



SASTRA

ENGINEERING · MANAGEMENT · LAW · SCIENCES · HUMANITIES · EDUCATION

DEEMED TO BE UNIVERSITY

(U/S 3 OF THE UGC ACT, 1956)

THINK MERIT | THINK TRANSPARENCY | THINK SASTRA

**RULES & REGULATIONS
FOR
B. Tech. / M. Tech. (5 – Year Integrated)
DEGREE PROGRAMMES**

(For the students admitted in 2018-19 and afterwards)

Approved in XXXIV Academic Council Meeting, 2-Jun-2018

1. DEFINITIONS

In these rules and regulations unless the context otherwise requires:

- 1.1 'Programme' means B.Tech. & M.Tech. (Integrated) Degree programme
- 1.2 'Course' means theory and/or practical subjects that are normally studied in a semester, like Mathematics, Engineering Mechanics, Electrical Machines, C Programming Lab, etc.

2. ELIGIBILITY FOR ADMISSION

- 2.1 Candidates for admission to the first semester of B.Tech. / M.Tech. (Integrated) degree programmes should have passed the final examination of +2 Higher Secondary Course in the academic stream (with Mathematics, Physics and Chemistry as subjects of study) or vocational stream (with Mathematics as one of the subjects of study) conducted by the Board of Secondary Education, Government of Tamil Nadu or an Examination of any other authority accepted by the Board of Management of SASTRA as equivalent thereto. They shall also satisfy the conditions regarding the minimum marks, age and physical fitness as may be prescribed by the Board of Management of SASTRA, from time to time
- 2.2 Candidates who have passed the Diploma in Engineering and Technology Examinations conducted by the State Board of Technical Education of Govt. of Tamil Nadu or an examination of any other authority recognised by the Board of Management of SASTRA as equivalent thereto, are eligible to join the third semester (II year) of B.Tech. programme under Lateral Entry Scheme. They also shall satisfy the conditions regarding the minimum marks, age and physical fitness as may be prescribed by the Board of Management of SASTRA from time to time
- 2.3 Candidates who have passed the B.Sc. Degree Examinations conducted by the Universities in Tamil Nadu or an examination of any other authority recognised by the Board of Management of SASTRA as equivalent thereto, are also eligible to join the third semester (II year) of B.Tech. programme under Lateral Entry Scheme. They also shall satisfy the conditions regarding the minimum marks, age and physical fitness as may be prescribed by the Board of Management of SASTRA, from time to time

3. DURATION OF THE PROGRAMME

- 3.1 The undergraduate programme leading to the Degree of Bachelor of Technology shall extend over a period of 8 semesters (4 academic years)
- 3.2 The integrated programme leading to the degree of Master of Technology shall extend over a period of 10 semesters (5 academic years)
- 3.3 Each semester shall normally consist of 18 weeks (about 90 working days) of course work, which consists of theory, laboratory and tutorial classes
- 3.4 For those admitted under Lateral Entry Scheme, the duration of the undergraduate B.Tech. degree programme shall be six semesters (i.e) 3rd to 8th semester of the regular programme
- 3.5 A student admitted to B.Tech. programme is eligible to get B.Tech. (Hons.) degree, subject to the conditions specified in para 10.7 of this regulation

4. BRANCHES OF STUDY

- 4.1 SASTRA offers the following B.Tech. / M.Tech. (Integrated) degree programmes:
 - i. B.Tech. Aerospace Engineering
 - ii. B.Tech. Bioengineering
 - iii. B.Tech. Bioinformatics
 - iv. B. Tech. Biotechnology
 - v. B.Tech. Chemical Engineering
 - vi. B.Tech. Civil Engineering
 - vii. B.Tech. Computer Science & Engineering
 - viii. B.Tech. Electronics & Communication Engineering
 - ix. B.Tech. Electrical & Electronics Engineering
 - x. B.Tech. Electronics & Instrumentation Engineering
 - xi. B.Tech. Information & Communication Technology
 - xii. B.Tech. Information Technology
 - xiii. B.Tech. Mechanical Engineering
 - xiv. B.Tech. Mechatronics
 - xv. M.Tech. Biotechnology (5-year integrated)
 - xvi. M.Tech. Medical Nanotechnology (5-year integrated)
- 4.2 The courses of study and credits for each of the semesters of the various B.Tech./M.Tech. (Integrated) degree programmes are given in the relevant course directory

