

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY PUTTUR – 517 583, A.P (AUTONOMOUS) Academic Regulations (R19) for B.Tech (Regular-Full time) CHOICE BASED CREDIT SYSTEM (CBCS)

(Effective for the students admitted into I year from the Academic Year 2019-20 onwards) **NOTE:** The regulations below are subject to amendments as may be made by the Academic Council of the College from time to time. Any or all such amendments will be effective from such date and to such batches of students (including those already undergoing the programme) as may be decided by the Academic Council. The Jawaharlal Nehru Technological University Anantapur, Ananthapuramu shall confer B.Tech. Under Graduate degree to candidates who are admitted to the Bachelor of Technology Programs and fulfill all the requirements for the award of the degree.

Preliminary Definitions and Nomenclature

In the following regulations, unless the context otherwise requires:

- (i) "U.G. Degree" means Undergraduate Degree which is B.Tech.
- (ii) "**Branch**" means specialization or discipline of B.Tech. like Civil Engineering, Mechanical Engineering, Electrical and Electronics Engineering, etc.
- (iii) "**Programme**" means U.G. Degree Programme (B.Tech.) in a particular **Branch** that is, B.Tech. in Civil Engineering, B.Tech. in Mechanical Engineering, etc.
- (iv) "**Course**" means a theory or practical subject that is normally studied in a semester like Mathematics, Physics, Chemistry Lab, etc.
- (v) "**College/Institute**" means Siddharth Institute of Engineering & Technology, Puttur.
- (vi) "**University**" means Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

1. Admission Procedure

Admissions are made to the first year of four-year B.Tech. Degree programme as per the norms of Andhra Pradesh State Council of Higher Education (APSCHE), Government of Andhra Pradesh.

2. Programme Pattern

- **2.1** The entire programme of study is for four academic years. All four academic years shall be on semester pattern.
- **2.2** A student eligible to appear for the end-semester examination in a course, but absent or has failed in the end-semester examination may appear for that course at the next supplementary examination when offered.
- **2.3** When a student is detained due to lack of credits/shortage of attendance, he/she may be re-admitted when the semester is offered after fulfillment of academic requirements. In such a case, he/she shall be in the academic regulations into which he/she is readmitted.
- 2.4 The minimum instruction days including exams for each semester shall be 90 days.

3. Award of B.Tech Degree

A student will be declared eligible for the award of the B.Tech Degree if he/she fulfills the following academic requirements:

- **3.1** Pursues a course of study for not less than four academic years and in not more than eight academic years from the year of admission. However, for the students availing "gap year" facility, this period shall be extended by two years at the most, and in such a case, the maximum period for graduation will be extended by the period of gap availed by the student.
- 3.2 Registers for 160 credits and secures all 160 credits.
- **3.3** Students, who fail to fulfill all the academic requirements for the award of the degree within the stipulated maximum duration from the year of admission, shall forfeit their seats in B.Tech. Course and their admission stands cancelled.

4. Courses of Study

With the approval of AICTE & JNTUA, following branches are offered for the B.Tech. Programme with effect from 2019-20.

S. No.	Name of the Branch	Branch Code
1	Civil Engineering	01
2	Electrical & Electronics Engineering	02
3	Mechanical Engineering	03
4	Electronics & Communications Engineering	04
5	Computer Science and Engineering	05
6	Computer Science & Information Technology	06
7	Agricultural Engineering	07

Any other branch as approved by the authorities of statutory bodies of the institute from time to time.

4.1 Programme related terms

- i. Credit: A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (Lecture/Tutorial) or two hours of practical work/field work per week.
- **ii. Academic Year:** Two consecutive (odd + even) semesters constitute one academic year.
- **iii. Choice Based Credit System (CBCS):** The CBCS provides choice for students to select from the prescribed courses.
- iv. Each course is assigned certain number of credits based on the following criterion:

Credits:	
1 Hour Lecture (L) per week	1 credit
1 Hour Tutorial (T) per week	1 credit
1 Hour Practical (P) per week	0.5 credit
1 Hour Drawing (D) per week	0.5 credit

5. Distribution and Weightage of Marks

- **5.1** The performance of a student in each semester shall be evaluated through internal evaluation and /or an external evaluation (end-semester examination) conducted semester wise.
- **5.2** Performance evaluation in each course (theory/ practical/drawing) shall be based on a total of 100 marks, of which the relative weightage for internal evaluation and end-semester examination shall be 40% and 60% respectively.

5.3 Internal Evaluation

The total internal weightage for all theory courses is 40 marks with the following distribution:

- a) 30 marks for Mid-term tests
- b) 10 marks for Assignments/Drawing sheets

5.3.1. Procedure for evaluating Mid-term tests for 30 marks

(i) For all theory courses there shall be two mid-term tests in each semester. First mid-term test shall be conducted for 50% of the syllabus and second mid-term test for the remaining syllabus. The duration of mid-term test shall be 1 hour 50 minutes of which, 90 minutes will be for descriptive test and 20 minutes for objective test.

