
 - Counseled the staff members on teaching learning evaluation
 - c) Alumni and employers on the programmes and what is the response of the department to the same?
 - Periodic feedbacks are collected from alumni and employers, the same feedback is used for the development of the department.
31. List the distinguished alumni of the department (maximum 10)
Common
32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
NA
33. List the teaching methods adopted by the faculty for different programmes.
NA
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
NA
35. Highlight the participation of students and faculty in extension activities.
NA
36. Give details of "beyond syllabus scholarly activities" of the department.
NA
-

-
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.

Nil

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths:

- The Department is manned by highly qualified and experience faculty
- The faculty is supported by highly experienced technical staff

Weaknesses:

- Lack of R&D Advanced activities

Opportunities:

- The existing R&D facilities in the Department in the field of Nanoscience can be enhanced by the collective effort of all the existing faculty members

Challenges:

- In the Engineering Curriculum, the role of Basic Science Departments (Physics and Chemistry) is marginal and in the Autonomous Scheme the role of these Departments may get eroded further.
- Non-availability of highly qualified and experienced faculty to fill the existing vacancies.

39. Future plans of the department.

- Enhancing the R & D facilities for Nanosynthesis lab



**DEPARTMENT OF CHEMISTRY**

- Name of the Department & its year of establishment
Department: Chemistry
Year of Establishment: 1980
- Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Chemistry (Common)
 - PG
--
 - Ph.D.
--
- Interdisciplinary courses and departments involved
Nil
- Annual/ semester/choice based credit system
Semester based.
- Participation of the department in the courses offered by other departments
NA
- Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors	01	01
Associate Professors	02	02
Assistant Professors	04	04

- Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No.of Experience	No. of Ph. D. students guided for the last 4 years
Dr. B. Veena Devi	M. Sc., Ph. D.	Professor	Organic Chemistry	32	Nil
G. V. Jayashree	M. Sc.	Associate Professor	Physical Chemistry	31	----
Dr. A. A. Jahagirdar	M. Sc., Ph. D.	Associate Professor	Organic Chemistry	26	Nil
Mamatha. K.M	M. Sc.	Assistant Professor	General Chemistry	6	----
Shruthi. B	M. Sc. (Ph. D.)	Assistant Professor	General Chemistry	7	----
Bhagyalakshmi. H	M. Sc. (Ph. D.)	Assistant Professor	Organic Chemistry	5	----
Dr. S. Soundeswaran	M. Sc., Ph. D.	Assistant Professor	General Chemistry	5	Nil

- Percentage of classes taken by temporary faculty – programme-wise information
50%
- Programme-wise Student Teacher Ratio
1:60 (Theory) 1:15 (Laboratory)
- Number of academic support staff (technical) and administrative staff: sanctioned and filled
support staff (technical)– 04
- Number of faculty with ongoing projects from

-
- a) national
Nil
- b) international funding agencies
Nil
- c) Total grants received.
Nil
Mention names of funding agencies and grants received project-wise.
Nil
12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
Nil
13. Research facility / centre with
- state recognition
 - national recognition
 - international recognition
- NA
14. Publications:
- number of papers published in peer reviewed journals (national / international)
15
 - Monographs
Nil
 - Chapter(s) in Books
Nil
 - Editing Books
Nil
 - Books with ISBN numbers with details of publishers
Dr. B. Veena devi, A book has been published in Lambert Academic publishing titled **“Chromium Removal Using Activated Carbon”**.
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
Nil
 - Citation Index – range / average
Nil
 - SNIP
Nil
 - SJR
Nil
 - Impact factor – range / average
Nil
 - h-index
Nil
15. Details of patents and income generated
Nil
16. Areas of consultancy and income generated
Nil
-

17. Faculty recharging strategies
Faculty members are motivated to attend faculty development programs, conferences, workshops and other academic programs to enhance their technical skills.
18. Student projects
- percentage of students who have done in-house projects including inter-departmental
 - percentage of students doing projects in collaboration with industries / institutes
- Nil
19. Awards / recognitions received at the national and international level by
- Faculty
 - Bhagyalakshmi.H has been awarded Encouragement award in International conference on luminescence conducted at PESIT college, Bangalore
 - Dr. A.A.Jahagirdar has been awarded best paper presentation in an international conference
 - Doctoral / post-doctoral fellows
 - Dr. S.Soundeswaran Postdoctoral Fellow (Japan)
 - B. Shruthi has been Awarded Doctorate degree in chemistry
 - Students
- Nil
20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.
- Nil
21. Student profile course-wise:
Common
22. Diversity of Students
Common
23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
NA
24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed <ul style="list-style-type: none">Campus SelectionOther than Campus recruitment	
Entrepreneurs	

25. Diversity of Staff

Percentage of faculty who are graduates	
of the same parent university	
from other universities within the State	
From other universities outside the state	

