Academic Regulations

Regulations Governing the Degree of Bachelor of Engineering (B.E.)

Effective from the Academic Year 2022-23

(2022 scheme)

Dr. Ambedkar Institute of Technology, Bangalore
[Estd. 1980 (An Autonomous Institution, affiliated to VTU, Belagavi,)
Approved by AICTE, New Delhi, Grant in Aid Institution (Govt. of
Karnataka,) Accredited by NBA & NAAC with 'A' grade]
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Dr. Ambedkar Institute of Technology

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1. Short Title and Commencement:

1.1 The regulations given below shall be common for all programmes offered by the college and are amended based on the Guidelines for Implementation of Academic Autonomy at Colleges (Amended-2021) by Visvesvaraya Technological University, Belagavi. These regulations shall be effective from academic year 2021-22.

1.2 The regulations shall come into effect from the date of notification by the College after their amendments made by the Academic Council with the approval by the Governing Body of the Institution.

2. Definitions:

(a) "Academic Autonomy" means freedom granted by the University to a College in all aspects of conducting its academic programmes for promoting excellence.

(b) "Autonomous College" means a College notified as an *autonomous college* by the University as per the VTU Statutes on Autonomous Colleges (Amended) 2011 and further amended from time to time as per UGC Regulations/Guidelines.

(c) "Commission" means University Grants Commission.

(d) "Council" means All India Council for Technical Education.

(e) "Statutes" Means VTU Statutes on Autonomous Colleges (Amended) 2011 and further amended from time to time.

(f) "University" means Visvesvaraya Technological University.

(g) "Institute" means Dr. Ambedkar Institute of Technology (Dr.AIT),Bengaluru

(h) "Program"means Under Graduate /Post Graduate degree program

(i) "Course" means a subject either theory or practical identified by its title and code number.

(j) "Teacher" means the teaching staff of the college appointed by following the specified rules of the University, and /or of the council.

3. Preamble:

As per the Statutes, a number of Engineering Colleges have been granted the autonomous status. There is a need to derive full benefits of the academic autonomy accorded to the college towards addressing the 21stcentury challenges faced by the technical education system in the country, like:

- Ever increasing influence of science and technology and their impact on human society.
- Shrinking time scale of new developments and the high rate of obsolescence in the older practices.
- Penetration of Information Technology in all sectors of human activity and economic Development.
- Service sector becoming a major avenue for employment of technical professionals and also for economic gains.
- Emergence of knowledge as a key driver for the progress of nations and for increasing their influence on the world scenario.

As engineers have to convert these challenges into opportunities, it is expected that the 21st century engineers will be required to have:

- Strong foundation in the basics of mathematics, science and engineering discipline.
- Command over the chosen area of technical specialization.
- Capacity to apply the professional knowledge and skills acquired.
- Good competence to learn a subject on one's own without major external help.
- Expertise in analysis, design, modelling and simulation of complex systems.
- Scaling up, mass production, system operation and maintenance.
- Estimation of costs and time factors in an assignment.
- Ability for rational, logical, orderly and objective thinking.
- Skills in personnel management and human relations, and
- Leadership qualities including spirit of tolerance, patience and team work.

Therefore, Institute make full use of the academic freedom given to it by the University:
- With responsibility and accountability
- Use the available opportunity to demonstrate its capabilities and innovative skills, to become visible in the higher education system and,
- Gaining the confidence, gratitude and respect of all its stake holders, especially students, alumni, parents and the society at large.

These are particularly important for each Autonomous College as well as the University to be able to maintain and enhance their respective reputation, image and visibility in the technical education system as a whole.

4. Academic Programmes:

4.1 General:
(a) Autonomy granted to the College is institutional in nature and hence the Academic Autonomy is applicable for all programmes offered by the college i.e. B.E at Undergraduate (UG), M. Tech., M.B.A and M.C.A programmes at Postgraduate (PG), M.Sc. (Engineering by research) and the Ph.D programme. In all cases, the programmes shall fulfil the minimum

academic quality and standards for the award of Degrees prescribed by the University, the Council and the Commission.

(b) The academic Autonomy provides an opportunity to the college to make schemes of instruction, syllabi, scheme of examinations and other aspects, with approval of its Academic Council, while fulfilling the minimum academic standards of the University for the Award of Degrees.

(c) An Autonomous college shall have the freedom to start Diploma (post- polytechnic Diploma, post-UG and post- PG levels) and/or Certificate programmes with the approval of its Academic Council. The issuance of certificates/diplomas on completion of such programmes shall be made under the seal of the concerned College only.

(d) An Autonomous College shall also be free to evolve methods for assessing the students' performance, notifying the results, issuing the grade cards/transcripts, migration and other certificates except the Degree Certificates.

(e) In order to get the various benefits of academic autonomy, the College structures its various academic programmes based on the Semester Scheme by introducing Credits for academic activities, bringing Examination Reforms for better achievement testing, awarding Letter Grades and Numerical Grade Points/ Averages for students' performance and setting appropriate Passing Standards as covered later in these Regulations.

(f) Following the guidelines recommended by the University, with respect to the Semester Scheme, Credit System, Examinations, Letter Grades and Numerical Grade Points/Averages, enables the students to avail of horizontal/ vertical mobility and transfer of credits from one Autonomous College to another and related benefits of academic autonomy.

4.2 Nomenclatures of Programmes:

(a) The College uses the nomenclature for their Degree programmes as specified by the UGC in its Notification dated 12th February, 2018 on "Specification of Degrees 2014" as amended from time to time. Besides, the Degree Certificates issued by the University to their awardees shall bear the name of the concerned Autonomous College as well. This will help in maintaining the identity of each programme conducted at the College and also ensuring its accountability.

(b) Therefore, the nomenclatures and their abbreviations given below, shall continue to be used for the Degree programmes offered by the Institute under the University:

(i) **UG Level**: Bachelor of Engineering (B.E).

(ii) **PG Level:** Master of Technology (M. Tech.),
Master of Business Administration (M.B.A.)
Master of Computer Applications (M.C.A.).

(iii) **Research Level:** M.Sc. (Engineering) by Research
Doctor of Philosophy (Ph.D.).

Besides, the branch, the subject of specialization, if any, shall be indicated in brackets after the abbreviation; e.g., B.E. (Mechanical Engineering), M.Tech. (Structural Engineering).

4.3. Programmes offered at Dr. AIT:

The details of UG, PG and Research programmes offered at the college is given in Table 1, 2 and 3 respectively.

Table 1: Under Graduate (UG) - B.E Programmes

Sl. No	Title of the B.E Programme	Abbreviation	Year of Establishment
1	Civil Engineering	CV	1980
2	Mechanical Engineering	ME	1980
3	Electrical and Electronics Engineering	EE	1980
4	Electronics and Communication Engineering	EC	1982
5	Industrial Engineering and Management	IM	1984
6	Electronics and Instrumentation Engineering	EI	1985
7	Computer Science and Engineering	CS	1987
8	Electronics &Telecommunication Engineering	TE	1991
9	Information Science and Engineering	IS	1993
10	Medical Electronics Engineering	ML	1999
11	Aeronautical Engineering	AE	2020
12	Artificial Intelligence and Machine Learning	AI & ML	2022
13	Computer Science and Business Systems	CS & BS	2022

Table 2. Post-Graduation (PG) Programmes

Sl. No	Title of the PG Programme	Abbreviation	Year of Establishment
1	Master of Computer Application	MCA	1999
2	Master of Business Administration	MBA	2001
3	M.Tech. in Computer Science &Engg.	SCS	2002
4	M. Tech in VLSI Design & Embedded System	LVS	2004
5	M. Tech. in Power Electronics	EPE	2010
6	M. Tech. in Digital Communication & Networking	LDN	2010
7	M. Tech. in Structural Engineering	CSE	2011
8	M. Tech. in Computer Networking	SCN	2013
9	M. Tech. in Machine Design	MMD	2013
10	M. Tech. in Cyber Forensic & Information Security	SCF	2018

Table 3. Research Programmes -M. Sc. Engg.(by Research)/Ph.D.

