



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, TELANGANA, INDIA

కాకతీయ ప్రौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

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B.TECH. CURRICULUM – URR26

Applicable to Students Admitted from the Academic Year 2026–27

UNDERGRADUATE RULES AND REGULATIONS-2026 (URR26)

In accordance with the National Education Policy 2020

**Regulations Governing the
Choice Based Credit System and
Multiple Entry and Multiple Exit Options
with
Competency-Focused Outcome Based Curriculum (CF-OBC)**

Approved by the Academic Council

Date: 07.07.2026



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp: Yerragattu Gutta, Hasanparthy (Mandal), Hanumakonda,
WARANGAL – 506 015, Telangana, India

(UGC Autonomous Institute Under Kakatiya University, Warangal)



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On 07-07-2026, Tuesday

No.	AC Members	Designation	Signature
1	Prof. K. Ashoka Reddy, Principal	Chairman	
Three Nominees of the University			
2	Prof. P. Malla Reddy, Department of Mathematics, KU, Warangal	Member	
3	Prof. B. Venkatram Reddy, Department of Physics, KU, Warangal	Member	
4	Prof. S. Jyothi, Department of Chemistry, KU, Warangal	Member	
Four Members from outside college			
5	Dr. G. Madhusudhan Reddy, Chief Advisor, BrahMos Aerospace, Hyderabad	Member	
6	Dr. D. Mohandas, Principal, KMC, Warangal	Member	
7	Dr. R.S. Prakash, Prof. of Mech. Engg., BITS Pilani, Hyd, Campus	Member	
8	Sri V. Balakishan Rao, Advocate, Hanumakonda	Member	
Deans of the Institute			
9	Prof. S. Narasimha Reddy, Dean, Academic Affairs	Member	
10	Prof. C. Venkatesh, Controller of Examinations	Member	
11	Prof. M. Veera Reddy, Professor I/c. I ³ C & MoUs	Member	
12	Prof. U. Shrinivas Balraj, Coordinator, IQAC	Member	
13	Prof. L. Sudheer Reddy, Dean, Planning & Execution	Member	
14	Prof. G. Raghotham Reddy, Dean, Research & Development	Member	
15	Prof. K. Sridhar, Dean, Students Affairs	Member	
16	Dr. T. Chandrabai, Training & Placement Officer	Member	
Heads of the Academic Departments			
17	Prof. M. Srikanth, Head, Dept. of CE	Member	
18	Prof. P. Srikanth, Head, Dept. of ME	Member	
19	Dr. M. Raghuram, Head, Dept. of ECI	Member	
20	Dr. M. Narsimha Rao, Head, Dept. of EEE	Member	
21	Prof. P. Niranjana, Head, Dept. of CSE	Member	
22	Dr. V. Venkateshwar Reddy, Head, Dept. of ECE	Member	
23	Prof. T. Senthil Murugan, Head, Dept. of IT	Member	
24	Prof. V. Shankar, Head, Dept. of CSE(N)	Member	
25	Dr. A. Jothi Prabha, Head, Dept. of CSE (AIML)	Member	
26	Dr. K. Shiva Shankar, Head, Dept. of M&H	Member	
27	Dr. H. Ramesh Babu, Head, Dept. of PS	Member	
28	Dr. P. Surender, Head, Dept. of Management	Member	
Four Senior Faculty of the College (different categories of teaching faculty)			
29	Prof. K. Venumadhav, Professor, Dept. of ECIE	Member	
30	Smt. A. Vijaya, Assoc. Professor, Dept. of ECE	Member	
31	Dr. S. Sunil Prathap Reddy, Assoc. Professor, Dept. of CE	Member	
32	Dr. Y. Bhavani, Assoc. Professor, Dept. of IT	Member	
Members from Academic Affairs of the College			
33	Dr. P. Nagarjuna Reddy, Faculty I/c, AA (UG)	Member	
34	Dr. R. Srikanth, Faculty I/c, AA (PG)	Member Secretary	

URR26 - RULES AND REGULATIONS FOR UNDERGRADUATE PROGRAMME
B. TECH 4-YEAR DEGREE PROGRAMME
COMPETENCY FOCUSED OUTCOME BASED CURRICULUM (CF-OBC) WITH
CHOICE BASED CREDIT SYSTEM (CBCS)
(Applicable w.e.f., the academic year 2026-27)

1. INTRODUCTION

- 1.1 Kakatiya Institute of Technology & Science, Warangal (KITSW) is an UGC autonomous institute under Kakatiya University (KU) Warangal. The institute offers 4-year (8 semesters) Bachelor of Technology (B.Tech.) degree programme, under Choice Based Credit System (CBCS) with effect from the academic year 2026-27.
- 1.2 The provisions contained in these regulations given the conditions for imparting course of instruction, conducting examinations and evaluation of students' performance leading to B.Tech. 4-year degree programme to be offered by the Kakatiya Institute of Technology & Science, Warangal and degree awarded by Kakatiya University, Warangal.
- 1.3 These regulations shall be called the *Kakatiya Institute of Technology & Science, Warangal (KITSW) regulations for the award of B.Tech. 4-year degree programme by Kakatiya University, Warangal.*
- 1.4 They shall come into effect from the date of getting approval from the Academic Council of the Kakatiya Institute of Technology & Science, Warangal.
- 1.5 They shall be applicable for all students enrolling for B.Tech. 4-year degree programme at the Kakatiya Institute of Technology & Science, Warangal from the academic year 2026-27.

2. DEFINITIONS

- 2.1 *"B.Tech."* means Bachelor of Technology, an Undergraduate Degree awarded from the Kakatiya University, Warangal
- 2.2 *"University"* means Kakatiya University, Warangal
- 2.3 *"Institute"* means Kakatiya Institute of Technology & Science, Warangal
- 2.4 *"UGC"* means University Grants Commission, New Delhi
- 2.5 *"AICTE"* means All India Council for Technical Education, New Delhi
- 2.6 *"MoE"* means Ministry of Education, Govt. of India, New Delhi
- 2.7 *"TGCH"* means Telangana Council for Higher Education, Govt. of Telangana, Hyderabad
- 2.8 *"GB"* means Governing Body of the Institute
- 2.9 *"AC"* means Administrative Committee of the Institute
- 2.10 *"FC"* means Finance Committee of the Institute
- 2.11 *"Academic Council"* means Academic Council of the Institute

- 2.12 **“AAC”** means Academic Advisory Committee of the Institute
- 2.13 **“Principal”** means Principal of the Institute
- 2.14 **“Dean”** means Dean of specific affairs of the Institute
- 2.15 **“HoD”** means Head of the Department of specific programme offered by the Institute
- 2.16 **“BoS”** means Board of Studies in the engineering of a specific programme offered by the Institute
- 2.17 **“CoE”** means Controller of Examinations of the Institute.

3. UNDERGRADUATE PROGRAMMES

- 3.1 The Institute shall offer the following Undergraduate Programmes under CBCS:
1. B.Tech. Civil Engineering (CE)
 2. B.Tech. Mechanical Engineering (ME)
 3. B.Tech. Electrical & Electronics Engineering (EEE)
 4. B.Tech. Electronics & Communication Engineering (ECE)
 5. B.Tech. Electronics & Communication Engineering (VLSI Design & Technology)
 6. B.Tech. Computer Science & Engineering (CSE)
 7. B.Tech. Information Technology (IT)
 8. B.Tech. Computer Science & Engineering (Networks) (CSN)
 9. B.Tech. Computer Science & Engineering (AI & ML) (CSM)
 10. B.Tech. Computer Science & Engineering (IoT) (CSO)
 11. B.Tech. Computer Science & Engineering (Data Science) (CSD)
 12. B.Tech. Computer Science & Engineering (Cyber Security)
- 3.2 The provisions of these regulations shall also be applicable to any new undergraduate programmes that are introduced from time to time with approval from appropriate bodies such as MoE / AICTE / UGC, etc.

4. ADMISSION

- 4.1 a) Candidates seeking admission to 1st year of the Four-Year B.Tech. degree programme shall have passed the Intermediate Examination of the Board of Intermediate Education, Telangana with Mathematics and Physical Sciences (Physics and Chemistry) as optional subjects or any other examination recognized by the University as equivalent to it.
- b) **Lateral Entry:** Candidates seeking admission directly into 2nd year of 4-year B.Tech. degree programme as **“Lateral Entry”** student shall have passed 3-year full time Diploma (after 10th Std) offered by State Board of Technical Education and Training, Telangana or any other examination recognized by the University as its equivalent.

- 4.2 The admissions shall be made in accordance with the guidelines issued by TGCHE.