5. CREDIT SYSTEM

- 5.1 To be eligible to receive a B.Tech. / M.Tech. (Integrated) degree a student should have successfully completed a minimum of 180 and 225 credits respectively
- 5.2 Each course, has a certain number of credits assigned to it depending upon its lecture, tutorial and laboratory contact periods in a week
- 5.3 There are mainly two types of courses that a student has to undergo – lecture courses and practical courses. The practical courses shall include laboratories, workshops and drawing classes. Every course has been assigned a certain number of credits governed by the following norms:
 - 5.3.1 1 credit for each lecture hour / week
 - 5.3.2 1 credit for each tutorial hour / week
 - 5.3.3 1 credit for each practical session of 2 hours / week
 - 5.3.4 12 credits for B.Tech. project work
 - 5.3.5 15 credits for M.Tech. (Integrated) project work
- 5.4 Credits for mini project work, seminar and field visits are separately given for the various B.Tech. / M.Tech. (Integrated) degree programmes in the course directory
- 5.5 The courses offered for the various B.Tech./ M.Tech. (Integrated) degree programmes are categorised as follows:
 - 5.5.1 Core courses are compulsory courses identified for each programme
 - 5.5.2 Department elective courses are programme specific pool of courses from which student registers based on interest
 - 5.5.3 Open elective courses which are trans-disciplinary/social sciences/management courses, taken by students across different branches
 - 5.5.4 Mandatory non-credited courses include Induction Training, Environmental Sciences, Constitution of India, Indian Traditional Knowledge, and NSS Activities
 - 5.5.5 The number of core courses, department electives and open elective courses are given in the course directory of the respective B.Tech. / M.Tech. (Integrated) Degree programmes

-
- 5.5.6 Students in the B. Tech. programme have an option of completing their course work requirements by VII semester through the Accelerated Course Registration System (ACRS) and devote the VIII semester to do project work in academic institutions or R&D centres or industries in India or in premier institutions abroad. ACRS is meant for high and consistent performers who maintain a minimum CGPA and SGPA of 7.5. Students with history of F or E grades are not eligible
- 5.5.7 Students' at the end of the V semester with the minimum CGPA of 7.5, may be permitted to register for courses outside the University *in-lieu* of the Department Electives with the prior permission of the Dean of the respective school and the Vice-Chancellor. However, such courses shall be restricted to a maximum of two
- 5.5.8 Students' engaged in research shall be allowed to register for Research Credit *in-lieu* of one Department Elective with the prior permission of the Research Supervisor, Dean and the Vice-Chancellor. The evaluation for Research Credits shall be done by a panel of faculty appointed by the Dean, Examinations
- 5.5.9 A student registered for the B.Tech. / M.Tech. (Integrated) programme shall engage in a minimum of 100hours of community service during the period of study and this shall be non-credited

6. COMPLETION OF DEGREE PROGRAMMES

- 6.1 A student earns credits by passing courses every semester. A student, who has registered for B.Tech. degree programme, has to earn 180 credits to be eligible for the award of the degree
- 6.2 A student, who has registered for M.Tech.(Integrated) degree programme, has to earn 225 credits to be eligible for the award of the degree
- 6.3 The courses will be offered in semester pattern right from the first year. For each theory course that the student is undergoing during a semester, there is a Continuous Internal Assessment (CIA) mark, for a maximum of 50 marks, based on the student's performance in the three monthly tests, seminar, quiz, assignment, etc. For each laboratory course, there is a Continuous Internal Assessment (CIA) mark, for a maximum of 50 marks based on the performance in the regular laboratory classes. There will be one examination of 3 hours duration at the end of the semester for each credited course with a weightage of 50 marks
- 6.4 A letter grade, corresponding to the marks secured by the student is awarded for each course for which a student has registered. On obtaining a pass grade, the student accumulates the course credits as earned credits. A student's performance is measured by the number of credits that the student has earned and the weighted grade point

