R&D RULES AND REGULATIONS

R&D Cell is headed by the Dean of Research and Development at Dr.Ambedkar Institute of Technology (Dr.AIT), Bangalore. The various facilities, dynamic initiatives to promote research (both sponsored & academic research) and consultancy are unparallel at Dr.AIT. The sparkling R&D culture fosters an innovative spirit to kindle the young minds at the campus under the able guidance and mentorship of motivated faculty members at all the departments. The support provided by our Chairman, Principal, Mentor, Deans, Heads of Departments, Professors, and Senior Faculty Members in the process of promoting research, filing patents is greatly acknowledged.

Dr.Ambedkar Institute of Technology(Dr. AIT), Bangalore is committed to creating a high-quality research ambiance in every department of the Institute for the faculty and students. Dr. AIT aims to provide a research environment that will promote a culture of high-quality research, which is ethical, competent, accountable, and safe. This policy document on Research & Development activities at Dr.AIT addresses specific aspects of conducting Research & Development activities within the college in compliance with the Visvesvaraya Technological University (VTU) regulations on Research.

PURPOSE

The purpose of the Research Policy is to provide a research environment that will promote a culture of high-quality research, which is ethical, competent, safe, and accountable. The policy shall serve as an overall framework within which research activities may be carried out.

OBJECTIVES

This research policy provides a broad framework to promote research, consultancy and innovation while upholding the code of ethics

The main objectives of the research policy are as follows:

- To promote and accelerate the quality research work within the college and in collaboration with industry, other institutes and R & D organizations.

- To create an environment within the College to build a research culture and to ensure an efficient and effective support system to facilitate faculty and researchers in their research activities.
- Ensure publications in SCI, Scopus indexed/Web of Science journals with high impact factor.
- Individual Citation Score needs to be improved by publishing in reputed journals.
- To foster an environment of undertaking socially relevant research with a prospective commercialization value.
- Catering to the specific needs of Industry for Product/Process development.
- 0Establish Research Centres of Excellence within the college
- To motivate the faculty to write the research projects thereby enhancing the research funding from Govt agencies and industries.
- Providing linkages with different sponsoring agencies for the development of R & D programmes in the emerging areas of engineering and Technology.
- To carry out rural oriented research under AICTE, Unnat Bharat Abhiyan Program
- Encourage partnerships nationally and globally through interdisciplinary collaborations.
- To Ensure quality, integrity, and ethics in research.
- To integrate teaching and research

CUSTODIAN OF POLICY

The implementation and updating of the Research Policy shall be carried out by Research and Development Monitoring Committee (RDMC) constituted in the college with Chairman, the Managing Trustee/Secretary as the Vice-Chairman, followed by the Principal as Convener, Dean(R & D) as member secretary and representatives from each department as members. The Research Policy will be monitored by a high-level committee, the Research Advisory Committee (RAC) to function under the Principal, Vice Principal, Dean(R & D), HOD's, faculty representatives, and external experts from industry and academia.

POLICY AND GUIDELINES

Dr. Ambedkar Institute of Technology, Bengaluru – 560 056
Research and Development Cell
Research Compendium

1. **Undertaking Research**

- Faculty members of Dr.AIT are expected to undertake research, leading to quality publications, presentations in reputed National/International conferences, generation of Intellectual property with commercial potential, and social relevance.
- Dr.AIT aims to provide a research environment that will promote a culture of high-quality research, which is ethical, competent, safe, and accountable.
- HOD of the concerned department, along with faculty researchers, is responsible for developing and maintaining an ethical and safe research environment within each department. Researchers must comply with relevant legislation, guidelines, policies, and directives issued by the Government of India and Karnataka and its relevant agencies concerning ethical and safe practices in research
- All Heads of the Department must regularly and diligently update the R&D information on the Institution website for department and submit the reports to R&D team.

2. **Obligations of faculty**

Research output will be considered as one of the criteria for faculty recruitment and promotion along with other academic responsibilities.

3. **Research Management**

Overall management of research activities may be coordinated by RDMC under the direct supervision of the Chairman, Vice-Chairman, Principal and Dean(R & D). RDMC shall be responsible for the overall functioning of the research activities within the Institute.

4. **Research Promotion Measures**

Research enjoys a prominent place in any higher education institution and Dr.AIT takes all possible measures to develop a research culture among students and faculty. The activities which may be undertaken under Research Promotion Measures are listed as under.

- Constitution of the RDMC at the college level to advise Principal/Management on research-related matters and monitor research activities in the college.

- Setting up of specific research and development center in each department to promote, streamline and execute research activities in the department. The HOD of the research wing in the department *de facto* shall be the department representative in the RDMC.

- The research wing in each department shall undertake industry/government-funded projects without, affecting in any way the regular academic activities of each faculty member in the college.

- Faculty and student research work in the college shall be published as Dr.AIT Technical Transactions which shall be numbered and catalogued by the Central Library.

  Upload all the student research reports on the college website with special emphasis on the outcome and social impact of research. Each department shall collect one hard copy of the Project report and the same shall be submitted to the college library.

5. **Research Collaborations, Grants, and Funding**

   - The college considers collaborations as an ideal tool for furthering research for the mutual benefit of the parties involved. Collaborations facilitating the sharing of resources, human and infrastructure are promoted by the college, provided it benefits the research endeavours of the college.

   - Collaborations with universities abroad and premier institutions in India may be given special attention. However, due care must be taken so that such collaborations never result in any defame to the college and are in tune with relevant university statutes and regulations.

   - The collaborating departments shall get prior sanction from the Chairman/Principal and RDMC for any type of collaboration with third parties.

   - Copy of external grant applications has to be provided to RDMC as soon as the applications are submitted.

6. **Research Facilities**

Every year, an internal review of existing facilities must be made by HOD at the behest of RDMC. The recommendations may be submitted to the management for appropriate actions preferably at the end of each academic year through Dean(R&D) and the Principal.

7. Conduct of Research by Students and Faculty

- Research scholars that may include individual or teams of students and/or faculties, conducting research must comply with the provisions contained in the Research Policy of the College and the University.

- The supervisor and the research scholar should respect the human dignity and rights of all stakeholders, promoting shared ethical values, and fulfil all academic/research activities according to such values

- The research Supervisor of a research student shall be responsible for providing guidance to students on all matters of research practice and ensuring that students are informed of the relevant University policies and procedures that affect the conduct of student research.

- Where a student is researching as part of a research team, the use and storage of research data, publication of research findings, confidentiality, or commercialization, or other agreements will apply to all members of the research group.

- A supervisor shall be entitled to have access to research data and other relevant information about the research of a student to undertake normal supervisory responsibilities and ensure compliance with this Policy and other University policies.

- To commit no form of plagiarism during art-of-work and preparation and dissemination of reports and research articles.

- Students are required to obtain prior approval from the college authorities to enter into any contractual agreement for commercial research or any technology transfer. Maintain confidentiality in respect of research data, methodology, and findings.

- To practice and promote fairness in research.

- To uphold the values of freedom, democracy, equality, and respect for diversity.

- To maintain the secrecy of the research findings/technical information and to avoid communication of any official document or information to others without permission

8.   **Research Publications and Authorship**

- The researchers have the freedom to publish their results in any of the journals which appear in the UGC list. Publications in online journals, which attract publication charges are not allowed.

- The researcher who holds the overall responsibility for the research should authorize the publication of results. Authorization should cover the integrity of results (no plagiarism), protection of intellectual property rights, and appropriate credit for authorship for persons who are directly involved in experimentation, interpretation of data, and such direct involvement in work, for publication.

- Anyone listed as an author in a paper must accept personal responsibility for ensuring familiarity with the contents of the paper, and that they can identify their contributions to it. The practice of granting honorary authorship is against the guidance referenced above. Other contributions to the work like permission to publish, financial support should be suitably acknowledged.

- Any publication to journals other than RDMC publication or in Conference proceedings should be intimated to RDMC.

9. Handling of research misconduct and fraud

In the event of misconduct, a disciplinary committee, on the instruction of the Principal, shall be formed to carry out an inquiry when academic dishonesty is reported against an individual/group. Suitable disciplinary action may be initiated, if found guilty, against such individual/group.

10. **Conflict of Interest**

Researchers must disclose to the RDMC/HOD any affiliation with or financial involvement in any organization or entity with a direct interest in the subject matter or materials of the researcher.

11. **Policy Review**

The Principal and Dean (R & D) shall initiate a review of this Policy as and when needed in association with RDMC.

Policy for Research and Consultancy Projects

The Institute follows a unique Incentive scheme to reward the faculty for the Research and Consultancy Project works carried out in the respective year. This scheme is introduced by the Management to impart research culture and to motivate faculty towards identifying innovations. The incentive scheme is as per the table below

Terms and Conditions:

- The consultancy work will be carried out under the Head (Principal) of Dr. AIT.

- The revenue generated will be deposited in the Institution's account. This is done to avoid misuse of funds. The Institute will provide the remuneration to the respective faculty as per the below chart, based on the revenue generated after the completion of every consultancy work.

- The selection of project staff shall normally be made as per the guidelines provided by the sponsoring agency and with the approval of the Principal through the Dean (R&D)

- Within the framework of a sponsored project, PIs shall be permitted to have a consultancy fee/honorarium, if the sponsor so approves.

- Faculty should motivate the students towards participation in industrial consultancy projects.

- Consultancy assignments must have a letter from the organization, clearly mentioning the work to be carried out, period and value of consultancy and the benefit of the consultancy to the Institution - both intellectually as well as financially. Proof of expenditure must be maintained by the consultancy incharge.

- The Head of the Department along with some senior faculty members shall then carry out a rigorous scrutiny at the Department level and ensure that their recommendations reach the R&D cell.

- Depending on the availability of funds under the Travel head and with the approval of the Principal, expenses (TA, DA, Registration Fee, etc.) for presenting papers in

National Conferences in fields relevant to the project shall be given to PIs/CoIs from the project fund.

- The Government of Karnataka TA & DA rules will apply to the PIs and project employees/Students for all sponsored research/consultancy projects related to traveling and boarding expenses.

- All departments shall strive for recognition by National/International agencies through schemes/funding from agencies such as AICTE, DST,UGC, ICMR and DRDO.

- The project staff may be allowed to register for Full-time MS (By Research)/Ph.D programme, if he/she fulfils all the requirements prescribed by the Institute.

S.No.	Category	Name	Percentage of Share
1	Funded Research Projects from Govt. organizations, R & D Organizations, Industry, universities, etc.	Principal Investigator	2% of the Received Fund only upon submission of Utilization Certificate (UC)
		All Co-investigators	A total of 1% on Received Fund will be shared (only upon submission of Utilization Certificate (UC))
2	Consultancy and Testing services	Individual / Team	The ratio of 60:40 is shared between Institution and Individual / Team respectively
3	Patent (US / Overseas / Indian)	Author(s)	A ratio of 50:50 will be shared only on the commercialization of the Patent.
4	Supervising the doctoral degrees	Supervisor	

Policies for Journal Publications:

To motivate the faculty members towards research and publishing their research findings in reputed journals with impact factors, incentives are given to faculty members.

- Affiliation must be Dr. AIT

- Applicable only for papers published in Science Citation Index (SCI) Journals.

- Faculties are requested to publish joint research papers with experts from Tier-1 Institutions / Industries.
- Student name should be the first author followed by guide name as the second author in the publication/patent in case of B.E, M.Tech Projects, and Ph.D. work.

S. No	Norms	Reward
1.	For the First and Second author	Rs. 15000/- each
2.	For the Third author and remaining authors	Rs. 5000/- equally shared
3.	Text/ Reference Book published by international publishers with an established peer review System	Rs. 25000/-
4.	Partial contribution to edited knowledge-based volumes published by international publishers.	Rs. 5000/-
Note: Exceptional contribution in Research Publication will be rewarded as Platinum Award and Gold Award categories, at the discretion of the Management.		

Faculty Development & Research Interactions:

To get expertise in a specific domain and promote the research interest, Dr.AIT is providing full financial help (Registration/course Fee and TA/DA) to faculty members/Students attending International Conference/Seminar in India and abroad. A faculty can avail of these benefits once in an academic year. TA/DA and Honorarium are allowed for the experts coming to Dr. AIT for Research Interactions and Collaborative Research works

PROCEDURE FOR ALLOTMENT OF SEED MONEY PROJECTS

1. Invites applications from all the Faculty Members having with or without Ph.D. degrees.
2. The proposal is scrutinized in the office of the Dean (R & D).
3. Constitution of Committee for the award of Seed Money Project by the duly approved by the Management
4. Faculty members give their presentations on scheduled dates and times.

5. Based on the project proposal and presentation, the seed money budget is decided by the committee after proper justification given by the faculty member at the time of presentation.

6. Papers regarding the allocation of funds for seed money were sent to the Management for its approval

7. After approval from the Management, the Principal Order for the allotment of seed money projects was issued by the office of Dean (R&D) to the concerned faculty (Maximum amount for seed money project is Rs. 5.00 Lacs and project duration is three(3) years).

Procedure for Ongoing Projects

Step 1. The Principal Investigator(PI) will be required to submit the Annual Progress Report(APR) in standard **format** at the end of every year, indicating the progress of the work accomplished during the concerned year.

Step 2. Assessment of the project by the head of the concerned Research center

Step 3. Review report received from the head of the research center

Step 4. PI will be required to present the work before the RDMC

Step 5. Recommendation by the members of the RDMC

Step 6. Recommendation by the Dean(R &D) and the Principal

Step 7. Approval of Hon'ble Secretary/Chairman, PVPWT

Step 8. A letter from the office of the Dean(R&D) will be sent to the concerned faculty for further release of the grant.

Step 9. Principal Investigators (PIs) shall arrange to maintain Procurement-cum-purchase Registers and Stock/Asset Register,

Step 10. All expenditures shall normally be made within the proposed date of completion of the project.

Responsibility of R & D cell:

- To conduct seminars, workshops, conferences and training programmes for inculcating research interest among faculty.
- To encourage and motivate faculty for submitting proposals to externally funded research and development projects.

- To support interdisciplinary and multidisciplinary research, product design and development, publications in national and international journals of high standard.
- To facilitate collaborations with researchers from premier Institutions and to encourage joint research venture in the latest technology.
- To initiate and promote MoU with industries and R & D organizations for consultancy and collaborative research.
- To suggest peer reviewed national and international journals for subscription in central library
- To motivate students to present technical papers in National and International conferences and display projects in various competitions.
- To allow faculty to participate for seminars, workshops, FDPs and conferences to upgrade their knowledge.
- To instruct research scholars and faculty members to apply for projects.
- Discussion and review on department research activities, funded projects and consultancy activities.
- Conducting seminars and workshops on various research avenues.
- Encouraging submission of Journal Paper.
- Measures to motivate students to carry out innovative and socially relevant projects.
- Organizing the international and national conferences.

11. **Outcome of Research:**

The faculty and students can publish or implement the following categories but not limited to the following:
- Book chapters
- Books (authored research, edited)
- Journal articles
- Reviews
- Conference proceedings
- Edited volumes of conference proceedings
- Computer software
- Audio-visual recording
- Working models
- Research reports
- Patent
- Technical reports
- Legal cases
- Encyclopedia entries
- Maps
- Editing and translations of major works
- Case studies
- Proposal of new theories
- Database

- Technical drawings

Facilities available on Campus:

The research facilities available on campus are:

i. A well-equipped library with more than 4467037 Books, and e-journals by IEEE ASPP, Springer link, J-Gate, ASME, McGraw Hill access and ASTM digital Library access with 80 plus printed national and international journals.

ii. Dr.AIT has an Institution membership with IEEE, ACM.

iii. Access to high quality technical content is available for reference through DELNET facility in the library.

iv. Software like MATLAB, Tanner, Xilinx, Lab View, Solid Works, ANSYS, Multi Sim, Oracle and DB2 are available.

v. Various Microcontroller kits are available and hardware for clustering, android based platforms, Wireless sensor network sensor nodes, ARM platforms, 3D Printers, Squeeze casting machine, Impact testing machine, Fatigue testing machine, Shot peening machine, Flexural testing machine and industry Robots for experimentation are available in the departments.