- (ii) For theory courses consisting of two parts of different courses, for example, Basic Electrical & Electronics Engineering shall have the following pattern:
- a. Question paper shall be in two parts viz., Part A and Part B.
- b. Each part consists of three units.
- c. The syllabus for first mid-term test will be Part-A and Part-B for the second mid-term test.

The descriptive test consists of 3 questions, one question from each unit, with individual choice ("either", "or" type) for 10 marks each. Later, the total marks (30) shall be scaled down to 20 marks. The objective test consists of 20 objective questions for 10 marks. Together, the maximum marks for each mid-term test shall be 30.

A student's performance (marks obtained) in mid-term tests will be computed by considering 80% of marks from the better performance and 20% of marks from the other. The final mid-term marks will be the addition of these two.

Example:

If a student scores 27 marks and 19 marks in one mid-term and another mid-term tests respectively,

Then Weighted Average Marks (final mid-term marks)

= (Maximum marks x 0.8) + (Minimum marks x 0.2)

 $= (27 \times 0.8) + (19 \times 0.2) = 21.6 + 3.8 = 25.4$, rounded to 26 Marks.

- **<u>Note 1</u>**: Marks of any fraction shall be rounded to the next higher mark.
- **Note 2**: If the student is absent for the mid-term test, no retest shall be conducted and marks for that test shall be considered as zero.

5.3.2. Procedure for evaluating Assignments for 10 marks

Student performance in assignments shall be evaluated for 10 marks as below:

- (i) For all theory courses, 10 marks shall be allotted for assignments based on theevaluation of 2 assignments (5 marks each) relevant to that particular course.
- (ii) For theory courses consisting of two parts of different course, each part shall have one assignment for 5 marks totaling to 10 marks.

5.3.3. Procedure for evaluating Design/Drawing courses

Case (i): For Engineering Graphics course, there shall be two mid-term tests in each semester. The first mid-term test shall be conducted for 50% of the syllabus and the second mid-term test for the remaining syllabus. The duration of mid-term test shall be for 2 hours.

Each mid-term test consists of 3 questions, one question from each unit, with individual choice (,,either", ,,or" type) for 10 marks each totaling to 30 marks. No objective test shall be conducted for this course.

10 marks shall be allotted for assignments based on the day to day evaluation of

drawing sheets.

Case (ii): For Design and Drawing of Irrigation Structures course, there shall be two mid-term tests in each semester. The first mid-term test shall be conducted for first 2 units and the second mid-term test for the remaining 3 units. The duration of mid-term test shall be for 2 hours.

Each mid-term test consists of 2 questions; one question shall be answered and evaluated for 30 marks (10 marks for Design & 20 marks for Drawing). No objective test shall be conducted for this course.

10 marks shall be allotted for assignments based on the day to day evaluation of drawing sheets.

5.3.4 For Practical (Lab) Courses

For practical courses, there shall be a continuous evaluation during the semester for 40 internal marks and the end-semester examination shall be for 60 marks.

- Internal evaluation for 40 marks shall be based on day-to-day assessment by the laboratory teacher concerned.
- In a practical course consisting of two parts (for example, Engineering and IT workshop Lab), the internal examination shall be evaluated for 40 marks in each part and final internal marks shall be arrived at by considering the average of marks obtained in the two parts.

5.4 End-Semester Examination

5.4.1 For Theory Courses

- The examination will be conducted for 60 marks and it will be of 3 hour duration.
- There shall be 5 questions, one question from each unit ("either", "or" type), and all questions are compulsory.
- Each question carries 12 marks.

The end-semester examination for theory courses consisting of two parts of different courses, for ex: Basic Electrical & Electronics Engineering shall have the following pattern:

- Question paper shall be in two parts viz., Part A and Part B with equal weightage.
- In each part there shall be 3 questions with individual choice ("either", "or" type) for 10 marks each (totaling to 60 marks for two parts).

5.4.2 For Practical (Lab) Courses

The end-semester examination for 60 marks shall be conducted by the laboratory faculty concerned and one senior faculty of the same department nominated by the Principal.

In a practical course consisting of two parts (for example, Engineering and IT workshop Lab), the end-semester examination shall be conducted for 60 marks in each part and final marks shall be arrived at by considering the average of marks obtained in the two parts.

5.5 Audit Courses

There is only internal evaluation for Audit Courses. The Internal evaluation is same as that of the theory courses. The student has to complete audit courses with a minimum of 40% of marks in internal examination for the award of the degree and there will be no external examination. However, attendance in the audit course shall be considered while calculating aggregate attendance. In case the student fails, he/she shall reappear as and when subsequent end-semester supplementary examinations are conducted.

