



**KINGS**  
COLLEGE OF ENGINEERING  
An Autonomous Institution

Affiliated to Anna University, Chennai, Approved by AICTE, New Delhi

**Punalkulam, Gandarvakottai Taluk,  
Near Thanjavur,  
Pudukkottai District – 613 303.  
Tamil Nadu.**



**KINGS COLLEGE OF ENGINEERING  
(AUTONOMOUS)**

**Approved by AICTE, New Delhi.  
Affiliated to Anna University, Chennai.  
Recognized under 2(f) & 12(B) status by UGC.  
A NAAC Accredited Institution**

**REGULATIONS 2024**

# **KINGS COLLEGE OF ENGINEERING**

## **(AUTONOMOUS)**

### **Vision**

To impart globally competitive technical education, enhance human values and to provide a research atmosphere to the socially challenged aspirants.

### **Mission**

Providing a comprehensive theoretical foundation, inculcating state of the art engineering practices and cutting-edge research ambience that leads to societal upliftment with ethical values through effective teaching – learning methodologies and appropriate information communication tools via dedicated faculty to the aspirants.

### **Quality Policy**

We are committed to provide top quality education at the prescribed costs and impart ethical values to the students of this region using modern and innovative teaching methods combined with experienced faculties. We shall truly strive to make the students socially responsible and contribute to the rapid growth of our country.

**REGULATIONS 2024**  
**(CHOICE BASED CREDIT SYSTEM)**  
**Common to all B. E. / B. Tech. Full – Time Programmes**  
**(From the Academic Year 2024 - 2025 onwards)**  
**DEGREE OF BACHELOR OF ENGINEERING / BACHELOR OF TECHNOLOGY**

This Regulation is applicable to the students admitted to B.E./B.Tech. Programmes at Kings College of Engineering (Autonomous) from the academic year 2024-2025 onwards.

**1. PRELIMINARY DEFINITIONS AND NOMENCLATURE**

**In this Regulation, unless the context otherwise specifies:**

- 1.1. “University”** means ANNA UNIVERSITY, CHENNAI, the Affiliating University.
- 1.2. “College / Institution”** means Kings College of Engineering (Autonomous).
- 1.3. “Programme”** means Degree Programme, i.e. Bachelor of Engineering (B.E.) / Bachelor of Technology (B.Tech.) Degree Programme.
- 1.4. “Specialization/Branch/Discipline”** means specialization or branch of B.E./B.Tech. Degree Programme, like Civil Engineering, Computer Science and Engineering, etc.
- 1.5. “Course”** means a theory / theory integrated practical / practical subject that is normally studied in a semester, like Mathematics, Digital Signal Processing, Data Science Laboratory, etc.
- 1.6. “Head of the institution”** means Principal of the College.
- 1.7. “Controller of Examinations (COE)”** means the authority of the Institute who is responsible for all activities related to Internal Assessments and End Semester Examinations of the Institute.
- 1.8. “Head - Centre for Academic Courses (Head-CAC)”** means the authority of the Institute who is responsible for all academic activities of the Academic Programmes for implementation of relevant rules of this Regulations pertaining to the Academic Programmes.
- 1.9. “Chairperson”** means the Head of the Department of the Board concerned.
- 1.10. “Head of the Department (HOD)”** means the Head of the Department concerned.
- 1.11. “Bona fide Student”** means the student who is admitted and joined in the Undergraduate Programme / Postgraduate Programme.

**1.12.** “**Choice-Based Credit System (CBCS)**” is a flexible system of learning that permits students to learn at their convenient pace. Students can choose electives from a wide range of elective courses offered by the departments and can also adopt an inter / trans-disciplinary approach in learning.

**1.13.** “**Contact Hours**” means duration of Lecture, Tutorial, Practical or Project Work, as applicable.

**1.14.** “**Credit**” means the weightage assigned to a particular course based on the contact periods to teach the prescribed syllabus. One credit is allocated to 15 contact hours for theory and 30 contact hours for practical.

**1.15.** “**Grade**” means the letter grade assigned based on the range of marks.

**1.16.** “**Grade point**” means a numerical weight allocated to each letter grade on a 10 - point scale.

**1.17.** “**Grade Point Average (GPA)**”: It is a measure of performance of work done in a semester. It is the ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester.

**1.18.** “**Cumulative Grade Point Average (CGPA)**”: It is a measure of overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters.

## 2. ADMISSION

### 2.1. Candidates seeking admission to the first semester of the eight semesters

#### B.E./B.Tech. Degree Programme:

Should have passed the Higher Secondary Examinations of (10+2) Curriculum (Academic Stream) prescribed by the Government of Tamil Nadu with Mathematics, Physics and Chemistry as three of the four subjects of study under Part-III or any examination of any other University or authority accepted by the Syndicate of Anna University as equivalent thereto.

#### (OR)

Should have passed the Higher Secondary Examination of Vocational stream (Vocational groups in Engineering / Technology) as prescribed by the Government of Tamil Nadu.

## 2.2. Lateral entry admission

**2.2.1.** The candidates who possess the Diploma in Engineering / Technology awarded by the State Board of Technical Education, Tamil Nadu or its equivalent are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech., as per the rules fixed by Government of Tamil Nadu.

**(OR)**

**2.2.2.** The candidates who possess the Degree in Science (B.Sc.) (10+2+3 stream) with Mathematics as a subject at the B.Sc. Level are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech.

Such candidates shall undergo two additional Engineering subject(s) in the third and fourth semesters as prescribed by Board of Studies.

## 2.3 Transfer from/to Autonomous Institution shall be granted subject to the following conditions:

2.3.1. Students seeking transfer from/to autonomous institution within the Anna University during the commencement of the academic year namely third/fifth/seventh semester should have passed all the examination held by the parent college/University for the course of study already completed and shall produce necessary documentary evidences to that effect, as per the rules fixed by Government of Tamil Nadu.

2.3.2. Students seeking transfer from/to Autonomous institution within the same University during the commencement of the academic year namely third and fifth semester of study should produce No objection Certificate (NOC) issued by Anna University, Chennai.

## 2.4 Multiple Entry/Multiple Exit

This clause is applicable as per the notification of the affiliating university.

## 3. PROGRAMMES OFFERED

B.E. / B.Tech. Programmes under the Faculty of Civil Engineering, Faculty of Mechanical Engineering, Faculty of Electrical Engineering and Faculty of Information and Communication Engineering.

The list of UG programmes with the respective branches approved by Anna University, Chennai and All India Council for Technical Education, New Delhi, are as follows:

S.No.	Code	Name of the Department
1	CE	B.E. - Civil Engineering
2	CS	B.E. - Computer Science and Engineering
3	EC	B.E. - Electronics and Communication Engineering
4	EE	B.E. - Electrical and Electronics Engineering
5	ME	B.E. - Mechanical Engineering
6	AI	B.Tech. - Artificial Intelligence and Data Science
7	IT	B.Tech. - Information Technology
8	SH	English
9	MA	Mathematics
10	PH	Physics
11	CY	Chemistry
12	GE	General Engineering/ Management Studies

#### 4. STRUCTURE OF PROGRAMMES

##### 4.1 Categorization of Courses

Every B.E. / B.Tech. Programme will have a curriculum with syllabi consisting of theory, theory with practical and practical courses in each semester that are approved by the respective Board of Studies and Academic Council of the College. All the programmes have well defined Programme Outcomes (PO), Programme Specific Outcomes (PSO) and Programme Educational Objectives (PEOs) as per Outcome Based Education (OBE). The content of each course is designed based on the Course Outcomes (CO).

**The courses shall be categorized as follows:**

###### **A. Foundation Courses**

- i. **Humanities, Social Sciences and Management Courses (HSMC)** include Professional English, Foreign Languages, Communication skills, Management etc.
- ii. **Basic Sciences Courses (BSC)** include Mathematics, Physics, Chemistry, Biology, Environmental Science etc.

- iii. **Engineering Sciences Courses (ESC)** include Engineering Practices, Engineering Graphics, Basics of Civil / Mechanical / Electrical / Electronics / Instrumentation, Computer Engineering, etc.
- iv. **Professional Core Courses (PCC)** are the engineering / technological core courses relevant to the chosen specialization / branch.
- v. **Professional Elective Courses (PEC)** include the elective courses relevant to the chosen specialization / branch offered under various specialization groups.
- vi. **Open Elective Courses (OEC)** include the courses offered by other branches, from the list specified in the respective curriculum of the B.E. / B. Tech. Programmes.