This policy stands recommendatory but not sacrosanct pertaining to incorporating dynamic changes and need based modifications.

EXECUTION PLAN

PREAMBLE: The academic reforms or goals that each faculty member should set in order to receive funding for various activities that will be carried out for the Department's and Institution's improvement are as follows:

1. Research and Development
1.1 Projects
1.1.1 Faculty Research Project:
1.1.1.1 Professor
   a) Shall have at least one active project in hand as a PI.
   b) Shall apply for at least one project during each AY along with an Assistant Professor.
   c) Minimum cost of the active project should be 10 lakh.

1.1.1.2 Associate Professor
   a) Shall have at least one active project in hand.
   b) Shall apply at least one project during each AY jointly with an Assistant Professor.
   c) Minimum cost of the project should be 5 lakh.

1.1.1.3 Assistant Professor with PhD
   a) Shall have at least one active/applied project in hand.
   b) Minimum cost of the project should be 3 lakh.

1.1.1.4 Assistant Professor without PhD
   a) Shall have at least one active/applied project in hand.
   b) Minimum cost of the project should be 1 lakh.

1.1.2 Student Study Project:
1.1.2.1 For UG students
   a) The project shall be guided by a single faculty member, and students can opt for a co-guide from another department for inter-disciplinary work.
   b) The final project report is to be attached with at least one paper reviewed/accepted/published in a Scopus indexed journal and the contents to be included in the project report.
   c) The students who are involved in the project are the principal authors, along with the Guide(s) as co-author(s).
   d) Dr. AIT's name shall be reflected in the affiliation of the author(s).

1.1.2.2 For PG Students
   a) The project shall be guided by a single faculty member, and students can opt for a co-guide from another department for inter-disciplinary work.
   b) The final project report is to be attached with at least one paper published in a Scopus indexed journal and the contents to be included in the project report.
   c) The Guide or the student can submit the results of the project for any patent.
   d) Dr. AIT's name shall be reflected in the affiliation of the author(s).

1.2 Patents

1.2.1 National Patents
a) Each department shall have at least FIVE published patents for a strength of 10 faculty members over a period of 5 years.
b) Each department shall have at least one granted patent in each AY.
c) All the patents shall show the affiliation of Dr AIT, which will be the co-claimant of any benefits drawn out of them.

1.2.2 International Patents
a) Each department shall have at least ONE published patent for a strength of 10 faculty over a period of 5 years.
b) Each department shall apply for at least one patent over a period of two years.
c) All the patents shall show the affiliation of Dr AIT, which will be the co-claimant of any benefits drawn out of them.

1.3 Consultancy

Each department shall generate at least Rs. 2 Lakhs in each AY for a faculty strength of 10.

1.4 Continuing Education/Resource generation

Each department shall generate at least Rs. 3 Lakhs in each academic year through various funded, self-financed programmes, or certificate courses, for a faculty strength of 10.

1.5 Publication

1.5.1 Research paper publication

In order to get good research publications and effective teaching, the Workload for each faculty members should be TH (Teaching hrs)+ RH (Research hrs)+ AW (Administrative works) +PH(Preparation hrs)= 34 hrs.

Designation	Guides				Non-Guides			
	TH	RH	AW	PH	TH	RH	AW	PH
Professor	08	10	12	04	10	10	10	04
Associate Professor with PhD	12	06	12	04	14	06	10	04
Associate Professor without PhD	-	-	-	-	14	04	12	04
Assistant Professor	16	10	04	04	16	08	06	04

1.5.1.1 Professor:
a) Shall publish at least one single authored paper over a period of ten years in the Scopus (Q1, Q2, Q3)/SCI indexed journal.
a) Shall publish at least two papers in the Scopus (Q1 and Q2)/WOS indexed journals in each academic year.

1.5.1.2 Associate Professor with PhD
a) Shall publish at least one single authored paper over a period of ten years in the Scopus (Q1, Q2, Q3)/SCI indexed journal.
b) Shall publish at least one paper in the Scopus (Q1 and Q2)/WOS indexed journal in each academic year.

1.5.1.3 Associate Professor without PhD
a) Shall be an author of at least one published paper in an academic year in the Scopus (Q1, Q2, Q3)/SCI indexed journals.

b) Shall present at least one paper in the national/international conferences conducted by reputed institutions (IISc. and IIT's) in each AY.

c) Shall attend at least two subject-related seminars, symposia, or workshops during the vacation in each AY.

d) Shall complete at least one (min 8 weeks) NPTEL course per semester.

1.5.1.4 Assistant Professor with PhD

a) Shall be an author of at least one published paper in an academic year in the Scopus (Q1, Q2)/SCI indexed journals.

b) Shall present at least two papers in the national or international conferences conducted by reputed institutions (IISc. and IIT's) in each AY.

c) Shall attend at least one subject-related seminar, symposium, or workshop during vacation in each AY.

d) Shall complete at least one NPTEL Course (min 4 weeks) per semester.

1.5.1.5 Assistant Professor without PhD

a) Shall be an author of at least one published paper in an academic year in the Scopus (Q1, Q2, Q3)/SCI indexed journals.

e) Shall present at least one paper in the national or international conferences conducted by reputed institutions (IISc. and IIT's) in each AY.

b) Shall attend at least one subject-related seminar, symposium, or workshop during the vacation in each AY.

c) Shall complete at least two NPTEL Courses (min 4 weeks) per semester.

1.5.2 Books /Chapter/Monogram publication

a) Each faculty member is encouraged to write at least one monogram, book chapter, or textbook once in each three year.

b) A faculty member without a PhD having at least 10 years of teaching experience shall publish at least one textbook in a span of 5 years through a national or international reputed publisher such as Tata McGraw Hill, Prentice Hall India, etc.

1.6 Research Guidance

1.6.1 Guiding for Doctoral degree students

Guide shall ensure that each research student

(i) Shall communicate at least one paper per semester and publish at least 3 independent papers (not counted for any other faculty or student) in the Scopus (Q1, Q2, Q3)/SCI indexed journals before submitting the thesis.

(ii) Shall have at least one conference paper presentation per semester.

1.6.2 Guiding for M.S. by Research

Guide shall ensure that each research student

(i) Shall communicate at least one paper per year and publish at least two independent papers (not counted for any other faculty or student) in Scopus (Q1, Q2, Q3)/SCI indexed journals before submitting the dissertation.

(ii) Shall have at least one conference paper presentation per semester.

1.6.3   Guiding for UG:

Project guide shall ensure that the content of the final project is based on at least one reviewed/accepted/published work of the team and the contents should be included in the project work.

1.6.4   Guiding for PG:

Project guide shall ensure that the content of the final project is based on at least one accepted/published and one reviewed/accepted/published work of the team and the contents should be included in the project report.

2. Establishment of Centralized Innovation Lab

2.1 Institutional Centralized

a) Management shall support the building and maintenance of at least one centralised, industry-sponsored, innovative in-house lab for inter-disciplinary research and innovation.
b) College shall have at least one facility run by other external agencies.

2.2 Core Branch Centralized

a) Institution shall have one common research facility for each of the following disciplines
    (i)   EEE, ECE, ETE, ML and EI branches
    (ii)   MECH, IEM, MBA and Civil Engineering
    (iii) CSE, ISE, AIML, CSBS and MCA
    (iv) Basic Sciences and Humanities

2.3 Departmental

Each research centre shall have at least ONE research facility/Lab

3. Attending Conference

Each faculty member is allowed to avail special casual leave/O.O.D. to participate only in one of the following categories.
a) Paper Presenter
b) Invited speaker
c) Session chair
d) Exhibitor

The applicant should apply to the conference through the proper channel and be informed once selected. A separate application must be submitted to avail of any financial support after getting the selection letter at least one month in advance of the conference.

3.1 National Conference:

a) Registration fee shall be provided organised by IIT's and NIT's
b) Admissible class of travel fare will be reimbursed as per Government norms once bi-annually.

3.2 International Conference:

a) Only Registration fee shall be provided once in five years for those who have served at least 5 years in the Institution for papers accepted in good conferences.
b) For travel aids it is encouraged to apply for government funding agencies.

4 Perception

4.1 Conducting National conference

Each Department/cluster shall conduct at least one bi-annual in-house National conference.

4.2 Conducting International conference

The Institution shall conduct an annual International conference for faculty in an emerging area.

4.3 Conducting Workshop/Symposia/Seminar

1. Each Cluster shall conduct at least one State-level symposium per AY.
2. The Institution shall conduct at least one National-level seminars per AY.

5 Industrial visit:

5.1 Local Visit

The department faculty shall visit technical exhibition or Hackathons along with students to see new technical developments in and around Bengaluru city, once in each Academic year.

5.2 Curriculum based

The department faculty shall take the students to the industry at least once in each academic year.

5.3 Curriculum development

A team of department faculty members (may be with senior students) shall visit industries equipped with new technology, instruments, or methodologies for the possible inclusion in the curriculum at least once in each academic year.

6 Skill Based Training

1. Each department shall invite industry professionals to give skill based training to the faculty and students at least twice in each academic year.
2. Each faculty member shall spend at least one week once in a year in reputed industries to get hands-on experience.

B. EXECUTION PLAN

The following is the allocation of the funds sanctioned by the PVPWT to support R&D activities and skill development programmes in order to fulfil the institutional research policy.

7. Incentives/grants and Supports.

7.1 **For Projects** (**Total 40 lakh**)

Designation	Requirement	Maximum seed money allocation per project (in lakhs)	Maximum allocation (in lakhs)
Professor	1. PhD with at least 3 years of experience as a Professor. 2. Published at least 5 papers in SCI indexed	4.00	12.00

		Maximum allocation per project	Maximum allocation
	journals during the last three years. 3. Not availed/sanctioned the same in last three years. 4. Not having any active funded project.		
Associate Professor	1. PhD with at least 3 years of service in the institution. 2. Published at least 3 papers in SCI indexed journals during the last three years. 3. Not availed / sanctioned the same in last three years. 4. Not having any active funded project.	3.00	6.00
Assistant Professor	1. PhD with at least 5 years of service in the institution. 2. Published at least 2 papers in SCI indexed journals during the last 5 years. 3. Not availed/sanctioned the same in last three years. 4. Not having any active funded project.	2.00	22.00

7.2 For Patents (**Total 10 lakh**)

PI	Nature	Requirements	Maximum allocation per project (in lakhs)	Maximum allocation (in lakhs)
Faculty patents	National patent	Dr AIT is a co-inventor of the patent.	0.40	4.00
	International patent		4.00	4.00
UG/PG Students	UG: students		0.25	1.00
	PG: Students		0.40	1.00

7.3 For Awards and Recognitions (**Total 05 Lakh**)

Category	Award	Number of awards per AY	Maximum allocation per faculty (in lakhs)	Maximum allocation (in lakhs)
Research	Best Researcher Award	Prof : 1 Assoc. Prof: 1 Asst. Prof: 1	0.45	1.35
	Top 25 research papers of the year	25	0.08	2.00
Academic	Best Teacher Award	Prof :1 Assoc Prof. -1 Asst Prof.-1	0.30	0.90
	Best UG Student Award	13	0.05	0.65
	Best student award for MCA and MBA.	2	0.05	0.10

7.4 For Attending conferences and publishing paper (**Total 15 Lakhs**)

Role	Requirement		Maximum allocation per proposal (in lakhs)	Maximum allocation (in lakhs)
Paper publication	1. Paper is accepted for publication in the identified SCI / Scopus indexed (Q1, Q2, Q3). 2. Partial support of the fund to be mentioned in the paper. 3. Applicant to be the first author of the paper. 4. Applicant should not have availed the same facility during the last AY.	National	0.25	4.00
		International	1.00	8.00
Book writing	Co-claimant to be Dr. AIT (with a percentage of Royalty condition 10% of the total Royalty)	International /Reputed Publisher	0.50	1.50

Conference Paper Presentation	1. Presenter to be a first author 2. Paper to be accepted for publication	Registration fee+ TA/DA (national):	0.10	1.00
Invited Talk	India	-	-	-
	Abroad (Reg fee)	2	0.25	0.50

7.5 For conducting Conference/Seminars/Workshop(**Total 15 Lakhs**)

Activity	Level	Maximum Number of proposals per AY	Maximum allocation per proposal (in lakhs)	Maximum allocation (in lakhs)
Workshop / Symposia / Seminars	National	10	0.30	3.00
Conferences	National	2	1.00	2.00
	International	2	5.00	10.00

7.6 Establishing Centralized Innovation Lab (**15 Lakhs**)

Type	Requirement	Number of proposals per AY	Maximum allocation per Lab (in lakhs)	Maximum allocation (in lakhs)
Institutional centric (refurbishment)	Government funded	1	15.00*	15.00
	Industry sponsored			
	Other			

* to start construction work in the first year.

7.7 For Industrial visit (Team wise) (**05 lakhs**)

Place	Purpose	Maximum allocation per team (in lakhs)	Maximum allocation (in lakhs)
Within Bangalore	Technical tour	0.05	0.50
	Curriculum based	0.04	0.40
	Curriculum development	0.02	0.20
Outside Bangalore (Within State)	Technical tour	0.07	0.70
	Curriculum based	0.15	1.00
	Curriculum development	0.20	2.00
Outside Karnataka (IIT)	Faculty	0.05	0.20

7.8 For Skill based training by industry professionals (**10 lakh**)

Category	Number of proposals per AY	Maximum allocation per team (in lakhs)	Maximum allocation (in lakhs)
Faculty	15	0.40	6.00
Students	15	0.28	4.00

General instructions:

1. A project sanctioned by the Institution is not transferable outside the institution.

2. The PI of the sanctioned project shall work at the institution till the completion of the project. In case of leaving in between, complete audit report should be submitted and NOC to be obtained from the Institution.

3. The outcome of the project is expected to generate at least five times the amount granted.

4. Funds available in one head can be transferred into other head on approval from the appropriate authorities on request.

5. For each of the activities supported a detailed report should be submitted to the appropriate authorities; if needed a presentation should be made to the Dr. AIT faculty members.

6. Faculty members receiving the seed money should submit Progress reports once in six months.

ADVISORY BOARD

RESEARCH ADVISORY BOARD

1. The Research Advisory Board (RAB) of Dr.AIT is an invited group of top R & D leaders from the Industry / R & D organizations / Institutes, who can guide the institute on academic / research matters and strategic planning. The Research Advisory Board is a forum where ideas are exchanged, and recommendations are made.

2. The Research advisory board can also be used for getting inputs and resources to accomplish excellence in various engineering programs of the institute. In addition to the program development, the Research Advisory Board is used for curriculum reform, generating employment prospects for graduates, internships for faculty, applied research opportunities, establishing the need for a new program, and as an external promoter to the administration.

3. The role of the Industry Advisory Board: -

    a) Act as an advisory alliance to the institute, in the growth of the academic / research programs, curriculum development, and other matters of long-term impact.

    b) Act as a link between the institute and its industrial and professional partners, providing an opportunity for the exchange of current and future industry and professional needs.

    c) Identify actions the institute should take to meet specific student, faculty, and industry needs.

    d) Provide recommendations on initiatives that the program should undertake to continuously improve and meet industry needs.

    e) Render advice to the institute on the generation of capital funds for the enhancement of infrastructure.