5. ACADEMIC SESSION

- 5.1 Each academic session is divided into two semesters (odd and even), each of 16 weeks
- a) **Odd Semester:** From June/July to October/November of academic year. However, the academic session of the first semester will be decided based on the counseling schedule declared by the TGCHE.
 - b) **Even Semester:** From November/December to March/April of academic year.
- 5.2 The Institute shall announce the academic Calander (Almanac) for all the academic activities well before the commencement of the academic year and take all the necessary steps to follow them scrupulously.
- 5.3 The academic activities in a semester normally include registration, course work, Continuous Internal Evaluation (CIE), End Semester Examination (ESE) and declaration of results.

6. REGISTRATION

- 6.1 All the students are required to register in person at the beginning of each academic year on the dates specified in the academic calendar (almanac).
- 6.2 The sole responsibility for registration rests with the student concerned.
- 6.3 Registration of students will be centrally organized by the Academic section.
- 6.4 The Registration procedure involves:
- a) Filling of the prescribed registration form
 - b) Payment of fees and clearance of outstanding dues (if any)
 - c) Signing undertakings (undertaking for regular attendance, discipline and against ragging) along with the parents
- 6.5 If for any compelling reasons like illness, etc., a student is unable to register on the announced day of registration, he/she can register within 12 working days from the beginning of the academic year on payment of an additional late fee as prescribed by the Institute.
- 6.6 **No late registration shall be permitted after 12th working day** from the scheduled date of commencement of class work for that academic year.
- 6.7 Only those students will be permitted to register who have
- a) cleared all institute and hostel dues of previous semesters
 - b) paid all required prescribed fees for the current academic year
 - c) not been debarred / detained from registering for a specified period on disciplinary or any other grounds
 - d) cleared the minimum academic requirement as detailed in Regulation No. 15

7. CURRICULUM

- 7.1 The URR26 regulations are in line with the National Education Policy 2020 (NEP2020) and the AICTE model curriculum to provide multidisciplinary holistic education to produce well-rounded engineering graduates.

These regulations offer the Choice Based Credit System and Multiple Entry and Multiple Exit Options with Competency-Focused Outcome Based Curriculum (CF-OBC).

- 7.2 a) The duration of the programme leading to B.Tech. degree will be 8 semesters (4 academic years)
b) However, for the lateral entry students, the duration of the program leading to B.Tech. degree will be 6 semesters (3 academic years)

- 7.3 The curricula for different degree programmes as proposed by the department and recommended by the BoS shall have the approval of the Academic Council.

- 7.4 As suggested by AICTE, the courses offered for UG programme are broadly classified as:

Basic science courses (BSC), Engineering science courses (ESC), Humanities and social sciences including management courses (HSMC), Program core courses (PCC), Program Elective (PE), Open Elective (OE) courses, Mandatory courses (MC) and Project (PROJ) based courses

- 7.5 The courses offered would have a *Lecture – Tutorial – Practical (L-T-P)* component to indicate contact hours. A separate laboratory (practical) course may exist (0-0-P) in certain cases as decided.

- 7.6 The academic programmes of the Institute follow the credit system.

- 7.7 Each course shall have credits(C), which reflects its weightage. The number of credits for a course in a semester shall ordinarily be calculated as below:

$$\text{Number of credits of a course, } C = L + T + (P/2)$$

where *L*, *T*, *P* represent the No. of Lecture, Tutorial and Practical hours / week

- 7.8 The students admitted for B.Tech. programme under Lateral Entry scheme have to be offered a mandatory course on “Environmental Studies” in the 3rd/4th semester of B.Tech. programme as per the stream of branches.

- 7.9 **Course Code:** Each course offered in the Undergraduate (B.Tech.) curriculum at this institute shall be listed by using a total of 8 digits, as follows:

Ex: **U26CE106**

- a) The first letter, to represent the Undergraduate Programme
Ex. U for Undergraduate Course
- b) The next two numbers, to represent the year in which the syllabus is proposed / revised.
Ex. 26 for the year 2026 from which syllabus is applicable for the batches admitted from academic year 2026-27

- c) The next two letters represent the department concerned offering that course.
Ex. CE for Civil Engineering
- d) The last three numbers, to represent the course number and semester in which it is being offered.
Ex. XYZ; X - Semester number ; YZ – Course number
106 represents course number 06 offered in the first semester

In general, a **course code “U26CE106”** represents an **Undergraduate Course number 06 for the batches admitted from the year 2026 offered by the Department of Civil Engineering in first semester.**

- 7.10 The syllabus of each course in the B.Tech. curriculum shall be divided into four (4) units.

8. ATTENDANCE

- 8.1 All the students are normally required to have 100% attendance in aggregate. However, a condonation for shortage of attendance up to 25% may be granted by the principal based on the recommendation of HoD concerned.
- 8.2 The condonation for shortage of attendance up to 25% (as mentioned in Regulation No. 8.1) shall be taken up only when the student takes prior permission for his absence stating fully the genuine reasons along with supporting documents to the HoD concerned.
- 8.3 Hence, students who do not have the mandatory requirement of minimum 75% of attendance in aggregate shall be detained and shall not be permitted to appear for the ESE of that semester.
- 8.4 All such students who are detained have to repeat the entire semester when it is offered, by following the due registration procedure
- 8.5 Attendance of all courses shall be entered before the end of each working day by the faculty concerned through the College Management System (CMS) portal of the institute website. Students are advised to monitor the status of their attendance through this CMS portal.

9. CONDUCT AND DISCIPLINE

- 9.1 All students shall be required to conduct themselves in a manner befitting the reputation of the institution, within and outside the premises of the Institute; and are expected to complete their studies without any break.
- 9.2 As per the order of Hon'ble Supreme Court of India, ragging in any form is strictly banned. Involvement of a student in ragging will be considered as a gross indiscipline and may lead to his / her expulsion from the Institute.
- 9.3 Detailed rules regarding the conduct and discipline (code of conduct) are made available on the Institute website.

10. EVALUATION PROCEDURE

- 10.1 The evaluation of students in every course of 4-year B.Tech. programme (8 semesters) and Lateral Entry students of B.Tech. programme (6 semesters),

is a continuous process and is based on their performance in different examinations as mentioned below:

- a) Sessional, involving **Continuous Internal Evaluation (CIE)** conducted all through the semester which includes **Teachers Assessment (TA)** and **Mid-Semester Examinations (MSE)**
 - b) Terminal, designated as **End Semester Examination (ESE) for three (3) hour duration**, which includes written examination for theory courses and practical/ design/ drawing examination with built-in oral part for laboratory/ design / drawing courses.
- 10.2 A student's performance in a course (subject) shall be judged by taking into account the result of CIE and ESE together.
- 10.3 CIE and ESE shall have 40:60 weightage i.e. CIE carrying 40% weightage and ESE carrying 60% weightage.
- 10.4 **Continuous Internal Evaluation (CIE) for Theory Course:**
- 10.4.1 CIE throughout the semester shall consist of TA and MSE.
 - 10.4.2 The distribution given to each component of CIE for a theory course is given below:

S. No.	Particulars	Weightage
1.	Teacher's Assessment (TA)	10%
2.	Mid Semester Examination (MSE)	30%
Total		40%

10.4.3 **TA:**

Course Teacher shall decide the components of assessment under TA (*Record of solutions of tutorial sheets / Solving tutorial problems on the board / CP & CRP presentations / Special Topic presentations / Course Projects / Assignments, etc.*) with due approval from the HoD and inform the students at the beginning of the semester

10.4.4 **MSE:**

- a) There shall be two mid semester examinations (MSE-I and MSE-II) of one and half hour (90 minutes) duration each.
- b) It is mandatory for the student to take both MSEs
- c) MSE evaluation shall be done as given below:
MSE marks awarded = (70% of the best of MSE-I & MSE-II marks) + (30% of the other MSE marks)
Ex: A student secured following marks
MSE-I marks = 10 out of 30
MSE-II marks = 20 out of 30
The MSE marks awarded = (70% of 20) + (30% of 10)
= 14 + 3 = 17 out of 30

10.4.5 The marks obtained by the students in MSE must be submitted to the Controller of Examination (CoE) by the teachers within 1 week from the date of conduct of the examination.