#### **B. Employability Enhancement Courses (EEC)**

##### **i. Employability Enhancement Skill Based Courses**

Skill based experiential learning courses will be offered in two categories:

- 1) Purely Laboratory Based Courses
- 2) Theory Integrated Laboratory Courses

##### **ii. Experiential Project Based Learning courses include :**

- 3) Project Work, Internship with project outcome, Creative and Innovative project, Mini Project.
- 4) Career Development skills, Professional Practices, Internships, Industrial/Practical Training, Technical Seminar, Case Study, etc.

#### **C. Mandatory Courses (Noncredit courses – will be mentioned in grade sheet)**

**Mandatory Courses (MC)** include the courses under:

**1) Indian Knowledge System** such as Constitution of India, Languages, Indian

Polity, Sangam literature, Sidha & Ayurvedha, Yoga, etc.

**2) General Studies** such as Disaster Risk Reduction, Cyber Security, Industrial safety, Nutrition, Stress Management, Mindfulness, etc.

**The recommended distribution of credits for each category (as per AICTE) is given Table 1.**

**Table 1: Credit Distribution**

<b>Category</b>	<b>Suggested credits Regular(160)</b>
<b>A. Foundation courses (61)</b>	
Humanities and Social Sciences including Management courses	14*
Basic science courses	25*

Engineering Science courses including workshop, drawing, basics of electrical/ mechanical/computer etc.	24*
<b>B. Professional Core Courses (48)</b>	48*
<b>C. Elective Courses (36)</b>	
Professional elective courses relevant to chosen specialization Branch	18*
Open Electives courses from other technical and /or emerging Subjects	18*
<b>D. Employability Enhancement Courses (15)</b>	
Project work, seminar and internship in industry or elsewhere	15*
<b>E. Mandatory Courses (Noncredit courses)</b>	-
<b>Universal Human Values-II (covered either in III or in IV Sem) (3)</b>	3
<b>Total</b>	<b>165*</b>

\* Minor variation is allowed as per need of the respective disciplines.

#### 4.2. Personality and Character Development (PCD) initiatives

All students shall enroll, on admission, in any one of the Personality and Character Development (PCD) activities which are listed below. Students shall undergo training / conduct activities for about **80 hours and attend a camp of about seven days** as applicable. The training shall include classes on hygiene and health awareness and also training in first-aid. Alternately, activities of science, literature and arts also help for personality and character development. Students shall conduct events or participate events actively in Science Club/Citizen club/ Eco Club/ Health & Hygiene Club/ Energy Club/ Literary Forum/ Fine Arts activities.

Student's PCD enrolment details during 3<sup>rd</sup> week of I semester commencement and activity details by in-charges/coordinators on the last working day of II semester & IV semester shall be forwarded to CoE office with Head of the Institution's approval.

**4.2.1.** Students who enroll and take active participation in anyone of the above activities for 80 hours shall be given a certificate by concerned coordinator and approved by Head of the Institution and the copy of the same shall be forwarded to the CoE office for the purpose of record and scrutiny. **Students shall be appraised for their performance as Satisfactory/ Good/ Excellent.** No fee shall be charged for all these activities.

**4.2.1.2.** **National Cadet Corps (NCC)** will have training camps, events and parades, Promotes B & C certification

**4.2.1.3.** **National Service Scheme (NSS)** will have social service activities in and around the College.

- 4.2.1.4. **National Sports Organization (NSO)** will have Sports, Games, Drills and Physical exercises.
- 4.2.1.5. **Youth Red Cross (YRC)** will have activities related to social services in and around College/Institution. While the training activities will normally be during weekends, the camp will normally be during vacation period.
- 4.2.1.6. **Science Club** shall organize activities of popularization of science and scientific temper through activities related to astronomy, works of great scientists from India and abroad, observing National Science Day, etc.
- 4.2.1.7. **Literary Club** like “Muthamizh Mandram” shall organize colourful literary events to propagate good humanist values, morals and ethics reflected in the classic literatures.
- 4.2.1.8. **Fine Arts Association** shall organize events encouraging music, dance, painting, documentary films, cultural events, etc. with social themes.
- 4.2.1.9. **Eco Club** shall engage in meaningful environmental activities and project work. Institute is committed to contribute towards the implementation of green campus initiatives like tree plantation, waste management, rain water harvesting, etc.
- 4.2.1.10. **Citizen Club** shall conduct activities to promote and empower civic-minded and ethically conscious students from grassroots.
- 4.2.1.11. **Wellness Centre** shall organize events to promote and empower health and maintain personal hygiene.
- 4.2.1.12. **Citizen Consumer Club** shall organize events to spread the awareness about consumer rights amongst all segments.
- 4.2.1.13. **Energy Club** shall organize activities and initiatives to promote judicious usage of power and energy conservation techniques.
- 4.2.1.14. **Sustainable Development Goals (SDG)** – The seventeen goals of SDG pave the way for personal development and creative engineers who are proud volunteers with a sense of achievement and ready to take up projects having a social impact and creating digital awareness. SDG activities may be carried out by the students in teams. These activities shall be supported by NSS/NCC/YRC/Sports coordinator.

#### **4.2.2. Student Induction Programme (SIP)**

When new students enter the institute, they also come with diverse thoughts, backgrounds and preparations. They come into a new unfamiliar environment, and many of them have little knowledge of the college. An important task, therefore, is to welcome the new students to higher education and prepare them for their new role. Student Induction Program is to help new students adjust and feel comfortable in the new environment, inculcate in them the ethos and culture of the

institution.

Two-week Student Induction Programme (SIP) is mandatory for the students pursuing the Undergraduate Programme. List of students who have successfully completed the SIP shall be certified by the Convener of the SIP, approved by the Head of the Institution. The completion of the SIP shall be printed in the Grade Sheet as "COMPLETED".

In the case of students who have got admitted later and those who have not attended the SIP at the time of joining the Undergraduate programme, it shall be conducted later and on completion, it shall be recorded in the grade sheet. No fee will be charged towards the conduct of the SIP and for including in the STATEMENT OF GRADES for the successful completion of the SIP.

SIP covers Physical activity, Creative Arts, Literary module, Proficiency modules, UHV, Lectures by Eminent people, Visit to local area, Familiarization to department & innovations as per AICTE SIP guidelines.

#### **4.3. Number of courses per semester**

Each semester curriculum shall normally have a blend of lecture courses not exceeding 7 Theory courses & Laboratory integrated theory courses; and 4 Employability Enhancement & Laboratory Courses. However, the total number of courses per semester shall not exceed 10. Each Course shall have credits assigned as per clause 4.4.

#### **4.4. Credit Assignment**

Each course is assigned certain number of credits based on the following norms:

**Table 2: Credit assignment**

Contact period per week	Credit(s)
1 Lecture period	1
1 Tutorial period	1
2 Laboratory Periods (also, for EEC courses like Seminar / Project Work /Case study / etc.)	1

#### **4.5. Industrial Training/ Internship**

A minimum of 14-20 credits of Internship / Entrepreneurial activities / Project work/ Seminar and Inter / Intra Institutional Training is recommended. Internships may be full-time or part-time; they are **full-time in the summer vacation and part-time during the academic session.**

During the summer/winter vacations after the 2<sup>nd</sup>/3<sup>rd</sup> Semester, students are required to be involved in Inter/Intra Institutional Activities viz. Inter/ Intra Institutional Workshop/Training; Working for consultancy/ research project; Contribution in Incubation/ Innovation/ Entrepreneurship Cell/ Institutional Innovation Council; Learning at Departmental Lab/Tinkering Lab/ Institutional

workshop for atleast one week. Students shall be appraised for their performance as Satisfactory/ Good/ Excellent and mentioned in Grade sheet.

During the summer/winter vacation after 4<sup>th</sup>/5<sup>th</sup>/6<sup>th</sup> semester, students may choose to participate in innovation related competitions, for e.g. Hackathons etc.; Development of new product/ Business Plan/ Registration of start-up; Participation in all the activities of Institution's Innovation Council, for e.g.: IPR workshop/ Leadership Talks/ Idea / Design/ Innovation/ Business Completion/ Technical Expos etc.; Internship with Industry/ Govt. / NGO/ PSU/ Any Micro/ Small/ Medium enterprise/Online Internship.

