



Sri Eshwar
College of Engineering
An Autonomous Institution



Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai
Kondampatti (Post), Kinathukadavu (Tk), Coimbatore – 641202

CURRICULAR ASPECTS

Criteria - I

(National Assessment and Accreditation Council)

REGULATIONS 2019

CHOICE BASED CREDIT SYSTEM (CBCS)

(Common to all B.E. / B.Tech. Programmes)

As per the guidelines given by the University Grants Commission, All India Council for Technical Education and Affiliating University (Anna University - Chennai), Regulations 2019 (R-2019) have been prepared integrating the features of the Choice Based Credit System (CBCS). The Regulation 2019 is applicable to the candidates admitted to the first year Bachelor of Engineering (B.E.) / Bachelor of Technology (B.Tech.) Degree Programmes of the Institution in the academic year 2019 - 2020 and academic year 2020 - 2021 for second year Lateral Entry students.

Note: The regulations, curriculum, syllabus and scheme of examinations are subjected to amendments as may be decided by the Academic Council of the Institution from time to time. Any or all such amendments will be effective from such date and to such batches of students as may be decided by the Academic Council.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In this Regulation,

- 1.1 **"Programme"** means Degree Programme (i.e) B.E. / B.Tech. Degree Programme.
- 1.2 **"Discipline"** means Branch or Specialization of B.E. / B.Tech. Degree Programme like Computer Science and Engineering, Mechanical Engineering, Information Technology etc.,
- 1.3 **"Course"** means a theory or practical subject that is normally studied in a semester like Mathematics, Physics, Engineering Graphics, etc.,
- 1.4 **"Head of the Institution"** means the Principal of the institution.
- 1.5 **"Head of the Department"** means the head of the department concerned.
- 1.6 **"Controller of Examinations"** means the authority of the Institution who is responsible for pertaining to Autonomous Examinations.
- 1.7 **"University"** means Anna University, Chennai.

- 1.8 **"Institution"** means Sri Eshwar College of Engineering, Coimbatore unless indicated otherwise by the context.

2. ADMISSION PROCEDURE

2.1. Regular Entry Admission

Candidates seeking admission to the first semester of the eight semesters of B.E. / B.Tech. Degree Programme:

- i) Should have passed the Higher Secondary Examination (Academic stream, 10 + 2) Curriculum as prescribed by Government of Tamil Nadu with Mathematics, Physics and chemistry as three of the four subjects of study under part – III or any equivalent examination accepted by competent authority.

(or)

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

They should also satisfy other eligibility conditions as prescribed by the Anna University, Chennai and Directorate of Technical Education, Chennai from time to time.

2.2 Lateral entry admission

- i) The candidates who hold a 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 BE / BTech in relevant branches of study, in their Diploma.

(or)

- ii) 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 subjects in the third and fourth semesters as prescribed by the examination committee. They should satisfy other eligibility conditions prescribed by the Anna University, Chennai and Directorate of Technical Education, Chennai from time to time.

3. PROGRAMMES OFFERED

The following branches of study approved by the University are offered by the Institution.

Undergraduate Programmes:

- B.E. Computer Science and Engineering
- B.E. Electrical and Electronics Engineering
- B.E. Electronics and Communication Engineering
- B.E. Mechanical Engineering
- B.E. Computer and Communication Engineering
- B.Tech. Information Technology

4. STRUCTURE OF PROGRAMMES**4.1. Categorization of Courses**

Every B.E. / B. Tech. Programme will have a curriculum with syllabi consisting of theory and practical courses that shall be categorized as follows:

Table 4.1 Categorization of Courses at UG Degree Programmes

S. No.	Category	Courses
1.	Humanities and Social Sciences (HS)	Technical English, Foreign Language, Management & Engineering Ethics, Human Values and Engineering Economics
2.	Basic Sciences (BS)	Mathematics, Physics and Chemistry
3.	Engineering Sciences (ES)	Materials, Workshop, Drawing, Basics of Electrical / Electronics / Mechanical / Computer Engineering, etc.,
4.	Professional Core (PC)	Courses relevant to the chosen specialization / branch
5.	Professional Electives (PE)	Courses relevant to the chosen specialization / branch
6.	Open Electives (OE)	Courses from other technical and/or emerging subject areas
7.	Project Work (PW)	Mini Project, Innovative/Multidisciplinary Project, Industry Project, Project Work
8.	Employability Enhancement Courses (EEC)	Personality Development, Verbal & Soft Skills, Communication Skills, Aptitude, Seminar, Industry Oriented Courses and Internship in Industry or elsewhere.