average

- 6.5 A student admitted, as per rule 2.1 should complete the B.Tech. Programme within a period of seven years from the date of admission. If a student is unable to complete the course within seven years, the student may be given a Diploma provided he / she has completed the required number of credits for a Diploma
- 6.6 A student admitted, as per rule 2.1 should complete the M.Tech. (Integrated) Programme within a period of eight years from the date of admission. If a student is unable to complete the course within eight years, the student may be given a B. Tech. degree provided he / she has completed the requirements for a B. Tech. degree
- 6.7 A student admitted, as per rule 2.2 or 2.3 should complete the B.Tech. programme within a period of six years from the date of admission. If a student is unable to complete the course within six years, the student may be given a Diploma provided he / she has completed the required number of credits for Diploma

7. ACADEMIC SCHEDULE

- 7.1 Normally odd semester classes will be conducted from July to November of the year. The regular examinations for odd semester courses will be conducted during November–December of the year. Similarly, even semester classes will be conducted during December–April. The regular examinations for even semester courses will be conducted during May–June of the year. The supplementary (arrear) examinations for even and odd semester courses will be conducted respectively during December & June of the year immediately after the regular examinations. Students have to register for the regular as well as all the standing arrear subjects in both the end semester examinations
- 7.2 The summer term special examination (to be conducted after the even semester May examinations results are announced) during June will be restricted to 8th semester subjects for B.Tech.

8. REQUIREMENTS FOR SUCCESSFUL COMPLETION OF A COURSE & EARNING CREDIT

- 8.1 Students must attend every lecture, tutorial and laboratory class. However, in order to provide for sickness and such other contingencies, a minimum attendance percentage has been prescribed. A student can appear for an end-semester examination only when he/she has put-in a minimum attendance of 80% during the semester. Percentage of attendance of a student will be the number of periods attended divided by the total number of periods actually conducted from the date of his/her admission and multiplied by 100

-
- 8.2 A student should necessarily register for the end-semester examinations in all the regular and applicable arrear courses
- 8.3 A student who has an attendance between 75 and 80% will be allowed to write the end semester examination provided he/she pays the condonation fees as prescribed by the University from time-to-time. A student shall be allowed to pay condonation fees only twice during the entire duration of his / her study in the University
- 8.4 A student who has an attendance between 70 and 75% will be allowed to write the end semester examination provided he/she pays the condonation fees and a caution deposit as prescribed by the University from time-to-time. A student shall be allowed to pay condonation fees and a caution deposit only once during the entire duration of his / her studies in the University. The caution deposit will be returned to the student at the end of the course provided the student maintains attendance more than 80% for the remaining semesters
- 8.5 A student who has an attendance less than 70% in the odd/even semester, will not be allowed to appear for the immediate odd/ even semester examination. In such a case, the student should register for the same semester during the next academic year, thereby losing one year
- 8.6 There is no provision for a student to improve his/ her attendance during the same semester
- 8.7 Out of a total of 100 marks allotted for each course 50 marks are allotted for continuous internal assessment and 50 marks for the end semester examination
- 8.8 The break-up for continuous internal assessment marks for any course is as follows:

Theory Course	Weightage	Practical Course	Weightage
First, Second & Third test (Best two out of three tests will be considered)	40%	Experimental work & observations	40%
Assignment, Seminar, Quiz, etc.	10%	Viva-Voce	10%
Total	50%	Total	50%

- 8.9 A candidate is declared to have passed in a course if he / she secures 'D' grade based on continuous internal assessment and the end-semester examination marks put together
- 8.10 A candidate can be debarred from writing the examinations of a semester for unsatisfactory conduct

9. EVALUATION OF THE ACADEMIC PERFORMANCE & PROMOTION

- 9.1 Course-wise grades are awarded to the students by adopting the following scheme, based on the aggregate marks scored by the student in the course (which includes internal assessment marks and end-semester examination marks)

RANGE	LETTER GRADE	GRADE POINT	DESCRIPTION OF PERFORMANCE
≥91%	S	10	Outstanding
≥86% and ≤ 90%	A+	9	Excellent
≥75% and ≤ 85%	A	8	Very Good
≥66% and ≤ 74%	B	7	Good
≥55% and ≤ 65%	C	6	Satisfactory
≥50% and ≤ 54%	D	5	Pass
< 50%	F	0	Fail
Absent	E	0	Exposure