**Table 3: Credit for Internship**

Duration of training / internship	Credit(s)
2 weeks	1
4 weeks	2
6 weeks	3

1 week = 40 internship hours

#### **4.5.1 Training as a part of Curriculum**

The students may undergo Industrial training for a period as specified in the Curriculum during the summer / winter vacation. In this case, the training has to be undergone continuously for a period of at least two weeks in an organization.

The students may undergo Internship at a Research organization / University/ Industry (after due approval from the Head of the Institution) for the period prescribed in the curriculum during the summer / winter vacation, in lieu of Industrial training.

Attendance Certificate mentioning the period of Industrial Training / Internship and signed by the competent authority of the industry as per the format provided by the Centre for Academic Courses shall be submitted to the Head of the Institution. The attendance certificate shall be forwarded to the COE, approved by the Head of the Institution for processing results.

#### **4.5.2 Additional industrial training**

**If Industrial Training/ Internship is not prescribed in the curriculum, the student may undergo Industrial Training/ Internship optionally and the credits earned will be indicated in the Grade Sheet.**

**If the student earns three credits in Industrial Training/ Internship, the student can choose to drop one Professional Elective in the entire study period. In such cases, Industrial Training / Internship need to be undergone continuously from one organization (6 weeks) or with a combination of two organizations (2 week + 4 week).** Students shall get permission from the Head of the Institution for taking Industrial Training/Internship and the Certificate of completion of Industrial Training / Internship shall be forwarded to the COE.

However, if the duration of the internship is less than 4 weeks, then it will not reflect in the classification of the degree.

#### 4.5.3 Schedule and Activity

**Table 4.: Recommendation for Internship activity / Project work**

S. No.	Schedule	Activity	Sub Activity	Evaluated by	Certification / Credit
1	Summer vacation after II semester (Duration 1-2 weeks)	Inter/ Intra Institutional Activities	i. Inter/Intra Institutional Workshop, Training ii. Contribution in Institute's innovation Council, EDC iii. Learning at Department lab, Tinkering Lab	Programme Head / Cell in-charge	Certification
2	Summer vacation after IV semester (4.5.2) (Duration 4-6 weeks)	Innovation / IPR / Entrepreneurship / IIC	i. Participation in innovation related completions for eg. Hackathons etc. ii. Development of new product/ Business Plan/registration of start-up iii. Participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.	Faculty Mentor / Programme Head / Convener of IIC / Convenor of IPR / EDC coordinator	2-3
(OR)					
	Summer vacation after IV & VI semester (4.5.1) (Duration 2-4-6 Weeks)	Industrial/ Govt./ NGO/MSME/ Rural Internship/ Innovation/ Entrepreneurship	i. Internship with Industry/Govt./ NGO/PSU/MSME ii. Rural Internship iii. Online Internship	Faculty Mentor/ Industrial Training in-charge/ Industry supervisor	1-3

3	VII semester (Duration 60 hours)	Project work- Phase 1	i. Literature Survey, Problem identification, Design analysis ii. Conference Publication	Programme Head/ project guide	2
4	VIII semester (Duration 240 hours)	Project work- Phase 2	i. Project work design implementation ii. International Conference / Journal Publication	Programme Head / Cell in-charge	8

**Note:** To support students who are unable to receive IIC activities / Industrial training offers, the following provisions are made (Clause 4.5.1 & activity S.No.2 of Table. 4)

In case of student unable to undergo Industrial Training as a part of curriculum as per norms, student shall be given In-House project work with outcome as product/ software solution/ model. Student should be assigned with Project mentor. Assessment of In-House project work will be as per 12.5.b. (Innovative project / mini-project work)

#### 4.6. Industrial Visit

Every student is required to go for **at least one Industrial Visit every semester starting from the second year of the Programme**. The Heads of Departments shall ensure that necessary arrangements are made in this regard.

#### 4.7. Value Added Course

Students may optionally undergo Value Added Courses (VAC) over and above the courses covered in the curriculum to obtain practical and industry specific knowledge. **Courses with two 15-hour duration / one 30-hour duration per year shall be offered by a Department with the prior approval from the Head of the Institution and the Centre for Academic courses without any additional fee charged from the students.**

Students shall also be allowed to take these courses offered in other Departments. In such cases, the number of student enrollment per class shall not exceed 60. The details of the syllabus, timetable and course coordinator may be sent to the Head-CAC and CoE after approval from the Head of the Institution at least one month before the course is offered. **Students can take a maximum of two - one credit courses / one - two credit course** during the entire duration of the Programme.

#### 4.8. Off campus courses and Transfer of Credits (SWAYAM-NPTEL/ Central or State funded University or Institute or Universities abroad / Central or State funded research labs)

Students are permitted to optionally enroll and study a **maximum of three off campus courses in physical/online/hybrid mode** under each UG programme with the approval of Head, Centre for Academic Courses as per the Regulations. The successful completion of these courses through any of the following three

categories shall be considered in lieu of professional elective / open elective courses of curriculum as approved by the Head of the Institution.

**4.8.1.1** Students are permitted to optionally enroll and study these courses through **SWAYAM - NPTEL platforms and credit transfer is to be done based on the marks and certificate provided by the NPTEL.**

The number of credits and transfer of credits are based on the procedure explained in Table 5 and the Mapping of the marks with the grades is explained in Table 6. The mapping of marks with grades is applicable, only if the student passes the course as per the guidelines of NPTEL.

**Table 5: Duration of the course and Number of credits**

No. of Weeks	No. of credits
4	1
8	2
12	3
16	4

**Table 6: Mapping of marks scored in NPTEL course**

Letter grade	Marks
O	90-100
A+	80-89
A	70-79
B+	60-69
B	50-59
C	40-49

**4.8.2.** Students are permitted to optionally enroll and study the courses in **physical / hybrid / online modes offered by reputed Central / State funded Universities/ Institutions which are in the top 20 positions in the latest NIRF ranking** and also conducting examination towards award of marks and grades. (NIRF Ranking for the last three years with respect to the year in which course is to be registered. Course enrolment is based on the respective stream for professional elective courses and based on other stream for open elective courses).

**Students are permitted to enroll and undergo such courses in Online mode at Universities abroad in top 500 in QS ranking in the last three years.** Students are also permitted to study courses of a particular semester in a University / Institution abroad based on MoU. A learning agreement shall be evolved to map all the courses offered in the programme and the courses offered in University abroad as per the procedure outlined by the Head – Centre for Academic Courses. The credits earned by the students in the University abroad shall be transferred as per the learning agreement. Students can enroll for the courses with the approval of the Head of the Institution only if the course is offered directly by University/ Institution and not with the Edu-tech platforms.

**4.8.3** Students are also permitted to enroll and study the courses in **physical/hybrid mode (not less than 50% in physical mode) that are offered by**

**(i) National/State funded research institutions/laboratories****(or)****(ii) (a)reputed companies (manufacturing or software) related to the programme, (b) reputed companies involved in transfer of knowledge, provided the knowledge transferring company is a spinoff from an Engineering/Technology practicing Industry and sharing the work experience of the respective industry.**

The companies mentioned in 4.8.3 (ii) (a) and the company with which the knowledge transfer company is associated in the case of 4.8.3 (ii) (b) should have average annual turnover of more than 200 crores over a period of 5 years. However, the academic content and delivery shall be in consonance with the academic standards and norms of the college.

The minimum qualification of the course instructor from the company as mentioned in 4.8.3. (ii) shall be B.E./B.Tech with 10 years of research / industrial experience. Such courses shall be offered through Memorandum of Understanding/ Memorandum of Agreement between the College and such institutions/ organizations/ companies.

The design of the courses with regard to the syllabus content, duration of each course and number of credits offered for each course shall be discussed and recommended by Head – Centre for Academic courses as per the Regulations and approved by the Head of the Institution.

For the offer of each course under 4.8.3, a course coordinator shall be nominated from the Department who shall coordinate, set question paper and evaluate answer script with the course instructor from research institution /laboratories/ industry/ company for the continuous assessment and end semester examination conducted by the College. The passing requirements are as per regulations.