Sl. No	Title of the Research Programmes	Year of Establishment
1	Civil Engineering	2003
2	Mechanical Engineering	2001
3	Electrical and Electronics Engineering	2008
4	Electronics and Communication Engineering	2008
5	Industrial Engineering and Management	2012
6	Electronics and Instrumentation Engineering	2008
7	Computer Science and Engineering	2012
8	Electronics &Telecommunication Engineering	2010
9	Information Science and Engineering	2012
10	Medical Electronics Engineering	2014
11	Physics	2007
12	Chemistry	2005
13	Mathematics	2003
14	MBA	2010
15	MCA	2011

4.4. Programme Duration

(**a**) The normal duration of fulltime academic programme is the same as that followed by the University, i.e., four years for B.E degree Program (Fulltime), three years for B.E. program under lateral entry to second year, two years for M.Tech., M.B.A., and M.C.A., one year for Diploma and six months for PG Certificate programmes. For research Programmes M.S. by research and Ph.D. as notified in University regulations and notification/directions issued from time to time.

(**b**) As a flexible credit system is followed for coursework, it is to be noted that the programme duration in the case of UG and PG shall also be dictated by the period in which a student earns the prescribed credits for the award of Degree. Hence, it is possible for an outstanding student to earn the required credits in a shorter time than that ordinarily prescribed for the relevant programme in (a) above.

(**c**) The maximum period which a student can take to complete a fulltime academic programme shall be the same as that prescribed by the University from time to time; e.g., double the normal duration of the programme, i.e., eight years for B.E. in case of fulltime Program and six years in case of the B.E. Program under lateral entry to second year, four years for M. Tech., M.B.A., and M.C.A., two year for Diploma and one year for Certificate Programme. Further, minimum and maximum period with respect to MS by research and Ph.D. shall be as for Research Programmes M.S. by research and Ph.D. as notified in University regulations.

(**d**) Besides, the maximum period for a programme shall also be dictated by the fact that a

student has to demonstrate the specified minimum academic performance by registering for the prescribed minimum number of credits in every semester for continuing with the programme. And, this period can be equal to or smaller than the maximum period indicated as in (c) above.

4.5. Admission of Students:

(a) Admissions: The admission of students to various UG, PG and Research Degree programmes listed under Section 4.3, is governed by the State Government and/or the University Policies/Practices in this regard. In particular, the admission of students for Research Degree programmes at the College shall be made by the University by associating the College concerned in the process as per the provisions in the VTU regulations governing the Degree of Ph.D., June 2017. However, the admission of students to Diploma and Certificate programmes shall be made by the College on its own, by following the Regulations approved by its Academic Council. In all the cases, it shall be necessary to follow the statutory provisions of reservation of seats to different categories of candidates from time to time.

(b) Lateral Entry: There is a provision for candidates with a polytechnic Diploma or any other qualification approved by the Council and the Commission to join UG Degree programmes at the beginning of the second year of the 4-year programme as per the prevailing practice in the University and asper the prevailing practice in the University.

(c) Change of Branch / Specialisation / College: The UG students can opt to migrate from one branch or specialization to another branch or specialization at the same College or at another Autonomous/ Affiliated/ Constituent College under the University at the beginning of the second year. In these cases, the Colleges follow the Rules and Regulations of the University/Council.

(d) Eligibility Criteria: The eligibility criteria / entry level qualification for admission of students to UG, PG, PG Diploma, PG Certificate, and Research Degree programmes at the Autonomous Colleges shall be the same as those prescribed by the University from time to time. The Autonomous Institutes shall follow any other notification issued by the University in this regard from time to time.
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- The eligibility criteria for admission of students from a non-Autonomous College to an Autonomous College, from one Autonomous College to another Autonomous College and from University scheme at an Autonomous College to its Autonomous

scheme, shall be as per prevailing norms of the University. However, the Autonomous Colleges are free to provide syllabus equivalence for such candidates with the approval of it's Academic Council.

- The eligibility criteria for the admission of students from other Universities (India / Abroad) to an Autonomous College shall be as per the prevailing norms of the University. However, the Autonomous Colleges are free to provide syllabus equivalence with the approval of it's Academic Council.

4.6. Semester Scheme:
a) Semester Scheme: The College adopts the Semester Scheme for its UG Program

b) Academic Calendar: There is uniformity in the functioning of the Semester Scheme for all academic programmes across the College, as this can provide good academic flexibility to their stake holders, particularly the students and the faculty members. For this purpose, each academic year is divided into semesters, with the calendar, durations and academic activities being fixed in advance by the college while maintaining a common opening /reopening date for the odd/even semester.

c) Academic year Breakdown: The breakdown of an academic year for implementing the Semester Scheme at a College is given in Table 1 as a typical example.

Table 4: Typical Schedule of Academic Year

Sl. No	Activity	Description
1	**Number of Semesters/Year**	Two regular semesters/year (ODD & EVEN) Supplementary/Fast track semester **(after 2nd and 4th year)** (**Note:** Supplementary/Fast Track Semester is primarily to assist the slow learners and/or repeater students for repeating the courses. However, the College uses this Semester to arrange Add-On Courses for other students and/or for deputing them for field work and/or internship).
2	**Semester Durations (Weeks)**	Main Semesters *(Odd/Even):* 19 weeks each. Summer Semester: 8 weeks
3	**Academic Activities (Weeks)**	Main Semester:(Odd /Even) Registration of Courses- 0.5; Course Work- 15.5; Examination Preparation-1.0; Examinations- 1.0; Declaration of Results- 1.0; **Total: 19.** Make-up examination and Recess: **2.0 weeks** Total duration of ODD and EVEN semester = **42 weeks** <u>Supplementary Semester</u> (For Repeat/Add-On Courses): Registration of Courses- 0.1; Course Work- 7.0; Examination Preparation-0.2; Examination-0.2;

		Declaration of Results-0.5; **Total: 8.** Make-up examination and Recess: 2.0 weeks Total duration of Summer Semester = 10 weeks **Note:** In each Semester, there shall be various provisions for students like, Registration of Courses at the beginning, Dropping of Courses in the middle and Withdrawal from Courses towards the end, all being under the Faculty Members' advice. These facilities are required to ensure proper monitoring of students by Faculty Advisors, leading to their improved learning capabilities and minimizing their chances of failure in the Courses registered.
4	**Examinations**	Continuous Internal Evaluation(CIE) and Semester End Examination(SEE), both having equal weightages in the students' performance in Course Work/Laboratory Work and other activities.
5	**Other Items**	• The total number of academic days in an academic year shall be >= 180. • Academic schedules prescribed at each College shall be strictly adhered to by it for success of the Semester Scheme. • Supplementary Semester shall be mainly used by the Colleges for conducting repeat Courses for the benefit of slow learners/ repeaters. • UG Students having satisfactory CIE and attendance but, failed **(F grade)** in SEE, need not register for course/s and can appear for SEE as and when conducted.

5. Credit System:

5.1. General:
(a) The Institute has adopted the Choice Based Credit System (CBCS) for all the Programs. The number of Contact Hours in a week of a particular course determines its credit value. Each credit course shall be assigned appropriate number of credits, is a measure of the weightage of the course. The students have an option of choosing from a wide range of electives (Professional and Open) and complete the programme at their own pace. Value added courses are also offered as a part of extended learning in inter-disciplinary and multi- disciplinary domains. The CBCS for the various programmes provides a great opportunity to the students in their preparation to meet the challenging opportunities ahead.

(b) **Major Benefits:** Major benefits accruing to the College by adopting the *Credit System* are listed below:

• Quantification and uniformity in the listing of courses for all programmes at a College, like core (hard/soft), electives and project work.

- Ease of allocation of courses under different heads by using their *credits* to meet national / international practices in technical education.

- Convenience to specify the minimum/ maximum limits of course load and its average per semester in the form of c*redits* to be earned by a student.

- Flexibility in programme duration for students by enabling them to pace their course load within minimum/maximum limits based on their preparation and capabilities.

- Wider choice of courses available from any department of the same College or even from other similar Colleges, either for *credit* or for *audit*.

- Improved facility for students to optimize their learning by availing of transfer of *credits* earned by them from one College to another.

(c) Credit System: In the Credit System, the course work of students is utilized and each unit is assigned one credit after a student completes the teaching-learning process as prescribed for that unit and is successful in its assessment.