- 9.2 A candidate who does not pass a course in the odd/even semester examination should register and take up the subsequent supplementary odd/even semester examination in that course and pass the same
- 9.3 Some students due to extraneous reasons score less marks in Continuous Internal Assessment (CIA) resulting in failing in the course. There is no provision for a student to improve his / her continuous internal assessment marks. For such candidates who appear in the subsequent supplementary exams, the following formula will apply:

$M = (I+E)$ or $2E$, whichever is greater, where I = CIA marks of the student; M = Total marks of the students and E = Marks scored by the student in the end semester supplementary examination

- 9.4 The average performance of a student in a particular semester is expressed as Semester Grade Point Average (SGPA). It is calculated for each semester as follows:

Let ' C_i ' be the credit assigned to the i^{th} course,

Let ' P_i ' be the grade point secured in the i^{th} course,

Let ' n ' be the number of courses for which the student has registered for the examinations,

$$SGPA = \frac{\sum_{i=1}^n C_i P_i}{\sum_{i=1}^n C_i} = \frac{C_1 P_1 + C_2 P_2 + \dots + C_n P_n}{C_1 + C_2 + \dots + C_n}$$

9.5 Calculation of Cumulative Grade Point Average (CGPA)

CGPA is calculated from SGPA of the current and previous semesters. Hence, it is an indicator of the performance of a student over the period of study. CGPA is calculated as follows:

Let '(SGPA)_i' be the SGPA of a student in ith semester,

Let 'N_i' be the number of credits taken by the student in ith semester,

Let 'k' be the number of semesters that a student has undergone,

$$CGPA = \frac{\sum_{i=1}^k (SGPA)_i N_i}{\sum_{i=1}^k N_i} = \frac{SGPA_1 N_1 + SGPA_2 N_2 + \dots + SGPA_k N_k}{N_1 + \dots + N_k}$$

10. CLASSIFICATION OF RESULT

- 10.1 Students admitted to the B. Tech. programme, securing a CGPA of 7.5 and above shall be deemed to have passed in first class with distinction provided all the courses are passed in the first attempt in the end semester examinations within the stipulated 8 semesters or 6 semesters for lateral entry students
- 10.2 Students admitted to the M.Tech. (Integrated) programme, securing a CGPA of 7.5 and above shall be deemed to have passed in first class with distinction provided all the courses are passed in the first attempt in the end semester examinations within the stipulated 10 semesters
- 10.3 Students admitted to the B.Tech. programme, who have passed all the courses securing a CGPA of 6.0 and above will be declared to have passed in first class provided all the courses are passed within the stipulated 8 semesters or 6 semesters for lateral entry students
- 10.4 Students admitted to the M.Tech. (Integrated) programme, who have passed all the courses securing a CGPA of 6.0 and above will be declared to have passed in first class provided all the courses are passed within the stipulated 10 semesters
- 10.5 Students who have passed all the courses securing a CGPA of 5.0 and above will be declared to have passed in second class provided all the courses are passed within the stipulated semesters
- 10.6 For students who have passed all the courses after the stipulated semesters, class shall not be awarded; only CGPA shall be mentioned in the degree certificate
- 10.7 A student eligible for first class with distinction as specified in 10.1 is also eligible to be declared to have passed with Honours provided he / she satisfies the following conditions:

10.7.1 The student should study on his/her own four additional theory courses offered for the programme as elective or from any other B.Tech. programmes of SASTRA, approved by the Dean of the respective school and included in the list of honours courses declared by the Institution for the respective semester

10.7.2 The student should choose one honours course in each of the V, VI, VII & VIII semesters from the list of honours courses declared by the University for the respective semester and branches

10.7.3 The student should register for the end semester examinations in these four courses and obtain 'D' grade or higher grade in the first attempt itself within the stipulated 8 semesters

11. SAVING CLAUSE / AUTHORITY

The Academic Council reserves the right to alter or amend or repeal or annul any or all of the rules and regulations