#### **4.9. Mandatory Courses**

Student shall study the mandatory courses offered under two groups (Indian Knowledge System and General Studies) as prescribed and it will be mentioned in the Grade Sheet. However, it will not be considered for the calculation of CGPA.

#### **4.10. B.E. / B. Tech. (Hons) and B.E. / B. Tech. minor with specialization in another discipline.**

##### **4.10.1. B.E / B.Tech. (Hons.)**

- a) The students should have taken **additional courses** from a specified group of Professional Electives (specialization group) or from any other specialization group of the same programme and earned a minimum of **18 credits**.
- b) Should have **passed all the courses** prescribed in the curriculum and additional courses **in the first attempt**.
- c) Should have earned a minimum of 7.50 CGPA taking into account of all the

courses prescribed in the curriculum and additional courses. The students, including Lateral Entry, shall be permitted to register for the courses from Semester V onwards, provided the students have earned a minimum CGPA of 7.50 until Semester III and have cleared all the courses in the first attempt.

- d) If a student decides not to opt for Honours, after completing certain number of additional courses, such additional courses studied shall be considered instead of the Professional Elective courses which are part of the curriculum.
- e) If a student has studied more number of such courses than the number of Professional Elective courses required as per the curriculum, the courses with higher grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the grade sheet; however, these courses will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately.
- f) If a student has failed in the additional courses or faced shortage of attendance, such courses shall not be printed in the grade sheet and shall not be considered for CGPA calculation and classification of degree.

#### **4.10.2. B.E./B.Tech. Minor with specialization in another discipline**

- a) The student should have earned **additionally a minimum of 18 credits** in any one of the chosen specialization in elective grouping offered from other Engineering Disciplines / Science and Humanities / Management.
- b) Should have **passed all the courses** prescribed in the curriculum and additional courses **in the first attempt**.
- c) The students, including Lateral Entry, will be permitted to register the courses from Semester V onwards provided the marks earned by the students until Semester III is CGPA 7.50 and above.
- d) If a student decides not to opt for Minor, after completing certain number of courses, the additional courses studied shall be considered instead of Open Elective courses which are part of the curriculum.
- e) If a student has studied more number of such courses than the number of open electives required as per the curriculum, the courses with higher grades shall be considered for calculation of CGPA. Remaining courses shall be printed in the grade sheet; however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately.
- f) If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.

#### **4.10.3. For these 18 credits, students can optionally enroll and study a maximum of 6 credits in online mode from SWAYAM-NPTEL platform** (in addition to the three online courses permitted for the /in the courses of curriculum), as approved by the Head – CAC and the same can be used to drop only the corresponding Honours / Minor course. The online course (NPTEL) should be

completed with not less than B+ Grade in advance to drop a corresponding Honours course.

**4.10.4.** B.E / B.Tech. (Hons.) and B.E./B.Tech. minor with specialization in another discipline will be optional for students and the students shall be permitted to select any one of them only.

**4.10.5. Student has to enroll for these six additional courses separately and pay additional examination fee.**

**4.10.6.** New Honours / Minor in emerging areas may be introduced by the department / institution at any time depending upon the requirement after getting approval from the concerned Board of Studies, Academic Council and Governing Body.

#### **4.11. Medium of Instruction**

The medium of instruction is English for all courses, examinations, seminar presentations and project work reports except for the other language courses.

#### **4.12. Employability Enhancement Courses**

Employability Enhancement Courses are offered as credit-based courses or as certification courses for the skill development of the students.

**4.12.1. Credit assignment for EEC Courses** on language skills, life skills and essential computing skills are as follows:

Table 7: EEC credit assignment

Category	L	T	P	C
Laboratory courses	0	0	4	2
	0	0	2	1
Theory integrated laboratory courses	1	0	2	2

**4.12.2.** Skill based experiential learning courses offered during IV to VI are under two categories 1) Online courses with industry certifications 2) Courses in association with direct industrial training with the approval of Head-CAC. These certification courses are required for qualifying for the award of the degree.

#### **4.12.3. Evaluation Procedure:**

The evaluation of the above-mentioned EEC is fully internal and shall be done by the Course Coordinator from the institution.

(a) If the course is organized as part of approved online courses with industry certification, then 50% will be from the marks provided through course completion procedure and certification, 50% shall be evaluated by the respective Course Coordinator(s) of the college by conducting appropriate theory and / or laboratory tests/project work, at the end of the course.

(b) If the course involves training cum certification from an identified

firm/company, then 20% of the marks will be from the internal assessment marks, 30% will be from the marks provided by the firm/company and 50% shall be evaluated by the respective Course Coordinators of the college by conducting appropriate theory and / or laboratory tests / project work, at the end of the course.

## 5. DURATION OF THE PROGRAMME

- 5.1 A student is ordinarily expected to complete the B.E. / B.Tech. Programme in 8 semesters (for H.Sc. students) and six semesters (for Lateral Entry students) but in any case, not more than 14 Semesters for H.Sc. (or equivalent) students and not more than 12 semesters for Lateral Entry students.
- 5.2 Each semester shall normally consist of 75 working days or 540 periods of 50 minutes each. The Head of the Institution shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught.
- 5.3 The Head of the Institution may conduct additional classes for improvement, special coaching, conduct of additional tests etc., over and above the specified periods. But for the purpose of calculation of attendance requirement for writing the end semester examinations (as per clause 6) by the students, following method shall be used.

$$\text{Percentage of Attendance} = \frac{\text{Total no.of periods attended in all the courses per semester}}{\left( \text{No.of periods per week as prescribed in the curriculum} \right) \times 15} \times 100$$

The End-Semester Examination will normally follow immediately after the last working day of the semester as per the academic schedule prescribed from time to time.

- 5.4 The total period for completion of the programme reckoned from the commencement of the first semester to which the student was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study (vide clause 18) in order that he/she may be eligible for the award of the degree (vide clause 16).

## 6. COURSE REGISTRATION

- 6.1 Each student has to register for all courses to be undergone in the curriculum during the start of a particular semester (with the facility to drop courses to a maximum of 6 credits (vide clause 6.2)). The courses dropped in earlier semesters can be registered in the subsequent semesters when offered.

The registration details of the student shall be approved by the Head of the Institution and forwarded to the Controller of Examinations. This registration is for undergoing the course as well as for writing the End Semester Examinations.

The courses that a student registers in a particular semester may include:

- i. Courses of the current semester
- ii. Courses dropped in the lower semesters
- iii. Courses as the part of Honors and Minor Degree
- iv. Courses advanced to Semester VII from Semester VIII (as per clause 12.4.7)

The maximum number of credits that can be registered in a semester is 36. However, this does not include the number of Re-appearance (U) and Withdrawal (WD) courses registered by the student for the appearance of Examination.

### **6.2 Flexibility to Add or Drop courses**

- 6.2.1 A student has to earn the total number of credits specified in the curriculum of the respective programme of study in order to be eligible to obtain the degree.
- 6.2.2 From the second to final semesters, the student has the option of dropping existing courses in a semester during registration. Total number of credits of such dropped courses shall not exceed 6 credits per semester. The student is permitted to drop the course(s) within 30 days of the commencement of the academic schedule.
- 6.2.3 From V to VIII semesters, the student has the option of registering for additional courses in a semester, with regard to enrolling for B.E. / B. Tech. (Hons) or B.E. / B. Tech. Minor. The total number of credits that a student can add in a semester is limited to 6, subject to a maximum of 2 courses. Maximum number of credits enrolled in a semester (Honours and Minor) shall not exceed 36. The online courses registered for B.E. / B. Tech. (Hons.) and B.E. / B. Tech. minor shall be over and above these 36 credits.

### **6.3 Choice of Professional Elective Courses**

The Professional Elective Courses are listed in the Curriculum in Table format as elective groups (Specialization mentioned aside). A student can choose one Professional Elective Course from one group. Selection of course can be either from one of the specialization or a combination of courses.

However, students irrespective of enrolling for additional courses for B.E. / B. Tech. (Hons.) are not permitted to choose more than one course from an elective group. For a professional elective course and open elective course, minimum number of students enrolment permitted shall be 10. However, the minimum number is not applicable for students enrolling B.E. / B. Tech. (Hons) and B.E. / B. Tech. (Minor). For the offer of each professional elective course at least two choices shall be given.