(d) Credit Definition: One credit referring to a Main Semester (Odd/Even) course shall be equal to:

1. 1-hour Lecture (L) per week per semester =1 Credit
2. 2 hours Tutorial / (T)per week per semester = 1 Credit
3. 2 hours Practical/Laboratory/ Drawing (P) per week per semester = 1 Credit.
4. Four-credit theory courses shall be designed for 50 hours of the Teaching-Learning process.
5. Three-credit theory courses shall be designed for 40 hours of the Teaching-Learning process.
6. Two-credit theory courses shall be designed for 25 hours of the Teaching-Learning process
7. One credit theory course shall be designed for 15 hours of the Teaching-Learning process

The following additional factors may also be noted in this connection:

- The above figures shall be multiplied by a factor of 2 in the case of the Supplementary Semester, and

- Other student activities which are not demanding intellectually or which do not lend to effective assessment, like practical training, study tours, attending guest lectures shall not carry any credit.

(e) Course Registration: A student shall register for courses (core or elective) to earn credits for meeting the requirements of a Degree programme. Such courses together with their grades

and the credits earned shall be included in the Grade Card issued by the College at the end of each semester, like odd, even, supplementary and it forms the basis for determining the student's academic performance in that semester.

(f) Audit Courses: In Addition, a student can register for courses for audit only with a view to supplement his/her knowledge and/or skills. Here also, the student's grades will have to be reflected in the Grade Card. But, these shall not be taken into account in determining the student's academic performance in the semester.

5.2 Credit Structure: A typical Credit Structure for coursework based on the above definition is given in Table 5. This shall be applicable for the coursework of students registered for all UG, PG and Research Programmes offered by the institution.

Thus, it is more appropriate to specify the eligibility requirements for a Degree award based on course work (like UG,) by prescribing the total number of *credits* to be earned, as an alternative to specifying the Programme Duration (as indicated in Section 4.4(a)).This will be of great help in providing the well-needed flexibility to the students in planning their academic programmes and their careers.

Table 5: Typical Credit Structure for Course work

Credit Values				
Theory/Lectures (L)(hours/week /Semester)	Tutorials (T) (hours/week /Semester)	Laboratory/ Practical (P) (hours/week Semester)	Credits (L:T:P)	Total Credits
4	0	0	4:0:0	4
3	0	2	3:0:1	4
2	2	2	2:1:1	4
3	0	0	3:0:0	3
2	2	0	2:1:0	3
2	0	2	2:0:1	3
0	0	6	0:0:3	3
2	0	0	2:0:0	2
1	0	0	1:0:0	1
0	2	0	0:1:0	1
0	1	1	0:0.5:0.5	1
0	0	2	0:0:1	1
NOTE: Activities like practical training, study tour, and participation in Guest lecturers do not car Credits.				

5.3. Course Load:

(a) The course load for a student per semester (EVEN/ODD) as well as its minimum and maximum limits, are based on the guidelines by the University, which is based on the

AICTE Model Curricula for UG Programmes(issued from time to time) and considering the academic strength and capability of an average student, the course load/semester for UG Programme ,

i. For I and II semester, the prescribed course load per semester is fixed at **20 credits/Semester** (common for all the UG Programs).

ii. In Higher semesters (FromIIIto VIII), the average course load is **22 credits /semester**, with its minimum and maximum limits being set at **16 and 28 credits** for all UG Programs including the credits of open electives. This flexibility enables students to cope-up with the course work and helps in improving their academic performance and optimizes the learning outcome.

iii. The minimum course load of any semester shall not be less than **16 credits even** after dropping a course(s) or withdrawing from the registered course(s).

5.4 Prescribed Number of Credits for the Program

(a) The total number of credits to be earned by students admitted to the first semester of 04 years B.E./B.Tech., the program shall be **160.**

(b) The total number of credits to be earned by students admitted to the third semester of 04 years B.E./B.Tech., program under lateral entry scheme shall be **120**.

(c) A student shall be eligible to obtain an Undergraduate degree with **Honours / Minors**, if he/she earns minimum additional**18** credits, as specified by university/Institute norms from time to time regarding the earning of additional credits[To be read along with Regulations Governing the Award of Honors/ Minors in B.E./B.Tech., Degree Programs].

5.5 Contact Hours:

Considering the expectations from engineering professionals with UG Degrees in the 21st century, the number of contact hours for students is fixed to 30-35 hours/week. This will help students in getting enough time and opportunity to do better preparation for the courses prescribed for credit, to take up self- study**,** to develop their creative talents and abilities and benefitting from the Add-On courses and those taken for audit. This can also enable them to get ready for challenging and exciting careers ahead. A typical example showing the calculation of contact hours based on course credits is given in Table 7.

Table 7: Calculation of Contact Hours/Week – An Example

No. of Courses	Credits of the Course	Total Credits	Contact hours per week
Three Lecture Courses	3:0:0	9	9
Two Lecture cum Tutorial Courses	3:1:0	8	10
Two Lecture cum Laboratory Courses	3:0:1	8	10
One Lecture, Laboratory cum Tutorial Course	1:1:1	3	5
Total		**28**	**34**

5.6 Course Registration Details:

i. Each student shall have to register for the prescribed courses of study at the beginning of the semester subject to course load/ semester requirement.

ii. The following category of students is required to re-register for the courses whenever they are offered.

- Students who have failed to secure the minimum marks in CIE (Continuous Internal Evaluation) and are under **NE** (Not Satisfying sessional marks) category.

- Students who have failed to secure the minimum attendance and are under **NE** category.

- Students who have withdrawn a Course and are under Grade **W**.

- Students who have dropped the courses.

5.7 Supplementary Semester/Fast Track semester:

a. The students who have satisfied CIE and Attendance requirements for the course/s and obtained **F** grade in SEE are permitted to appear directly in ensuing examination/s as backlog paper/s. The students need not re-register for such course/s in the supplementary/ fast track semester. In case the student wishes to improve CIE/ he/she has to re-register for supplementary / fast track semester as and when offered next.

b. The student who obtains required attendance and CIE in supplementary semester, but obtains **F** grade in SEE, is permitted appear for SEE subsequently as backlog course/s. The student need not repeat course for Attendance and CIE.

c. The course/s for which the student does not possess satisfactory attendance and CIE score, shall be marked as **NE** in the Grade sheet. Such students are not permitted for SEE for the Courses marked as **NE** in Grade sheet. The students have to re-register

only for course/s marked as **NE** in **supplementary/ subsequent semester whenever that course is offered and obtain the required CIE and attendance**. Subsequently, they are eligible to appear for SEE in such course/s.

d. Courses with Transitional Grades Viz "W" , " I", and "X" are also eligible to register in supplementary semester **(refer 8.2 (a)-(d)** for definition of these grades) in case if they wish to improve the score in CIE.

e. All courses may not be offered in the Supplementary semester. It is the discretion of the College to offer the courses based on the availability of resources. The Institutes shall notify time table for Supplementary semester well in advance.

f. Supplementary Semester is optional; it is for the student to make best use of the opportunity. Supplementary semester is a special semester and the student cannot demand it as a matter of right.

g. A student is permitted to register for a maximum of **16 credits** in Supplementary / fast track semester.A student has to choose those courses which are offered by the Institution in a given Supplementary Semester. In the supplementary semester, each course need to be offered for required number of lectures/ tutorial/ laboratory hours as prescribed in the syllabus.

h. **Registration for Summer/Fast Track semester:**

A student of UG programme will have opportunity to register for summer/fast track semester which is offered after **4th semester for courses from 1 st to 4th semester** and **after 8th semester for courses from 5th to 8th semester**. For registering to for summer/fast track semester, the **student should complete the Internship/s** as notified in the University Regulations / directions. The students opting for supplementary semester between 4th and 5 th semester must comply the missed internship requirement in the subsequent semester in the gap between **5 th and 6th semester.**

6. Curriculum Framework

6.1 General Issues:

(a) Curriculum Framework is important in setting the right direction for a Degree/ Diploma/Certificate programme by the College, as it takes into account the type and quantum of knowledge necessary to be acquired by a student to qualify for a particular degree in his/her chosen branch or specialization area.

(b) Besides, this also helps in assigning the credits for each course, sequencing the courses semester-wise and finally arriving at the total number of courses to be studied and the total number of credits to be earned by a student to fulfil the requirements for the conferment. The College also takes into account the AICTE Model Curricula notified from time to time and follow them so as to be abreast of the national trends in this connection.

6.2. B.E. Degree Programme:

The Curriculum Framework for a B.E. Degree programme shall include the following Courses.