The Research Advisory Board (RAB) committee:

Sl.No	Name	Designation	Organization	
1.	Sri S.Mariswamy	Chairman	PVP Welfare Trust	Chairman
2.	Sri A.R.Krishnamurthy	Secretary / Managing Trustee	PVP Welfare Trust	Member
3.	Dr.Umesh.B.N	Treasurer	PVP Welfare Trust	Member
4.	Dr.N.C.Shivaprakash	Mentor	Dr.Ambedkar Institute of Technology, Bengaluru	Member
5.	Dr.M.Meenakshi	Principal	Dr. Ambedkar Institute of Technology, Bengaluru	Member
6.	Dr.J.K.Kishore	Senior Scientist	Indian Space Research Organisation, Bengaluru	Member
7.	Aparna	DGM	Department-Information system, Bharath Electronics, Bengaluru	Member
4.	Dr. R Brakaspathy	R&D Advisor	Indian Institute of Technology – Madras Chennai	Member
5.	Raju. M.S.	Scientist-F	Centre for Airborne System, DRDO, Ministry of Défense, Bangalore	Member
6.	Dr. Krishna Venkatesh	Director, R & D	Jyothi Institute of Technology, Bengaluru	Member
7.	Dr.Gowri Shankar	Dean(III)	Dr.Ambedkar Institute of Technology, Bengaluru-560 056	Member
8.	Dr.G.V.Jayaramaiah	Dean(R & D)	Dr.Ambedkar Institute of Technology, Bengaluru-560 056	Member Secretary

R&D OUTCOMES

AY		Till 2018	AY 2019-20	AY 2020-21	AY 2021-22
Publications	Journal	36	24	40	33
	Conference	4	45	5	6
	Books	2	4	4	4
	Book Chapter	0	2	1	0
Patents	Published	89			
Consultancy	1250000				
Research Scholars	Full Time	06			
	Part time	114			
PhD Awarded	Internal	17			
	External	13			
Conferences conducted		3	1		
Projects/Exhibitions		1	1	1	1
MSME				1	2

Department of Computer Science and Engineering
Details of papers published in Journals – National and International

1. Total No papers published in National Journal (Jan-Jun 2021): **NIL**
2. Total No of Papers published in International Journal (Jan-Jun 2021):**15**
3. Total Publications till June 2021(from the beginning): **349**

Sl. No	Title of the Article	Name of the journal – National/international	ISSN & Detail	Date and Page No.
		January 2021 to June 2021		
1	Performance Analysis of IoT Routing Protocol: A Study	International Journal of Engineering Trends and Technology	ISSN: 2231 – 5381	2/1/2021 102-106
2	Integration of particle swarm optimization with an adaptive K-Nearest Neighbor for energy-efficient clustering in MANET	International Journal of Advance Research, Ideas and Innovations in Technology	ISSN: 2454-132X	2020 233-240
3	Medical Chatbot for Disease Prediction using Machine Learning	International Journal of All Research Education and Scientific Methods (IJARESM)	2455-6211	6/1/2021 and 3094 to 3098
4	Sentiment Analysis for Texual Comments	International journal of Research and Analytical Reviews (IJRAR)	P-ISSN 2349-5138	June 2021, 796-800
5	Detection of Brain Tumor in MR images using hybrid Fuzzy C-mean clustering with graph cut segmentation technique	Turkish Journal of Computer and Mathematics Education Journal	ISSN 1309-4653	5/4/2021,
6	Enhancing Data Protection in Cloud Computing using Key Derivation based on Cryptographic Technique	IEEE		06 May 2021
7	Pest Detection nd obliteration Based Robotics	PiCES- International Journal	ISSN 2566-932X	25/06/2021
8	Machine learning model for clinical named entity recognition	International Journal of Electrical and Computer Engineering (IJECE)	ISSN: 2088-8708	April 2021 and 1689~1696
9	Indexing Strategies for Performance Optimization of Relational Databases.	International Research Journal of Engineering and Technology	e-ISSN: 2395-0056	May 2021 and Pages 3801 - 3805
10	A new ensemble of Texture descriptors based	Journal of Critical Reviews	ISSN-2394-5125	7/6/2020 644-649

	on Local appearance based methods for Face Anti-spoofing system			
11	Graph Theory Concepts Used In Image Segmentation	International Journal Of Multidisciplinary Educational Research(IJMER)	ISSN:2277-7881	30/06/2021 and pages 15-21
12	Prediction of Thyriod Disease using Machine Learning Techniques	International Advanced Research Journal in Science, Engineering & Technology	ISSN:2393-8021	Vol. 8, Issue 3, March 2021
13	Insight to security paradigm , research trend & statistics in internet of things(IoT)	Global Transitions Proceedings, journal homepage : https://www.elsevier.com/locate/gltp	ISSN: 2666-285X	23 January 2021, Volume 2, Issue 1, June 2021, Pages 84-90
14	Energy Aware Resource Utilization Technique for Workflow Scheduling in Cloud Computing Environment	Turkish Journal of Computer and Mathematics Education Journal		Vol.12 No.10 (2021), 7461-7472
15	Transmogrification Of The Hevc Using Dct And Dwt As Hybrid Transformation	Turkish Journal of Computer and Mathematics Education Journal	ISSN 1309-4653	Vol.12 No.8(2021), 3171-3175

Details of papers published in conferences – National and International

1. Total number of papers published in National conference(Jan-Jun 2021): **NIL**
2. Total number of papers published in Inter-National conference (Jan-Jun 2021):: **02**
3. Total number of paper published in National and International conference as on June 2021(from the beginning): **178**

Sl. No	Title of the Article	Name of the Conference – National/international	ISSN & Detail	Date and Page No.
		January 2021 to June 2021		
1	Analysis of Healthcare Industry Using Machine Learning Approach: A Case Study in Bengaluru Region	In Proceedings of the Springer sponsored International Conference on Sentimental Analysis and Deep Learning (ICSADL 2021)	2194-5357	
2	Advanced system for driving assistance using ardino and proteus design tool	3rd International conference on intelligent communication technologies and virtual mobile networks	978-0-7381-1183-4	February 2021, pg,1214-1219

Details of funded projects
Department of Computer Science and Engineering
Details of Completed Projects

1

1. Total number of completed projects(January 2021 -June 2021): **05**

2. Total number of completed Projects(from the beginning till June 2021): **08**

Sl. No	Title of the Research Project	Name of Principal/co-principal investigators	Funding agency	Date of completion	Duration of project	Amount (Rs.)	Outcome of the project – Publications / PhD Degree / Patents
1.	Sensor Network Design for Data Gathering for Real Time Applications funded by All India Council for Technical Education (AICTE), New Delhi.	Dr. Siddaraju	AICTE	2019	3 years	9.5 Lakhs	2 M.Tech Projects-Paper published in International Journals
2	Camouflage robot	Madhu B	KSCST	2021	8 Months	6,000	Completed
3	Use of Wearable Devices to Perform Real Time Analysis for the Wellness of Aging Population and Patients by Developing a Big Data Analytics System	Dr.Gowrishankar S.	VGST, Govt. of Karnataka	2020	1 Year 10 Months	5 Lakhs	Completed
4	Towards many to many communications among the deaf, dumb and blind users	Vinutha H	KSCST	2020	8 months	5,500	Completed
5.	Automated Contactless COVID-19 detection with the aid of X-ray images using Deep Neural Network	Vinutha H	KSCST	2021	8 months	6,000	Completed

Dr. Ambedkar Institute of Technology, Bengaluru – 560 056
Research and Development Cell

Details of ongoing projects
Department of Computer Science and Engineering

1 Total number of ongoing projects(January 2021 -June 2021): **NIL**

2.Total number of ongoing projects(January 2018-June 2021): **01**

Sl. No	Title of the Research Project	Name of Principal/ Co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status & probable date of completion
1	"Water Body Monitoring Buoy for Real Time Monitoring of Marine Life & Fresh Water Quality funded by the Management of Dr. Ambedkar Institute of Technology, Bengaluru."	Dr.Siddaraju	Dr.AIT	3 years	6 Lakhs	Patent published, Paper published in SCI Journals

Details of Project Proposal submitted
Department of Computer Science and Engineering

1.Total Number of Project proposals submitted (January 2021 to June 2021): **06**

2.Total Number of Project proposals submitted(from the beginning): **10**

Sl. No	Title of the Research Project	Name of Principal/co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status
1 .	"Iot Based Remote Emission And Driver Safety System For Automobiles With Artificial Intelligence"	Principal investigator: Dr. Siddaraju Co-principal investigators: Dr. Shylaja K R, Asha K N	DST	3 years	Rs. 9295750	Temporary Registration No. : TPN / 58873 Submitted Date:15/11/2020 Under Processing
2.	"Automatic Extraction of River Networks frpm Satallite Images"	Principal Investigator: Dr. Shamshekhar S. Patil	ISRO	3-Years	Rs.54,00,000/-	Under Processing
3	Air monitoring system	Principal Investigator: Dr. Nandini N	VTU	3-Years	Rs.22,00,000	Under processing

4.	Campus Monitoring	Principal Investigator: Dr. Nandini N	VTU	3-Years	Rs.5,00,000	Under processing
5.	Development of technology enhanced emergency management system with LORA communication technology for healthcare system	Principal Investigator: Dr. Nandini N, Rashmi N	VTU	2-Years	17,00,000	Under processing
6.	Artificial Intelligence BIOCARD predictors among normal individuals	Principal Investigators: Dr. Vijaya Kumar M V, Sowmya C L	DST	2 Years	Rs.40,00,000	Under processing

Details of Testing and Consultancy
Department of Computer Science and Engineering

1. Total number of Testing and Consultancy(January 2021-June 2021): **02**
2. Total number of Testing and Consultancy(from the beginning till June 2021): **03**

Sl. No	Name of faculty member/s involved	Name of the Client	Address of the client	Nature of testing and Consultancy services offered	Date	Amount, Rs.
1.	Dr.Siddaraju	VIVO Technologies	Rajajinagar Industrial area, Bangalore	Consultant for application development	16.01.2021	30000
2	Tejaswini K	MandemIT	D:no 1, Madhurawada, Visakhapatnam - 530048	Development	13/12/2020	20000
3	Dr.Gowrishankar S., Mr. Srinivasa A. H., Mr. Praveena M. V., and Ms.Veena A.	Anjanadhri Constructions	Anjanadhri Constructions, Nonavinakere - 572224, Tiptur, Tumkur, Karnataka.	Development	May 2021	50000

Details of Copy rights/ Patents/ Trademarks
Department of Computer Science and Engineering

1. Total number of copy rights(from January 2021-June 2021): **NIL**
2. Total number of Patents(from January 2021-June 2021): **10**
3. Total number of Trademarks(from January 2021-June 2021)**: NIL**
4. Total number of Trademarks(from the beginning till June 2021): **NIL**
5. Total number of Patents (from the beginning till June 2021): **13**
6. Total number of Copy rights (from the beginning till June 2021): **03**

Sl. No	Details	Name of the Student involved	Name of the Faculty involved	Registration Details	Status
1	**Title of invention:**AN Iot Based Self Phased Analysis Of Adverse Effects In Covid Recovered Patients **Name of inventor(s):** I., Jasmine Selvakumari Jeya; K. N., Asha; Potdar, Veena; S.,	-	Asha K N, Veena Potdar	Filed at Commission of Patients, Australian Patents Register, Patent number: 2021101599	**Granted on** 5th day of May 2021 **Term of Patent:** Eight years from

	Chidambaranathan; Krishnan,Balachandran; A. K., Sujatha; M. R., Vinutha; P., Manasa; G., Keerthana And R., Satheesh Kumar				29 March 2021
2	**Title of invention:** An Apparatus for Detetction, Classification and Characterization of EEE signals for BCI System **Name of inventor(s):** Dr. Siddaraju , Asha Rani K P, Cyril Prasanna Raj P		Dr. Siddaraju , Asha Rani K P	Filed at Government of India Patent Office, CBR number: 8516 Patent Number : 202141009690	**Filed on 09-03-2021**
3	**Title of invention** :Voluntary Data Collection Mechanism From The General Public And Detection For Covid Symptoms **Name of inventor(s):** Dr.Kavitha K S, Dr.Ganga Holi,Madhu b,Vijayakumari G, Vathsala M K	-	Madhu B	Filed at Commission of patients, Australian Patents Register ,Patent Number 2021102530	**Granted on** 16th day of June 2021 **Term of Patent:** Eight years from 12 May 2021
4	A System and Method for Providing Home Based Healthcare Recommendations	Ms.Damanpreet Kaur	Dr.Siddaraju, Dr.Gowrishankar S.	Application Number: 201641028197 Filing Date: 19th August 2016 Publication Date: 23rd February 2018 Domain: Machine Learning	Published
5	A Floating Platform System for Remotely Monitoring and Analyzing the Quality of Water Bodies	-	Dr.Siddaraju, Dr.Gowrishankar S. and Mr.Srinivasa A. H.	Application Number: 202141015896 Filing Date: 05th April 2021 Publication Date: 16th April 2021 Jurisdiction: India Domain: Internet of Things	Published

6	Machine Learning Based Intelligence Automatic water tank cleaning Robot for home	-	Tejaswini K	Application Number: 202041053139 Filing Date: 07 Dec 2020 Publication Date: 18 Dec 2020 Jurisdiction: India Domain: Machine Learning	Awaiting for Examination
7	Air Quality Monitoring And Controlling Device Using Internet Of Things (Iot)	-	RAVIKUMAR J Dr. PRASAD A Y, Dr. K S ANANDA,	Application Number: 202041034749 Filing Date: 13th August 2020 Publication Date: 4th September 2020 Jurisdiction: India Domain: Internet of Things	
8	Multiple Company Mobile Number Intergrate in Single SIM	-	Dr. Shamshekhar S Patil	Application Number: 2021102421 Filing Date: 09th May 2021	Filed
9	Trespassers detection system for Agriculture fields using Artificial Intelligence and Methods	-	Vinutha H	Application Number: 202041047576 Filing Date: 06/11/2020	Published
10	An efficient adaptive beam former for cellular communications	-	Rashmi N	Application Number:202141016 330A Filing Date:07-4-2021 Publication Date: 23-4-2021 Jurisdiction: India	Published

Dr. Ambedkar Institute of Technology, Bengaluru – 560 056
Research and Development Cell

Details of Doctoral Degree holders of the Department
Department of Computer Science and Engineering

1.Total number of Doctoral degree holders (from Jan-Jun 2021): **02**
2.Total number of Doctoral degree holders(from January 2018-June 2021): **04**
3.Total number of Doctoral degree holders(from the beginning): **09**

Sl. No	Name of the Faculty Member	Area of Research	Year of award of degree	Name of the University/institution	No. of students (MSc and PhD)	
					Completed	Ongoing
1	Dr.Siddaraju	WSN	2011	VMU	5	4
2	Dr.Asha	MANET	2021	Prist University	-	-
3	Dr.Leena Giri	Semantic Web 3.0	2020	Bangalore University	-	-
4	Dr.Prabha R	WSN	2016	Bangalore University	-	6
5	Dr. Gowrishankar S.	Computer Networks	2010	Jadavpur University		2
6	Dr. K RShylaja	Artificial Intelligence	2018	JNTU, Anathpur	-	-
7	Dr. Smitha Shekar B	VANET	2019	Shri JJTU	-	-
8	Dr. Harish G	IoT	2019	Shri JJTU	-	-
9	Dr.Shamshekhar S. Patil	Networks	2021	VTU – Belagavi	-	-
10	Dr. Nandini N	Data mining	2015	Bharatiyar University	1	4

Details of Research Scholars registered in the <u>Department Research Center</u>

<u>(Internal (faculty)candidates)</u>
Department of Computer Science and Engineering
1. Total number of   research scholars registered internal(Jan-June 2021):**NIL**
2. Total number of research scholars registered internal (from Jan 2018- June 2021): **01**
3.Total number of research scholars registered internal(from the beginning): **04**

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
1	Jayalakshmi K	VTU	Data Security in Cloud Using Homomorphic	Dr. Prabha R	Professor	2017	Course Work completed

Sl No	Name	Affiliation	Area of Research	Supervisor Name	Designation	Year	Status
			Encryption Techniques				
2	Arathi P	VTU	Data Science	Dr. Prabha R	Professor	2018	Course Work completed
3	Veena A	VTU	Data Science	Dr. GowriShankar S	Professor	2017	DC completed

Details of Research Scholars registered in the <u>Department Research Center</u>
<u>(External candidates)</u>
Department of Computer Science and Engineering

1. Total number of research scholars registered External(Jan-June 2021): **NIL**
2. Total number of research scholars registered External (from Jan 2018- June 2021): **02**
3. Total number of research scholars registered External(from the beginning): **15**