## **7. ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER**

- 7.1 A student who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester. Ideally every student is expected to attend all classes of all the courses and secure 100% attendance. However, in order to give provision for certain unavoidable reasons such as medical / participation in sports, the student is expected to attend at least 75% of the classes. Therefore, he/she shall secure not less than 75% (after rounding off to the nearest integer) of overall attendance as calculated as per clause 5.3.
- 7.2 However, a student who secures overall attendance between 65% and 74% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) / participation in sports events, may be permitted to appear for the current semester examinations, subject to the condition that the student shall

submit medical certificate / sports participation certificate attested by the Head of the Institution. The same shall be forwarded to the Controller of Examinations for record purposes.

7.3 Students who secure less than 65% overall attendance shall not be permitted to write the University examination at the end of the semester and not permitted to move to the next semester. They are required to repeat the incomplete semester in the next academic year, as per the norms prescribed.

## 8. CLASS COORDINATOR

There shall be a class coordinator for each class. The class coordinator will be one among the course-instructors of the class. He / She will be appointed by the Head of the Department concerned. The class coordinator is the ex-officio member and the Convener of the class committee. The responsibilities for the class coordinator shall be:

- To act as the channel of communication between the HOD and the students of the respective class.
- To collect and maintain various statistical details of the students.
- To help the chairperson of the class committee in planning and conduct of the class committee meetings.
- To monitor the academic performance of the students including attendance and to inform the class committee.
- To coordinate the students' welfare activities like awards, medals, scholarships and industrial visits.

## 9. CLASS COMMITTEE

Every class shall have a class committee consisting of teachers of the class concerned, student representatives and a Chairperson (Senior faculty), who is not teaching the class. The functioning is like the 'Quality Circle' (more commonly used in industries) with the overall goal of improving the teaching- learning process.

### 9.1. Functions of the class committee:

- Solving problems experienced by students in the class room and in the laboratories.
- Clarifying the regulations of the degree programme and the details of rules therein particularly (clause 5 and 7).
- Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- Informing the student representatives the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / drawing / project work / seminar etc.) the breakup of marks for each experiment / exercise / module of work, should be clearly discussed in the class committee meeting and informed to the students.
- Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.

- Identifying the slow-learners, if any, and requesting the faculty concerned to provide some additional help or guidance or coaching to such students.

9.2 The class committee for a class under a particular branch is normally constituted by the Head of the Department. However, if the students of different branches are mixed in a class (like the first semester which is generally common to all branches), the class committee is to be constituted by the Head of the Institution.

9.3 The class committee shall be constituted within the first week of each semester.

9.4 At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee, covering all the elective courses.

9.5 The chairperson of the class committee may invite the class coordinator(s) and the Head of the Department to the class committee meeting.

9.6 The Head of the Institution may participate in any class committee meeting of the institution.

9.7 The chairperson is required to prepare the minutes of every meeting, submit the same to the Head of the Institution within two days of the meeting and arrange to circulate it among the students and teachers concerned. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the Management by the Head of the Institution.

9.8 The first meeting of the class committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held in a semester at suitable intervals. **The Class Coordinator shall display the cumulative attendance particulars of each student on the Notice Board at the end of every such meeting to enable the students to know their attendance details to satisfy the Clause 7 of this Regulation.**

During these meetings the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

## 10. COURSE COMMITTEE FOR COMMON COURSES

Each common theory course offered to more than one discipline or group, shall have a "Course Committee" comprising all the faculty members teaching the common course with one of senior faculty nominated as the course coordinator. The nomination of the course coordinator shall be made by the Head of the Department / Head of the Institution depending upon whether all the faculty members teaching the common course belong to a single department or to several departments. The 'Course Committee' shall meet one week prior to exam schedule in order to arrive at a common scheme of evaluation for the test and shall ensure a uniform evaluation of the tests. Wherever feasible, the Course Committee may also prepare a common question paper for the internal assessment test(s).

## 11. SYSTEM OF EXAMINATION

11.1 Performance in each course of study shall be evaluated based on  
 (i) Continuous Internal Assessment throughout the semester and  
 (ii) End Semester Examination at the end of the semester.

11.2 Each course, both theory and practical (including project work & viva voce examinations) shall be evaluated for a maximum of 100 marks.

S.No.	Category of Course	Continuous Assessment Test	End Semester Examination
1	Theory	40	60
2	Theory with Laboratory	50	50
3	Laboratory	60	40
4	Laboratory with Theory	50	50
5	Project Work	60	40

11.3 Internship shall carry 100 marks and shall be evaluated through internal assessment only (as per rubrics for evaluation).

11.4 The End Semester Examination (theory and practical) of 3 hours duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.

11.5 The End Semester Examination for Project Work shall consist of evaluation of the final report submitted by the student or students of the project group (of not exceeding 4 students) by an external examiner and an internal examiner, followed by a viva-voce examination conducted separately for each student by a committee consisting of the external examiner, the supervisor of the project group and an internal examiner.

11.6 For the End Semester Examination of practical courses including Project Work, the internal and external examiners shall be appointed by the Controller of Examinations.

## 12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

For all theory, laboratory courses, theory courses with laboratory component and project work, the continuous assessment shall be awarded as per the procedure given below:

### 12.1 THEORY COURSES

Three internal assessments shall be conducted in a semester. Each test carries a maximum of 50 marks and will be conducted for a duration of 90 Minutes. The total marks obtained in these assessments put together out of 150 shall be proportionately reduced to 30 marks and rounded to the nearest integer. The internal assessments shall be in written mode.

Two individual assignments, 40 marks each, (Assignment / Case Study/Seminar /Mini Project/Other Experiential Learning) for each course shall be reduced to 10 marks.

**Table 9: Internal assessment mark split – Theory courses**

	Internal Assessment marks	Individual Assignment / Case Study/ Seminar /Mini Project /Other Experiential Learning	End-Semester Exam	Total marks
Evaluation	150	80	100	
Weightage	30	10	60	100

**12.2 LABORATORY COURSES**

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. There shall be at least one internal test. The criteria for arriving at the Internal Assessment marks of 60 is as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer.

**Table 10: Internal assessment mark split – Lab courses**

Internal Assessment (100 Marks) *	
Evaluation of Laboratory Observation, Record	Test
75	25

\* Internal assessment marks shall be converted into 60 marks

**12.3. THEORY COURSES WITH LABORATORY COMPONENT / LABORATORY COURSES WITH THEORY COMPONENT**

Weightage of continuous internal assessment and end semester examination marks will be 50% each. The distribution of marks for the theory and laboratory components in the internal assessments and end semester examination for different types of courses are provided in the Table 11.

**Table 11: Internal assessment and End Semester Examination mark split – Theory with Lab / Lab with theory courses**

L	T	P	C	Internal Assessments*-Marks	End Semester Examination -Marks
2	0	2	3	Theory (25%) Lab (25%)	Theory (25%) Lab (25%)
3	0	2	4	Theory (25%) Lab (25%)	Theory (35%) Lab (15%)
2	0	4	4	Theory (25%) Lab (25%)	Theory (15%) Lab (35%)

1	0	4	3	Lab – (25%) Theory (25%)	Lab only (50%)
1	0	2	2	Lab – (25%) Theory (25%)	Lab only (50%)

The procedure for the conduct of internal assessments for theory and laboratory components shall be as per the clause 12.1 and 12.2 respectively. The weighted average shall be converted into 50 marks for Internal Assessment

## 12.4 PROJECT WORK / INTERNSHIP

- **During the VII semester**, students will undergo **Project Work phase-1** as per recommendations. Activities such as Literature Survey, Problem identification, Design analysis, etc. shall be done during Phase-1 of Project Work. Every student is required to prepare a file containing documentary proofs & maintain project diary for recording the activities done. There shall be one review during VII semester. The evaluation of these activities will be done by Programme Head, Project Coordinator along with Project Guide / Faculty guide & Industry Supervisor.
- **During the VIII semester**, students will undergo **Project Work phase-2**, a semester long project work as specified in the curriculum, in their own discipline or interdisciplinary nature.
- **Semester long project work at Industry:**  
Students are permitted to undertake a semester long industrial project or semester long internship in an industry / research organization in lieu of the final semester project work, provided the domain of such projects or internships come under the same discipline and approved by Head – CAC and the industry has no objection in submitting the work carried out as a report.