(a) **Recommended Courses:** These include coursework under the following categories:

- Humanities, Social Sciences, and Management Courses (HSMC)
- Basic Science Courses (BSC)
- Engineering Science Courses (ESC)
- Professional Core Courses (PCC)
- Professional Elective Courses (PEC)
- Open Elective Courses (OEC)
- Integrated Professional Core Courses (IPCC)
- Project Work: Mini-project work and Major Project work
- Seminar
- Internship (INT)
- Non-Credit Mandatory Courses (NCMC)
- Ability Enhancement Courses(AEC)
- Universal Human Values Courses(UHV)

(b) **Mandatory courses (MC) and other requirements***:*
The UG student shall complete the non-credit mandatory courses defined in the curricula. like Employability skills, NSS, NCC, Sports, Yoga. Such courses shall not carry any *credit* for the award of the Degree. But, a pass in each such course during the programme shall be a necessary requirement for the student to qualify for the Degree. Hence, the student's performance with respect to *Mandatory Courses* shall be included in the grade card as Pass (PP) /Not Pass(NP).

(c) Induction Programme and Internships:
- A three week Induction Programme is mandatory for the first-year B.E. students at the beginning of their First Semester, as per the requirements of AICTE in its Model UG Curriculum (February 2018).
- Besides, there is also a mandatory requirement of Internships to be undertaken by all the UG students as specified by the University from time to time.

(d) Classifications of Courses: The above courses shall be classified as:

(i)Institutional Courses-Credit Courses

Basic Sciences, Engineering Core Courses and Humanities & Social Science courses are the

Institutional Courses. The student shall complete all the Institutional courses having credit weightage. The grades and credits earned by the candidate in the courses shall be included in the grade card.

(ii) Departmental Core Courses –Credit courses

Professional Core courses are Departmental Core Courses. The student shall complete all the departmental core courses having credit weightage. The grades & credits earned by the candidate in the courses shall be included in the grade card.

(iii) Departmental and Inter-Departmental Electives–Credit Courses.

Professional Elective courses of parent and other departments are the Departmental &Inter-Departmental Electives. The student shall complete the prescribed number of departmental and inter departmental electives having credit weightage. The grades and credits earned by the candidate in the course shall be included in the grade card.

(iv) Mandatory Courses–Non-Credit Courses.

The student shall complete the non-credit mandatory courses defined in the curricula. Such courses shall not carry any *credit* for the award of the Degree. But, a pass in each such course during the programme shall be a necessary requirement for the student to qualify for the Degree. Hence, the student's performance with respect to *Mandatory Courses* shall be included in the grade card as Pass (PP) /Not Pass(NP).

(v) Audit courses–Non-Credit Courses.

A student having prerequisite can register to any course under (ii) and (iii) of (6 . 2 d) whenever they are offered with a view to supplement his/her knowledge and/or skills. Registration for audit course(s) is permitted from III semester on wards.The audit course(s) has to be completed as per the attendance and CIE norms for record of the audit course(s) in the grade card.

(e) **Allocation of Credits for B.E. Degree Programme:** Looking at the UG Engineering Degree programmes practiced at leading institutions in India and abroad and the need for Indian engineering professionals to be able to meet the 21st century challenges, proposed breakdown of coursework is as given in Table 8. It is expected that this breakdown will lead to a highly useful and respectable B.E. Degree programme under the Institution.

Table 8: Breakdown for the B.EDegree Curriculum

Sl. No.	Category	AICTE Breakup of Credits Total 160	Proposed Breakup of Credits (Total 160)
1	Humanities and Social Sciences including Management courses	12	10
2	Basic Science courses	25	23
3	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc	24	20
4	Professional Core Courses	48	43
5	Professional Elective courses relevant to chosen specialization/branch/Ability Enhancement Courses	18	14
6	Open subjects - Electives from other technical, emerging, arts commerce and NCC/NSS subjects/Abili Enhancement Courses	18	14
7	Mini and Major Project work /seminar/ Summer Internship and Research /lndustrial Internship	15	32
8	Mandatory Non- Credit Courses [Environmental Sciences, Induction trainin Indian Constitution, Universal Human Values, Kannada]	No credits	04
	Total	**160**	**160**

(f) **Sequencing of Courses for B.E Degree:** The above breakdown of the B.E Degree curriculum shall form the basis for proper sequencing of the coursework for the programmes. Based on this, a typical sequencing plan for coursework by taking into account the provisions in the AICTE Model Curriculum for B.E. Degree programme is given in Table 9.

Table 9: A Typical Sequencing Plan for the B.E Degree Curriculum

Semesters	Course Categories
I-II	• HSMC, BSC, AEC, and ESC, Common for all Programmes as per AICTE Model Curriculum. • MC and Mandatory Induction Programme (3 weeks).
III-IV	• HSMC, BSC, AEC, and ESC, Common for all Programmes (to be continued) • IPCC, INT • Also, MC (to be continued, if required) • PCC: In two/three groups (like Circuit, Non-Circuit). • Area-wise Orientation, Add-On Courses.

V-VII	• PCC/PEC/OEC, Core and Electives. • IPCC, AEC, HSMC, • Branch-wise Orientation, Add-On Courses, Seminar, Internship.
VIII	• PEC/OEC, Electives, Project work(PROJ), Dissertation. • Add-On Courses, Seminar, Final wrap-up of Programme.

7. Assessment:

7.1. Achievement Testing:

a) The assessment of students' performance in course work during and/or at the conclusion of a programme has to be done using examinations. In general, an examination addresses different objectives, like achievement-testing, prediction-testing, endurance-testing, creativity-testing and testing for ranking.

(b) In technical education, the assessment has to be preferably of the achievement- testing type, so that a student's knowledge, understanding and competence in the courses studied are properly assessed and certified. The reforms in the examination system given below enables the College to achieve this goal and gain the confidence and respect of thestake holders, particularly students. Typically, achievement- testing is done in two parts as follows, both of them being important in assessing a student's achievement:

- **Sessional:** Involving Continuous Internal Evaluation (CIE),to be conducted by the course instructor all through the semester. This includes mid-term tests, homework assignments, problem solving, group discussions, quiz, seminar, mini-project and other means.

- **Terminal,** covering Semester End Examinations (SEE),to be conducted by the course instructor jointly with an external examiner at the end of a semester, on dates to be fixed at the College level. This may include a written examination for theory courses and practical/design examination with built-in oral part for laboratory/design courses.

(c) The Students are assessed through Continuous Internal Evaluation(CIE) and Semester End Examination(SEE). Both CIE and SEE being equally important in judging the coursework performance of students, they need to be conducted with equal rigour and equal seriousness in the credit system. This makes it necessary that both of them are assigned equal **(50:50) weightage**. And, a student's performance in coursework shall be judged by taking into account the results of both CIE and SEE individually and also together by giving equal weightage for them.

7.2 Question Papers Guidelines:

(a) Question Paper Pattern: For an effective achievement testing of students in a course, a good question paper needs to be used as the principal tool. This makes it necessary for the question papers used at CIE and SEE to;

- Cover all sections of the course syllabus uniformly.
- Be unambiguous and free from any defects/errors.
- Emphasize knowledge testing, problem solving and quantitative methods.
- Contain adequate data/ other information on the problems assigned, and
- Have clear and complete instructions to the candidates.

(b) Question Paper Planning: The above requirements make it necessary for a Question Paper to cover the entire syllabus, with a provision for the students to answer questions from the whole syllabus. As students need to be given some choice in the questions included in the Paper, it is necessary for the Question Papers at SEE, in particular, to have built in choice under each modulesof the syllabus.

(c) Besides, it is also necessary for the Course syllabi to be drafted properly, be defect-free and also properly given in modular form to enable the setting of good question papers covering the whole syllabus. These aspects have to be taken into account, in particular, by the Boards of Studies.

(d) Typical Question Paper: The questions to be included in the Question Papers at **Continuous Internal Evaluation (CIE) and SemesterEndExamination (SEE)** can be of two types as follows and the course instructors as well as the external examiners shall have to be well trained/experienced to set them.

- Multiple Choice Question, having each question to be answered by tick marking the correct answer from the choices (commonly four) given against it. Such a question paper to be useful in the testing of knowledge, skills, comprehension, application, analysis, synthesis, evaluation and understanding of the students. However, Question Papers for CIE and SEE to include not more than 15-20% of questions of this type.

- Comprehensive Questions, having all questions of the regular type to be answered in detail. Such a Question Paper to be useful in the testing of overall achievement and maturity of the students in a course through long questions relating to

theoretical/practical knowledge, derivations, problem solving, modeling, simulation, design, application and quantitative evaluation.