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
1	Suma R	VTU	WSN	Dr.Siddaraju	Professor	2012	CV Completed
2	Rekha S	VTU	WSN	Dr.Siddaraju	Professor	2017	CV Completed
3	Ashok	VTU	WSN	Dr.Siddaraju	Professor	2018	DC completed
4	Priyanka H M	VTU	Cloud Computing	Dr.Mary Cherian	Professor	2016	CV Completed
5	Padmini C	VTU	Identifying spam reviews using opinion mining and machine learning in social Networks	Dr.Mary Cherian	Professor	2019	Course Work taken
7	Madhu N	VTU	Internet of Things	Dr. GowriShankar S	Professor	2016	Course Work taken
11	Chaya S	VTU	Security Paradigms for Effective Privacy Preservations on Cloud Infrastructors	Dr. Nandini N.	Associate Professor	2015	CV Completed

12	Manjuna th	VTU	Energy Efficient Design with wireless Backhaul in 5G mm Wave Cellular Network	Dr. Nandini N.	Associate Professor	2017	Course Work taken
13	Chandra kanth	VTU	Machine Learning	Dr. Nandini N.	Associate Professor	2017	Course Work taken
14	Mamath a R	VTU	Emergency Mobile Target Tracking in Wireless Sensor Networks	Dr. Prabha R	Professor	2017	Course Work completed
15	Shilpa S	VTU	A New Apporach To Collabrative Intrusion Detection System For Hybrid Cloud and Public Cloud	Dr. Prabha R	Professor	2016	Course Work completed

Details of faculty members pursuing PhD in other Universities/Institutions
Department of Computer Science and Engineering

1.Total number of faculty members pursuing PhD in other Universities(Jan-June 2021): **02**

2.Total number of   faculty members pursuing PhD in other Institutions(Jan-June 2021): **NIL**

3.Total number of faculty members pursuing PhD in other Universities (Jan 2018- June 2021): **03**

4.Total number of faculty members pursuing PhD in other Institutions(from the beginning): **16**

Sl. No	Name of the faculty	Design ation	Area of Researc h	Details of Research Supervisor/s		Year of registrat ion	Status of the work
				Name	**Affiliation**		
1	Mr. Srinivasa A H	Associa te Profess or	IoT	Dr.Siddara ju	JJTU	2015	CV Complet ed
2	Mr. Suresha D	Associa te Profess or	Data science	Dr. K Karibasap pa		2010	CV Complet ed
3	Ravi Kumar J	Assista nt Profess or	Machine learning	Dr. Ramakant h Kumar P		2013	Colloqui um Complet ed
4	Asha K N	Assista nt	Data Science	Dr. R Rajkumar	Associate Professor Grade 2, VIT, Vellore	2014	DC Complet ed

		Professor				
5	Praveena M V	Assistant Professor	Database	Dr. Ajeet A Chikamannur	RLJIT	2015	CV Completed
6	Veena Potdar	VTU	Machine Learning	Dr. Prabha R	Professor	2015	Course Work completed
7	Madhu B	Assistant Professor	Data Security	Dr.Ganga Holi	AMC Engineering College	2015	Open Seminar Completed
8	Vinutha H	Assistant Professor	Image processing, Pattern recognition	Dr. Thippeswamy G	Professor, Dept. of CSE , BMS IT	2015	CV Completed
9	Mamatha S K	Assistant Professor		Dr. Krishnappa H K		2015	CV Completed
10	Harish Kumar H C	Assistant Professor		Dr. T G Basavaraju		2016	Reregistred
11	Chidanandan V	Assistant Professor	M2M Networks	Dr.Narendran Rajagopalan	Professor,Dept.of.CSE,NITP	2016	DC Completed
12	Vinod Kumar K P	Assistant Professor		Dr. Vinay Hegde		2017	
13	Revanasiddappa	Assistant Professor	IoT	Dr.Sumaswamy	Professor,Sir.MVIT	2017	Open Seminar-1 Completed
14	Tejaswini K	Assistant Professor	Image processing	Dr.Umadevi	Associate Professor	2019	Yet to complete Course work

15	Vinutha M S	Assistant Professor	Natural Language Processing	Dr. Padma M C	UOM		2021	Registered
16	Lavanya Santhosh	Assistant Professor	Data Science	Dr. Nagendraswamy H S	UOM		2021	Registered

Department of CIVIL ENGINEERING

Details of papers published in Journals – National and International

1. Total No papers published in National Journal(Jan-Jun 2021): Nil

2. Total No of Papers published in International Journal(Jan-Jun 2021): **04**

3. Total Publications till June 2021(from the beginning):**287**

Sl. No	Title of the Article	Name of the journal – National/international	ISSN & Detail	Date and Page No.
		January 2021 to June 2021		
1	Characteristics of wear resistance and hardness investigation of graphite powder filler and Kevlar fiber reinforced polypropylene matrix composites-A Taguchi's Approach.	PSYCHOLOGY AND EDUCATION International	00333077 VOL.58, NO.2(2021)	JAN 2021,8161-8168
2	Comparative study on Properties of High strength Hybrid FRC with conventional concrete	IJAEM – International	2395-5252	July 2021 1493-1503
3	Geological and Geomorphological analysis and Hydrogeochemical Environment of aquifers of the southern west coast of Karnataka, India	IJSR-International Journal of Scientific Research	2277-8179 Vol.10 Issue 3	March 2021, 54-57

4	Digital Pedogogy for Sustainable learning	International Journal of Education	2582-1334, Vol. 9, No. 3, 2021, pp. 179-185	01.06.2021

Department of **CIVIL ENGINEERING**

Details of papers published in conferences – National and International

1. Total number of papers published in National conference:**01**

2. Total number of papers published in Inter-National conference: **02**

3. Total number of paper published in National and International conference as on June 2021(from the beginning): **60**

Sl. No	Title of the Article	Name of the Conference – National/international	ISSN & Detail	Date and Page No.
		January 2021 to June 2021		
1	Studies on the use of Geology, Pumping test of Coastal Dakshina Kannada district for logical Examination of salt water intrusion	National	NCIRCE	June 2021, 238
2	Tribological and Mechanical Investigation of Coir-Silk Reinforced Polypropylene Based Matrix Composites	IOP Conference Series: Materials Science and Engineering	3rd International Conference on Inventive Research in Material Science and Technology (ICIRMCT 2021,) Volume 1091, 0112052	22nd- 23rd January 2021, Coimbatore, India
3	Application of Heavy Metal Pollution Index and Metal Index for the Assessment of Ground Water Quality in Peeny Industrial Area	International Conference on Contemporary and Sustainable Infrastructure (ICCSI-2021) Organised by the Dept . of Civil Engineering, SJB Institute of Technology, Bengaluru	International Conference on Contemporary and Sustainable Infrastructure (ICCSI-2021) Organised by the Dept . of Civil Engineering, SJB Institute of Technology, Bengaluru	21st- 22nd May, 2021

Details of funded projects

Department of CIVIL ENGINEERING

Details of Completed Projects

1. Total number of completed projects(January 2021 -June 2021): **Nil**
2. Total number of completed Projects(from the beginning till June 2021): **06**

Sl. No	Title of the Research Project	Name of Principal/co-principal investigators	Funding agency	Date of completion	Duration of project	Amount (Rs.)	Outcome of the project – Publications/PhD Degree/Patents
1.	Studies of low cost fly ash lime concrete blocks	R & D project	AICTE	-	-	9.7 lakhs	Publications
2.	Studies on corrosion of rebars embedded in concrete due to carbonization	Dr. KS, Dr. TCS & Dr. KVM	AICTE	-	-	20 lakhs	Publications
3.	Health monitoring of repair & rehabilitation of structures	Dr. BSK, Dr.SV	VTU	-	-	16.32 lakhs	Publications
4.	Construction of Ashoka hostel building Dr AIT	Dr. BSK	AICTE	-	-	200 lakhs	Publications
5.	Assessment of indoor air pollution & its impact on human health	Dr. CNS	AICTE	-	-	9.41 lakhs	Publications
6.	Synthesis of magneto rheological (MR) fluid for engineering applications	Dr. SV	Dr. AIT	-	-	2.4 lakhs	Publications

Details of ongoing projects

Department of CIVIL ENGINEERING

1. Total number of ongoing projects(January 2021 -June 2021): **01**
2. Total number of ongoing projects(January 2018-June 2021): **01**

Sl. No	Title of the Research Project	Name of Principal/ Co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status & probable date of completion
1	Synthesis of Magneto – Rheological Fluid for Engineering Applications	Dr. S. Soundeswarn, Principal Investigator	Dr. AIT	2 years	Rs.2,40,000/	Procurement of Equipment is in progress.
2	Assesment of Indoor Air Pollution and its Impact on Human Health	Dr. C. Nanjunda Swamy	AICTE	3 years	Rs.9,41,000/	Procurement of Equipment is in progress.

Details of Project Proposal submitted

Department of CIVIL ENGINEERING

1. Total Number of Project proposals submitted (January 2021 to June 2021): **02**
2. Total Number of Project proposals submitted(from the beginning): **06**

Sl. No	Title of the Research Project	Name of Principal/co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status
1.	Natural resources/Assets mapping using Geospatial Techniques-A Case study for Selected Panchayats of Kukanoor Block of Koppal District, Karnataka State	Dr.S.S.Honnagoudar / Dr.S.D.Venkataraj Mohan	VGST, GOK	3 years	20 lakhs	under process
2.	Studies on Geotechnical properties of Contaminated soil Along the Vrisha Bhavathi river stretch and its implications on Environment	Dr.S.D.Venkataraja Mohan / Dr.A.A Jahagirdar	KSCST, IISc campus, BANGALORE	8 months	5,000/-	Near completion

Dr. Ambedkar Institute of Technology, Bengaluru – 560 056
Research and Development Cell

Details of Testing and Consultancy

Department of CIVIL ENGINEERING

1. Total number of Testing and Consultancy (January 2021-June 2021): **03**

2. Total number of Testing and Consultancy (from the beginning till June 2021): **77**

Sl. No	Name of faculty member/s involved	Name of the Client	Address of the client	Nature of testing and Consultancy services offered	Date	Amount, Rs
1.	Sharath B / Supritha R M	Deepak Consultants and Construction	BTM layout II stage, Bangalore	Compressive Strength of Concrete Cubes	25/02/2021	600/-
2.	Dr. S. Vijaya & Ms. Mary Bhagya Jyothi	Faculty & Students of EWIT, Bangalore	EWIT, Bangalore	To Conduct Structural Engg. Lab for M Tech Students	March 2021	Rs. 15000/-
3.	Dr. S. Vijaya	Mrs. Rajini V Akki	Asst. Prof., CED, East Point College of Engg, Bangalore 49	Use of Carbonation Chamber and Specimen Testing	3/4/2021	Rs.4200/-

Details of Copy rights/ Patents/ Trademarks

1. Total number of copy rights(from January 2021-June 2021): **Nil**

2. Total number of Patents(from January 2021-June 2021): **Nil**

3. Total number of Trademarks (from January 2021-June 2021)**: Nil**

4. Total number of Trademarks(from the beginning till June 2021):**Nil**

5. Total number of Patents (from the beginning till June 2021):**Nil**

6. Total number of Copy rights (from the beginning till June 2021): **Nil**

Sl. No	Details	Name of the Student involved	Name of the Faculty involved	Registration Details	Status
1	-	-	-	-	-

Dr. Ambedkar Institute of Technology, Bengaluru – 560 056
Research and Development Cell

Details of Doctoral Degree holders of the Department
Department of CIVIL ENGINEERING

1. Total number of Doctoral degree holders (from Jan-Jun 2021): **05**
2. Total number of Doctoral degree holders (from January 2018-June 2021): **09**
3. Total number of Doctoral degree holders (from the beginning): **09**

Sl. No	Name of the Faculty Member	Title of Research	Year of award of degree	Name of the University/institution	No. of students (MSc and PhD)	
					Completed	Ongoing
1	Dr C Nanjundaswamy	Treatment of pre-digested distillery effluent by isolated bacterial strain	2000	IIT Roorkee	2	1
2	Dr B Shivakumaraswamy	Seismic Strengthening of RC columns & Joints using GFRP	2009	Bangalore	4	
3	Dr. M N Hegde		2009	IISc, Bangalore	5	
4	Dr K V Lokesh	Pollution Problems Relating to soil and Subsurface Waters in the Industrial Conurbation of Bangalore and Mysore and Mitigation Thereof	2004	Bangalore	2	
5	Dr S Vijaya	Performance of Geo-grid reinforced sand beds under static and repeated loads in presence of water	2010	Bangalore	1	
6	Dr. S D Venkatraj Mohan	Effect of alkalies and acids on geotechnical properties of expansive and non-expansive soils- A case study	2011	Bangalore	1	
7	Dr K V Maanjunath	Up flow column studies for the removal of heavy metals by low cost adsorbents	2016	IIT Kuvempu	-	
8	Dr Chandrrasekar	Air pollution modeling using soft techniques	2016	Roorkee	-	

9	Dr S G Ramachandraiah	Modeling on water and soil productivity and crop yield in water sheds of semi-arid climatic region	2014	Bangalore	1	
10	Dr M R suresh		2019	VTU		

Details of Research Scholars registered in the Department Research Center (Internal (faculty)candidates)

1. Total number of research scholars registered internal(Jan-June 2021): **Nil**

2. Total number of research scholars registered internal (from Jan 2018- June 2021): **Nil**

3. Total number of research scholars registered internal(from the beginning): **Nil**

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
-	-	-	-	-	-	-	-

Details of Research Scholars registered in the Department Research Center (External candidates)

1. Total number of research scholars registered External(Jan-June 2021): **01**

2. Total number of research scholars registered External (from Jan 2018- June 2021): **02**

3. Total number of research scholars registered External(from the beginning): **13**

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
1	Anitha B. H	BMSCE, Banglore	Environmental Engineering	Dr. C. Nanjunda Swamy	Professor	Feb-2021	Comprehensive Viva is Completed

Details of faculty members pursuing PhD in other Universities/Institutions

1. Total number of faculty members pursuing PhD in other Universities(Jan-June 2021):**Nil**

2. Total number of faculty members pursuing PhD in other Institutions(Jan-June 2021):**Nil**

3. Total number of faculty members pursuing PhD in other Universities (from Jan 2018- June 2021): **01**

4. Total number of faculty members pursuing PhD in other Institutions(from the beginning): **11**

Dr. Ambedkar Institute of Technology, Bengaluru – 560 056
Research and Development Cell

Sl. No	Name of the faculty	Designation	Area of Research	Details of Research Supervisor/s		Year of registration	Status of the work
				Name	Affiliation		
1	Shreyas.K	Asst professor	Highway Engineering	Dr.L Manjesh	Professor, UVCE	2017	Ongoing
2	Sowmya.M	Asst professor	Geology	Dr. Shalini	Professor, GAT	2014	Ongoing

Department of Electronics and Communication Engineering

Details of papers published in Journals – National and International

4. Total No papers published in National Journal(Jan-Jun 2021): 01

5. Total No of Papers published in International Journal(Jan-Jun 2021): 19

6. Total Publications till June 2021(from the beginning): 293

Sl. No	Title of the Article	Name of the journal – National/international	ISSN & Detail	Date and Page No.
		January 2021 to June 2021		
1.	Hydroponics System based on IoT	Annals of R.S.C.B	ISSN:1583-6258, Vol. 25, Issue 4, 2021,	Pages. 9683 - 9688 April 2021
2.	Block-Chain Technology for Securing and Managing the Database in Oil and Gas Industry	Annals of R.S.C.B.	ISSN: 1583-6258, Vol. 25, Issue 4,	April 2021, pp. 12475 – 12486
3.	Chaotic based encryption algorithms for speech signal and cryptographic requirements: A brief survey	Materials Today Proceedings	DOI:10.1016/J.MATPR. 2021.01.244 Corpus ID: 233781621 Scopus indexed	In Press
4.	Design and ASIC Implementation of Efficient 8-bit	Annals of cell biology	12463–12474. Can be Retrieved from https://www.annalsofrs	