This industrial project or internship is apart from the summer industrial training or summer internship, if any. If the outcome of the project work is the development of a finished product, then it may lead to a start-up activity. The students have to submit a project report or internship report or start-up report on or before the last working day of the semester and the assessment of the same is detailed in clause 12.4.4

- **Team size and category:**  
Project work may be allotted to a single student or to a group of students not exceeding 4 per group with a guide from the same department. However, if the project is of interdisciplinary nature, then students from different programmes are permitted to form a group and the guide can be from other department also.
- Industrial Project work / In-House Project addressing problems related to environment & sustainability, agriculture, safety, transport & logistics, green economy, societal issues etc., shall be highly encouraged.

12.4.1 Project Work shall be carried out under the supervision of a “qualified faculty” in the Department concerned.

12.4.2 The Project Work carried out in the industry / academic/research institution shall be jointly supervised. The Project Work shall be jointly supervised by a supervisor of the department and an expert from the organization as a joint supervisor and

the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Institution and suitable record of the meetings shall be maintained

12.4.3 The Head of the Department shall constitute a review committee for Project Work for each programme. The review committee consists of supervisor, an expert from the Department and a project coordinator from the Department. If the project coordinator/expert member happens to be the supervisor, then an alternate member shall be nominated. In the case of Industrial Project/Internship, the review committee shall consist of the supervisor, the coordinator from industry and the project coordinator from the Department.

There shall be three reviews conducted by the review committee during VIII semester. The student shall make presentation on the progress made by him / her before the committee. The total marks obtained in the three reviews shall be reduced for 60 marks and rounded to the nearest integer (as per the scheme given in 12.4.4). Rubrics based evaluation shall be made.

12.4.4 The project report shall carry a maximum of 10 marks. The project report shall be submitted as per the approved guidelines as given by the Head-CAC. Same marks shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 30 marks. Marks awarded to each student of the project group is based on the individual performance in the viva-voce examination.

**Table 12: Project work mark split**

Continuous Assessment (60 Marks)			End Semester Examinations (40 Marks)			
Review-I	Review-II	Review-III	Report	Viva-Voce Examination		
20	20	20	10	Internal 10	External 10	Supervisor 10

In the case of industrial projects, review report by Industrial supervisor shall be submitted for evaluation. The marks allotted for supervisor will be shared equally by the supervisor from the Department and coordinator from Industry.

12.4.5 The last date for submission of the project report is on the last working day of the semester. If a student fails to submit the project report on or before the specified deadline, it will be considered as fail in the Project Work and the student shall re-register for the same in the subsequent semester.

12.4.6 Students shall also undertake a start-up activity for the development of products as part of project work. If the outcome of a start-up is a fully developed product and whose concept is tested and validated, then it shall be considered in lieu of the project work. Such students shall submit a start-up report, which includes the concepts and process flow of the developed product, publications and patents, if any. The evaluation of the start-up report is as per the clause 12.4.4.

12.4.7 If students undergo semester long project work during semester VII, then the courses offered during semester VII will be offered during semester VIII.

## 12.4 OTHER EMPLOYABILITY ENHANCEMENT COURSES

12.5.1. The Seminar / Case Study is to be considered as purely INTERNAL (with 100% internal marks only). Every student is expected to present a minimum of 2 seminars per semester before the evaluation committee and for each seminar, marks can be equally apportioned. The three-member committee appointed by the Head of the Institution, consisting of the course coordinator and two experts from the Department, will evaluate the seminar and at the end of the semester, the marks shall be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper/ case study report (40%), presentation (40%) and response to the questions asked during presentation (20%) for seminar/case study.

12.5.2. Idea lab- Innovative project / Mini project work shall carry 100 marks and shall be evaluated through internal assessment only. The evaluation will be done continuously based on 4 reviews (zeroth review to third review) and a final review with oral Viva-Voce Examination, conducted internally by a three-member Departmental Committee constituted by the Head of the Institution. The weightage of marks allotted for reviews is as per the following table:

**Table 13: Idea Lab- Innovative Project / Mini Project work mark split**

Review	1	2	3	Final Viva Voce & Report
Weightage	20	20	20	40

12.5.3. The Aptitude & Soft skill course / Aptitude & Technical skill course offered from Semester 3 to 7, is evaluated through internal assessments only. 2 additional practice tests before Internal Assessment 1 & 2 will be conducted through Online mode to assess aptitude module and technical module. The evaluation for soft skill course is based on activities, conducted by Training and Placement Cell (TAP) of the institute. Module wise digital certification will be issued to students for every semester.

12.5.4. The Industrial / Practical Training, Summer Project, Internship, shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical Training / Internship / Summer Project, the student shall submit an attendance certificate from the organization where he / she has undergone training and a brief report. The assessment shall be conducted internally by a three-member Departmental Committee constituted by the Head of the Institution consisting of the course coordinator and two experts from the Department. The weightage will be 50 marks for the certificate, 20 marks for the report, 20 marks for the presentation and 10 marks for the interactions.

12.5.5. For Online industry certified courses, evaluation procedure will be, 50% for the certification and 50% for the test/project/lab experiment. For Industry tied

course with direct mode training, lab evaluation procedure / lab integrated course evaluation procedure will be followed.

For all the courses under Employability Enhancement Courses Category, except for the Project Work, the evaluation shall be done with 100% internal marks and as per the procedure described in clause 12.5. (1) / (2) / (3) / (4) / (5)

#### **12.6. ASSESSMENT FOR VALUE ADDED COURSE**

The Value Added Course shall carry 100 marks and shall be evaluated through continuous assessments only. Two Assessments shall be conducted during the semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. A committee consisting of the Head of the Department, staff handling the course and a senior faculty member nominated by the Head of the Institution shall do the evaluation process. The list of students along with the marks and the grades earned shall be forwarded to the Controller of Examinations for appropriate action at least one month before the commencement of End Semester Examinations.

The grades earned by the students for Value Added Courses will be recorded in the Grade Sheet, however the same shall not be considered for the computation of CGPA.

#### **12.7. ASSESSMENT FOR MANDATORY COURSES**

For every Mandatory Non-credit Courses, there will be two continuous internal assessments carrying equal marks which include tests/assignments/ seminars etc. The total marks obtained in all the two assessments put together shall be proportionately reduced for 100 marks and rounded to the nearest integer. Students securing more than 50% will be declared as eligible. Appraisal shall be Excellent (75-100)/ Good (60-74)/Satisfactory (50-59).

#### **12.8. Internal marks** approved by the Head of the Institution shall be displayed by the respective HODs within 5 days from the last working day.

#### **12.9 Attendance Record**

All Course in-charges shall have to maintain an 'ATTENDANCE AND ASSESSMENT RECORD', which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the Head of the Department & the Head of the Institution periodically (weekly once / fortnightly) for checking the syllabus coverage and the records of test marks and attendance. At the end of the semester, the record shall be verified by the Head of the Institution who will keep this document in safe custody (for five years). The University or any inspection team appointed by the University may verify the records of Attendance and Assessment Record of both current and previous semesters.

## 12.10 Conduct of Academic Audit

In order to ensure the assessments are made as per the procedure, Academic Audit is to be done for every course taught during the semester. For the internal assessments conducted for each course as per details provided in Clause 12, the academic records shall be maintained in the form of documentation for the individual assignments / case study report / report of mini project submitted by each student and assessment test question paper and answer script. Report of industrial training / internship shall also be maintained, if applicable. For laboratory courses students' record shall be maintained. Further, the attendance of all students shall be maintained as a record. The Head of the Institution shall arrange to conduct the Academic Audit for every course in a semester by forming the respective committees with an external course expert as one of the members drawn from a technical institution of repute near the institute. The University or any inspection team appointed by the University may verify the records of Academic Audit report of the courses of both current and previous semesters, as and when required.

## 13. REQUIREMENTS FOR APPEARING FOR END SEMESTER EXAMINATIONS

A student shall normally be permitted to appear for the University Examinations for all the courses registered in the current semester (vide clause 6) if he/she has satisfied the semester completion requirements (as per clause 7).

**Further, examination registration by a student is mandatory for all the courses in the current semester and all arrear(s) course(s) for the end semester examinations failing which, the student will not be permitted to move to the higher semester.**

A student who has already appeared for any course in a semester and passed the examination is not entitled to reappear in the same subject for improvement of grades.