7.3. Examinations:

(a) Maintenance of Standards: For ensuring a high standard in both CIE and SEE fully meeting the provisions of the University Statutes and being able to declare the results of students' performance at both these in a time bound manner as per theAcademic Calendars.

i. **Continuous Internal Evaluation (CIE):** The CIE shall be conducted exclusively by the course instructor. The instructor to spell out the components of CIE to the students in advance, maintain transparency in its operation, declare the evaluation results in time and then return the answer scripts and assignment sheets to them as soon as possible. The instructor shall also solve the questions from these test papers during tutorial sessions for the benefit of all the students concerned, especially slow learners.

ii. **Semester End Examination (SEE):**

The SEE shall be conducted jointly by the course instructor and an external examiner appointed for this purpose by the College. Here, the external examiner is to mainly associate with the work of Question Paper setting, because of the difficulties in having him/her for conducting the evaluation of students' answer scripts due to the tight time schedule for the various tasks connected with SEE, as covered in sub-sections (i) and(ii) below.

iii. *SEE Answer Scripts:* The answer scripts of SEE may be normally evaluated by the course instructor only. But as a healthy step, an Examination Committee shall oversee this task and ensure the quality and standard of evaluation and also of the *grades* awarded in all the cases. The next step to be taken before declaring the results, to include an external review of the SEE conducted.

iv. *External Review of SEE:* An external review shall be conducted under the aegis of the Board of Studies/Board of Examiners of the College by appointing a panel of experts from outside the College for this purpose aiming at a complete review of SEE operation in the College.*This may include such steps as, question paper review, checking random samples of answer scripts, analysis of results/grades awarded and other related*

aspects. This step to be also necessary for gaining the confidence of the University and of the society at large, on the fairness, transparency and acceptability of the examination practice among the stakeholders.

(b) Attendance Standards:

i. All students shall maintain a minimum attendance of 85% in each Course registered. In case of short fall of attendance, the Principal of the Institute can condone the deficiency upto10% on the prescribed limit of 85% in special cases like medical exigencies, participation with permission in University/State/National/International sports meets, cultural events, etc.He/She has to produce authentic documents through the Mentor and HODs recommendations.Even in such cases, a **minimum of 75% attendance is absolutely mandatory**.

ii. The basis for the computation of the attendance shall be the period prescribed by the College by its calendar of events. For the first semester students, the same is reckoned from the Date of Admission to the Course.

iii. The students shall take note of his/her attendance status periodically from the respective faculty and strive to make up for the shortage. The Departments shall periodically announce the attendance status of the students. Non-receipt of such information from the College, the student shall not consider it as a valid reason for exemption from the attendance requirements.

iv. If a student does not satisfy the attendance requirements in any Course, then he / she shall not be permitted to attend the SEE in that Course and is deemed to have been declared "NE" (Not satisfactory) in that Course. In such a case, student has to **Re-Register for the course whenever it is offered (regular/Summer semester).**

v. **Leave Facility during an odd/even semester**
- A student must obtain prior permission from the concerned course teacher, Mentor and Head of the Department(HOD)in advance, when the absence is expected to be more than two consecutive days. The application for leave of absence must be made in writing to the HOD with the recommendation of the Mentor. The student will have to furnish the supporting documents either before or after the absence.
- In case the application cannot be made in advance for grant of leave, the same must be made immediately after returning from the absence, along with necessary documents.

- Failure to apply in writing before proceeding on leave or within are reasonable period of time after returning from leave may lead to the absence being considered as casual absence. The above requirements also apply to students representing the institute in University/State/National/International sports meets, cultural events, etc.

- The permitted leave of absence will be considered for attendance condonation to an extent of 10% only. Hence the above relaxation is only to those students having attendance in the range of 75% to 85%.

(c) Passing Standards:

To maintain high academic standards, the Institute has adopted the eligibility criterion for CIE and SEE as shown in Table 10 for UG Programmes.

Table 10: Passing Standards using Absolute Grading	
Evaluation Method	Passing Standard
Sessional (Continuous Internal Evaluation)	Score: ≥ 40%
Terminal (Semester End Examination)	Score: ≥ 35%
Overall Score for passing (CIE+SEE) is 40%	

In the case of all the courses of the program, the maximum CIE marks shall be 50 and the maximum SEE marks shall be 50. The minimum CIE marks secured shall be **40%** of maximum marks, i.e. 20 out of 50 marks for passing. The minimum SEE marks to be secured shall be **35 %** of the maximum marks i.e., 18 out of 50 marks for passing. In total, the student has to secure **40 % of the course maximum marks i.e.,** the sum of the CIE and SEE marks prescribed for the Course.

(d) Project work evaluation: The evaluation of CIE of the project work shall be based on the progress of the student in the work assigned by the project supervisor periodically evaluated by him/her together with a Departmental Committee constituted for this purpose at each Autonomous College. Seminar presentation, project report(dissertation) and final oral examination conducted by a common Project Evaluation Committee at the College level shall form the SEE of the project work.

(e) In the case of other requirements, such as seminar, industrial internship, field work, comprehensive viva voce, if any, the assessment shall be made as laid down by the Academic Council of the College.

(f) There shall be no re-examination for any Course in the *credit system* **to take care of such students:**

i. Who have absented themselves from attending CIE or SEE without any valid reason;
ii. Who have failed (Grade F) to meet the minimum passing Standard prescribed for CIE and/or SEE;
iii. Who have been detained for shortage of attendance in any coursework;
iv. Who have withdrawn (Grade W, as covered in Section 8.) from a Course.

Such students shall be required to re-register for the Course(s) and go through CIE and SEE again and obtain a Grade P or better (see Tables 17) in each case. The re-registration shall be possible only when the particular Course is offered again either in a main (Odd/Even) or a summer semester.

(d)Successive Failures:
If a student fails to pass a Course even after four attempts, that course is deemed to be exempted for him/her. Then, the student may choose a course of his / her choice with the same number of credits from the pool of courses stipulated by the concerned Board of Studies. The course so selected should not have been studied by the student or to be studied in higher semester/s. The faculty advisor shall guide/advise the student in this regard. The college has to make arrangements for the registration, conduction of CIE for the selected course. This prevision is given only for two courses (one at a time) during the entire maximum duration of a course. However, this is optional and the student can prefer to repeat the same course in which he/she has failed repeatedly.

8. Grading:
8.1 General:
(a) In recent years, the grading system has replaced the evaluation of students' performance in a Course based on absolute marks, because of its many advantages. Therefore, Autonomous Colleges under the University shall follow this practice. Here again, it is necessary to maintain uniformity in the grading practices at different Colleges to ensure that the migration of students or transfer of credits among Autonomous Colleges under the University is made easy.

(b)Letter Grades: Course Letter Grade (or simply letter grade or grade) is an index of performance of a student in a said course and refers to a qualitative measure of achievement of a student in each course, based on the percentage range of marks secured in CIE and SEE put together or CIE alone. Grades are denoted by letters **O, A+, A, B+, B, C, P and F**. The rubrics attached to letter grades are as follows:

O - Outstanding, A+ - Excellent, A - Very Good, B+ - Good, B - Above Average,

C - Average, P- Pass and F - Fail. If student remain absent for SEE of any of the course, the letter grade assigned to that course shall be 'F'.

Not Eligible (NE): If a student fails to satisfy Attendance and / or CIE requirement for course/s then such course/s shall be marked as **Not Eligible "(NE)**" i.e. Not eligible to appear for SEE in that Courses/s.

(c) Absolute Grading: Dr Ambedkar Institute of Technology adopts the absolute grading system.

8.2 Grade Points:

(a) Depending on the *letter grades* assigned, a student earns certain *grade points.* As the *grading* system can have different scales for *grade points* (like 5, 8, 10.) The institute follows a 10-pointscale. The total marks scored by the students in CIE and SEE shall be converted into letter (an Alphabet) grades O, A+, A, B+, B, C, P, E and F. Each letter grade is basically a qualitative measure of performance of a student. The equivalence of letter grade interms of grade points and examination marks range is ass hown in Table.11.

Table 11: Grade Points Scales for Absolute Grading

Letter Grade	O	A+	A	B+	B	C	P	F
	Outstanding	Excellent	Very Good	Good	Above Average	Average	Pass	Fail
Grade Points	10	9	8	7	6	5	4	0
Score (Marks) Range %	90-100	80-89	70 -79	60 -69	55-59	$50-54$	40-49	0-39

(b) The *grade points* given in Table 11 will help in the evaluation of *credit points* earned by the student in a Course as the *credit points* are equal to the number of credits assigned to the Course multiplied by the *grade points* awarded to the student in that Course. This shall be used in arriving at the *credit index* of the student for that semester, as it is the sum total of all the *credit points* earned by the student for all the Courses registered in that semester.