	Integer Division Algorithms		cb.ro/index.php/journal /article/view/4175 Issue 4 Vol.25 , 2021 Scopus indexed	
5.	Chaotic Encryption Algorithms of speech signal and cryptographic requirements: A brief Survey	Materials today proceedings, International Journal and Technology Research, Elsevier publications,Vol 1, issue 1	https://doi.org/10.1016/ j.matpr.2021.01.244 2214-7853/_ 2021 Elsevier Ltd. All rights reserved.	In Press
6.	Design of Microstrip Dual-Mode Wideband Bandpass Filter with Controlled Center Frequency and Bandwidth Using Bandstop Filter Topology	IETE Journal of Research,	DOI: 10.1080/03772063.202 1.1929518	2021/5/29 1-9 Publisher Taylor & Francis
7.	Ultra-Optimized 8-bit Unsigned Array Multiplier design using Reversible Logic	GIS SCIENCE JOURNAL	ISSN NO: 1869-9391	1105-1110 Jan,2021
8.	Predictive Analysis of Intelligent Sensing and Cloud-Based Integrated Water Management System	*Big Data Analytics for Internet of Things* Wiley publishers	9781119740780 DOI:10.1002/97811197 40780	(2021): 247-264.
9.	"Generation of Narrowband Signals for Wireless Body Area Networks"	International Research Journal of Engineering and Technology- (IRJET)	Volume 8 Issue	1, January 2021| ISSN (online): pp.426-431
10	"Design and Implementation of IoT based Vehicle tracking and Theft control"	International Journal of Advance Research and Innovative Ideas in Education (IJARIIE)	Vol.7 , Issue1,	2021 pp2395-4396
11	DESIGN AND ASIC IMPLEMENTATI ON OF FOUR	Sambodhi (UGC Care Journal)	ISSN: 2249-6661 Vol-44, No.-02	pp. 202.207

	WAY SET-ASSOCIATIVE CACHE MEMORY			January-March(2021)
12	ROBUST FACE RECOGNITION USING HYBRID FEATURES	International	**0976-6553**	22/06/2021 273-280
13	Predictive Analysis of Intelligent Sensing and Cloud-Based Integrated Water Management System	*Big Data Analytics for Internet of Things*	9781119740780 DOI:10.1002/9781119740780	(2021): 247-264.
14	Verification And Validation Of ASBO Based Antenna Array Radiation Pattern Synthesis For Power Optimization	International journal of Grid and Distributed Computing (IJGDC)	*ISSN*: 2005-4262(Print); *ISSN*: 2207-6379 (Online)	31st March 2021, Pp.35-42
15	Array pattern synthesis for desired side lobe level using modified differential evolution	Materials Today: Proceedings	ISSN: 2214-7853	2021/2/16
16	MODTREE: PRÉCISED LINE-OF-VISION AND NON-LINE-OF-VISION PATH IDENTIFICATION DESIGN IN RFID SYSTEMS	Sambodhi (UGC Care Journal)	ISSN: 2249-6661 Vol-44, No.-03	January-March(2021)

Department of Electronics and Communication Engineering

Details of papers published in conferences – National and International

4. Total number of papers published in National conference:06

5. Total number of papers published in Inter-National conference:08

6. Total number of paper published in National and International conference as on June 2021(from the beginning): 129

Sl. No	Title of the Article	Name of the Conference – National/international	ISSN & Detail	Date and Page No.
			January 2021 to June 2021	
1	Cryptographically Securing Data Base in Petroleum Industry	Proc. National Conference on Signal Processing and Communication Technologies (CSPCT'21)	Kamaraj College of Engineering & Technology, Vellakulam	23rd April 2021
	Smart Driving assistance using arduino and proteus Design tool	International conference on Expert Clouds and Applications(ICOECA 2021)	NIL	18-19 Feb 2021
	Advanced System for Driving assistance using arduino and proteus Design tool	Intelligent Communication Technologies and virtual mobile networks(ICICV 2021)	NIL	4-6 Feb 2021
	Low Power Multiplier Design Using Dynamic Voltage and Frequency Scaling	International Conference on Intelligent Systems Electrical and Communication Technology	978-93-83470-37-2	09th & 10th April, 2021 1
	Advance System for Driving Assistance Using Arduino and Proteus design tool	Third International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV-2021) (IEEE Conference)	DOI: 10.1109/ICICV50876.2021.9388620	02/04/2021
	ASIC Implementation and Analysis of	2021 International Conference on Intelligent	978-1-7281-8583-5/21/$31.00 ©2021 IEEE	June 25-27, 2021

Logic BIST Controller for Ripple Carry Adder at Different	Technologies (CONIT) Karnataka, India			
Mod Tree Precised Line-of-Vision And Non-Line-Of-Vision Path Identification In RFID Systems In the Online	"International Conference on Intelligent Systems Electrical and Communication Technology" Organized by Department of ECE, EEE, CSE and IT St. Martin's Engineering College, Dhulapally, Secunderabad, T.S,India on		(ICISECT-2021)	9th& 10 th April 2021

Details of funded projects

Department of Electronics and Communication Engineering

Details of Completed Projects

3. Total number of completed projects(January 2021 -June 2021):00
4. Total number of completed Projects(from the beginning till June 2021):03

Sl. No	Title of the Research Project	Name of Principal/co-principal investigators	Funding agency	Date of completion	Duration of project	Amount (Rs.)	Outcome of the project – Publications/PhD Degree/Patents
7.	"Wireless Electronic Multiline Notice Board" exhibited in technical exhibition held on 14-4-2014 at Dr.AIT, Bangalore during 124th birth anniversary	Dr.Humadevi, Sudha BS	Dr.AIT	JAN 2014	3 Yrs	1,00,000	Model prepared on"Wireless Electronic Multiline Notice Board"and exhibited in technical exhibition held on 14-4-

	of Bharath Rathna Dr.B.R.Ambedk ar.					2014 at Dr.AIT and submitted to department.
8.	DUAL MODE RECONFIGURABLE COMPACT MICROSTRIP FILTERS	Dr.J.S.Baliga r	VTU	Jan 2015	3 years	12.52 lakhs	Hardware product, 2 publications in IJ
9.	Multi line wireless notice board	Dr G V J/ Dr.HU	Dr A.I.T	Jan 2014	3	One Lakh	Submitted to Department

Details of ongoing projects

Department of Electronics and Communication Engineering

3. Total number of ongoing projects(January 2021 -June 2021):00
4. Total number of ongoing projects(January 2018-June 2021):02

Sl. No	Title of the Research Project	Name of Principal/ Co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status & probable date of completion
3	Digital Encryption of Speech signal using chaotic based stream cipher system for secure voice communication	Dr Ramesh S	VGST	03 Years	Ongoing	01 Year
4	Anomaly Action detection in restricted area using deep learning	Ripal Patel/Dr. Tanuja P	Dr.AIT	02 Years	Ongoing	01 Year

Details of Project Proposal submitted

Department of Electronics and Communication Engineering

3. Total Number of Project proposals submitted (January 2021 to June 2021):16
4. Total Number of Project proposals submitted(from the beginning):40

Sl. No	Title of the Research Project	Name of Principal/co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status
3.	**Modelling and Fabrication of Exscosleketol arm for people suffering from Parkinson disease**	Harsha , Meenakshi Rathod	VGST	02 Yr	20L	Submitted
4.	**Development of Classification Evaluation Framework for pomegranate Leaves Diseases using Machine Leaning Models**	Harsha, Dr. S Ramesh	Dr.AIT	02 Yr	5L	Submitted

5.	**Development of Classification Evaluation Framework for pomegranate Leaves Diseases using Machine Leaning Models**	Harsha, Dr. S Ramesh	VTU	02 yr	5L	Submitted
6.	**Faculty Development Programme For Engineering College Teachers (FDP-ENGG)**	Harsha, Pushpalatha	VGST	10days	1.5L	Submitted
7.	Autonomous Crash Avoidance System	Dr. Mahalinga V Mandi/Dr. Shivaputra	VGST	02 Years	20,00,000	Applied in Feb 2021
8.	Design of Flicker free SMPS FOR 99% CRI LED with Android Application for Brightness tuning.	Principal investigator Dr.Shilpa K.C	RPS (COLLEGE PROPOSAL)	1 YEAR	1,50,000/	Submitted
9.	A Machine-Learning-Agro-Things (MLAT) Enabled Solar Powered Smart Device for Automatic Plant Disease Prediction.	Principal investigator Dr.Shilpa K.C	VGST	1 YEAR	2.50.000/	Submitted
10	Development of Technology-Enhanced Emergency Management system with LoRa Communication Technology for Health Care.	co-principal investigators Dr.Shilpa K.C	VTU	2 Years	22.34 Lakhs/-	Submitted
11	Broad band ,low side lobes microstrip antenna arrays	Dr.J.S.Baligar	VTU	3 years	22 lakhs	Submitted
12	Broad band ,low side lobes phased array microstrip antenna arrays	Dr.J.S.Baligar	DST	3 years	18 lakhs	Submitted
13	Broad band and compact microstrip antennas	Dr. H Umadevi, Dr.J.S.Baligar	VGST	3 years	30 lakhs	Submitted
14	Helping Women make Contraceptive Choices	Dr.Tanuja P Ripal Patel	AICTE	2 years	6 lakhs	Submitted

	using Deep Learning Techniques					
15	Prediction of Likelihood of Contraceptive Method among Women using Deep Learning Techniques	Dr.Tanuja P Ripal Patel	VGST	2 years	4 Lakhs	Submitted
16	Deep Learning Framework for Digital restoration of damaged Cultural Heritage	Dr.Tanuja P Ripal Patel	VGST	2 years	4 Lakhs	Submitted
17	Anomaly Action Detection in Restricted Area using Deep Learning	Dr.Tanuja P Ripal Patel	Inhouse RPS	2 years	1.8 Lakhs	Submitted and Not accepted
18	An IoT and Machine Learning Basedmobile application for Farmers	Dr.Rangaswamy Y Mr.Sujay S N	VGST		96500/-	Pending
19	Enhanced Braille Display	Meenakshi L Rathod (as a guide) and students	VTU	1 yr	5000	Selected at the college level and submitted to VTU
20	Award for Research Publications (ARP) in R & D	SWAMY T N	VGST	Nil	20,000	Submitted
21	5G Spectrum Efficient Bandwidth Utilization using HEVC Compression Standard	SWAMY T N	VGST	3 Yr	10 L	Submitted
22	Rescue Robot for Human Detection	Sudha B S	VTU	6 months	5000	Submitted
23	Floating waste scooper robot on water surface	Dr. Umadevi H	KSCST	6	6000	Submitted

Details of Testing and Consultancy

Department of Electronics and Communication Engineering

3. Total number of Testing and Consultancy(January 2021-June 2021):NIL

4. Total number of Testing and Conulstancy(from the beginning till June 2021):NIL

Sl. No	Name of faculty member/s involved	Name of the Client	Address of the client	Nature of testing and Consultancy services offered	Date	Amount, Rs
4.	NIL					

Details of Copy rights/ Patents/ Trademarks
Department of Electronics and Communication Engineering

7. Total number of copy rights(from January 2021-June 2021):00

8. Total number of Patents(from January 2021-June 2021): 03

9. Total number of Trademearks(from January 2021-June 2021)**: 00**

10. Total number of Trademarks(from the beginning till June 2021):00

11. Total number of Patents (from the beginning till June 2021): 13

12. Total number of Copy rights (from the beginning till June 2021):00

Sl. No	Details	Name of the Student involved	Name of the Faculty involved	Registration Details	Status
2	Marcomodel analysis for health monitoring of Covid-19 patients	None	Harsha	2021101315 Date: 06/05/2021	Granted
3	UBIQUITOS computing system for mental health monitoring of person during the pandemic of Covid-19	None	Harsha	2021101903	Published Date: 06/05/2021
4	Deep learning technique in Steaganography with multimedia network security for health care	None	Harsha	20211012689	Filed 19/05/2021
5	Development of Image Processing based Fruit Spoiled Detection System	--	Suresha D, AP, Dept. of CSE	202141008722 dated 2nd March 2021	Published on 12.03.3021
6	Reconfigurable compact microstrip filters	Dr.H.Umadevi	Kavithadevi C S , Dr.J.S.Baligar	16 may 2021	Granted patent (Australian)

7	**Improved Signum Error LMS Method for Directions-of-Arrival Estimation of Radio Signals using Rotational Invariance Technique**	Shwetha N	Sangeetha N	Ref.no.202141028809 Application number **TEMP/E1/32227/2021CHE** **C B R no.23228**	filed
8	Design and development of smart security and surveillance system		**Meenakshi L Rathod**	Appln. No. 202141003615 Date of filing: 27/01/2021 Publication date: 05/02/2021	Published
9	Development of IOT based underground wire fault detection system	--	Shivaputra	202041000118 A dated 02/01/2021	Published on 26/02/2021

Details of Doctoral Degree holders of the Department

Department of Electronics and Communication Engineering

4. Total number of Doctoral degree holders (from Jan-Jun 2021):0
5. Total number of Doctoral degree holders(from January 2018-June 2021):03
6. Total number of Doctoral degree holders(from the beginning):06

Sl. No	Name of the Faculty Member	Title of Research	Year of award of degree	Name of the University/institution	No. of students (MSc and PhD)	
					Completed	Ongoing
	Dr. S Ramesh	Cryptography and Network Security	2013	Dr. M.G.R. Educational and Research Institute	00	
	Dr. Mahalinga V Mandi	Cryptography, CDMA, Digital Communication	2013	Dr. M.G.R. Educational and Research Institute	00	

	Dr. Umadevi H	Wireless Communication	2014	Bangalore University	00	03
	Dr. Shivaputra	Image Processing, Digital Communication and Signal Processing	2017	Jain University	00	
	Dr. J S Baligar	RFID, Wireless Sensors	2003	Bangalore University	01	
	Dr. Tanuja Patgar	Performance Evaluation of Communication Based Train Control and Tracking System using WSN	2019	VTU	NIL	NIL
	Dr. Chetan S	Image Processing	2017	Jain University	0	00
	Dr. Rangaswamy Y	Image Processing	2020	JNTU	00	00
	Dr. Shilpa K C	VLSI	2018	VTU	00	00

Details of Research Scholars registered in the Department Research Center (Internal (faculty)candidates)

4. Total number of research scholars registered internal(Jan-June 2021):00

5. Total number of research scholars registered internal (from Jan 2018- June 2021):00

6. Total number of research scholars registered internal(from the beginning):08

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
1	Siddesha K	Assistant Professor, Dept. of ECE, Dr.AIT	Enhanced energy aware task scheduling mechanism for multicore processor	Dr. G V Jayaramaiah	Professor (shifted to EEE Dept.)	2016	CV Completed

2	Prasanna Kumar	Associate Professor, Dept. of EIE, Dr.AIT	Study of health monitoring of machine and performance measurements in apparel industry	Dr. G V Jayaramaiah	Professor (shifted to EEE Dept.)	2011	CV Completed
3	Mohan Kumar V	Assistant Professor, Dept. of ECE, Dr.AIT	Design and investigation of locomotion based energy harvesting system for low power sensor applications	Dr. G V Jayaramaiah	Professor (shifted to EEE Dept.)	2015	CV Completed
4	Swamy T N	Assistant Professor, Dept. of ECE, Dr.AIT	A new technique for fast intra prediction mode decision for high efficiency video coding (HEVC) encoders	Dr. K Ramesha	Professor (shifted to IT Dept.)	2014	CV Completed
5	Naveen K N(full Time)	Dept. of ECE, Dr.AIT	Development And Performance Analysis Of Ranging Algorithms For OFDMA Systems	Dr. K Ramesha	Professor (shifted to IT Dept.)	2015	Colloquium completed
6	Sudha B S	Associate Prof, ECE, Dr.AIT	Broadband microstrip antennas for mobile communication application	Dr. J S Baligar	Associate Professor	2016	Course Work COmpleted

7	Pushpalat ha G S	Assistan t Prof, ECE, Dr.AIT	Digital encryption of speech signal using chaotic based stream cipher system for secure voice communicati on	Dr. S Ramesh	Professor and Head	2016	CV Complete d
8	Kavitadev i C S	Dr.AIT	Design and implementati on of Microstrip filters course work yet to complete	Dr. H Umadevi	Professor	2015	CV Complete d

Dr. Ambedkar Institute of Technology, Bengaluru – 560 056
Research and Development Cell

Details of Research Scholars registered in the <u>Department Research Center</u> (External candidates)