## 14. PASSING REQUIREMENTS

- 14.1 A student who secures not less than 50% of total marks prescribed for the course (Continuous Internal Assessment (CIA)+ End semester examinations) with a minimum of 45% of the marks prescribed for the end-semester examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for both theory and laboratory courses (including project work).
- 14.2 If a student fails to secure a pass in a theory course / laboratory course (except electives), the student shall register and appear only for the end semester examination in the subsequent semester. In such case, the internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks

(CIA + End Semester Examination) as per clause 14.1, then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the End Semester Examinations alone.

14.3 If the course, in which the student has failed, is a Professional Elective or an Open Elective course, the student may be permitted to complete the same course. In such case, the internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the candidate secures a pass. However, from the third attempt onwards if a candidate fails to obtain pass marks (CIA + End Semester Examination) as per clause 14.1, then the candidate shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the End Semester Examinations alone.

If any other Professional Elective or Open Elective course is opted by the student, the previous registration is cancelled and henceforth it is to be considered as a new Professional Elective or Open Elective course. The student has to register and attend the classes, earn the continuous assessment marks, fulfil the attendance requirements as per clause 7 and appear for the end semester examination.

14.4 If a student has submitted the project report but absent in the end semester examination of project work, the student is deemed to be failed. In this case and also if a student attends and fails in the End Semester Examination of Project work of B.E. / B.Tech, he/she shall attend End Semester Examination again, which shall be conducted within 60 days from the date of declaration of the results. The subsequent viva-voce examination shall be considered as reappearance with payment of exam fee. In case, the student fails in the subsequent viva-voce examination also, the student shall redo the project work again, when offered next.

14.5 The passing requirement for the courses which are assessed only through purely internal assessments (EEC courses except Project Work and laboratory), is 50% of the internal assessment (CIA) marks only.

14.6 A student can apply for revaluation of the student's semester examination answer paper in a theory course, as per the guidelines of the COE on payment of a prescribed fee along with the prescribed application to the COE through the Head of the Institution. The COE will arrange for the revaluation and the results will be published to the student concerned. Revaluation is not permitted for laboratory course and EEC courses.

## 15. AWARD OF LETTER GRADES

15.1 The award of letter grades will be decided using relative grading principle. The performance of a student will be reported using letter grades, each carrying certain points as detailed below in Table 14:

Table 14: Letter Grade and Grade points

Letter Grade	Grade Points	Mark range
O (Outstanding)	10	91-100
A+ (Excellent)	9	81-90
A (Very Good)	8	71-80
B+ (Good)	7	61-70
B (Average)	6	56-60
C (Satisfactory)	5	50-55
U (Reappearance)	0	<50
SA (Shortage of Attendance)	0	
WD (Withdrawal)	0	
UA (Absent)	0	

A student is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades: "O", "A+", "A", "B+", "B", "C".

15.1.1 'SA' denotes Shortage of Attendance (as per clause 7.3) and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet. "U" denotes that the student has failed to pass in that course. "WD" denotes Withdrawal from the exam for the particular course. The grades U and WD will figure both in the Grade Sheet as well as in the Result Sheet. In both cases, the student has to appear for the End Semester Examinations as per the Regulations.

15.1.2 If the grade U is given to Theory Courses/ Laboratory Courses, it is not required to satisfy the attendance requirements (vide clause 7), but has to appear for the end semester examination and fulfill the norms specified in clause 14 to earn a pass in the respective courses. If the grade U is given to EEC course (except Project Work), which are evaluated only through internal assessment, the student shall register for the course again in the subsequent semester, fulfill the norms as specified in clause 14 to earn pass in the course. However, attendance requirement need not be satisfied.

**15.2** For the PCD related activities such as National Cadet Corps (NCC)/ National Service Scheme (NSS) / NSO / YRC / Science club / Literary Club/ Fine Arts Association, a 'COMPLETED' remark will appear in the Grade Sheet on successful completion of the same. Every student shall put in a minimum of 75% attendance in the training and attend the camp or events of the clubs / associations compulsorily. The training and camp or club events shall be completed during the first year of the programme. However, for valid reasons, the Head of the Institution may permit a student to complete this requirement in the subsequent years. **Successful completion of any one of the above co-curricular activities is compulsory for the award of degree.**

15.3 The grades O, A+, A, B+, B, C obtained for the one/two credit course (not the part of curriculum) shall figure in the Grade Sheet under the title 'Value Added Courses/Internship/Industrial training'. The courses for which the grades obtained are SA will not figure in the Grade Sheet.

15.4 For the students who complete the Mandatory Course satisfying attendance requirement, the title of the Mandatory Course will be mentioned in the Grade Sheet along with obtained appraisal rating.

## 15.5 GRADE SHEET

After results are declared, Grade Sheets will be issued to each student which will contain the following details:

- Name of the institution / college
- List of courses studied for Honors, Minor and any other additional courses in which the student has passed with the grades under the title additional courses.
- The Grade Point Average (GPA) for the semester considering only the courses of curriculum (not the additional courses)
- The Cumulative Grade Point Average (CGPA) of all courses registered from first semester onwards considering only the courses of curriculum (not the additional courses).

However, for the students who have successfully completed the requirements of B.E. / B. Tech. (Hons) and B.E. / B.Tech. Minor vide Clause 4.10, grades scored in the six additional courses shall be taken into account for the computation of CGPA.

During each semester, the list of curricular courses (not the additional courses) registered and the grades scored in each course are used to compute the Grade Point Average (GPA). GPA is the ratio of the sum of the products of the number of credits of curricular courses (not the additional courses) registered and the grade points corresponding to the grades scored in those courses, taken for all the courses, to the sum of the number of credits of all the courses in the semester.

'U' grades will be excluded for calculating GPA and CGPA.

$$GPA/CGPA = \frac{\sum_{i=1}^n C_i GP_i}{\sum_{i=1}^n C_i}$$

Where

- $C_i$  is the number of Credits assigned to the course
- $GP_i$  is the point corresponding to the grade obtained for each course
- $n$  is number of all courses successfully cleared, during the particular semester in the case of GPA and during all the semesters in the case of CGPA.

15.5.1 If a student studies more number of professional and open electives than required as per the student's programme curriculum, the calculation of final CGPA shall be as per 4.10.1.d,e and 4.10.2.d,e.

15.5.2 If a student successfully completes all the requirements of the programme and also meets the requirements of B.E. / B. Tech. (Hons) or B.E. / B. Tech. Minor but desires not to opt for the additional qualification, then he/she has to submit a declaration with regard to the same 30 days before the completion of VIII semester.

15.5.3 In the consolidated grade sheet the CGPA earned shall be converted into percentage of marks as follows:

$$\text{Percentage of Marks} = \text{CGPA} \times 10.$$

## 16 ELIGIBILITY FOR THE AWARD OF THE DEGREE

16.1 A student shall be declared to be eligible for the award of the B.E. / B.Tech. Degree provided the student has

- i. Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.
- ii. Successfully completed the course requirements, appeared for the end Semester examinations and passed all the subjects within the period as prescribed in clause 5.1 and 5.1.1.
- iii. Successfully passed any additional courses prescribed by in the curriculum whenever the student is readmitted under KCE Regulations 2024.
- iv. Successfully completed the NCC / NSS / NSO / YRC / Science Club / Literature Club / Fine Arts Club requirements.
- v. No disciplinary action pending against the student.

The award of Degree must have been approved by the Result passing Board and Syndicate of the University.

## 16.2 CLASSIFICATION OF THE DEGREE AWARDED

### 16.2.1 FIRST CLASS WITH DISTINCTION:

A student who satisfies the following conditions shall be declared to have passed the examination in First class with Distinction:

- Should have passed the examination in all the courses of all the eight semesters (6 semesters in the case of Lateral Entry) in the student's First Appearance. Withdrawal from examination (vide Clause 17) will not be considered as an appearance.
- Should have secured a CGPA of not less than 8.50.
- One year authorized break of study (if availed of) is included in the five years for award of First Class with Distinction for regular students and four years for Lateral entry students.
- Should not have been prevented from writing End Semester Examination in any of the courses of the Curriculum making up the total credit requirement.
- A student who satisfies norms given in clause 4.10 becomes eligible for classification of the degree with B.E./B.Tech. (Hons) and B.E./B.Tech. minor.