(c) *Earning of Credits:* A student shall be considered to have completed a Course successfully and earned *credits* if he/she secures an acceptable *letter grade* in the range **O to P.** *Letter grade* 'F' in any Course implies failure of the student in that Course and no *credit* shall be earned.

(d) *Transitional Grades:* The *transitional grades,* such as, **'I', 'W' and 'X'** shall be awarded to a student in the following cases. These *grades* need to be converted into one or the other of

the *letter grades* (O-F) after the student completes his/her Course requirements, including the examinations.

i) ***Grade 'I':*** Awarded to a student having satisfactory attendance at classes and meeting the passing standard at CIE in a Course, but remained absent from SEE for valid and convincing reasons acceptable to the College, like:

- Illness or accident, which disabled him/her from attending SEE;
- A calamity in the family at the time of SEE, which constrains the student to be away from the Institute;
- Any other emergency certified by the competent authority.

In the event of above, it is the responsibility of the **student/Parent/Guardian to inform the college authorities [(Mentor/HoD] immediately**. The information shall be in the form of either written communication, personal communication by Parent/Guardian/Peer or any Electronic messages. The student needs to submit all the relevant documents(hospital reports, certificate from competent authorities etc)

(ii) ***Grade'X':*** A student,who has satisfied attendance requirements and has CIE marks($\geq$90) in any course, but earned **F** grade in SEE, shall be awarded grade'**X'**.

(iii) ***Grade 'W':*** Awarded to a student having satisfactory attendance at classes, but withdrawing from that Course before the prescribed date in a semester as per faculty advice.

(e) ***Make-up Examination:*** The *Make-up Examination* facility shall be available to the students who may have missed to attend the SEE of one or more Courses in a semester for valid reasons and given the 'I' grade. Students having the 'X' grade shall also be eligible to take advantage of this facility. The *Make-up Examination* shall be held as per dates notified by Controller of Examination, immediately after the announcement of Semester end examinations (both regular and summer semesters) results.

In all these cases, the standard of the *Make-up Examination* shall be the same as that of the regular SEE for the Courses.

(f) All the 'I' and 'X' *grades* awarded to the students shall have to be converted into one of the letter grades based on the performance in the makeup examination. In case the student fails to register in the immediate makeup examination or fails to appear for th makeup examination, then F grade shall be awarded to the student in that course.

(g) All the 'W' *grades* awarded to the students shall be eligible for conversion to the appropriate letter *grades* only after the concerned students re-register for these Courses in a main(*Odd/Even)*/supplementary semester and fulfil the passing standards for their class attendance, CIE and SEE as prescribed at the College.

(h) *Grade Card:* Each student shall be issued a *Grade Card* (or transcript) at the end of each semester. While this will have a list of all the Courses registered by a student in the semester together with their *credits,* the *letter grades* with *grade points awarded* in each case and those with *grades 'I', 'W' and 'X'*, only those Courses registered for *credit* and having *grade points* shall be included in the computation of the student's performance, like *SGPA* and *CGPA*. And, the Courses taken for *audit* will not form part of this computation. The results of *mandatory courses*, which are of the *non-credit* type, shall also be reflected in the *Grade Card as PP (for Passed) or NP (for Not Passed).* It shall be noted that each UG student shall have to obtain the *grade* PP in each *mandatory course* to qualify for the Degree award by the University

8.3 Grade Point Averages:

(a) **SGPA and CGPA***:* The *credit index* can be used further for calculating the Semester Grade Point Average *(SGPA)* and the Cumulative Grade Point Average *(CGPA),* both being important academic performance indices of the student. While *SGPA* is equal to the *credit index* for a semester divided by the total number of *credits* registered by the student in that semester, *CGPA* gives the sum total of *credit indices* of all the previous semesters divided by the total number of *credits* registered in all these semesters. Both theequations together facilitate the declaration of academic performance of a student, at the end of a semester and at the end of successive semesters respectively. Thus,

(i) Semester Grade Point Average (SGPA):

SGPAisequaltothecreditindexforasemesterdividedbythetotalnumberof credits registered by the student in that semester.

$$SGPA= \sum \frac{[(Course\ Credits) \times (Grade\ points\ for\ all\ registered\ Courses\ with\ letter\ grades\ from\ S\ to\ F)]}{\sum (Course\ credits\ for\ all\ registered\ Courses\ with\ letter\ grades\ from\ S\ to\ F)}$$

(ii) Cumulative Grade Point Average (CGPA): CGPA gives the sum total of credit indices of all the previous semesters divided by the total number of credits registered in all these semesters.

$$CGPA = \frac{\left[\sum \frac{(Course\ Credits)x(\ Grade\ Point/s)\ for\ all\ the\ courses\ registered\ by\ the}{students\ \ excluding\ F\ grades\ until\ \ that\ semester.}\right]}{\left[\sum \frac{(Course\ Credits)\ for\ all\ the\ courses\ registered\ by\ the\ student}{excluding\ \ F\ grades,\ in\ that\ \ semester.}\right]}$$

The SGPA AND CGPA shall be rounded off to 2 decimal points and reported in grade cards.

(b) **Vertical Progression***:* The criteria for Vertical Progression is based on University guidelines. Hence to lay down uniform minimum standards for CGPA together with the minimum number of credits to be earned in an academic year so as to facilitate the mobility of students from one College to another. All the below clauses are subject to a maximum duration of eight (for Regular Students) / six years (for Lateral Entry Students) as applicable.

In case of students admitted to the first year:

i. Students have to fulfill the attendance and CIE requirement to appear for SEE of course/s of 1st year .

ii. Students having not more than **16 credits** in the 1st and 2nd semesters of the first year of the program shall be eligible to move to the 3rd semester (2nd year) of the program. These courses include courses marked as NE .

iii. The students who fail to satisfy CIE and attendance requirement has to repeat the courses whenever offered next and become eligible for the 2nd year.

iv. **Obtaining CIE:** From the (3rd semester) second year onwards the student who obtains the required attendance for the course, but not the required CIE marks is allowed to move forward to the next semester. However, the student has to mandatorily obtain the required CIE in the subsequent semester. Obtaining minimum CIE marks for the course is mandatory. It may also be noted that the student shall not be permitted to appear for SEE in such courses until he/she obtains the required CIE.

v. **Carryover of backlog courses:** From 3rd semester onwards **t**he student/s who obtains required attendance, CIE, and appears for examinations but fails (F Grade) to pass a course/s is allowed to move forward to the next semester (odd /even) irrespective of a number of F grades. However, for the award of degree, the student has to pass in all courses as per applicable scheme and regulations and earn the prescribed credits. This is subject to a permitted maximum duration. **It may also be noted that the student will be given admission to the IV year (7th semester/8th semester) provided he/she passes all courses of 1st and 2nd semesters.**

vi. From the second year onwards there shall be no restriction from promotion from an even to next odd semester (or odd to next even semester) even if the student has not

satisfied the attendance requirementin one or more courses (including bridge courses for lateral entry students) shall not be eligible to appear for the Semester End Examination (SEE) of that course(s). The student shall be required to repeat that coursewhenever offered next.

vii. Permitted Maximum credits for registration: The student shall be permitted to register for total courses not exceeding 28 credits. These 28 credits include the courses of the regular semester and backlogs. The registration of these additional credits includes the courses having a shortage of attendance and the courses whose CIE requirements are not fulfilled. A student has to pay the prescribed fee as notified by the University from time to time.

Maintain $> = 5.00$ CGPA before the award of B.E. degree;

i. Degree should be completed by 8 years (regular) or 6 years (for diploma);

(b) **Award of Class:** Sometimes, it is necessary to provide equivalence of these averages, viz., SGPA and CGPA with the percentages and/or Class awarded as in the conventional system of declaring the results of University examinations. This shall be done by Autonomous Colleges under the University only at one stage by prescribing certain specific thresholds in these averages for First Class with Distinction, First Class and Second Class, at the time of Degree Award. This provision given in **Table 12** follows the approach of the Council for this purpose as reproduced from the AICTE Approval Process Handbook.