10.4.6 The dates for MSE and ESE shall be declared by the CoE in consultation with the Dean, Academic Affairs.

10.5 Continuous Internal Evaluation (CIE) for Laboratory (Practical) Course:

10.5.1 CIE for laboratory course shall carry 40% weightage.

10.5.2 CIE throughout the semester shall consist of the following:

Assessment Components	Weightage
Regular Experimentation / Job work and Viva-voce	20%
Regular submission of record	10%
Quiz / Skill test / Viva-voce at the end of semester	10%
Total Weightage	40%

10.6 End Semester Examination (ESE) for Laboratory (Practical) Course:

10.6.1 There shall be an ESE at the end of each semester for three (03) hour duration for each laboratory course.

10.6.2 The ESE for laboratory course shall carry 60% weightage.

10.6.3 The marks distribution at ESE shall be as follows:

Assessment Components	Weightage
Procedure, Experimentation, Tabulation, Result, as applicable ...	45%
Viva-voce	15%
Total Weightage	60%

10.7 Continuous Internal Evaluation (CIE) for Seminar & Mini Project:

10.7.1 Seminar:

The HoD shall constitute a Department Seminar Evaluation Committee (DSEC)

10.7.1.1 DSEC shall allot a faculty supervisor to each student for guiding on (i) selection of topic (ii) literature survey and work to be carried out (iii) preparing a report in proper format and (iv) effective seminar presentation

10.7.1.2 There shall be only continuous Internal Evaluation (CIE) for seminar

10.7.1.3 Seminar Assessment Framework:

The assessment framework given below is indicative in nature and shall serve as guideline for the department to develop department-specific Seminar assessment framework.

Seminar Assessment Components	Weightage
Seminar Supervisor Assessment	20%
Seminar Report	30%
SDG Alignment	10%
DSEC Assessment: Oral presentation with PPT and viva-voce	40%
Total Weightage:	100%

Keeping in view the department requirements and expected outcomes, the departments shall develop department-specific assessment framework and implement rubric-based evaluation for Seminar.

As part of department-specific assessment framework, the department shall

- (i) identify components of assessment for Semester
- (ii) **SDG Alignment:** include “SDG Alignment” as one of the components of assessment, with appropriate weightage.
- (iii) assign suitable weightage to each assessment component
- (iv) **develop well-defined rubrics, with measurable criteria, for the evaluation of each assessment component.**

10.7.1.4 **Seminar Topic:** The topic should be interesting and conducive to discussion. Topics

10.7.1.5 **Report:** Each student is required to submit a well-documented report on the chosen seminar topic as per the format specified by DSEC.

10.7.1.6 **Anti-Plagiarism Check:** The seminar report should clear plagiarism check as per the Anti-Plagiarism policy of the institute

10.7.1.7 **Presentation:** Each student should prepare PPT with informative slides and make an effective oral presentation before the DSEC as per the schedule notified by the department

10.7.1.8 The candidate shall register the Seminar as supplementary examination in the following cases:

- a) student is absent for oral presentation and viva-voce
- b) student fails to submit the report in prescribed format
- c) student fails to fulfil the requirements of seminar evaluation as per specified guidelines

10.7.1.9 Supplementary examination for seminar

- a) The CoE shall send a list of candidates registered for supplementary to the HoD concerned

10.7.1.10 The DSEC, duly constituted by the HoD, shall conduct seminar evaluation and send the award list to the CoE within the stipulated time

10.7.2 Mini Project:

The HoD shall constitute a *Departmental Mini Project Evaluation Committee (DMPEC)*

10.7.2.1 Every student shall take up an independent Mini project on innovative ideas. However, wherever it is not feasible a group of 2 to 4 students shall be allowed to take up a mini project. The DMPEC shall take a decision on the number of students in a group.

10.7.2.2 DMPEC shall allot a faculty supervisor to each student for guiding on (i) selection of topic (ii) literature survey and work to be carried out (iii) preparing a report in proper format and (iv) effective mini project oral presentation

10.7.2.3 There shall be only continuous Internal Evaluation (CIE) for mini project

10.7.2.4 **Mini Project Assessment Framework**

The assessment framework given below is indicative in nature and shall serve as guideline for the department to develop department-specific Mini Project assessment framework.

Mini Project Assessment Components	Weightage
Mini Project Supervisor Assessment	15%
Working model / process / software package / system developed	20%
Mini Project report	15%
Mini Project paper	10%
Video pitch	10%
DMPEC Assessment: Oral presentation with PPT and viva-voce	15%
SDG Alignment	5%
Research Alignment	10%
Total Weightage:	100%

Keeping in view the programme requirements and expected outcomes, the departments shall develop department-specific assessment framework and implement rubric-based evaluation for Mini Project.

As part of department-specific assessment framework, the department shall

- (i) identify components of assessment for Mini Project
- (ii) **SDG Alignment:** include “SDG Alignment” as one of the components of assessment, with appropriate weightage.
- (iii) **Research Alignment:** Departments may include **Research Alignment as a distinct assessment component** with appropriate weightage. The objective is to encourage research orientation and innovation rather than mere completion of project work. This motivates the students to translate project outcomes into conference presentations, journal publications, patents or other scholarly contributions.
- (iv) assign suitable weightage to each assessment component, and
- (v) **develop well-defined rubrics, with measurable criteria, for the evaluation of each assessment component.**

- 10.7.2.5 **Mini Project Topic:** The topic should be interesting and conducive to discussion. Topics may be found by looking through recent issues of peer reviewed Journals/ Technical Magazines on the topics of potential interest
- 10.7.2.6 **Working Model:** Each student is required to develop a working model/ process/ system on the chosen work and demonstrate before the *DMPEC* as per the dates specified by *DMPEC*
- 10.7.2.7 **Report:** Each student is required to submit a well-documented report on the chosen seminar topic as per the format specified by *DMPEC*
- 10.7.2.8 **Anti-Plagiarism Check:** The seminar report should clear plagiarism check as per the Anti-Plagiarism policy of the institute
- 10.7.2.9 **Presentation:** Each student should prepare PPT with informative slides and make an effective oral presentation before the *DMPEC* as per the schedule notified by the department
- 10.7.2.10 **Video Pitch:** Each student should create a pitch video, which is a video presentation on his/ her mini project. Video pitch should be no longer than 5 minutes by keeping the pitch concise and to the point, which shall also include key points about his/ her business idea / plan (*if any*) and social impact
- 10.7.2.11 The candidate shall register the Mini project as a supplementary examination in the following cases:
 - (a) Student is absent for oral presentation and viva-voce
 - (b) Student fails to submit the report in prescribed format
 - (c) Student fails to fulfil the requirements of Mini project evaluation as per specified guidelines.
- 10.7.2.12 Supplementary examination for mini project
 - (a) The CoE shall send a list of candidates registered for supplementary to the HoD concerned
- 10.7.2.13 The *DMPEC*, duly constituted by the HoD, shall conduct Mini project evaluation and send the award list to the CoE within the stipulated time

10.7.3 Evaluation for Major Project Work:

- 10.7.3.1 Final year major project work is teamwork and represents the culmination of study towards the B. Tech degree. Major project offers an opportunity to integrate the knowledge acquired from various courses and apply it to solve real-world complex engineering problems. The student learning assessment process (SLAP) shall include a good number of presentations, demonstration of work undertaken, submission of a project report, writing project paper in scientific journal style & format, preparing project poster and creating video pitch on the complete project work.
- 10.7.3.2 Activities of the major project SLAP shall be planned in such a way to ensure that the students acquire the essential knowledge,

skills and qualities (KSQ) of a professional engineer.

10.7.3.3 Major project work shall be normally conducted in two stages:
Major project work

- (a) Phase-I in seventh semester and Major project work Phase-II in eighth semester.
- (b) Nearly 50 - 75% of the proposed work to be completed in 7th semester as Phase-I and the remaining work to be continued and completed in 8th semester as Phase-II

(I) Major Project Phase-I:

- (a) Every student is expected to put approximately **72 hours of work** into the major project *phase-I* course over the 12 weeks of 7th semester
- (b) The HoD shall constitute a *Departmental Project Evaluation Committee (DPEC)*
- (c) The convener DPEC shall allot faculty supervisors to all project teams for guiding on (i) project objectives and expected deliverables (ii) plan their project work and timeline (iii) enough resources for successful project completion (iv) knowledge, skills and qualities (KSQ) to be acquired to propose solutions to the identified real-world problem for the project work (v) preparing a well-documented report in proper format and (iv) effective major project oral presentation
- (d) The project supervisors shall ensure students focus on the project objectives, expected deliverables and students have sufficient resources for successful project completion
- (e) The project supervisors are also expected to continuously emphasize and guide the students on following project timeline, meeting cadence, activity journaling in project logbook
- (f) There shall be only continuous Internal Evaluation (CIE) for Major Project *Phase-I*
- (g) **Major Project Phase-I Assessment Framework:**

The assessment framework given below is indicative in nature and shall serve as guideline for the department to develop department-specific Major Project Phase-I assessment framework.