**Table 15: Classification for award of degree - FWD**

Degree (i)	Duration of programme (ii)	Duration permitted (iii)	Additional credits above the requirement of curriculum (iv)	CGPA (Min) (v)	Pass in (vi)	Break of study (vii)	Prevention to write end semester examination (viii)	Withdrawal from Writing end semester examination (viii)
B.E./ B.Tech. (Regular)	4 years	5 years	-	8.50	First attempt	One year authorised break of study included in the Duration permitted	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. Lateral Entry	3 years	4 years	-	8.50	First attempt	One year authorised break of study included in the Duration permitted	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. (Hons)	3/4 years (Lateral entry, Regular respectively)	4/5 years (Lateral entry, Regular respectively)	18 credits from more than one specialization of the same programme	8.50	First attempt	One year authorised break of study included in the Duration permitted	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. minor	3 / 4years (Lateral entry, Regular respectively)	4 / 5 years (Lateral entry, Regular, respectively)	18 credits from any one minor group of the other programme	8.50	First attempt	One year authorized break of study Included in the duration permitted (iii)	Not permitted	Will not be considered as an attempt

### 16.2.2 FIRST CLASS

A student who satisfies the following conditions shall be declared to have passed the examination in **First class**:

- Should have passed the examination in all the courses of all eight semesters and 6 semesters in the case of Lateral Entry) **within five years**.
- One year authorized break of study (if availed of) or prevention from writing the End Semester examination due to lack of attendance (if applicable) is included in the duration of five years
- Should have secured a CGPA of not less than **6.50**.
- A student who satisfies norms given in clause 4.10 becomes eligible for classification of the degree with B.E./B.Tech. (Honours) and B.E./B.Tech. Minor

**Table 16: Classification for award of degree – FC (or First Class)**

Degree (i)	Duration of programme (ii)	Duration permitted (iii)	Additional credits (iv)	CGPA (Min) (v)	Pass in (vi)	Break of study (vii)	Prevention to write end semester examination	Withdrawal from writing end semester examination (viii)
B.E./ B.Tech. (Regular)	4 years	5 years	-	6.50	-	One year authorised break of study included in the duration permitted (iii)	Included in the Duration permitted (iii)	-
B.E./ B.Tech. Lateral Entry	3 years	4 years	-	6.50	-	One year authorised break of study included in the duration permitted (iii)	Included in the Duration permitted (iii)	-
B.E./ B.Tech. (Hons)	3 / 4 years (Lateral entry, Regular respectively)	4/5/6 years (Lateral entry, Regular respectively)	18 credi ts from more than one specializatio n of the same programme	6.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt

B.E./ B.Tech. minor	3/4 years (Latera l entry, Regula respect ively)	4/5 years (Lateral entry, Regular respectively)	18 credits from any one specializatio n of the other programme	6.50	-	One year authorised break of study included in the Duration permitted (iii)	Included in the Duration permitted (iii)	-
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#### 16.2.3 SECOND CLASS

Students who pursue B.E./B.Tech. in Regular mode or lateral entry mode or B.E./B.Tech. minor in specialization of another discipline and **who are not covered in clauses 16.2.1 and 16.2.2** and who qualify for the award of the degree (vide Clause 16.1) shall be declared to have passed the examination in **Second Class**.

16.2.4 A student who is absent in the End Semester Examination in a course / project work after having registered for the same shall be considered to have appeared in that examination and shall reappear (except approved withdrawal from end semester examinations as per clause 15) for the purpose of classification.

16.2.5 Student earned additional 18 credits as per Clause 4.10 (i) and (ii) but does not satisfy the conditions mentioned in 16.2.1 or 16.2.2 shall not be awarded B.E./B.Tech. (Hons.). In such case if the student becomes eligible for First Class, while computing CGPA with the Professional Elective / Open Elective courses with higher grades the student shall be awarded B.E. / B.Tech. in First Class only.

16.3 A student who is absent in end semester examination in a course / project work after having registered for the same shall be considered to have appeared in that examination for the purpose of classification. (subject to clause 17).

#### 16.4 PHOTOCOPY / REVALUATION

A student can apply for photocopy of his/her semester examination evaluated answer paper in a theory course, as per the guidelines of the COE, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Institution. The answer script is to be valued and justified by a faculty member, who has handled the subject and recommend for revaluation with the breakup of marks for each question. Based on the recommendation, the student can register for the revaluation through proper application to the Controller of Examinations. The Controller of Examinations will arrange for the revaluation and the results will be published. Revaluation is not permitted for practical courses and EEC courses. A student can apply for revaluation of answer scripts for not exceeding 5 subjects at a time.

### 16.5 REVIEW

Students not satisfied with Revaluation can apply for Review of his/ her examination answer paper in a theory course, within the prescribed date on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Institution.

Students applying for Revaluation only are eligible to apply for Review and the paper shall be reevaluated.

## 17. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

- 17.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by the Chairman, Sports Board and the HOD) be granted permission to withdraw from appearing for the end semester examination in any course or courses in ANY ONE of the semester examinations during the entire duration of the degree programme. The application shall be sent to the COE through the Head of the Institution with required documents.
- 17.2 Withdrawal of application is valid if the student is otherwise eligible to write the examination (Clause 7) and if it is made within TEN days after the date of the examination(s) in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations. For a student to withdraw from a course / courses, he/she should have registered for the course, fulfilled the attendance requirements (vide clause 7) and earned continuous assessment marks.
- 17.2.1 Notwithstanding the requirement of mandatory 10 days, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.
- 17.3 In case of withdrawal from a course / courses, the courses will figure both in the Grade Sheet as well as in the Result Sheet. However, withdrawal shall not be considered as an appearance for the eligibility of a student for First Class with Distinction.
- 17.4 If a student withdraws from writing end semester examinations for a course or courses, he/she shall register for the same in the subsequent semester and write the end semester examination(s).
- 17.5 If a student applies for withdrawal from Project Work, he/she will be permitted for the withdrawal only if the student has submitted the project report before the deadline. However, the student may appear for the viva-voce examination within 60 days after the declaration of results for Project Work and the same shall not be considered as reappearance.
- 17.6 Withdrawal is permitted for the end semester examinations in the final semester, as

per clause 16.2.1.

## **18. PROVISION FOR AUTHORISED BREAK OF STUDY**

- 18.1 A student is permitted to go on authorised break of study for a maximum period of one year as a single spell.
- 18.2 Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the student may apply for additional break of study not exceeding another one year. If a student intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to re-join the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Head, Student Affairs in advance, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Institution stating the reasons therefore and the probable date of re-joining the programme.
- 18.3 The student permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed only by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply to the Director, Academic Courses of University in the prescribed format through Head of the Institution at the beginning of the readmitted semester itself for prescribing additional courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.
- 18.4 Total number of credits to be earned by the student shall be more than or equal to the total number of credits prescribed in the curriculum in force. If the credit assigned for L T P of the courses are not same in two Regulations under consideration, then equivalence shall be arrived as per the credit assignment followed in the Regulations in force.
- 18.5 The authorized break of study is included in the duration specified for passing all the courses for the purpose of classification (vide Clause 16.2).
- 18.6 The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- 18.7 If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study' (Clause 18.1).
- 18.8 If a student in Full Time mode wants to take up a job / start-up / entrepreneurship during the period of study he/she shall apply for authorised break of study for one year. The student shall join the job / start-up / entrepreneurship only after getting approval of the same by the Head of the Institution with due proof to that effect.
- 18.9 No fee is applicable to students during the Break of Study period.

## **19. DISCIPLINE**

- 19.1 Every student is required to observe disciplined and decorous behaviour both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the College. The Head of the Institution shall constitute

a disciplinary committee consisting of Two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline and notify the CoE about the disciplinary action recommended by the Head of the Institution. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted including one representative from Anna University, Chennai. In this regard, the member will be nominated by the University on getting information from the Head of the Institution.

19.2 If a student indulges in malpractice in any of the End Semester Examination / internal examination he / she shall be liable for punitive action as prescribed by under the regulations from time to time.

**20. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI**

The College may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and scheme of examinations through the Board of Studies, Academic Council with the approval of the Governing Body.

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