

Academic Regulations

for

B.Tech Programme under Autonomous Status

With effect from 2019-2020 admitted batch

Admissions

Admissions into first year of B.Tech., Program and admissions into second year (lateral entry) of B.Tech., Program of the Institute will be as per the norms stipulated by Andhra University & Andhra Pradesh State Council for Higher Education (APSCHE), Govt. of Andhra Pradesh. The duration of the program is for four/three years, he/she can do so by taking more years to complete but not more than eight/six years from the year of first admission for regular/lateral entry respectively. These regulations will be in force from 2019-2020 academic year for regular admission and for lateral entry students the regulations will be effected from 2020-21.

Programs offered

The B.Tech., programs being offered by the institute are

1. B.Tech in Civil Engineering
2. B.Tech in Computer Science and Engineering
3. B.Tech in Electronics and Communication Engineering
4. B.Tech in Mechanical Engineering

Structure of the Program

The program consists of courses belonging to different categories such as Basic Science Course (BSC), Engineering Science Course (ESC), Mandatory Course (MC), Professional Course (PC), Professional Core Course (PCC), Professional Elective Course (PEC), Open Elective Course (OEC), Massive Open Online Course (MOOC) and Laboratory Course (LC).

Each course is assigned a certain number of credits depending on the number of classes being held for the course (theory or lab). The number of classes being conducted per week in theory is reflective of the number of credits. The number of credits for labs is half of the number of lab sessions being conducted per week. The credits allotted for Mini-Project and Project Work are given in the course structure of the respective departments.

Mandatory course (MC) is a course that is apart from Professional Elective(PE), Professional Core Course(PCC), Open Elective(OE) as mentioned in the program.

Open Elective(OE) is a course offered by any other department apart from the home department.

Professional Elective Course(PEC) is a course that is offered by the department and the student has to choose in the electives offered and have to complete one of the electives offered for the semester.

Professional Core Courses (PCC) are all the courses that belong to the said program and have highest weightage among all other courses.

Laboratory Course(LC) is a compulsory course that is offered by the department in each of the semesters of study.

The student is expected to register for at least three MOOC courses in the three semesters of their study. There will be two credits given to each of the MOOC courses.

The number of credits to be acquired by the regular student to graduate from the program is 162 and for lateral entry student they are 123.5. Regular student has to complete two audit courses, one mandatory course, and all the lab courses, all the professional core courses and professional electives for the successful completion of course work for the award of the degree. The completion of MOOCs courses in their course duration will yield a certificate, certifying the student of being capable of pursuing a degree in the mentioned vertical. The student is expected to pursue MOOCs courses in such a fashion that it will yield complete knowledge of a subject in the three semesters.

Registration

The student can register to the courses in the said semester according to the courses offered by the department.

Attendance regulations

A regular course of study during a semester warrants the student to put up a minimum attendance of 75% in all the subjects of the semester, as the case may be, computed by totaling the number of periods of lectures, workshops, laboratories, drawing, tutorials, project and any other practicals, held in every subject over the semester as specified in the scheme of instruction.

However, in special cases and for sufficient cause shown, the Principal may, on the recommendation of the Head of the Department concerned, condone the deficiency in the average attendance to an extent of 9% for reasons such as ill-health, if the application for condonation is submitted at the time of actual illness or after the resumption of classes by the student after the illness and is supported by a certificate from an authorized Medical Officer.

In the case of students, who participate in activities like N.S.S., N.C.C., Intercollegiate tournaments, Inter-University tournaments conducted by the Inter-University Board and any such other activities involving the representation of the College/University

with the prior approval of the Head of the Department/Principal, the candidate may be deemed to have attended the college during the actual period of such activity, solely for the purpose of attendance.

A candidate who cannot satisfy the attendance requirements as specified above, because of late admission under special circumstances, reasonable and acceptable to the University on the basis of documents, shall attend at least 50% of the total scheduled periods during that academic year and shall have attended at least 90% of the total periods of instructions held from the date of admission.

Shortage of attendance between 65-74% will be condoned on payment of fee as fixed by the competent authority and the student concerned will be permitted to take the end semester examination.

The student shall be deemed detained if he/she does not satisfy the attendance requirements as prescribed by an attendance committee constituted by the Principal for each semester.

Examination and evaluation process

The performance of each student shall be evaluated for a maximum of 100 marks for theory and practical/drawing subjects, mini project, project work.

Theory Course:

For all lecture based courses the assessment shall be for 30 marks through internal evaluation and for 70 marks through external semester end examination.

1. Internal Evaluation: The internal evaluation is carried out by the faculty concerned to teach the subject and is performed as following for the 30 marks to be awarded to the student.

- i) *Two Internal assessments(Mid/Sessional) for 20 marks*
- ii) *Any of the two methodologies as informed by the faculty professing the course at the start of instruction by assignments, project work, quiz, viva-voce, drawing sheet assignments in case of drawing is to be evaluated for 10 marks.*

Under no circumstances re-examination will be conducted for internal mid examinations.

2. External Evaluation: The question papers shall be set externally and the answer scripts shall be evaluated through a single valuation system. Revaluation of the answer scripts is allowed by payment of the prescribed fee.

Free electives/MOOCs are/shall be evaluated internally for 100 marks, and the student has to put up a minimum attendance of 75%.