(c) Conversions of CGPA into Percentage of marks and Class Equivalence:

There is no formula for the conversion of CGPA into the percentage ofmarks. However, the following formula for conversion of the CGPA on a 10- point scale into the percentage of marks (M) for employment / higherstudies, etc may be used;

Percentage of marks secured, M = CGPA Earned x 10

Illustration for a CGPA of 8.20;

Percentage of marks secured M = $8.20 \times 10 = 82.0$ %

(d) **Class equivalence**: Subsequent to the conversion of final CGPA, after successful completion of the Program, into the percentage of marks (M), a graduating student is reckoned to have passed in,

(i) First Class with Distinction (FCD) if M ≥ 70
(ii) First Class (FC) if $60 \leq M \geq 70$
(iii)Second Class (SC) if $50 \leq M \geq 60$
(iv) Pass Class (P) if $40 \leq M \geq 50$

8.4 Gracing Policy:

- Grace marks shall be awarded to a Subject/Paper/Practical/ Head of passing to a maximum of 2% of Semester End Examination (SEE) marks if, after gracing the candidate gets minimum prescribed marks in the Theory/Practical and passes in the subject.

- A candidate shall be eligible to a maximum of 5 grace marks, provided He/She has failed in only one subject (Pr/Th/Head of Passing) of the examination passes the whole examination by such gracing Gets minimum prescribed marks in the paper/ practical and aggregate for passing by such gracing.

- Above is also applicable to the candidates who have cleared all courses in the programme but failed in one course which deny the award of degree.

- Grace Marks shall be awarded for declaration of classes also. For obtaining a higher class a candidate is eligible for getting a maximum of 5 grace marks, which will be added to the total aggregate marks of the candidate and will declare the candidate to have passed the examination in I Class of FWD.

- Grace marks (GMR) awarded as per GMR 01 for passing a subject and GMR 02 for passing the whole examination are shown only in the ledger and not in the statement of marks. A candidate is entitled for grace marks only under any one of the regulations either as per GMR01 or GMR 02 or GMR 03 A candidate is entitled for grace marks of 5 for the award of class of the degree.

9. Other Academic Matters:
9.1 Choice Based Credit System:

(a) It is necessary to implement a *Choice Based Credit System* for academic programmes at all the Autonomous Colleges under the University. This will be of considerable benefit to the students for customizing their programmes of direct interest to them, developing their individual capabilities and talents and preparing them for exciting careers ahead in the 21stcentury.

(b) This makes it necessary for the Autonomous Colleges to provide for:

(i) Easy access to the Schemes of Instruction, Syllabi, *Credit Structure* of programmesand the Courses being conducted by all students (either in print or in electronic form) so as to assist them in course work planning.

(ii) Institutionalizing the conduct of course work by adopting a centralized time table for all the programmes at a College, with a view to assist the students in customizing their programmes and also optimizing the use of physical facilities.

(iii) Establishing a dynamic *Faculty Advisory System* at each College with 5-10 students assigned to an Advisor, for guiding them in planning/implementing their course work in a flexible and effective manner and also monitoring them.

9.2. Change of Branch:

Students can apply for change of branch in accordance with the provisions laid down by the Institute, University, Council and Government of Karnataka. Change of branch is considered in the following cases;

- Change of branch is considered at the beginning of III Semester only.
- Only those students who have earned all the 40 credits of I/II semesters are eligible for the change of branch.

9.3. Transfer of Students:

(a) **Transfer of Dr. AIT students from non-autonomous to the autonomous Program**

- Students seeking transfer from VTU Programs of Dr. AIT to II or III year autonomous Programs of Dr. AIT shall be eligible to be admitted to the respective odd semesters (III & V) as per the VTU regulations under which the student enrolled to the B.E degree Program. Further the student should satisfy the course equivalence between non-autonomous and autonomous curricula. Otherwise they shall have to register and complete the additional courses to become eligible for the award of degree under Autonomous Program of Dr. AIT. In case of failed courses of VTU programme, student shall complete such courses by appearing in the examinations conducted by VTU.
- Students seeking readmission shall be free from malpractice issues and dues to the Institution.

(b) **Transfer of students from other Non-autonomous Institutions to the autonomous program of Dr.AIT**

- Students seeking transfer from VTU Programs of other Institutions to II or III year

autonomous Programs of Dr. AIT shall be eligible to be admitted to the respective odd semesters (III & V) as per the VTU regulations under which the student has enrolled to the B.E degree Program. Further the student should satisfy the course equivalence between non-autonomous and autonomous curricula. Otherwise they will have to register and complete the additional courses to become eligible for the award of degree under Autonomous Program of Dr. AIT. In case of failed courses of VTU program, students shall complete such courses by appearing in the examination conducted by VTU.

- Students seeking readmission shall be free from malpractice issues.

(c) Transfer from other autonomous Institutions to the autonomous program of Dr.AIT

- Students seeking transfer from other Autonomous Institutions to II or III year autonomous Programs of Dr. AIT shall be eligible to be admitted to the respective odd semesters (III & V) as per the Autonomous Academic Regulations for Bachelor of Engineering (B.E) of Dr. AIT. Further the student shall satisfy the course equivalence between the two autonomous curricula. Otherwise they will have to register and complete the additional courses to become eligible for the award of degree under Autonomous Program of Dr.AIT.
- Students seeking readmission shall be free from malpractice issues.

9.4. Temporary withdrawal from the Program:

(a) A student shall be permitted to withdraw temporarily from the program on grounds like, prolonged illness, calamity in the family or any other serious happening. The withdrawal shall be for periods which are integral multiples of a semester provided:

(i) The student shall present the facts to the Institute within 6 weeks from the date he/she has last attended the classes stating fully the reasons for such a withdrawal, together with supporting documents and endorsement of his/her parent or guardian.

(ii) The student shall not have any dues to the Institute.

(iii) A student availing temporary withdrawal from the programme of study under the above provision shall be required to pay such fees and/or charges as may be fixed by the Institute at the time of reporting to the Institute to continue the Program. The fees/ charges once paid shall not be refunded.

(iv) A student shall be entitled to avail the temporary withdrawal facility only once during his/her studentship of the Program at the Institute. The withdrawal period shall be such that the candidate can complete the Program requirement (160 credits for students admitted in I year and 120 credits for Lateral entry students). However, any other permissible concession requested by the concerned student shall have to be at the discretion of the Academic Council of the Institute.

9.5. Readmission

Students of Dr.AIT under autonomy seeking readmission as a repeater to any semester are permitted during the entire Program subject to the following:

- Complete rejection of the result of the semester to which readmission is sought.
- Temporary withdrawal from the program (refer to section no 9.c).

9.6 Termination from the Program:

A student shall be required to withdraw from the programme and leave the College on the following grounds:

(a) Failure to secure *CGPA* ≥5.00 on three consecutive occasions to lead the student being asked to discontinue the programme and leave the College. However,

- Failure to secure a CGPA ≥ 5.00 at the end of any semester for the first time, to attract warning before approval of the student to continue in the following semester (on probation).
- There shall be a provision for the rejection of total performance of a semester and re-registration for the semester. This shall be done only once in the entire course of studies.

(b) Absence from classes for more than six weeks at a time in a semester without leave of absence being granted by the competent Authority.

(c) Failure to meet the standards of discipline as prescribed by the College from time to time.

9.7 Students' Feedback:

a) The college collects the feedback from students on their course work and various academic activities conducted. The feedback is obtained on-line from the students at regular intervals maintaining confidentiality.

b) The feedback received from the students is reviewed/discussed by a committee constituted for the purpose and necessary corrective measures are taken.

9.8 Award of Degree:

(a) B.E. Degree:

(i) Students shall be declared to have completed the Program of B.E. / degree and is eligible for the award of degree provided the students have undergone the stipulated Course work of all the semesters under the Scheme of Teaching and Examinations and have earned the prescribed number of credits **within the permitted maximum duration.**

(ii) For the award of degree, completion of bridge courses, if any, as applicable is compulsory.

(iii) Mandatory earning AICTE points

AICTE Activity Points (non-credit) have no effect on SGPA/CGPA.

In case a student fails to earn the prescribed activity Points before the commencement of 8th semester examinations, the Eighth Semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of the degree only after the release of the Eighth Semester Grade Card.

Level of entry in degree course	Total Years for Points	Minimum Points
1st Year Regular	1st to 4th Year	100
2nd Year (3rd Sem.) through lateral entry or transfer from other Institutions	2nd to 4th year	75
Students transferred from other Universities to fifth semester at Dr AIT	3rd to 4th year	50

The Activity Points earned shall be reflected on the student's eighth semester Grade Card.