Major project work Phase-I Assessment Components (7th semester)	Weightage
A. Supervisor Assessment	20%
B. DPEC Assessment (i) Registration Presentation (10%) (ii) Progress Presentation-I (20%) (iii) Project progress*: Part of working model/ process/software package/system developed (25%) (iv) Well-documented Progress Report on Phase-I work (10%) (v) SDG Alignment (5%) (vi) Video pitch on Phase-I (10%)	80%
Total Weightage	100 %

Keeping in view the programme requirements and expected outcomes, the departments shall develop department-specific assessment framework and implement rubric-based evaluation for Major Project Phase-I.

As part of department-specific assessment framework, the department shall

- (i) identify components of assessment for Major Project Phase - I
 - (ii) **SDG Alignment:** include “SDG Alignment” as one of the components of assessment, with appropriate weightage.
 - (iii) **Research Alignment:** *Departments may include Research Alignment as a distinct assessment component with appropriate weightage. The objective is to encourage research orientation and innovation rather than mere completion of project work. This motivates the students to translate project outcomes into conference presentations, journal publications, patents or other scholarly contributions.*
 - (iv) assign suitable weightage to each assessment component, and
 - (v) **develop well-defined rubrics, with measurable criteria, for the evaluation of each assessment component.**
- (h) **Working Model:** Every project team shall be required to develop a working model/process/software package/system, on the chosen work. The progress made in this shall be demonstrated during progress presentation-I at the end of *phase-I* and the completed working model/ process/software package/system before DPEC as per the dates specified by DPEC at the end of *phase-II*.
- (i) **Progress Report on phase-I:** Every project team shall be required to submit a well-documented progress report on dissertation phase-I as per format specified by DPEC.
- (j) **Video pitch on phase-I:** Every project team shall be required to create a pitch video, which is a video presentation on their major project work *phase-I*. It should be a 3 to 5-minute-long video (no longer than 5 minutes), highlighting the progress made at various stages during *phase-I* project implementation
- (k) A student shall register for supplementary examination for the Major project work *phase-I* in the following cases:
- (l) Student is absent for oral presentation and viva-voce as part of progress presentation-I
 - (m) Project team fails to submit the progress report on *phase-I* in prescribed format
 - (n) Project team fails to submit the video pitch on the progress made during the *phase-I* period.
 - (o) Student fails to fulfill the requirements of major project work *phase-I* evaluation as per specified guidelines
- (p) **Supplementary examination for major project work phase-I**
- (q) The CoE shall send the list of students registered for supplementary examination, to the HoDs concerned
- (r) DPEC shall conduct major project *phase-I* supplementary exam and send the award list to the CoE within the stipulated time

(II) Major Project Phase-II:

- (a) All the major project teams shall take *phase-I* forward and complete the remaining work as *phase-II* in the 8th semester.

- (b) Every student is expected to put approximately 168 hours of work into the major project *phase-II* course over the 12 weeks of 8th semester
- (c) The project supervisors are expected to guide the students to systematically continue the *phase-I* work, useful work during inter-semester break, meeting the deadlines as proposed in project timeline
- (d) The project supervisors shall ensure students focus on the project objectives and expected deliverables and ensure students have sufficient resources for successful project completion
- (e) The project supervisors are also expected to continuously emphasize and guide the students on following project timeline, meeting cadence, activity journaling in project logbook.
- (f) There shall be CIE and ESE for Major Project Phase - II
- (g) **Major Project Phase-II Assessment Framework:**

The assessment framework given below is indicative in nature and shall serve as guideline for the department to develop department-specific Major Project Phase-II assessment framework.

Major Project Phase-II Assessment Components (8 th Semester)	Weightage
A. CIE (i) Supervisor Assessment (10%) (ii) DPEC Assessment (30%) (a) Progress presentation-II (10%) (b) Final presentation (10%) (c) Working model/process/software package/system developed (10%)	40%
B. ESE a. Well-documented project report (15%) (DPEC shall evaluate the project reports, as per the rubrics, well before the ESE. At the time of ESE, evaluated project report marks shall be posted in the award list, along with the ESE oral presentation marks. Students shall appear for Viva-Voce with project report) b. Oral presentation with PPTs and viva-voce (15%) c. Project poster (5%) (DPEC shall evaluate the project poster, as per the rubrics, well before the ESE. At the time of ESE, evaluated project poster marks shall be posted in the award list. Students shall appear for Viva-Voce with project poster) d. SDG Alignment (5%) e. Research Alignment (10%) f. Project video pitch (5%) g. Project paper (5%)	60%
Total Weightage	100%

Keeping in view the programme requirements and expected outcomes, the departments shall develop department-specific assessment framework and implement rubric-based evaluation for Major Project Phase-II.

As part department-specific of assessment framework, the department shall

- (i) identify components of assessment for Major Project Phase - II
 - (ii) **SDG Alignment:** include “SDG Alignment” as one of the components of assessment, with appropriate weightage.
 - (iii) **Research Alignment:** *Departments may include **Research Alignment as a distinct assessment component** with appropriate weightage. The objective is to encourage research orientation and innovation rather than mere completion of project work. This motivates the students to translate project outcomes into conference presentations, journal publications, patents or other scholarly contributions.*
 - (iv) assign suitable weightage to each assessment component, and
 - (v) **develop well-defined rubrics, with measurable criteria, for the evaluation of each assessment component.**
- (h) **Working Model:** Every project team shall be required to develop a working model /process / software package/system, on the chosen work. The completed working model/process / software package/system shall be demonstrated during final presentation at the end of *phase-II*.
- (i) **Video pitch:** Every project team shall be required to create a pitch video, which is a video presentation on their major project work *phase-I & phase-II*. The project team shall present the produced video pitch during Final presentation
- (j) **Project poster:** At the end, the project teams shall present their project in the form of posters (A2 size). Teams shall have to present their work during the poster presentation session scheduled at the end of the 8th semester, at the time of demonstration of complete porotype / working model / software package / system developed.
- (k) **Well-documented plagiarism-cleared project report:** Every project team shall be required to submit a well-documented project report on the work carried out, as per the format specified by the DPEC. The report should clear plagiarism check as per the anti-plagiarism policy-2020 of the institute.
- (l) A student shall register for supplementary examination for the Major project work *phase-II* in the following cases:
- (i) Student is absent for oral presentation and viva-voce as part of ESE presentation
 - (ii) Student fails to fulfill the requirements of major project work *phase-II* evaluation as per specified guidelines
- (m) Supplementary examination for major project work *phase-II*
- (i) The CoE shall send the list of students registered for supplementary examination, to the HoDs concerned
 - (ii) The DPEC, duly constituted by the HoD, shall conduct major project *phase-II* supplementary exam and send the award list to the CoE within the stipulated time

10.7.4 Evaluation for Internship:

- a) The students shall undergo 6-8 weeks internship during summer/winter vacation at industry/R&D organization / Academic Institutes like IITs, IIITs & NITs.
- b) The students preferably undergo an internship at one organization only. In case of any difficulty, the stipulated period of internship shall be completed at different organizations with a minimum of one week internship at every stage.
- c) The internship evaluation shall be done in the VII semester of study and hence the students shall complete the prescribed period of internship before start of VII semester (from end of II semester to commencement of VII semester).
- d) The internship evaluation shall be done by *department internship evaluation committee* (DIEC) based on the submitted report by student and oral presentation.
- e) There shall be only Continuous Internal Evaluation (CIE) for internship evaluation.
- f) **Internship Assessment Framework:**

The assessment framework given below is indicative in nature and shall serve as guideline for the department to develop department-specific Internship assessment framework.

Internship Assessment Components	Weightage
A. Internship Supervisor's Assessment (i) Feedback from the internship supervisor on completion of internship assignment/work (20%) (ii) Feedback from the internship supervisor - on quality of work in internship assignment/work (10%) (iii) Feedback from the internship supervisor - internship log book (10%) (iv) Feedback from the internship supervisor - on attendance, punctuality and work hours (10%) (For the case of 6-8 week internship done in more than one spell, it will be the average of all the internship supervisors' assessments)	50%
B. DIEC Assessment (i) Internship duration (8 /12 weeks) (6/8 weeks online via NPTEL and 2/4 weeks offline) (10% / 15%) (ii) Internship Report (20%) (iii) Oral Presentation (with PPT) and viva voce (10%) (iv) SDG Alignment (5%)	50%
Total Weightage:	100%

Note: *It is mandatory for the student to appear for oral presentation (with PPT) and viva voce to qualify for course evaluation*

Keeping in view the programme requirements and expected outcomes, the departments shall develop department-specific assessment framework and implement rubric-based evaluation for Internships.