4. Total number of   research scholars registered External(Jan-June 2021): 00

5. Total number of research scholars registered External (from Jan 2018- June 2021):02

6. Total number of research scholars registered External(from the beginning):15

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
1	K. Chidananda Murthy	INTEL, Bangalore	Chaotic Sequences for Cryptographic Applications	Dr. Mahalinga V Mandi	Professor	2015	Waiting for Viva-Voce
2	Dileep D	Engineer/Scientist, ISTRAC-ISRO, Bangalore	Chaotic Sequences for Navigation Applications	Dr. Mahalinga V Mandi	Professor	2015	Waiting for Viva-Voce
3	Premakumar M N,	INTEL, Bangalore	Secure Key distribution in WSN Cryptography	Dr Ramesh S	Professor & HOD	2015	Thesis submitted
4	**Ganeshan V**	Vishwa Jothi Technologies Pvt. Ltd, #3346, 2nd floor	Computer aided implementation and evaluation of grid connected operation of different synchronization methods of hybrid(PV-wind) DC Microgrid on the	Dr. G V Jayaramaiah	Professor (shifted to EEE Dept.)	2016	Course Work Completed

		stability of the voltage source converter				
5	**Vinay Kumar K**	Senior Project Manager, Robert Bosch Engineering and Bussiness Solution Pvt. Ltd, Bengaluru	To Study Reliability and Analysis of Dedicated Short Rang Communication	Dr. G V Jayaramaiah	Professor (shifted to EEE Dept.)	2016	Course Work Completed
6	**Narashimamurthy**	LRDE, DRDO, C V Ra	Algorithms and architecture for adaptive beamforming	Dr. G V Jayaramaiah	Professor (shifted to EEE Dept.)	2009	Course Work Completed
7	**Sidramayya Swamy Matad**	Assistant Professor, ECE, SG Balejundri , Belagavi	Development of OFDMA transceiver subsystem using FPGA.	Dr. K Ramesha	Professor (shifted to IT Dept.)	2015	CV COmpleted
8	**Shruthi N**	Assitant Prof, ECE, BIT.	Communication	Dr. K Ramesha	Professor (shifted to IT Dept.)	2016	Course work completed

9	**Ashwini P**	Assitant Prof, ECE, REVA	Image processing	Dr. K Ramesha	Professor (shifted to IT Dept.)	2015	Course work completed
1 0	**Kubendra K**	INTEL	Optimization of clock circuits for SoC	Dr. K Ramesha	Professor (shifted to IT Dept.)	2012	Course work completed
1 1	**Shobha I Hugar**	Asssitant Prof, ECE, Sapthagiri College, Blore.	Design and Implementation of reconfigurable band pass microstrip filters	Dr. J S Baligar	Associate Professor	2013	CV Complted
1 2	**Sunitha S V 1DA16PEJ29**	VVIT, Bengaluru	Improving the intelligibility of Dysarthric speech	Dr. Shivaputra	Assistant Professor	2016	CV Complted
1 3	**Soumyashree M**	PDA Gulbarga	Object segmentation using Adaptive composite filter	Dr. Shivaputra	Assistant Professor	2016	CV Complted
1 4	**G Srinivasalu**	Assistant Professor, ECE Dept. CMRIT, Bengaluru	Noval Technique for efficient power	Dr. H Umadevi	Professor	2016	Course work completed

1 5	Soumay Padukone	Assistant Professor, ECE Dept. Oxford, Bengaluru	DNA microwave array analysis in forensic science using optical sensor with image processing	Dr. H Umadevi	Profess or	2019	Course work complet ed

Details of faculty members pursuing PhD in other Universities/Institutions

5. Total number of   faculty members pursuing PhD in other Universities(Jan-June 2021):01

6. Total number of   faculty members pursuing PhD in other Institutions(Jan-June 2021)00

7. Total number of faculty members pursuing PhD in other Universities (from Jan 2018- June 2021):02

8. Total number of faculty members pursuing PhD in other Institutions(from the beginning):12

Sl. No	Name of the faculty	Designati on	Area of Research	Details of Research Supervisor/s		Year of registrati on	Status of the work
				Name	Affiliation		
1	Sajidha tabasum	Assistant Professor	Antenna	Dr. Veena k n	REVA University	2021	Completed Course Work
2	Harsha	Assistant Professor	Robotics and Artificial Intellingence	Dr. Veena k n	REVA University	2019	Comprehen sive Completed
3	Hemalath a K N	Assistant Professor	Digital Design & VlSI	Dr. Sangeetha B G	RNS Institute of Technolog y	2015	Completed comprehens ive Viva
4	Meenak shi L Rathod	Assistant Professor	Antenna radiation pattern synthesis	Dr. Meera A,	Professor ECE Departme nt BMS college of Engineeri ng	2013	CV Complted

5	Girija.S	Assistant Professor	Optimization of Digital Circuits	Dr. S R Bhaghyalakshmi	ECE Departme nt BMS college of Engineeri ng,	2016	
6	Mala Sinnoor	Assistant Professor	Design and development of digital filter for bio-medical signals	Dr. Shanthi K J	Medical Electronic s Departme nt Dr.AIT	2017	
7	Hemalat ha K.N	Assistant Professor	Optimization of Digital Circuits	Dr. S R Bhaghyalakshmi	ECE Departme nt BMS college of Engineeri ng,	2015	
8	Shwetha M	Assistant Professor	Multimedia Communicat ion	Dr. Yamunadevi	TCE Departme nt, Dr.AIT	2017	
9	Divya	Assistant Professor	Communicat ion	Dr. K B Raja	Bangalore Universit y	2016	
10	Manjula N	Assistant Professor	On chip energy measurenme nt and optimization for portable electronic devices	Dr. Shiva S Yellenpalli	UTL	2015	
11	Shwetha N	Assistant Professor	A novel self-adaptive channel equalizer using hybrid approach	Dr. Manoj Priyatham,	Professor, EC Dept. APSCE,	2017	

					VTU Regional Center		
12	Sujay S N	Assistant Professor	Development of fusion based biometric algorithm for authentication	Dr. H S Manjunath Reddy	Global Institute of Technology	2015	

Department of Electronics & Instrumentation

Engineering

Details of papers published in Journals – National and International

1. Total No papers published in National Journal(Jan-Jun 2021):nil

2. Total No of Papers published in International Journal (Jan-Jun 2021):02

3. Total Publications till June 2021(from the beginning): 174

Sl. No	Title of the Article	Name of the journal – National/international	ISSN & Detail	Date and Page No.
		January 2021 to June 2021		
1	K.Ramesha, Joint Initial Uplink Synchronization and Interference Aware Resource Allocation for D2D Communication in the MU-OFDMA System	IETE Journal of Research-SCI- Journal	0377-2063	26 Apr 2021, PP.1-21
2	M. Prasanna Kumar Generation of Electricity using Heat produced in Automobile	International Journal of Advances in Engineering and Management (IJAEM)	ISSN: 2395-5252	Issue 2 Feb 2021, pp: 174-177

Summary Publication Details as on January 2021-June 2021Department of

Electronics and Instrumentation Engineering

Details of papers published in conferences – National and International

1. Total number of papers published in National conference:34

2. Total number of papers published in Inter-National conference:07

3. Total number of paper published in National and International conference ason June 2021(from the beginning):33

Sl. No	Title of the Article	Name of the Conference – National/international	ISSN & Detail	Date and Page No.
		January 2021 to June 2021		
1	Nil			

Details of funded projects

Details of Completed Projects

1. Total number of completed projects(January 2021 -June 2021): Nil
2. Total number of completed Projects(from the beginning till June 2021):04

Sl. No	Title ofthe Research Project	Name of Principal/co-principal investigators	Funding agency	Date of completion	Duration of project	Amount (Rs.)	Outcome of the project – Publications/PhD Degree/Patents
1.	Design and Development of Autonomous Wheeled Robotic Systems for Outdoor Application	Dr.Meenakshi M	VTU	2015-19	5years	12. 87 Lakhs	Robot product developed

2	Digital Evaluation System	Prasanna kumar M	Dr. AIT	2017	1 year	19 Lakhs	Nil
3	Online PG thesis Evaluation system	Prasanna kumar M	Dr. AIT	2018	0.5 year	2 Lakhs	Nil
4	Office automation system	Prasanna kumar M	Dr. AIT	2019	1 year	8 Lakhs	Nil

Details of ongoing projects

1. Total number of ongoing projects(January 2021 -June 2021):
2. Total number of ongoing projects(January 2018-June 2021):

Sl. No	Title of the Research Project	Name of Principal/ Co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status & probabledate of completion
1	Smart Self-Defence Gadget For Women's Safety Using Iot	Monikashree T S	KSCST	6months	6000	On going 30 Agust 2021

Details of Project Proposal submitted

1. Total Number of Project proposals submitted (January 2021 to June 2021): 05
2. Total Number of Project proposals submitted(from the beginning): 20

Sl. No	Title of the Research Project	Name of Principal/co-principal investigators	Funding agency	Duration of Project	Amount (Rs.)	Status
1.	5G Spectrum Efficient Bandwidth Utilization using	Dr. K.Ramesha	Dr.AIT	2 yrs	8,86,000/-	Yet to know

	H.266 (Versatile Video Coding) Standard.					
2	5G Spectrum Efficient Bandwidth Utilization using HEVC Compression Standard	PI: Dr.K.Ramesha Co.PI: Mr.Swamy.T.N	VGST	3years	991000=00	Yet to know
3	Fumigating Robot for Sanitization of Health care centers and open areas.	PI: Mrs. Hamsa Rekha S D Co-PI: Dr. Mennakshi M	VGST	1 year	78,600/-	Proposal submitted
4	Robotic assembling of COVID-19 testing kit	PI: Mrs. Sheetal N Co-PI: Dr. Mennakshi M	VGST	1 year	80,000/-	Proposal submitted
5	Design and Implementation of an Intelligent and Automated Traffic Control System	PI;Sridevi N Co PI: Dr.M.Meenakshi	VGST	2years	20,00000/-	Waiting for approval
6	Advanced Technology Infrastructure Setup for Electronic Product Design	PI; Sridevi N Co PI: Dr.M.Meenakshi	VGST	2years	20,00000/-	Waiting for approval

Details of Testing and Consultancy

1. Total number of Testing and Consultancy(January 2021-June 2021):Nil

2. Total number of Testing and Consultancy(from the beginning till June 2021):Nil

Sl. No	Name of faculty member/s involved	Name of the Client	Address of the client	Nature of testing and Consultancy services offered	Date	Amount, Rs
1.	NIL					

Details of Copy rights/ Patents/ Trademarks

1. Total number of copy rights(from January 2021-June 2021):Nil

2. Total number of Patents(from January 2021-June 2021):Nil

3. Total number of Trademearks(from January 2021-June 2021):**Nil**

4. Total number of Trademarks(from the beginning till June 2021): Nil

5. Total number of Patents (from the beginning till June 2021):Nil

6. Total number of Copy rights (from the beginning till June 2021): NIl

Sl. No	Details	Name of the Student involved	Name of the Faculty involved	Registration Details	Status
1	NIL				

Details of Doctoral Degree holders of the Department

1. Total number of Doctoral degree holders (from Jan-Jun 2021):03
2. Total number of Doctoral degree holders(from January 2018-June 2021):03
3. Total number of Doctoral degree holders(from the beginning):01

Sl. No	Name of the Faculty Member	Title of Research	Year of award of degree	Name of the University/institution	No. of students (MSc and PhD)	
					Completed	Ongoing
1	Dr.Meenakshi	Control system	2006	Indian Institute of Science (IISc), Bangalore	05	03
2	Dr.K.Ramesha	Image Processing	2013	JNTU, Hyderabad	02	05
3	Dr.Ganapathi V Sagar	Efficient Authentication Algorithms for Face and Iris Biometrics	2018	Bangalore University	-	-

Details of Research Scholars registered in the Department Research Center (Internal (faculty)candidates)

1. Total number of research scholars registered internal(Jan-June 2021): Nil

2. Total number of research scholars registered internal (from Jan 2018- June 2021): Nil

3. Total number of research scholars registered internal(from the beginning): 02

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
1	P Shubha	Dr.AIT	Image Processing and Robotics	Dr.M.Meenakshi	Professor&HOD	2013	Thesis Submitted
2	Sridevi N	Dr.AIT	Image Processing	Dr.M.Meenakshi	Professor&HOD	2015	Waiting for Thesis submission
3	M.Prasanna	Dr.AIT	Embedded Systems	Dr.G V Jayarama	Professor& HOD	2011	Ongoing

Kumar		iah			

Details of Research Scholars registered in the Department Research Center (External candidates)

1. Total number of research scholars registered External(Jan-June 2021): Nil

2. Total number of research scholars registered External (from Jan 2018- June 2021): Nil

3. Total number of research scholars registered External(from the beginning):04

04

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
1	Hithaishi Devaraj	VTU	Image Processing	Dr.M.Meenakshi	Professor&HOD	2018	Course work completed
2	Niranjan Murthy H S	VTU	Medical Imaging Processing	Dr.M.Meenakshi	Professor&HOD	2009	Completed
3	Sundeep Bhatt	VTU	Image Processing and Robotics	Dr.M.Meenakshi	Professor&HOD	2011	Completed
4	Beena ullal math B N	VTU	Signal and image processing	Dr.M.Meenakshi	Professor&HOD	2009	Completed
5	Nandeesh M D	VTU	Medical Image Processing	Dr.M.Meenakshi	Professor&HOD	2010	Completed
6	Murali H S	VTU	Parameter estimation and Automation	Dr.M.Meenakshi	Professor&HOD	2009	Completed

Details of faculty members pursuing PhD in other Universities/Institutions

1. Total number of faculty members pursuing PhD in other Universities(Jan-June 2021): Nil

2. Total number of faculty members pursuing PhD in other Institutions(Jan-June 2021):Nil

3. Total number of faculty members pursuing PhD in other Universities (from Jan 2018- June 2021):01

4. Total number of faculty members pursuing PhD in other Institutions(from the beginning):01

Sl. No	Name of the faculty	Designation	Area of Research	Details of Research Supervisor/s		Year of registration	Status of the work
				Name	Affiliation		
1	Sridhar Kumar H R	Asst.Professor	Image processing	Dr.chamu ndeshwari	Christ university	2019	Course work completed

Summary Publication Details as on January 2021-June 2021

Department of Electronics & Telecommunication Engineering

Details of papers published in Journals – National and International

7. Total No papers published in National Journal(Jan-Jun 2021):**00**

8. Total No of Papers published in International Journal(Jan-Jun 2021): **06**

9. Total Publications till June 2021(from the beginning):**174**

Sl. No	Title of the Article	Name of the journal – National/international	ISSN & Detail	Date and Page No.
		January 2021 to June 2021		
1	Analysis of vowel addition or deletion in Continuous Speech	Global Journal of Engineering and Technology Advances	eISSN: 2582-5003	2021, 07(03), 136–143
2	Heterogeneous Wireless Ad-hoc Networks to Enhance Coverage Area Using Femtocells	International Journal of New Innovations in Engineering and Technology	ISSN: 2319-6319	Volume 17 Issue 1 June 2021
3	**Smart Village System for Rural Development**	**International Journal on Creative Research Thoughts**	**Volume -9, Issue-5, ISSN-2320-2882, 2021(Peer Reviewed)**	**May and pp. a643-a648**
4	Energy Efficient Scheduling in Wireless Sensor Networks Based on Residual Energy Levels of Sensor Nodes	International Journal of Creative Research Thoughts (IJCRT)	ISSN: 2320-2882	Volume 9, Issue 1 January 2021
5	Designing an Energy Efficient Clustering in Heterogeneous Wireless Sensor Network	International Journal of Computer Networks and Communications(IJCNC)	https://doi.org/10.5121/ijcnc.2021.13105	vol 13, no. 1, pp. 75 – 92, 2021.