Laboratory Course:

Laboratory course shall be evaluated for 100 marks, out of which 50 marks are evaluated as internal assessment and 50 marks through external assessment. The internal assessment of 50 marks is distributed as 25 marks for continuous assessment, record work, student regularity and 25 marks for internal lab examination. The external examination is will be conducted by two examiners one from the department and an external examiner nominated by the Principal from a list of examiners recommended by the Board of Studies.

Project Work:

The project work shall be spread over the entire VIII semester and is of somewhat innovative in nature, with research / industry orientation. A project batch shall comprise of not more than four students. A mid-term evaluation is conducted on the progress by Head of the Department and the supervisor for 25 marks. On completion of the project, a second evaluation is conducted before the report is submitted for another 25 marks. The final evaluation shall be based on the report submitted and a viva-voce examination for 50 marks by an external examiner appointed by the Principal.

Minimum academic requirements

In case of theory courses having both internal and end semester examination, a student is deemed to be failed if he secures less than 28 marks in the end semester examination or less than 40 marks from both internal and end semester examination put together. For all other courses having only end examination, a student is deemed to be failed if he secures less than 40 marks.

In case of Practical / Project having both internal and end semester examination / evaluation, a student is deemed to be failed if he secures less than 25 marks in the end semester examination or less than 50 marks from both internal and end semester examination put together.

Supplementary examinations are to be held along with the same semester end examinations.

Criteria for achieving minimum credits

A student shall be deemed to have satisfied the minimum academic requirements and earned the credits allotted to each theory subject if only he secures not less than 40% marks in the semester-end examination and a minimum of 40% marks in the sum of the internal evaluation and semester-end examination taken together. In the labs/projects, the student should secure a minimum of 50% marks in the external examination and a

minimum of 50% marks in the sum of internal evaluation and external examination evaluation taken together.

Further, a candidate has to secure a minimum of 40% in theory examination (excluding sessional marks) and an aggregate of 40% to pass in theory. And a minimum of 50% (excluding sessional marks) in the Practical Examination / Project / Mini project work in Semester-End Examination with an aggregate of 50% to pass.

A student will be promoted to the next semester, if only he satisfies the minimum attendance requirement.

Award of grades

Absolute grading system is followed for awarding of grades to the students.

Grade point: It is the numerical weight that is attracted by a grade allotted on a 10-point scale.

Letter Grade: it is an index of the performance of students in a said course. The grades are denoted by the following letters and their respective marks range is given hereunder.

Sl.No.	Range of Marks	Grades	Grade Point	
1	> 90 and ≤ 100	O	10	Outstanding
2	> 80 and ≤ 90	A+	9	Excellent
3	> 70 and ≤ 80	A	8	Very Good
4	> 60 and ≤ 70	B+	7	Good
5	> 55 and ≤ 60	B	6	Above Average
6	≥ 50 and ≤ 55	C	5	Average
7	≥ 40 and < 50	P	4	Pass
8	< 40	F	0	Fail
9			0	Ab(Absent)

The performance of each student at the end of a semester is indicated by Semester Grade Point Average (SGPA). The SGPA is calculated as

$$SGPA = \frac{\sum(\text{Credits of a course} \times \text{Grade Points awarded for the course})}{\sum \text{Credits of a course}}$$

SGPA is calculated for the candidates who have passed in all the courses of the semester. Cumulative Grade Point Average(CGPA) will be calculated from the II Semester onwards up to the final semester. CGPA is calculated for those students who have passed all the courses. The conversion of CGPA to percentage can be had by multiplying the CGPA with 10.

CGPA is calculated as

$$CGPA = \frac{\sum(\text{Credits of a course} \times \text{Semester Grade Point Average})}{\sum \text{Credits of a course}}$$

A candidate shall be declared as passed in a course if he/she secures a "P" grade for UG in engineering and "C" grade for PG in engineering for theory examination and a "C" grade in laboratory course/Project/Mini Project/Industrial Training.

Further a candidate has to secure a minimum of 40% in theory examination (excluding sessional marks) and a minimum of 50% (excluding sessional marks) in laboratory/Project/ Mini project in semester end examination to pass.

A candidate has to secure a minimum of 5.0 SGPA for a pass in each semester for UG in Engineering.

Award of class

The student depending on the CGPA acquired will be awarded the class as follows

Sl.No.	Class	CGPA
1	First Class with Distinction	7.0 and more
2	First Class	6.0 or more but less than 7.0
3	Second Class / Pass	5.0 or more but less than 6.0

Malpractices

The Controller of Examinations/Dean of Examinations shall refer the cases of suspected malpractices in mid examinations and semester-end examinations to Malpractice Enquiry Committee constituted by the Institute. Such committee shall follow the approved scales of punishment. The Principal shall take necessary action against the erring students based on the recommendations of the committee.

Eligibility for the award of degree

A student shall be eligible for the award of the B.Tech. degree if he/she fulfills the following conditions

1. Register/successfully complete all the courses prescribed within the stipulated period.
2. His/her CGPA should be greater than 5.0 (Minimum requirement for pass)
3. No disciplinary action is pending against him/her
4. Has paid the prescribed fee for all the years

Academic calendar

The dates of all important events, such as commencement of class work, examinations, vacations, etc., during the academic year will be specified in the Academic Calendar of the Institute, as approved by the Academic Council.

Amendments to regulations

The Institute may, from time to time, revise, amend, or change the Regulations, Schemes of Examinations, and / or Syllabi and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the Institute.

General

1. Where the words 'he', 'him', 'his', occur, they imply 'she', 'her', 'hers', also.
2. The academic regulations should be read as a whole for the purpose of any interpretation.
3. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Chairman, Academic Council is final.