As part of department-specific assessment framework, the department shall

- (i) identify components of assessment for Internship
 - (ii) **SDG Alignment:** include “SDG Alignment” as one of the components of assessment, with appropriate weightage.
 - (iii) assign suitable weightage to each assessment component, and
 - (iv) **develop well-defined rubrics, with measurable criteria, for the evaluation of each assessment component.**
- g) **Internship Report:** Each student is required to submit a well-documented internship report (both *soft copy and soft bound hard copy*) as per format specified by DIEC
- h) A student shall register for supplementary examination for the internship evaluation in the following cases:
- (i) absent for oral presentation and viva-voce
 - (ii) fails to submit the internship report in prescribed format
 - (iii) fails to fulfil the requirements of internship evaluation as per specified guidelines
- i) **Supplementary examination for internship evaluation**
- j) The CoE shall send the list of students registered for supplementary examination, to the HoDs concerned
- k) The DIEC, duly constituted by the HoD, shall conduct internship evaluation supplementary exam and send the award list to the CoE within the stipulated time

10.7.5 Evaluation of MOOC

10.7.5.1 SWAYAM - MOOC

- (i) **SWAYAM-MOOC:** Massive Open Online Courses (MOOCs) are such online courses which are developed as per the pedagogy and made available on the SWAYAM (Study Web of Active-learning by Young and Aspiring Minds) platform of *Government of India*
- (ii) **SWAYAM** shall notify all Institutions, on 1st June and 1st November every year, the list of online learning courses to be offered in the upcoming semester.

10.7.5.2 Registration for SWAYAM - MOOCs and Credits

- (i) The student shall be allowed to register for MOOCs courses for the designated Professional electives and Open electives mentioned in the curriculum.
- (ii) The student shall select a relevant MOOCs course carrying 3 credits.
- (iii) The Institutional MOOCs coordinator, with the help of departmental MOOCs coordinator, shall guide the students throughout the course.

10.7.5.3 **Evaluation and Certification of MOOCs:**

- (i) The Principal Investigator (PI) shall be a subject matter expert (SME) belonging to a reputed educational institution, called Host Institution
- (ii) The host Institution and PI shall be responsible for evaluating the registered students for MOOCs course
- (iii) After conduct of examination and completion of the evaluation, the PI through host institution shall award Marks/Grade as per the evaluation scheme announced.

10.7.5.4 **Credit Mobility of MOOCs:**

- (i) Institution shall allow the credit mobility for the courses earned through MOOCs.
- (ii) A certificate regarding successful completion of the MOOCs courses shall be issued through the host Institution and sent to the parent institution.
- (iii) The parent institution shall give equivalent credit weightage to the students for the credits earned through online learning courses through SWAYAM platform in the credit plan of the programme.

In case the student is unable to complete the MOOC for theory courses, he/she shall be allowed to select an appropriate course listed under the respective courses offered at the institute / department concerned and appear for a supplementary exam as per Regulation No.13. In such a case, the student is deemed to have passed the supplementary exam of a theory course taken as a result of an unsuccessful MOOC attempt, if he/she secures

- a) 40% of marks assigned to the supplementary ESE (Max. Marks: 60) and
- b) 40% of marks assigned to the CIE of MOOC (Max. Marks: 40) & supplementary ESE of the course taken together (Max. Marks: 100).

In this case, the MOOC continuous internal marks (MOOC-CIE) for the registered supplementary ESE shall be taken from the **MOOC online assignments portion** of the unsuccessful MOOC. *If the maximum marks for the online assignment portion of MOOC is 25 and if the student scored 16 in that MOOC, then scaling is done for 40 marks for MOOC-CIE (i.e., 16/25 marks shall be scaled up to $(40 \times 16)/25 = 25.6$ marks for MOOC-CIE).*

- 10.7.5.5 URR-26 allows our students to take massive open online courses (MOOCs) on the SWAYAM platform, delivered by the NPTEL and other national coordinators (hereafter abbreviated to SWAYAM-NPTEL), for the professional electives (PEs) and open electives (OEs) of the under-graduate programmes

- 10.7.5.6 As per the provisions made in URR-18, a student can either do any one of the courses, attending classes, offered by the department under PE or take an equivalent SWAYAM-NPTEL MOOC and complete online.
- 10.7.5.7 **Credit Transfer:**
- (i) Opted SWAYAM-NPTEL MOOC for Professional Core courses & Professional Electives should have prior approval from the programme's internal board of studies (BoS) for proper transfer of credits, for the award of degree. All such lists of approved SWAYAM-NPTEL MOOCs for PEs and other courses along with the registered list of candidates shall be presented to the BoS, whenever conducted.
 - (ii) For open electives (OEs) and non-core courses, the SWAYAM-NPTEL MOOCs should have prior approval from the Dean AA in consultation with BoS chairperson of course offering department/centre for proper transfer of credits, for the award of degree. All such lists of approved SWAYAM-NPTEL MOOCs for OE-IV along with registered list of candidates shall be presented to the JBoS, whenever conducted.
- 10.7.5.8 Each BoS, for its UG program, shall approve the list of SWAYAM-NPTEL courses of 8 week/12 week duration, which shall be considered equivalent to 03 credits courses. (CAM table is to be prepared for equivalent SWAYAM-NPTEL course with CO-PO mapping).
- 10.7.5.9 SWAYAM-NPTEL Certifications of any 04-week course will not be considered for credit transfer.
- 10.7.5.10 **In the case of Supplementary for MOOC failed candidates:** In case the student is unable to complete the MOOC for theory courses, he/she shall be allowed to select an appropriate course listed under the respective courses offered at the institute / department concerned and appear for supplementary as per Regulation No.13. In such a case, the student is deemed to have passed the supplementary exam of a theory course taken as a result of an unsuccessful MOOC attempt, if he/she secures
- (a) 40% of marks assigned to the supplementary ESE (Max. Marks: 60) and
 - 40% of marks assigned to the CIE of MOOC (Max. Marks: 40) & supplementary ESE of the course taken together (Max. Marks: 100). In this case, the CIE marks for the registered supplementary ESE shall be taken from the **online assignments portion** of the unsuccessful MOOC. *If the maximum marks for the online assignments portion of MOOC is 25 and if the student scored 16 out of 25, then scaling is done for 40 marks for MOOC-CIE (i.e., 16/25 marks shall be scaled up to $(40 \times 16) / 25 = 25.6$ marks for MOOC-CIE).*

10.7.5.11 **Structure for converting marks secured in NPTEL Online Certification (NOC) Exam to Grade Equivalent**

Total marks secure (X) in NPTEL Online Certification (NOC) exam	Grade
$X \geq 80\%$	S
$70\% \leq X < 80\%$	A
$60\% \leq X < 70\%$	B
$50\% \leq X < 60\%$	C
$40\% \leq X < 50\%$	D
$X < 40\%$	F

10.7.5.12 Improvement Examination: Students who have completed a MOOC equivalent to an institute-offered theory course through self-learning and wish to register for an Improvement Examination shall choose one of the following options during registration:

- **Option-1:** Students may seek exemption from appearing for the improvement examination in courses completed through MOOC.
- **Option-2:** Students may choose to take the improvement examination for the corresponding institute-offered course.
 - In this case, CIE marks for the registered improvement Exam shall be taken from the **online assignments portion** of the MOOC. *If the maximum marks for the online assignment portion of MOOC is 25 and if the student scored 16 out of 25, then scaling is done for 40 marks for MOOC-CIE (i.e., 16/25 marks shall be scaled up to $(40 \times 16)/25 = 25.6$ marks for MOOC-CIE).*

11 MINIMUM REQUIREMENT FOR PASSING A COURSE

11.1 **Theory Course:** A student is deemed to have passed a theory course, if he / she secures

- (a) 40% of marks assigned to End Semester Examination (ESE) and
- (b) 40% of marks assigned to the Mid Semester Examination (MSE) & End Semester Examination (ESE) of the course taken together and
- (c) 40% of marks assigned to Teacher's Assessment (TA), Mid Semester Examination (MSE) and End Semester Examination (ESE) of the course taken together.

11.2 The marks assigned to MSE will be considered as per the Regulation No. 10.4.4

11.3 **Laboratory Course:** A student is deemed to have passed in a laboratory course, if he / she secures

- (a) 40% of marks assigned to End Semester Examination (ESE) and
- (b) 40% of marks assigned to the Continuous Internal Evaluation (CIE) and End Semester Examination (ESE) of the laboratory course taken together.