6.	Flow Ananysis og Gigabit Computer Network traffic at wirespeed using bMonosek	International Journal of Computer Science and Information Society(IJCSIS)	ISSN 1947-5500, Vol.19	1st Feb 2021, Page No. 1-4

Department of Electronics & Telecommunication Engineering

Details of papers published in conferences – National and International

7. Total number of papers published in National conference: **00**

8. Total number of papers published in Inter-National conference:**04**

9. Total number of paper published in National and International conference as on June 2021(from the beginning):**270**

Sl. No	Title of the Article	Name of the Conference – National/international	ISSN & Detail	Date and Page No.
		January 2021 to June 2021		
1	Low power multiplier design using dynamic voltage and frequency scaling in the online	International Conference on Intelligent Systems Electrical and Communication Technology	ISSN N0. 2249-6661	9th and 10th April 2021. Vol-44,PP-02
2	Energy Efficient Optimized Channel Estimation for Spectrum Sensing in Cognitive Radio Network", ,	International Conference on Communication and Computational Technologies	Springer	February 2021.
3	A Back Propagation Neural Network Model and Efficient Routing Security Mechanisms against Blackhole Attack in HWSNs,	International Conference on Recent Trends in Machine Learning, IOT, Smart Cities and Applications" ICMISC	Springer	March 2021
4.	Prediction and Comparative Analysis using Ensemble Classifier model on leafy vegetable growth rates in DWC and NFT smart hydrponic system	Fifth International Conference on Information and Communication Technology for Intelligent Systems	Springer	April 22-23, 2021

Details of funded projects

Department of Electronics & Telecommunication Engineering

Details of Completed Projects

5. Total number of completed projects(January 2021 -June 2021): **00**
6. Total number of completed Projects(from the beginning till June 2021): **03**
7. Students Projects Funded by KSCST : **06**

Sl. No	Title of the Research Project	Name of Principal/co-	Funding agency	Date of completion	Duration of project	Amount (Rs.)	Outcome of the project –

		principal investigators					Publications/PhD Degree/Patents
1.	Human Tracking using Image Processing Techniques	Dr. B. Sivakumar	AICTE-RPS	2016	3 years	9,00,000/-	3 papers published
2.	Remote Engineering and Virtual Instrumentation through Establishment of Remote Communication Laboratory for conducting the Experiments	Dr. Yamuna Devi C. R Dr. Prashanth C. R. , Sowmya M	PVPWT	2017 – 2018	1 Year	1,27,853	02-Conference paper has been presented.
3.	Inception of IoT Test Bench to Facilitate experimentation, research and product development on device to device communication using multiple sensor node analysis	Dr. Yamuna Devi C.R./ Dr. Prashanth C . R./ Dr. Aravind H L	PVPWT	2017-18	2 years	Rs. 4,99,220/-	Publication

Students Projects Funded by
Karnataka State Council for Science and Technology - KSCST

Student Names	Project Title	Name of the Faculty	Amount (Rs.)	Year
1.Bhargava P 2.Anjana Khadka 3.Misba Afroze 4.Prathiksha Ramesh	ARM CORTEX-M3 based secure data transmission for Examination system	K.V.Mahesan	5000/-	2017-18
1.Chethan Gowda 2.Vishwas G.L 3.Pavan N.J 4.Rajashekara V.S	Andriod based warfield robot with wireless night vision camera	Usha Rani M.A	6000/-	2017-18
1.Shruthi S.P 2.Shwetha Sridhar Hiregange 3.Swathi.S 4.T.N Bhuvana	Smart phone controlled unmanned ground sensor drone vehicle for air quality and environmental monitoring	Sowmya M	4000/-	2017-18

1.Sania Sulthana 2.Shwetha 3.Harshitha 4.Manoj 5.Harish B.P	Congestion Control and Collision Avoidance in Vehicular Area Network	Usha Rani M.A	6,500/-	2018-19
1. Dheeraj S E 2. Lathif Sharieff 3. Nisha Singh 4. Sabitha Khanum Z	Design and Analysis of 10 Port Router for Network on chip	Dr. Yamuna Devi C R	5,500/-	2019-20
1. Jagruth S. 2. Deepika S. 3. Jalaja M. 4. Rachana S. L.	Camouflage Surveillance Robot in Defense using AI	Dr. Prashanth C. R.	5,000/-	2020-21

Details of ongoing projects

Department of Electronics & Telecommunication Engineering

5. Total number of ongoing projects(January 2021 -June 2021): **01**
6. Total number of ongoing projects(January 2018-June 2021): **01**

Sl. No	Title of the Research Project	Name of Principal/ Co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status & probable date of completion
1.	A Design of Smart Antenna based Mobile ad-Hoc Network	Dr. B. Sivakumar	AICTE-RPS	3 Years	10,00,000/-	2022
2.	Monosek for Network Security Lab	Dr. Yamuna Devi C. R.	VGST - Vision Group of Science and Technology, Government of Karnataka	2 years	20,00000/-	II Phase in Progress Dec 2021

Details of Project Proposal submitted

Department of Electronics & Telecommunication Engineering

5. Total Number of Project proposals submitted (January 2021 to June 2021): **07**
6. Total Number of Project proposals submitted(from the beginning): **15**

Sl. No	Title of the Research Project	Name of Principal/co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status
1.	Framework for Aquatic Diffusion monitoring	Dr. B. Sivakumar	PVPWT	2 Years	5,00,000/-	Applied (Result Awaiting)

	System using Sensor Networks by IOT					
2.	The Design and Development strategies for miniaturized Transceiver system for S-Band Application using HMIC technology	Dr. B. Sivakumar	VGST	2 Years	28,30,000/-	Applied (Result Awaiting)
3.	Implementation of noise suppression for high quality audio communication.	Dr. Aravinda HL/ 1) Mahesan KV 2) Usharani MA	PVP Welfare Trust	12 Months	1,52,000/-	Under Process
4.	Optical Communication and Networking Lab	Dr. Chandrakala V/Dr. Shruthi PC	K-FIST-L2	02	20 lakhs	---
5.	Framework for Aquatic Diffusion monitoring System using Sensor Networks by IOT	Praveen K B	PVPWT	2 Years	5,00,000/-	Applied (Result Awaiting)
6.	The Design and Development strategies for miniaturized Transceiver system for S-Band Application using HMIC technology	Praveen K B	VGST	2 Years	28,30,000/-	Applied (Result Awaiting)
7.	Finfet And Deep Sub-Micron Level MOSFET Modeling And Simulation For Analog And Digital Asic Design Environment.	Dr Prashanth C R	VGST	3 Years (2021)	60,00,000/-	Result awaited

Details of Testing and Consultancy

Department of Electronics & Telecommunication Engineering

5. Total number of Testing and Consultancy(January 2021-June 2021): **00**

6. Total number of Testing and Conulstancy (from the beginning till June 2021): **01**

Sl. No	Name of faculty member/s involved	Name of the Client	Address of the client	Nature of testing and Consultancy services offered	Date	Amount, Rs
5.	Dr. B. Sivakumar	Charan Technologies	No.15, Sivani Building, 6th Cross, Binny Layout, Vijayanagar, Bangalore - 560040	Design of Microstrip Antenna (Technical Consultancy)	10th April 2014	5,000/-

Details of Copy rights/ Patents/ Trademarks

13. Total number of copy rights(from January 2021-June 2021): **00**

14. Total number of Patents(from January 2021-June 2021): **00**

15. Total number of Trademearks(from January 2021-June 2021)**: 00**

16. Total number of Trademarks(from the beginning till June 2021): **00**

17. Total number of Patents (from the beginning till June 2021): **03**

18. Total number of Copy rights (from the beginning till June 2021): **00**

Sl. No	Details	Name of the Student involved	Name of the Faculty involved	Registration Details	Status
10	An apparatus for reducing linear microstrip line bend loss using rectangular patch antenna		Praveen K B,Dr. B. Sivakumar	Application no: 201841014694	Filed
11	A system and method for sending bulk messages	D C Raghavendra	Dr. B. Sivakumar	Ref.No/ Application No: 905/CHE/2014	Yet to Receive Certificate
12	An apparatus for reducing linear microstrip line bend loss using rectangular patch antenna		Dr. B. Sivakumar Praveen K B	Application no: 201841014694	Filed

Details of Doctoral Degree holders of the Department
Department of Electronics & Communication Engineering

7. Total number of Doctoral degree holders (from Jan-Jun 2021): **01**
8. Total number of Doctoral degree holders(from January 2018-June 2021): **05**
9. Total number of Doctoral degree holders(from the beginning): **08**

Sl. No	Name of the Faculty Member	Title of Research	Year of award of degree	Name of the University/institution	No. of students (MSc and PhD)	
					Completed	Ongoing
1	Dr. Chandrakala V	Secure Biometric Authentication using Palmprint and Face	2018	Bangalore University	---	---

2.	Dr. Sudha H Thimmaiah	Estimation and Minimization of Localization Errors for WSNs	2020	PRIST University, Thanjavur, Tamil Nadu	---	---
3	Dr. Vidya Honguntikar	Evolutionary Techniques in MAC and Network Layer Inspired by the behavior of Anuran Family Species to build a Reliable Wireless Sensor Networks	2020	Visvesvaraya Technological University (VTU), Belagavi	---	---
4	Dr. Aravinda HL	Analysis and retrieval of Medical Images from bases using CBIR techniques associated with semantics for diagnosis purposes	2020	Jain University	---	---
5	Shruthi PC	Intelligent Placement of Wavelength Converters In WDM Networks	2021	Visvesvaraya Technological University (VTU)	---	---

Details of Research Scholars registered in the Department Research Center (Internal (faculty)candidates)

7. Total number of research scholars registered internal(Jan-June 2021): **00**

8. Total number of research scholars registered internal (from Jan 2018- June 2021): **01**

9. Total number of research scholars registered internal(from the beginning): **02**

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
1	Usha Rani MA	VTU	Wireless communication	Dr Prashanth CR	Professor	2015	Awaiting for CV Research Centre Changed from BMS To Dr.AIT

Details of Research Scholars registered in the Department Research Center (External candidates)

7. Total number of research scholars registered External(Jan-June 2021): **00**

8. Total number of research scholars registered External (from Jan 2018- June 2021): **02**

9. Total number of research scholars registered External(from the beginning): **15**

Sl. No	Details of research scholar	Area of Research	Details of Research supervisor/s	Year of registration	Status of the work

	Name	Affiliation		Name	Designation		
1.	Lakshmi Bhaskar	VTU	Sensor Networks	Dr. Yamuna Devi	Associate Professor	2018	Course Work Completed
2.	Priya H K	VTU	Sensor Networks	Dr. Yamuna Devi	Associate Professor	2019	Registered

Details of faculty members pursuing PhD in other Universities/Institutions

9. Total number of faculty members pursuing PhD in other Universities(Jan-June 2021): **00**

10. Total number of faculty members pursuing PhD in other Institutions(Jan-June 2021): **00**

11. Total number of faculty members pursuing PhD in other Universities (from Jan 2018- June 2021): **01**

12. Total number of faculty members pursuing PhD in other Institutions(from the beginning): **02**

Sl. No	Name of the faculty	Designation	Area of Research	Details of Research Supervisor/s		Year of registration	Status of the work
				Name	Affiliation		
1	Kavitha Narayan BM	Assistant Professor	Wireless sensor networks	Dr A Rijuvana Begum	PRIST University	2019	Preparing for 3rd DC meeting

Department of Medical Electronics Engineering

Details of papers published in Journals – National and International

10. Total No papers published in National Journal(Jan-Jun 2021):Nil

11. Total No of Papers published in International Journal(Jan-Jun 2021):04

12. Total Publications till June 2021(from the beginning):04

Sl. No	Title of the Article	Name of the journal – National/international	ISSN & Detail	Date and Page No.
		January 2021 to June 2021		
1	Revisiting Electrical Safety Design and Risk Management for Medical Devices	LINO Journal	ISSN: 0211-2574, Vol. 11, Issue 02	February 2021, pp. 1-10
2	Design and Development of Vibroarthogram Screening Device and	ICTACT Journal	ISSN: 0976-9102, Vol.11, Issue 04	May 2021, pp. 2453-2459

	Assessment of Joint Motion in the pursuit of Signal Processing			
3	Ultrasound image segmentation through deep learning based improvised U-Net	Indonesian Journal of Electrical Engineering and Computer Science	ISSN: 2502-4752 DOI: 10.11591/ijeecs.v21.i3	Oct 1, 2020 pp.1424-1434
4	Comparative Analysis of Image Enhancement Techniques for Ultrasonic Ovarian Cyst Images	Inventive Research in Computing Applications ICIRCA-2021	ISBN - 978-0-7381-4627-0	Accepted for publication

Department of Medical Electronics Engineering

Details of papers published in conferences – National and International

10. Total number of papers published in National conference: nil

11. Total number of papers published in Inter-National conference:nil

12. Total number of paper published in National and International conference as on June 2021(from the beginning):nil

Sl. No	Title of the Article	Name of the Conference – National/international	ISSN & Detail	Date and Page No.
	January 2021 to June 2021			
1	**nil**			

Details of funded projects

Department of Medical Electronics Engineering

Details of Completed Projects

8. Total number of completed projects(January 2021 -June 2021):nil
9. Total number of completed Projects(from the beginning till June 2021):nil

Sl. No	Title of the Research Project	Name of Principal/co-principal investigators	Funding agency	Date of completion	Duration of project	Amount (Rs.)	Outcome of the project – Publications/PhD Degree/Patents
10.	nil						

Details of ongoing projects

Department of Medical Electronics Engineering

7. Total number of ongoing projects(January 2021 -June 2021):nil
8. Total number of ongoing projects(January 2018-June 2021):nil

Sl. No	Title of the Research Project	Name of Principal/ Co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status & probable date of completion
5	nil					

Details of Project Proposal submitted

Department of Medical Electronics Engineering

7. Total Number of Project proposals submitted (January 2021 to June 2021):03
8. Total Number of Project proposals submitted(from the beginning): _____

Sl. No	Title of the Research Project	Name of Principal/co-principal investigators	Funding agency	Duration of project	Amount (Rs.)	Status
24	Design and Development of Low Cost Portable Medical Devices	Dr. D K Ravish Nayana R Shenoy	VGST	02 years	8,75,000=00	Submitted
25	Thermal Imaging for detection of thyroid gland abnormalities	Nayana R Shenoy Kamala C.	VTU	02 years	15,00,000=00	Submitted
26	Design of Photoplethysmography system for the detection of atherosclerosis	Dr. A. P. Manjunatha	Dr.AIT, B-56	02 years	2,000,00=00	Submitted
27	Implementation of IOT driven Medical Devices for Telemedicine Applications	Dr. D K Ravish Dr. K. J. Shanthi	Dr.AIT, B-56	02 years	2,50,000=00	Submitted

Details of Testing and Consultancy
Department of Medical Electronics Engineering

7. Total number of Testing and Consultancy(January 2021-June 2021):nil

8. Total number of Testing and Conulstancy(from the beginning till June 2021):nil

Sl. No	Name of faculty member/s involved	Name of the Client	Address of the client	Nature of testing and Consultancy services offered	Date	Amount, Rs
6.	nil					

Department of Medical Electronics Engineering

Details of Copy rights/ Patents/ Trademarks

19. Total number of copy rights(from January 2021-June 2021):nil

20. Total number of Patents(from January 2021-June 2021):nil

21. Total number ofTrademearks(from January 2021-June 2021)**:**nil

22. Total number of Trademarks(from the beginning till June 2021):nil

23. Total number of Patents(from the beginning till June 2021):nil

24. Total number of Copy rights(from the beginning till June 2021):nil

Sl. No	Details	Name of the Student involved	Name of the Faculty involved	Registration Details	Status
13	nil				

Details of Doctoral Degree holders of the Department
Department of Medical Electronics Engineering

10. Total number of Doctoral degree holders (from Jan-Jun 2021):nil
11. Total number of Doctoral degree holders(from January 2018-June 2021):01
12. Total number of Doctoral degree holders(from the beginning):02

Sl. No	Name of the Faculty Member	Title of Research	Year of award of degree	Name of the University/institution	No. of students (MSc and PhD)	
					Completed	Ongoing
1	nil					

| 2 | Dr. A. P. Manjunatha | Early Detection of Breast Cancer Using Mammogram Analysis | 2018 | Jawaharlal Nehru Technological University, Ananthapur-515002 Andrapradesh | nil | nil |
| 3 | Dr. K. J. Shanthi

Dr. D. K. Ravish | Volumetric Analysis of Brain MRI using Image processing

Analysis of EEG fro seizure detection and Prediction | 2012

2017 | Kerala University, Kerala

Anna University, Chennai-600025, Tamilnadu | nil

nil | 03

nil |

Details of Research Scholars registered in the Department Research Center (Internal (faculty)candidates)

10. Total number of research scholars registered internal(Jan-June 2021):nil

11. Total number of research scholars registered internal (from Jan 2018- June 2021):nil

12. Total number of research scholars registered internal(from the beginning):03

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
1	Sumana S	VTU	Image Processing	Dr. K. J. Shanthi	Professor & Head	2015	Course work completed and preparing for comprehensive Viva
2	Mala Sinoor	VTU	ECG Signal Processing	Dr. K. J. Shanthi	Professor & Head	2017	Course work taken
3	Rajiv I Pujar	VTU	Biomedical Instrumentation	Dr. K. J. Shanthi	Professor & Head	2017	Course work taken

Details of Research Scholars registered in the Department Research Center (External candidates)

10. Total number of research scholars registered External(Jan-June 2021):nil

11. Total number of research scholars registered External (from Jan 2018- June 2021):nil

12. Total number of research scholars registered External(from the beginning):02

Sl. No	Details of research scholar		Area of Research	Details of Research supervisor/s		Year of registration	Status of the work
	Name	Affiliation		Name	Designation		
1	Nayana R. Shenoy	VTU	Medical Image Processing	Dr.Anand Jatti	Associate Professor	2015	Thesis submitted
2	Kamala C.	VTU	Medical Image Processing	Dr. Manisha Joshi	Professor	2016	Comprehension Viva Completed

Details of faculty members pursuing PhD in other Universities/Institutions

13. Total number of faculty members pursuing PhD in other Universities(Jan-June 2021):nil

14. Total number of faculty members pursuing PhD in other Institutions(Jan-June 2021):nil

15. Total number of faculty members pursuing PhD in other Universities (from Jan 2018- June 2021):nil

16. Total number of faculty members pursuing PhD in other Institutions(from the beginning):nil_____

Sl. No	Name of the faculty	Designation	Area of Research	Details of Research Supervisor/s		Year of registration	Status of the work
				Name	Affiliation		
				nil			

Department: Electrical & Electronics Engineering

List of Faculty with doctorate and Specialization.