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.
One
27. Present details about infrastructural facilities
- A. Library
NA
- B. Internet facilities for staff and students
Yes
- C. Total number of class rooms
Common
- D. Class rooms with ICT facility
Common
- E. Students' laboratories
02
- F. Research laboratories
01
28. Number of students of the department getting financial assistance from College.
Nil
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
No
30. Does the department obtain feedback from
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
Yes
- To improve the academic quality of the department.
- b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
YES
- Counseled the staff members on teaching learning evaluation
- c) Alumni and employers on the programmes and what is the response of the department to the same?
- Periodic feedbacks are collected from alumni and employers, the same feedback is used for the development of the department.
31. List the distinguished alumni of the department (maximum 10)
Common
32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
NA

-
-
33. List the teaching methods adopted by the faculty for different programmes.
NA
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
NA
35. Highlight the participation of students and faculty in extension activities.
NA
36. Give details of “beyond syllabus scholarly activities” of the department.
NA
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
Nil
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
- Strength:
We have excellent teachers with average experience of 15 years
 - Weaknesses
Not adequate number of helpers
 - Opportunities
Staff and Faculty are encouraged to participate in international conferences and FDP across the globe and monitorial support is provided
Department is encouraged to have MOU's with other universities
 - Challenges
Constraint of space
39. Future plans of the department.
- To attain 100% Results
 - To provide a good basic knowledge of chemistry for the students in their respective engineering course
-
-



DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

1. Name of the Department & its year of establishment
Department: Humanities and Social Sciences
Year of Establishment: 1980
2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 - UG
Common
3. Interdisciplinary courses and departments involved
Not Applicable
4. Annual/ semester/choice based credit system
Semester based.
5. Participation of the department in the courses offered by other departments
NA
6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Post	Sanctioned	Filled
Professors		
Associate Professors		
Assistant Professors	01	1

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No of Years of Experience	No. of PhD Students guided for the last 4 years
Dr.T.R.Shashipriya	M.Phil, Ph.D	Asst. Prof & Head	Language & Literature	24 years	NA

8. Percentage of classes taken by temporary faculty – programme-wise information
Nil
9. Programme-wise Student Teacher Ratio
NA
10. Number of academic support staff (technical) and administrative staff: sanctioned and filled
NA
11. Number of faculty with ongoing projects from
 - a) national
Nil
 - b) international funding agencies
Nil
 - c) Total grants received.
NilMention names of funding agencies and grants received project-wise.
Nil
12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

-
- Nil
13. Research facility / centre with
- state recognition
 - national recognition
 - international recognition
- NA
14. Publications:
- number of papers published in peer reviewed journals (national / international)
NA
 - Monographs
Nil
 - Chapter(s) in Books
Nil
 - Editing Books
Nil
 - Books with ISBN numbers with details of publishers
Nil
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
Nil
 - Citation Index – range / average
Nil
 - SNIP
Nil
 - SJR
Nil
 - Impact factor – range / average
Nil
 - h-index
Nil
15. Details of patents and income generated
Nil
16. Areas of consultancy and income generated
Nil
17. Faculty recharging strategies
Faculty members are motivated to attend faculty development programs, conferences, workshops and other academic programs to enhance their technical skills.
18. Student projects
- percentage of students who have done in-house projects including inter-departmental
 - percentage of students doing projects in collaboration with industries / institutes
- NA
19. Awards / recognitions received at the national and international level by
-
-

- Faculty
 - Doctoral / post-doctoral fellows
 - Students
- Nil

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Nil

21. Student profile course-wise:

Common

22. Diversity of Students

Common

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Nil

24. Student Progression

Student Progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed <ul style="list-style-type: none">• Campus Selection• Other than Campus recruitment	
Entrepreneurs	

25. Diversity of Staff

Percentage of faculty who are graduates	
of the same parent university	
from other universities within the State	
From other universities outside the state	

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Nil

27. Present details about infrastructural facilities

A. Library

NA

B. Internet facilities for staff and students

Yes

C. Total number of class rooms

Common

D. Class rooms with ICT facility

Common

E. Students' laboratories

-
- NA
- F. Research laboratories
- NA
28. Number of students of the department getting financial assistance from College.
Nil
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
No
30. Does the department obtain feedback from
a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
Yes
- To improve the academic quality of the department.
 - b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
YES
 - Counseled the staff members on teaching learning evaluation
 - c) Alumni and employers on the programmes and what is the response of the department to the same?
• Periodic feedbacks are collected from alumni and employers, the same feedback is used for the development of the department.
31. List the distinguished alumni of the department (maximum 10)
Common
32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
NA
33. List the teaching methods adopted by the faculty for different programmes.
Teaching is done through work book along with the regular method of theory and lab. This brings in confidence and easy learning in the students.
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
The lessons are taught according to the lesson plan and the test papers when evaluated will show the percentage of understanding in the students of the lessons taught.
35. Highlight the participation of students and faculty in extension activities.
NA
36. Give details of “beyond syllabus scholarly activities” of the department.
NA
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
Nil
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
NA
-



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39. Future plans of the department.
NA





Declaration by the Head of the Institution

I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Signature of the Head of the institution with seal:

Place:

Date:



NAAC Steering Committee

Dr.M.Meenakshi,
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Dr.T.Sreenivasulu Reddy,
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