11.4 **In the case of Supplementary for MOOC failed candidates:**

In case the student is unable to complete the MOOC for theory courses, he/she shall be allowed to select an appropriate course listed under the respective

courses offered at the institute/department concerned and appear for supplementary as per Regulation No.13. In such a case, the student is deemed to have passed the supplementary exam of a theory course taken as a result of an unsuccessful MOOC attempt, if he/she secures

- (a) 40% of marks assigned to the supplementary ESE (Max. Marks: 60) and
 - (b) 40% of marks assigned to the CIE of MOOC (Max. Marks: 40) & supplementary ESE of the course taken together (Max. Marks: 100).
- In this case, the CIE marks for the registered supplementary ESE shall be taken from the **online assignments portion** of the unsuccessful MOOC. *If the maximum marks for the online assignments portion of MOOC is 25 and if the student scored 16 out of 25, then scaling is done for 40 marks for MOOC-CIE (i.e., 16/25 marks shall be scaled up to $(40 \times 16)/25 = 25.6$ marks for MOOC-CIE).*

12 GRADING SYSTEM

- 12.1 At the end of the semester a student is awarded a letter grade in each of his / her courses considering the total percentage of marks secured (X) in that course.
- 12.2 For arriving at a grade obtained by a student in a particular course, the total percentage obtained by the student in CIE+ESE for that course shall be converted to a letter grade following the guidelines in Table below at Regulation No. 12.3
- 12.3 **Grades:** The Institute shall follow an absolute grading system. The grades will be awarded to each course as below:

X = Percentage of Marks Scored in (CIE+ESE)

Grade	Total Marks Secured (X)
S	$X \geq 90\%$
A	$80\% \leq X < 90\%$
B	$70\% \leq X < 80\%$
C	$60\% \leq X < 70\%$
D	$50\% \leq X < 60\%$
P	$40\% \leq X < 50\%$
F	$X < 40\%$

- 12.4 **Grade Points:** The typical grades and their numerical equivalents on 10-point scale (called Grade Points) are as follows:

Performance	Letter Grade	Grade Points (G_i)
Superior	S	10
Excellent	A	9
Very Good	B	8
Good	C	7
Satisfactory	D	6
Pass	P	5
Fail	F	0

- 12.5 **F-Grade** is a Fail Grade. The course in which the student has earned F-Grade will be termed as a backlog course.

- 12.6 In addition, there shall be a transitional **M-Grade**. M-Grade for “Debarred” due to indiscipline / malpractice during examination.
- 12.7 A Semester Grade Point Average (SGPA) will be computed for each semester. The SGPA will be calculated as follows:

$$SGPA = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

where ‘n’ is the no. of courses (subjects) offered (excluding mandatory non-credit courses) for the semester, ‘C_i’ is the credits allotted to a particular course, ‘G_i’ is the grade-points carried by the letter corresponding to the grade awarded to the student for the course as illustrated in Regulation No. 12.4.

- 12.8 The SGPA would indicate the performance of the student in the semester to which it refers. SGPA will be rounded off to the second place of decimal and recorded as such.
- 12.9 Starting from the second semester, at the end of each semester, a Cumulative Grade Point Average (CGPA) will be computed for every student as follows:

$$CGPA = \frac{\sum_{i=1}^m C_i G_i}{\sum_{i=1}^m C_i}$$

where ‘m’ is the total number of courses (subjects) the student has been offered from the first semester onwards up to and including the present semester, ‘C_i’ and ‘G_i’ are as explained in 12.7.

- 12.10 The CGPA would indicate the cumulative performance of the student from the first semester up to the end of the semester to which it refers. CGPA will be rounded off to the second place of decimal and recorded as such.
- 12.11 SGPA and CGPA are calculated in consideration of only credits cleared, i.e. F-Grade credits are not included for calculation.

13. SUPPLEMENTARY EXAMINATIONS.

- 13.1 A student who obtained the F-Grade in a course (theory or practical) can appear in a subsequent End Semester Examination (ESE) in the same course as a supplementary candidate.
- 13.2 However, the marks secured in Continuous Internal Evaluation (CIE) by the student in that course during the semester study shall remain unaltered.
- 13.3 The students who have passed the supplementary examination will be awarded grade with ‘*’ marked on the courses passed in the supplementary.
- 13.4 In case the student is unable to complete the MOOC for theory courses, he/she shall be allowed to select an appropriate course listed under the respective courses offered at the institute/department concerned and appear for supplementary as per Regulation No.13. In such a case, the student is deemed to have passed in supplementary exam of a theory course taken as a result of an unsuccessful MOOC attempt, if he/she secures
- 1) 40% of marks assigned to the supplementary ESE (Max. Marks: 60) and

- 2) 40% of marks assigned to the CIE of MOOC (Max. Marks: 40) & supplementary ESE of the course taken together (Max. Marks: 100).

The MOOC continuous internal marks (MOOC-CIE) for the registered supplementary ESE shall be taken from the MOOC online assignments portion of the unsuccessful MOOC. *If the maximum marks for the online assignment portion of MOOC is 25 and if the student scored 16 in that MOOC, then scaling is done for 40 marks for MOOC-CIE (i.e., $16/25$ marks shall be scaled up to $(40 \times 16)/25 = 25.6$ marks for MOOC-CIE).*

13.5 Makeup Examination for VIII semester courses:

Makeup Examination for the students having backlog courses at VIII semester of 4th year B.Tech. programme shall be conducted immediately after the release of VIII semester regular examinations results.

14. REVALUATION

- Re-evaluation is allowed in theory ESE only.
- If the award of the re-evaluator varies from the original award by less than or equal to 20% of maximum marks prescribed for the course, the original awards shall be taken as final.
- If the award of the re-evaluator varies from the original award by more than 20% of the maximum marks prescribed for the course, the answer script shall be examined by the second re-evaluator. If the award of both re-evaluators is more than 20% of the maximum marks prescribed for the course, then the average of the two re-evaluated awards thus available shall be taken as final. Otherwise, the original award shall be taken as final.

15. CONDITIONS FOR PROMOTION

A student shall have to satisfy the attendance requirements for the semester as per Regulation No. 8 for promotion to the next higher semester. In addition,

- for promotion to the fifth semester, a student should not have more than four backlogs in the first and second semesters taken together.
- for promotion to the seventh semester, a student should not have more than four backlogs in the courses of first to fourth semesters taken together.
- the grade (marks) secured in mandatory non-credit courses will not be counted for the purpose of backlogs. However, a minimum P-Grade is compulsory in those courses for the award of the degree.

16. IMPROVEMENT EXAMINATION

- Students who wish to improve their SGPA are permitted for SGPA improvement only for theory courses. The student may opt to re-appear all theory courses of a particular semester at the immediately succeeding End Semester Examination (ESE) for improving his/her grades.
- Laboratory Courses / Seminar / Mini Project / Major Project and other courses having only CIE are not considered for Improvement Examination.

Improvement of SGPA (For Existing Students):

- 16.1 An existing student who wishes to improve his/her SGPA may register for the Improvement Examination of a particular semester only **once**, and **only during the immediately succeeding Eng Semester Examinations (ESE)**.

For example, a student seeking improvement of the **III Semester SGPA** shall register for the Improvement Examination of the III Semester only during the **immediately succeeding IV Semester End Semester Examinations**. Requests for Improvement Examinations in any subsequent examination session shall not be entertained.

For the award of the SGPA, he/she will have the benefit of the higher of the two aggregates of marks/grades secured in the corresponding semester(s). However, the marks secured in Continuous Internal Evaluation (CIE) by the student in those courses during the semester study shall remain unaltered.

- 16.2 Students those who have re-appeared for improvement will be awarded grade with '\$' marked on the courses appeared for improvement examination. '\$' will state the grade improvement. Such improved grades will not be counted for the award of Prizes, Medals and Rank.
- 16.3 However, the students who register for improvement examinations and wish to drop from appearing in the examinations, by written application to the CoE, before commencement of examinations, shall be permitted to retain their earlier grades.

Improvement of Overall CGPA (For Passed-Out Students):

- 16.4 A candidate who wishes to improve his/her overall CGPA may do so within one academic year immediately after having passed all the examinations, by reappearing at not more than two semesters (all theory courses pertaining to the semester taken together) examinations. For the award of the overall CGPA, he/she will have the benefit of the higher of the two aggregates of marks/grades secured in the corresponding semester(s).
- 16.5 In case of candidates who have secured CGPA less than 6.5 may appear for improvement in individual subject within one year from the date of completion of VIII semester.
- 16.6 However, the marks secured in Continuous Internal Evaluation (CIE) by the student in those courses during the semester study shall remain unaltered.
- 16.7 Course completed students who are willing to take improvement examinations of 8th semester shall appear for improvement exams during the advanced supplementary examinations.