9.	Mandatory Courses (MC)	Environmental Science, Indian Constitution and Tradition
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4.2. **Personality and Character Development**

All students shall enroll in any one of the personality and character development activities (NCC / NSS /NSO/ YRC /UBA) and undergo the training for 40 hours during the first year.

National Cadet Corps (NCC) will have a number of parades/camps as specified by the NCC officer.

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

National Sports Organization (NSO) will have sports, Games, Drills and Physical exercises.

Youth Red Cross (YRC) society activity will include peacetime activities like health and hygiene, yoga, international friendship, awareness camps etc.,

Unnat Bharat Abhiyan (UBA) will have activities related to technical social services in villages around the institution. While the training activities will normally be during weekends, the camp will normally be held during vacation period.

4.3. **Number of courses per semester**

In each semester, the curriculum will normally have a blend of theory courses not exceeding SEVEN and practical/EEC courses not exceeding FOUR. However, the total number of courses per semester shall not exceed ELEVEN (including EEC)

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

- Courses of the current semester.
- Courses advanced to Semester V, VI and VII from Semester VIII

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

4.4. Credit Assignment

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

Contact period per week	Credits
1 Lecture Period	1
1 Tutorial Period	1
2 Practical Periods (Laboratory / Seminar / Project Work / etc.)	1

4.5. Industrial Training / Internship

The students may undergo industrial training / internship at industrial / research organizations / educational institutions for the prescribed period in the curriculum during summer vacation.

4.6. Industrial Visit

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

4.7. Industry Oriented courses

Students have to undergo Industry Oriented Courses with one credit of 30 hours duration which will be offered by experts from industry / faculty (internal as well as external) on specialized topics. Students have to complete such one credit courses during the semesters III to VII as and when these courses are offered by the department as specified in the Curriculum.

4.8. Online courses

4.8.1. Students can register and earn credits for only one online course of 3 credits during the fifth semester and sixth semester period, relevant to their programme approved by the Head of the Institution from time to time.

4.8.2. A student can drop any one 3 credit course from PE or OE category of VI, VII or VIII semester, if he/ she successfully completes online course with 3 credits (which are provided with certificates)

- 4.8.3.** The entire online course offered by SWAYAM, Ministry of Human Resource Development (MHRD) portal and NPTEL Courses are approved. Other online courses are to be approved by the respective Board of Studies. Suitable Online courses relevant to PE/OE to be dropped shall be chosen from approved portal.
- 4.8.4.** Students who undergo 12 weeks of Online courses can earn 3 credits for courses in NPTEL, AICTE - SWAYAM etc. Alternatively, students who undergo 45 hours of any other approved online courses can earn 3 credits.
- 4.8.5.** Department Advisory Committee (DAC) shall monitor the progress of the student and recommend Continuous Internal Assessment marks based on their performance in the online course. The student may be exempted from undergoing one PE of OE only after successful completion of the online course and submission of the certificate. Based on the marks obtained in the online certification exam an equivalent grade will be recommended by the Office of Controller of Examinations.
- 4.9. Flexibility to Register Courses**
- 4.9.1.** The student shall undergo the eighth semester courses in the fifth, sixth or seventh semesters.
- 4.9.2.** In a particular semester, a student is permitted to add course registration for Two Electives (PE and / or OE) as advancement course subjected to a maximum of 30 credits from 5th Semester onwards with due approval from Head of the Institution through the Head of the Department and Dean (Academics).
- 4.9.3.** However, a student having "No standing arrears" and a CGPA of 7.5 and above is only eligible.
- 4.9.4.** The student shall register for the Project work in VIII semester only. The students satisfying the above conditions shall be permitted to carry out their final semester Project work for six months in industry/research organizations, if they have successfully completed all their 8th semester theory courses as advancement course in their lower semesters.

4.9.5. No Advancement Course (Fast Track course) shall be offered by any department unless a minimum 10 students register for the course.

4.9.6. However, if the students admitted in the associated branch and semester is less than 10, this minimum will not be applicable.

4.10. Minimum Credits

The total number of credits that a student earns during the period of study is called the total credits. For the successful completion of the B.E./B.Tech. Programme, a regular student must earn 160-162 credits (varies with the programme) in a minimum of eight Semesters, while a lateral-entry student must earn 114 - 116 credits in a minimum of six semesters.

4.11. Flexibility to Add Credits

4.11.1. 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. However, if the student wishes, then the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's programme in the Course Category of Professional Elective (PE) and or Open Elective (OE) only.

4.11.2. For calculating the CGPA, the best out of the credits scores earned by the students will be taken in the PE and / or OE Category.

4.11.3. Flexibility to add credits is not permitted in other category of courses.

4.12. Medium of Instruction

The medium of instruction is English for all courses, examinations, seminar presentation / project / thesis / dissertation reports.



PRINCIPAL
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