(d) B.E./B.Tech. (Honors) degree

A student shall be declared to have completed the Program of B.E., degree and shall be eligible to get undergraduate B.E., degree with Honours, provided.

(i) the student has undergone the stipulated Course work of all the semesters under the same Scheme of Teaching and Examinations and has earned the prescribed number of credits, i.e. 160 credits for I semester admitted students and 120 for III semester admitted students(lateral entry)

(ii) has earned additional 18 or more credits through University/Institiute- approved online Courses.

(iii) satisfied the Regulations Governing the Award of Honors at B.E. Degree Programs – Guidelines.

c. B.E. with Minor degree

A student shall be declared to have completed the Program of B.E. Degree and shall be eligible to get undergraduate B.E. degree with minors, provided.

(i) The student has undergone the stipulated Course work of all the semesters under the same Scheme of Teaching and Examinations and has earned the prescribed number of credits, i.e. 160 credits for I semester admitted student and 120 for III semester admitted student

(ii) Has earned additional 18 or more credits through a University/Institute - approved courses list submitted by the board of studies.

9.9 Noncompliance of CGPA ≥5 at the end of the Program

(A) Students, who have completed all the courses of the Program but do not have a CGPA ≥ 5.00 at the end of the Program, shall not be eligible for the award of the degree.

(B) In such cases, students shall be permitted to appear again for SEE in course/s [other than Internship, Technical seminar, Project (Mini and Main), and Laboratories] of any Semester/s without the rejection of CIE marks for any number of times, subject to the provision of the maximum duration of the Program to make up the CGPA equal to or greater than 5.00 for the award of the Degree.

9.10. Recommendations for Degree Award:

(a) The College forwards its recommendations to the University in respect of students qualifying for UG/PG/ Research Degree Awards based on their success in the examinations/adjudication of theses as the case shall be after receiving approval from the Authorities/ Bodies of the College concerned.

(b) The Autonomous College ensures that such student as in (a) has fulfilled all the requirements for the Degree Award.

(c) Only those students recommended for the Degree Award shall be entitled to receive the relevant Provisional Certificates/Transcripts from the College at this stage.

9.11 Graduation Ceremony:

(a) The College shall have its own annual *Graduation Ceremony* for the award of Degrees (Provisional Certificates) to the students completing the prescribed academic and other

requirements in each case as per the lists recommended to the University, in prior consultation with the University and by following the provisions in the University Statutes.

(b) The Colleges institutes Prizes and Awards to meritorious students, for being given away annually at the *Graduation Ceremony.* This will greatly encourage the students to strive for excellence in their academic activities. All successful students shall receive the PDC provided:

(i) No dues to the Institute, Departments, Hostels, Library and any other institute facility.

(ii) Normal practice and disciplinary action pending against the student.

(9.12) Other Issues:

(a) Students' Grievance Cell: Students shall approach this Cell for any kind of academic related issues. The cell is headed by the Principal. Students can appeal to the cell immediately for needful.

((b) Conduct and Discipline:

(i) All the students of the Institute shall conduct themselves within and outside the premises of the Institute in a manner befitting the great traditions of the Institute.

(ii) The students shall not indulge in any activity which is likely to bring down the prestige of the Institute.

(iii) The students shall show due respect and courtesy to the teachers, administrators, officers, employees and others associated with the Institute and maintain cordial relationships with fellow students.

(iv) Discrimination of any form amongst student community is forbidden.

(c) Ragging: Ragging in any form is strictly prohibited and is considered as a serious offence as per the order of the Honorable Supreme Court of India. The following acts of omissions and commissions shall constitute gross violation of the code of conduct and are liable for invoking disciplinary measures:

(i) Ragging, lack of courtesy, discrimination of any form, indecent behaviour within and outside the Institute, wilful damage and thieving of Institute property and of fellow students, possession, consumption and distribution of alcohol and hallucinogenic drugs and narcotics, smoking, carrying arms, unruly behaviour causing disturbance to fellow students, hacking in to other's computers and cyber related crimes, examination malpractices, plagiarism, etc.

(ii) Commensurate with the gravity of the offence, the punishment includes reprimand, fine, expulsion from the hostel, debar from examinations, temporary rustication,

suspension from the Institute, expulsion from the Institute and handing over the case to the law enforcing authorities of the Government.

(d) Faculty Advisor/Mentor:

The Mentor system makes the students punctual and helps them to complete their studies successfully. The faculty is the Mentor and the student is the Mentee.

(i)   Objective(s):

- To guide and fulfill the academic requirements of the students.
- To advise the students appropriately from time time.

(ii)   Roles and Responsibilities of Mentor:

- The mentor shall monitor the student who fails to satisfy minimum attendance and internal marks (40 %) requirements in all Courses, as per Regulations.

- The mentor and Mentee shall maintain updated diary, complete in all respects from time to time.

- The mentor shall arrange for a meeting with the students fortnightly and submit the proceedings to the respective Chairpersons of the Department.

- The mentor shall invite the parents for discussion at least once in every semester to update the academic progress of their ward, in case of non-performing and / or irregular students.

- The mentor shall arrange to send the progress reports to the Parents / Guardian regarding the details of Attendance, Test Marks, Examination results etc.

- Mentor shall ensure that the students do not indulge in any sort of ragging / illegal activity inside the campus / hostel.

(iii)   Expected Outcome

Results in enhanced performance and holistic development of the students.

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY,
BENGALURU-560056
STUDENT CODE OF CONDUCT DECLARATION

I, ……..…………………………………………………………….Son/Daughter of
……………………………………………………… aged about …………………..
Years got admitted to …………………… Semester …………………………….
B.E/M.Tech/MBA/MCA in the academic year ………………… am fully aware of the
following provisions of the code of conduct and I shall follow them strictly during my stay in
this Institution.

1. I shall wear compulsorily my **IDENTIFTY CARD** whenever I am in the Institution.

2. I shall adhere to the following **DRESS CODE:**

    a: BOYS: Shall not wear half pant & T-Shirts with logos, wordings etc., and will not
    sport long hair.

    b: GIRLS: I shall not wear half pant, skirt and T-shirt with logos, wordings etc., and
    shall not wear shorts, transparent, tight fitting and sleeveless tops.

3. I shall desist **USING MOBILE PHONE** and **if found using in the campus I permit
    the authorities to confiscate the same.**

4. I shall not smoke in the campus, if found smoking, the Institution authorities can take
    any suitable action against me.

5. I shall not indulge in any form of **ragging.** If found in the act of ragging, I shall fully
    abide by the decision of the Institution authorities.

6. I shall try to use public transport and conserve energy.

7. I shall not use environmentally unfriendly material like plastic bags, bottles etc. inside
    and outside the campus. I shall not write any slogans, draw pictures etc. on the walls of
    the college buildings and shall not cause any damage to the property of the college. If
    found doing so, the authorities can take action deemed fit against me.

8. I agree to open a Savings Bank Account in Syndicate bank, Dr.AIT Branch and operate
    all my financial transactions with the Institution through the Saving Bank Account only.
    In case I leave the Institution due to transfer to another college or for any other reason,
    I shall not close my Saving Bank Account until clearing all dues to the college and vice
    versa.

9. I shall fully abide by the rules and regulations regarding attendance requirements and
    Class Marks to write examination. In case of shortage I shall fully abide by the actions
    taken by the Institution as per the rules and regulations of the Institution and or VTU.

10. I shall fully abide by the rules and regulations set by the VTU and Institutional Academic regulation with respect to the entire examination and other academic issues. If found violating such rules and regulations I shall voluntarily accept the penalties levies on me by the authorities even to the extent of being debarred from examination or from the Institution.

11. I shall not create any noise or nuisance in or near the class rooms where the teaching is going on or in the campus.

12. In case of surrendering the seat during the course, I shall pay full tuition fee for the remaining years.

13. **In case of violation of any of the provisions of the student code of conduct, Institution authorities can initiate any disciplinary action against me and I shall abide by the same.**

Admission Application No:

Syndicate Bank SB A/c No: Signature of the Student

Aadhar Card No:

I have gone through the provisions of the student code of conduct from Sl. No. 1 to 13 and abide with all of them, which are laid down by the Institution and I shall ensure that my ward follow the same.

Name:

Date: Signature of the Parent/Guardian