Improvement in the case of MOOC:

- 16.8 Students who have taken MOOC (NPTEL/SWAYAM courses) under Self-learning as equivalent to the course in the curriculum, shall be given the below TWO options to select one while registering for the Improvement Examination:
 - **Option-1:** Students may seek exemption from appearing for the improvement examination in courses completed through MOOC.
 - **Option-2:** Students who have completed an equivalent NPTEL course may choose to take the improvement examination for the corresponding institute-offered course
 - In case the student takes option-2, the MOOC continuous internal marks (MOOC-CIE) for the registered supplementary ESE shall be taken from the MOOC online assignments portion of the MOOC course. *Ex: If the maximum marks for the online assignment portion of MOOC is 25 and if the student scored 16 in*

that MOOC, then scaling is done for 40 marks for MOOC-CIE (i.e., 16/25 marks shall be scaled up to $(40 \times 16)/25 = 25.6$ marks for MOOC-CIE).

17. GRADUATION REQUIREMENT

- 17.1 A student shall be declared to be eligible for award of the B.Tech. degree, if he/she has registered and completed all the courses with a minimum P-grade scored in every course and secured a total of stipulated all batches same credits.
- 17.2 Normally a student should complete all the requirements consecutively in 8 semesters (4 academic years) for the award of B.Tech. degree. However, the students who fail to fulfill all the requirements for the award of B.Tech. degree within a period of 16 consecutive semesters (8 academic years from the registration in 1st semester) shall forfeit his / her enrolment to the program.
- 17.3 The students admitted in the lateral entry scheme should complete all the requirements consecutively in 6 semesters (3 academic years) for award of B.Tech. degree. However, the students who fail to fulfill all the requirements for the award of B.Tech. degree within a period of 12 consecutive semesters (6 academic years from the registration in 3rd semester) shall forfeit his / her enrolment to the program.
- 17.4 a) **CGPA to Percentage conversion:** As per UGC and AICTE guidelines, the CGPA will be converted to percentage of marks as below:
Percentage of marks (%) = (CGPA - 0.50) x 10
Ex: If CGPA is 6.50,
the equivalent Percentage of marks = $(6.50 - 0.50) \times 10 = 60\%$
- b) **CGPA to Class conversion:**

No.	Division	Eligibility Criteria
1	First Division with Distinction	a) Student should secure $CGPA \geq 7.50$ b) Student should pass all the courses along with the batch of students admitted with him/her within 8 consecutive semesters (6 consecutive semesters for lateral entry students) c) Student who appeared for improvement examination up to 6 th semester will also be considered d) Student who has cleared any course in supplementary examination shall not be awarded Distinction
2	First Division	a) Student should secure CGPA, which is $6.50 \leq CGPA < 7.50$ within the time frame of the programme i.e. 16 semesters (12 semesters in case of lateral entry students) b) Student who has cleared any course in supplementary examination and secured $CGPA \geq 6.50$
3	Second Division	Student should secure CGPA, which is $5.50 \leq CGPA < 6.50$ within the time frame of the programme i.e. 16 semesters (12 semesters in case of lateral entry students)
4.	Pass Division	Student should secure CGPA, which is $4.50 \leq CGPA < 5.50$ within the time frame of the programme i.e. 16 semesters (12 semesters in case of lateral entry students)
5.	Fail	Student with a $CGPA < 4.50$ will not be eligible for award of degree

17.5 Minor / Honours / Honours with Research in Engineering can be conferred as per AICTE guidelines and Model curriculum January 2026

A student will be conferred with Undergraduate degree as "*Bachelor of Technology in XXX Engineering/Technology, with Honours / Honours with research*" (or) "*Bachelor of Technology in XXX Engineering/Technology, with Minor in YYY Engineering/ Technology / specialization*", if he/she completes an additional 18 credits. These additional 18 credits could be acquired through SWAYAM-NPTEL MOOC / other MOOC such as Coursera, Udemy, IITB spoken tutorials. These additional 18 credits earned through SWAYAM-NPTEL MOOC / other MOOC should be in addition to the credits acquired through SWAYAM - MOOC offered in the curriculum as part of Professional Electives/Open Electives. The University will award degrees to the students who are evaluated and recommended by the Institute.

17.5.1 Honours / Honours with Research: Honours is an additional credential a student may earn if he/she does additional learning for 18 credits *in his/her own discipline* of B.Tech programme. These additional credits shall be acquired through MOOC from the *list of courses for Honours*, prescribed by the respective departments. These courses shall mostly be advanced courses (or) courses designed to give more exposure to different areas of one's own discipline. In the case of **Honours with Research** a student shall earn an additional 18 credits. A student opting for Honours with Research shall undergo research internships at the institute, after 2nd and 3rd year of the programme (**5+5 = 10 credits**), shall complete Research Methodology course through MOOC / at the institute (**4 credits**) and shall produce a Research Paper (**4 credits**). On successful accumulation of these additional credits, at the time of graduation, it shall be mentioned in the degree certificate as "*Bachelor of Technology in XXX Engineering / Technology, with Honours / Honours with Research*".

17.5.2 Minor in Engineering: A minor in engineering/specialization is an additional credential a student may earn if he/she does additional learning for 18 credits *in a discipline other than his/her major discipline* of B.Tech programme. These additional credits shall be acquired through MOOCs from the *list of courses for Minor Engineering/Minor specialization* prescribed by the respective departments. On successful accumulation of these additional credits, at the time of graduation, it shall be mentioned in the degree certificate as "*Bachelor of Technology in XXX Engineering / Technology, with Minor in YYY Engineering / Technology / specialization*".

17.5.2.1 Minor in Engineering/Technology/Industry Relevant Specilization: A Minor degree can also be offered by external recognized agencies such as SWAYAM/NPTEL (domain certification), NASSCOM, CII, NSDC, NSIC, BFSI any organization with signed MoUs etc., which will be notified by the respective department's BoS and shall be ratified by Dean, Academic Affairs. However, in all such Minor programmes the number of credits shall be equal to 18 and if

any such programme offers a Minor degree with less than 18 credits then the respective BoS shall be finalizing additional courses (theory / laboratory) to be completed in order to fulfil number of requisite credits.

- 17.5.3 A student shall be eligible to register for Honours / Honours with Research in the same discipline of his/her study, and/or a Minor in Engineering/specialization offered by another department.
- 17.5.4 A student can register for both Honours in the same discipline and also a Minor in Engineering in another discipline. On successful accumulation of prescribed credits for Honours and also prescribed credits for Minor in Engineering / Technology / specialization, at the time of graduation, it shall be mentioned in the degree certificate as *"Bachelor of Technology in XXX Engineering / Technology, with Honours / Honours with Research and/or Minor in YYY Engineering / Technology / specialization"*
- 17.5.5 A student who has completed B.Tech. IV semester in his/ her regular B.Tech. programme without any standing backlogs and with a minimum CGPA of 7.0 shall be allowed to register for Honors / Honors with Research and/or Minor in Engineering. In case of promising candidates, having standing backlogs, the BoS chair and Dean, AA shall take appropriate decision on allowing Honours / Honours with Research / Minor degree programmes.
- 17.5.6 Student who wants to register for Honours / Honours with Research and/or Minor in Engineering shall opt for registration at the end of the IV semester of his/ her B.Tech. programme, subject to the conditions prescribed by the AAC from time to time.
- 17.5.7 Student registered for Honors/Honors with Research and/or Minor in Engineering/specialization shall ensure the following in his/her regular B. Tech programme
 - (i) student is expected to maintain a minimum SGPA of 7.0 from V semester to VIII semester of regular B. Tech programme
- 17.5.8 A student may withdraw from Honours/Honour with Research and/or Minor in Engineering/specialization at any time before graduating. Such students shall apply for withdrawal to the Dean AA, before the start of any semester. The Dean AA shall communicate the list of such students to the HoDs concerned (parent-department /minor-department) with a copy to the CoE.
- 17.5.9 During the curriculum revision, the HoDs in coordination with their Department Academic Advisory Committee (DAAC) shall identify the list of courses to be offered by the department under Honours curricula/Minor in Engineering/specialization curricula and forward the same to the office of the Dean AA.
- 17.5.10 Student shall be permitted to take a maximum of one theory course and one laboratory course during any semester for additional learning towards Honours curricula/Minor in Engineering curricula.