Sl No	Name of the Faculty	Specialization
1.	Dr.G V Jayaramaiah	Power Electronics and Drives
2.	Dr Eranna	High Voltage and Insulation
3.	Dr H V Govindaraju	Power Electronics and Drives
4.	Dr S. Vasudevamurthy	High Voltage and Insulation
5.	Dr.Shankaralingappa C B	Power System
6.	Dr. Ariptha Raju	Electro hydrodynamics

Department: Electrical & Electronics Engineering

List of Faculty with Guide ship.

Sl No	Guide Name	Specialization
1.	Dr.G V Jayaramaiah	Power Electronics and Drives
2.	Dr H V Govindaraju	Power Electronics and Drives
3.	Dr.Shankaralingappa C B	Power System

PhD Awarded

Sl No	Name of the Guide	Name of the Faculty	Research centre	Year of Award	University
1.	Dr. B V Sumangala	Dr S. Vasudevamurthy	EEE, Dr. AIT	2018	VTU, Belagavi
2.	Dr. B V Sumangala	Dr Eranna	EEE, Dr. AIT	2019	VTU, Belagavi
3.	Dr.G V Jayaramaiah	Dr H V Govindaraju	EEE, Dr. AIT	2019	VTU, Belagavi
4.	Dr. Rudranna N	Dr. Ariptha Raju	EEE, RVCE	2021	VTU, Belagavi

Department: Electrical & Electronics Engineering

List of research scholars.

1.		Research Scholars	Reg.No.	University
2.		Prof Shivlingaiha	1DA15PEJ15	VTU, Belagavi
3.	**Guide**	Prof Dawarakanath	1DA15PEJ005	VTU, Belagavi
4.		Prof Padmashree	1DA15PEJ02	VTU, Belagavi
5.	Dr Jyoti Koujalagi	Prof Babita	1DA15PEJ17	VTU, Belagavi
6.		Prof Suma	1DA15PEJ01	VTU, Belagavi
7.		T B Dayananda	1DA17PES01	VTU, Belagavi
8.	Dr. Shankaralingappa C. B	Anandraj	1AY13PEN02	VTU, Belagavi
9.		Anzum	1AY15PEJ05	VTU, Belagavi
10.		Naveen T.S.	1AY15PEJ01	VTU, Belagavi
11.		Arathi P.B.	1AY15PEJ03	VTU, Belagavi
12.		Tanuja	1AY15PEJ03	VTU, Belagavi
13.		Vijay	1DA16PEJ15	VTU, Belagavi
14.		Rekha C M	1AY13PEN01	VTU, Belagavi
15.	Dr. Sumangala B V	Sharath Darshan	1DA12PEN08	VTU, Belagavi
16.		Girish.	1DA12PEN07	VTU, Belagavi

Publications (SCI and web of science)

Academic Year	(2021-2022)	(2020-2021)	(2019 – 2020)	2022-23
No. of Journal publications	09	04	06	03

Publications (International Journal)

Academic Year	(2021-2022)	(2020-2021)	(2019 – 2020)	2018-19	2017-18
No. of Journal publications	11	19	12	17	7

Conferences and Journal Publications

Sl.No	Year Aug-July	International Journal	National Journal	International Conference	National Conference	Total
1.	2017-2018	32	0	08	13	53
2.	2018-19	22	-	4	14	40
3.	2019-2020	14	-	3	-	17
4.	2020-2021	10	-	6	-	16
5.	2021-2022	11	-	02	-	13
Grand Total						139

Department of Electrical and Electronics Engineering

Research Project Outcomes:

Research projects:

(1) "Investigations on suitability of natural vegetable oils as dielectric fluid in transformers" – R & D Project:

a. Out Come: Patents

R & D Project - "Investigations on suitability of natural vegetable oils as dielectric fluid in transformers"

Sl.No	Patent Name/No	Indian/International	Faculty/Investigator(s)	Year of Patent Grant	Status
1	"A process to extract Liquid Dielectric Coolant from Rice Bran Oil" / C.B.R.No.17273	International – U.S	1.Dr.B.V.Sumangala (retd.) 2. Dr.G.R.Nagabhushana 3. S.Vasudevamurthy 4. A.N.Nagashree 5.Champa.V	2018	**Granted Patent No.US9994753B2**
2	"A process to extract Liquid Dielectric Coolant from Sesame Oil" / C.B.R.No.17271	International – U.S	1.Dr.B.V.Sumangala (retd.) 2. Dr.G.R.Nagabhushana 3. S.Vasudevamurthy 4. A.N.Nagashree 5.Champa.V	2019	**Granted Patent No.US10256007B2**
3	"A process to extract Liquid Dielectric Coolant from Rice Bran Oil".	Indian	1.Dr.B.V.Sumangala (retd.) 2. Dr.G.R.Nagabhushana 3. S.Vasudevamurthy 4. A.N.Nagashree 5.Champa.V	2020	**Granted Patent No.352034**
4	"A process to extract Liquid Dielectric Coolant from Sesame Oil".	Indian	1.Dr.B.V.Sumangala (retd.) 2. Dr.G.R.Nagabhushana 3. S.Vasudevamurthy 4. A.N.Nagashree 5.Champa.V	2020	**Granted Patent No.351971**
5	"A process to extract Liquid Dielectric Coolant from Rice Bran Oil".	International – Canada	1.Dr.B.V.Sumangala (retd.) 2. Dr.G.R.Nagabhushana 3. S.Vasudevamurthy 4. A.N.Nagashree 5.Champa.V	2015	Under Progress
6	"A process to extract Liquid Dielectric Coolant from Sesame Oil".	International – Canada	1.Dr.B.V.Sumangala (retd.) 2. Dr.G.R.Nagabhushana 3. S.Vasudevamurthy 4. A.N.Nagashree 5.Champa.V	2015	Under Progress

Funded Research and Development Projects:

Completed Projects:

Sl. No	Title of the Project	Duration (Years)	Sanction Letter No. with Amount	Funding Agency	Name of the Investigators	Status of the Project
1	Investigations on suitability of natural vegetable oils as dielectric fluid in transformers	03	VTU/Aca/2009-10/A-9/11711 dated 06 jan 2010 **Rs.19.43 Lacs**	Visveswaraiah Technological University	(1)DrB.V.Sumangala (Retd.) (Principal Investigator) (2)S.Vasudevamurthy (Co Principal Investigator)	**Completion Report submitted in November 2019**

Testing and Consultancy Projects:

2021 - 2022

Sl. No	Name of the Faculty Involved	Date	Industry/Organization/Company/Individual	Nature of Consultancy/Testing/Evaluation	Details of Amount recieved	Benefits Recieved to college
1	1. Dr.Eranna 2. Dr.Vasudevamurthy.S	02-07-2022	RVCE	Transformer oil testing	NEFT transfer to A/c No.04862010044078, CanaraBank dated 02.07.2022 UTR KKBKH22183982081	4000/-
2	1. Dr.Eranna 2. Dr.Vasud	15-06-	JCE, Mysore	Transformer oil testing	IMPS transfer- to A/c No.04862010044078 –Ref no	15000/-

	evamurthy.S	2022			OUT/216618721581/ CNRB0010486/0486 20	
3	1. Dr.Eranna 2. Dr.Vasud evamurthy.S	11-03-2022	Suman Controls pvt ltd, Bengaluru	Partial Discharge Testing of 11 kV C.T & 33 kV P.T	NEFT transfer to A/c No.048620100440 78, Syndicate Bank dated 11.03.2022 UTR SBIN122069673002	175 00/-
					Total Rs.	**36, 500 /-**

Testing and Consultancy Projects:

2020 – 2021

Sl. No	Name of the Faculty Involved	Date	Industry/Organization/ Company/Individual	Nature of Consultancy/Testing/Evaluation	Details of Amount recieved	Benefits Received to college
1	1. Dr.Eranna 2. Dr.Vasudeva murthy.S	July 2021	RVCE, Bengaluru	Resistivity and DF testing of transformer oil	Credited via challan no. 45502 to A/c No.048620 10044078, Syndicate Bank dated 09.07.2021	5000/-
2	1. Dr.Eranna 2. Dr.Vasudeva murthy.S	Feb &Mar. 2021	Gear India Pvt Ltd	HV & Insulation behaviour of wireless antenna subsystem	UTR IOBAN212 18159250 dated 06-08-2021	81,00 0/
					UTR IOBAN212 21147959	4860 0

					dated 09-08-2021	
					IOBAN21030532591 dated 30-01-2021	15000
3	1. Dr.Eranna 2. Dr.Vasudevamurthy.S	Feb 2021	Individual		Partial Discharge Testing of Press Boards	Challan No.45062 dated 22/02/2021	5000/-
					Total Rs.	**1,54,600/-**

Revenue from other sources:

Sl. No	Name of the Faculty Involved	Date	Industry/Organization/Company/Individual	Nature of Consultancy/Testing/Evaluation	Details of Amount recieved	Benefits Received to college
1	Rajesh L V	06-11-2021	M/s.BLR Techno Solutions	Laboratory Utilization	Credited via challan no. 46288 to A/c No.04862010044078, Canara Bank dated 06.11.2021	3000/-
					Total Rs.	**1,57,600/-**

Testing and Consultancy Projects:

2019 - 2020

Sl. No	Name of the Faculty Involved	Date	Industry/Organization/Company/Individual	Nature of Consultancy/Testing/Evaluation	Details of Amount recieved	Benefits Received to college

1	1. Dr B.V.Sumangala Professor 2. Dr.Eranna Associate Professor 3. Dr.S.Vasudevamurthy Associate Professor	01.02.2020	M/s Hi-Volt Engineering Solutions	Partial Discharge Testing of 100 kV Transformer	NEFT transfer to A/c No.04862010044078, Syndicate Bank dated 05.02.2020 (UTR SBIN420036334005)	7000/-
2		08.11.2019	S.K.High Voltage Equipments, Bengaluru	Partial Discharge Testing of 11kV Potential Transformer	Credited via challan no. 29716 to A/c No.04862010044078, Syndicate Bank dated 08.11.2019	2500/-
3		16.08.2019	Suman Controls pvt ltd, Bengaluru	Testing and Analysis of Transformer Oil	NEFT transfer to A/c No.04862010044078, Syndicate Bank dated 16.08.2019 (UTR P19081630525878)	3000/-
4		01.08.2019	M/s Hi-Volt Engineering Solutions	Partial Discharge Testing of transformer (June 2019)	Credited thr' NEFT UTR No.SBIN419213978028, dated 01.08.2019	7000/-

5		2/08/2019	Individual Research Project – University putra, Malaysia	Analysis of the Effect of nano-materials on Transformer Oil	(Credited through NEFT UTR No.SBIN11 9214302247 2/08/2019)	3900 0/-
6		August 2019	Suman Controls pvt ltd, Bengaluru	Transformer Oil Testing	NEFT transfer to A/c No.048620 10044078, Syndicate Bank dated 16.08.2019 (UTR P1908163052 5878)	3000/-
7		June 2019	M/s Hi-Volt Engineering Solutions	Partial Discharge Testing of transformer	Amount to be received	700 0/-
					Total Rs.	**68, 50 0/-**

Projects proposals sent to funding agencies:

2021-2022

Sl. No	Title of the Project	Duration (Years)	Application No. with Amount	Funding Agency	Name of the Investigators	Status of the Project
1	Synchronization and load balancing of the DC micro grid converters for a sandwiched	03	16,44,000/-	AICTE RPS	Dr.G.V.Jayara maiah	Awaiting reply

	AC loads in islanded mode					
2	Analyse harmonics on AC Power Lines using simulate and achieve tunable filters for tolerable levels of harmonics as defined by IEEE-519 for general consumer loads and industrial loads	03	**VRN/003492/ 21-22 – 300000/-**	VGST, Government of Karnataka	Arpitha Raju (Principal Investigator) Rajesh L V (Co Principal Investigator)	**Awaiting reply**
3	Establishment of Battery Management system and electric vehicle laboratory	02	**30,30,000/-**	VGST, Government of Karnataka	Dr.Shankaralinga pa C B	**Awaiting reply**

Projects proposals sent to funding agencies:

2020-2021

Sl. No	Title of the Project	Durati on (Years)	Application No. with Amount	Funding Agency	Name of the Investigators
1	Establishment of Advanced Solar Photovoltaic based Three Phase Smart Micro Grid Laboratory.	02	30.03	VGST, Government of Karnataka	Dr.Shankaralinga pa C B
2	"Promoting interest creativity and Ethics among	02	**2 Lakhs**	AICTE – Quality Improvrmevt Programme	Arpitha Raju (Principal Investigator)

students (SPICES)"				

2019-2020

Sl. No	Title of the Project	Duration (Years)	Application No. with Amount	Funding Agency	Name of the Investigators
1	Investigations on suitability of natural vegetable oils as dielectric fluid in transformers	2	2,70,000	Internal Funding from college	Dr.Vasudevamurthy S (Principal Investigator)

2018-2019

Sl. No	Title of the Project	Duration (Years)	Application No. with Amount	Funding Agency	Name of the Investigators
1	Electrothermal Transport Phenamena in Dielectric liquids driven by buoyancy and surface tension forces	3	391000	VGST, Government of Karnataka	Arpitha Raju (Principal Investigator)

PhD Enrolment at the Research Centres:(Please click here for details)

Sl.No	Department	No of Research Scholars
1	Civil Engineering	5
2	Mechanical Engineering	20
3	Electrical and Electronics Engineering	15
4	Electronics and Communication Engineering	21
5	Industrial and Engineering Management	3
6	Electronics and Instrumentation Engineering	5
7	Computer Science and Engineering	13
8	Electronics and Telecommunication Engineering	5
9	Information Science and Engineering	11
10	Medical Electronics	2
11	Physics	2
12	Chemistry	4
13	Mathematics	6
14	Management and Business Administration	5
15	Master of Computer Application	3
	Total	120