- 17.5.11 Student shall take laboratory courses, listed under Honours curricula/Minor in Engineering curricula, in the parent-department /minor-department during inter-semester break and complete the lab course.
- 17.5.12 The office of the Dean AA shall compile and release a list of courses under Honours curricula/Minor in Engineering curricula for different departments/programmes/disciplines, highlighting the importance of each discipline.
- 17.5.13 By the end of April of every academic year, the Dean AA in coordination with HoDs shall notify the department wise list of equivalent courses in MOOCs/SWAYAM-NPTEL MOOCs against the list of courses notified under Honours curricula/Minor in Engineering curricula, by respective departments.
- 17.5.14 The office of the Dean AA shall release registration notification for Honours/Minor in Engineering, during even semester of every academic year inviting interested students of B. Tech IV semester to apply.
- 17.5.15 Interested students shall submit three (03) copies of applications in the prescribed format, *notified by the Dean AA*, along with supporting documents to the concerned HoD in the parent-department. The HoD in coordination with DAAC shall scrutinize the submitted applications and forward the consolidated list of registered students along with two sets of applications to the Dean AA.
- 17.5.16 The Dean AA shall notify, in coordination with the CoE, the list of eligible students towards **Honours** and forward this list to the **parent-department**. These notified students shall be allowed to do additional learning towards Honours in Engineering from V semester onwards.
- 17.5.17 The Dean AA shall notify, in coordination with the CoE, the list of eligible students towards Minor in Engineering and forward this list to the Minor-department in which student opted to gain prescribed credits for Minor in Engineering along with one set of application. These notified students shall be allowed to do additional learning towards Minor in Engineering from V semester onwards.
- 17.5.18 In the process of additional learning towards Honours/ Minor in Engineering, the student shall exercise carefully all options to ensure the following:
- (i) The credits earned in a course studied in regular curriculum towards fulfilment of basic degree shall not be claimed under credits for additional learning towards Honours/ Minor in Engineering and vice versa
 - (ii) A course once studied in regular curriculum, shall not be taken again for additional learning towards Honours/Minor in Engineering

- 17.5.19 The HoD in coordination with department MOOCs coordinator and faculty counsellor concerned, shall monitor progress of the registered student during the semester for successful completion of registered courses of Honours curricula.
- 17.5.20 The Minor-department HoD in coordination with Minor-department MOOCs coordinator and faculty counsellor concerned, shall monitor progress of the registered student during the semester for successful completion of registered courses of Minor in Engineering curricula.
- 17.5.21 On successful completion of registered courses, the student shall submit the course completion details in "Semester wise progress report (*for additional learning towards Honours/Minor in Engineering*)" in the prescribed format notified by the Dean, AA along with Certificate/Grade sheet/Mark sheet (indicating credits of the course) to the HoDs concerned (parent-department /Minor-department).
- 17.5.22 The HoDs shall consolidate "Semester wise progress report (*for additional learning towards Honours/Minor in Engineering*)" of all the students registered for Honours / Minor in Engineering in their departments and forward the same to the Dean AA.
- 17.5.23 The Dean AA shall ensure genuineness of the submitted certificates, of registered students, with the help of the Institute MOOCs coordinator and forward the semester wise progress of registered students to the CoE.
- 17.5.24 The CoE shall ensure for reflecting the earned credits for additional learning towards Honours/Minor in Engineering in corresponding student semester grade sheet.
- 17.5.25 Separate CGPA for Honours and/or Minor in Engineering shall be mentioned in the consolidated grade sheet.
- 17.5.26 The students who have registered for Honours/ Minor in Engineering but unable to accumulate the 18 credits prescribed towards Honours/ Minor in Engineering at the time of graduation, he/she shall be awarded the Degree in his/her discipline without any mention about Honours/ Minor in Engineering.
- 17.5.27 The University will award degrees to the students who are evaluated and recommended by the Institute.

18. MALPRACTICE IN EXAMINATION

- 18.1 Malpractice in examination is an illegal activity and is prohibited.
- 18.2 Mobile phones are strictly prohibited in the examination hall.
- 18.3 Exchange of question paper and material like pen, pencil, sharpener, eraser, scale, calculator, etc., during examination is strictly prohibited.
- 18.4 Malpractice in examination is viewed very seriously. Malpractice includes oral communication between candidates, possessing forbidden material, mobile phones (switched off/on) etc.

18.5 Any malpractice or engaging in any improper conduct and violation of the examination code by the student during examinations is liable for the punishment as given below:

No.	Nature of Malpractice	No.	Punishment
1.	Taking help from others, consulting and/or helping other examinees during the examination period inside the examination hall or outside it, with or without their consent or helping other candidates to receive help from anyone else	a)	Cancelling the examination of the paper in which he/she indulged in malpractices
2.	If the examinee attempts to disclose his / her identity to the valuer by writing his/her Hall Ticket Number at a place other than the place prescribed for it or any coded message including his/her name or addressing the valuer in any manner in the answer book	b)	Cancelling the examination of the paper in which he/she indulged in malpractices
3.	Candidate is found in possession of forbidden material; relevant or not relevant but not used	c)	Cancellation of the result of all examinations (both theory and practical) taken and proposed to be taken including current examination in that session
4.	Destroying the material found in his / her possession or acting in any other manner with a view to destroying evidence	d)	Cancellation of the result of all examinations taken or proposed to be taken during that session and prohibiting his/her admission to or continuation in any course of the Institute for a period of one year. The student will be eligible to appear for the next corresponding semester / year examination in the succeeding academic year
5.	Smuggling main answer book /additional answer book/ question paper / matter in to or out of the examination hall & conspiring to interchange Hall Ticket Numbers	e)	Cancellation of the result of all examinations taken or proposed to be taken during that session and prohibiting his/her admission to or continuation in any course of the Institute for a period of one year. The student will be eligible to appear for the next corresponding semester / year examination in the succeeding academic year
6.	Candidate is found in possession of forbidden material, relevant or not relevant but used	f)	Cancellation of the result of all examinations taken or proposed to be taken during that session and prohibiting his/her admission to or continuation in any course of the Institute for a period of one year. The student will be eligible to appear for the next corresponding semester / year examination in the succeeding academic year

7.	In case of (i) impersonation, (ii) misbehaviour with the invigilators/any person related to examination work, (iii) insertion of written sheets in different handwriting in the main/additional answer book, and (iv) creation of disturbance in and around the examination hall during or before the examination	g)	Cancellation of the result of all examinations taken or proposed to be taken during that session and prohibiting his/her admission to or continuation in any course of the Institute for a period of two years. Further, the candidate shall not be allowed to appear for any examination during the period of punishment
8.	If a candidate is found guilty of malpractice in the improvement examination (after completion of course)	h)	Punishment will be awarded subject to the above rules and further, he/she will not be permitted to appear for further improvement examination
9.	Taking out answer booklets outside the examination room.	i)	The candidate shall be awarded an "F" Grade in that course
10.	Possession of Mobile phones, programmable calculator, recording apparatus or any unauthorized electronic equipment.	j)	Cancellation of the result of all examinations (both theory and practical) taken and proposed to be taken including current examination in that session
11.	Possession of earphones, headphones and other relevant gadgets	k)	Cancellation of the result of all examinations (both theory and practical) taken and proposed to be taken including current examination in that session
12.	Taking a photo and sending the question paper outside the examination hall through mobile phone or any electronic gadget	l)	Cancellation of the result of all examinations (both theory and practical) taken and proposed to be taken including current examination in that session and prohibiting his/her admission into or continuation of any course of the institute for a period of one year. Further the candidate shall not be allowed to appear for any examination during the period of punishment
13.	Candidate is found in possession of forbidden material, like written or printed materials, bits, writings on scale, calculator, Eraser, hand kerchief, dress, part of the body and hall ticket etc., relevant or not	m)	Cancellation of the result of all examinations (both theory and practical) taken and proposed to be taken including current examination in that session
14.	Possession of answer book of another candidate. Giving the answer book to another candidate.	n)	Cancellation of the result of all examinations (both theory and practical) taken and proposed to be taken including current examination in that session
15.	Physical assault to the invigilator or any examination officials.	o)	Rustication from the Institute.
16.	Helping candidates during examination from outside the examination venue through	p)	Suspension from the institute for one semester

	WhatsApp or any other way.		
17.	Student found to be written any relevant content on the table or bench before starting the examination	q)	Cancellation of the result of all examinations (both theory and practical) taken and proposed to be taken including current examination in that session
18.	Any other forms of exam malpractice, not covered	r)	Appropriate Decision by the exam malpractice committee

19. ROLL NUMBER ALLOTMENT

The Roll Number given to the student shall have a total of 8 digits as follows:

Ex: **B26CE108**

- The first letter, to present the Bachelors (B.Tech.) degree programme. Ex: B for B.Tech. programme
- The next two numbers represent the year in which the student admitted into I semester.
Ex: 26 for 2026
- The next two letters represent the department concerned to which the student belongs.
Ex: CE for Civil Engineering
- The last three numbers represent the three - digit roll number of the student.
In general, a **student with roll number "B26CE108"** represents a B.Tech. student admitted in 2026 in Civil Engineering bearing roll number 108.

20. AMENDMENTS

Not with standing anything contained in this manual, the Academic Council of the Institute reserves the right to modify/amend the curricula, requirements and rules & regulations pertaining to its undergraduate programmes, without any further notice.

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