5.6 Project Phase - I

Project Phase – I is introduced in IV year I Semester and is evaluated internally for 100 marks. There shall be no external evaluation for Project Phase-I.

The objective is to enable group of students to take up investigative study in the broad field of relevant engineering branch, theoretical/practical problem to be assigned by the department under the guidance of a Project Supervisor. The group of students should submit a report and give an oral presentation on progress of project at the end of the semester in the presence of Project Supervisor and Internal Department Committee (IDC) consisting of Head of Department (HOD), Project Coordinator and a senior faculty of the department nominated by HOD.

• For Project Phase – I, The IDC shall evaluate the project work for 60 marks and project supervisor shall evaluate for 40 marks. The student is deemed to have failed, if he/she secures less than 40% of 100 marks allotted.

• A student who has failed may reappear for the above evaluation, when it is rescheduled within 15 days after the end-semester examinations; even if he/she fails, may reappear for the same in the next subsequent semester, as and when it is scheduled.

5.7 Project Phase - II

- The objective of Project Phase II which is continued in IV-year II semester is to enable the student to extend further the investigative study taken up under Project Phase I, and to provide a solution for the theoretical/practical problem.
- Out of the total 200 marks for the Project Phase II, 80 marks shall be for internal evaluation and 120 marks for the external evaluation (Viva-voce). The student is deemed to have failed, if he/she secures less than 40% of 200 marks allotted.

The evaluation method of the Project Phase - II is as follows:

Internal Evaluation (80 marks)

Project Supervisor shall evaluate for 40 marks and the remaining 40 marks shall be evaluated by IDC based on two reviews (each review of 20 marks), one at the mid of semester and the other before submitting the project report.

External Evaluation (120 marks)

The external project viva-voce will be conducted by the Internal examiner (HOD concerned) and External examiner nominated by the Principal.

Supplementary Examinations

At the end of each Semester there will be regular examinations for the current Semester. Those students who could not clear their courses in their previous attempt can appear for the examinations under supplementary category along with the regular students after registering themselves at the examination branch. Supplementary examinations for the all the other Semesters other than the current one will also be conducted at the same time.

However, Advanced Supplementary examinations will be conducted for IV-II semester examinations.

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5.8 Internship/ Surveying Camp/ Industrial Training/ Research Projects in National/International Laboratories or Academic Institutions

There shall be 60 hours duration to complete internship from III B.Tech I Semester onwards. The weightage by the concerned company for internship course is 40 marks and will be evaluated based on day to day assessment. The internship performance shall be evaluated in the IV B.Tech I Semester for 60 Marks by IDC based on student's internship report and presentation.

A student shall acquire 2 credits assigned, when he/she secures minimum 40% of 100 marks. In case, if a student fails, he/she shall reappear as and when the subsequent semester supplementary examinations are conducted.

Alternatively, B. Tech Civil Engineering students can take up a mini project on Water Resource Engineering in place of the above for 2 credits. Topics can be found in the Civil Engineering curriculum.

Surveying Camp is introduced at III Year I Sem. Surveying Camp should be conducted for two weeks by forming student groups not exceeding five students in each group. The group of students should submit a report. The Surveying Camp faculty evaluates the report submitted for 100 marks.

5.9 Seminar

There shall be a seminar presentation in IV B.Tech II Semester. Each student should collect information on a specialized topic and deliver a Seminar on the same. The student should also prepare a technical report, showing his/her understanding of the topic, and submit to the department before the seminar. The report and the presentation shall be evaluated for 100 marks by a departmental committee consisting of Head of the Department, seminar supervisor and a senior faculty member. The seminar shall be conducted any time during the semester as per the convenience of the department committee and students. There shall be no external examination for seminar.

5.10 Comprehensive Viva Voce

The goal of a comprehensive viva-voce is to evaluate the knowledge over the course of B.Tech Degree in the relevant discipline. The Examination will be conducted for 100 Marks and Evaluation will be done by the HoD and Internal Department Committee (IDC). The student has to complete Comprehensive Viva

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6. Attendance Requirements

- **6.1** A student shall be eligible to appear for final examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the subjects in a semester.
- 6.2 Shortage of attendance below 65% in aggregate shall in <u>NO</u> case be condoned.
- **6.3** Condonation of shortage of attendance in aggregate up to 10% (>= 65% and < 75%) in each semester may be granted by the College Academic Committee (CAC).
- **6.4** Students whose shortage of attendance is not condoned by CAC in any semester are not eligible to take their end-semester examination.
- **6.5** A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester. They may seek re-admission for that semester when offered in the next academic year.
- **6.6** A stipulated fee shall be payable towards condonation for shortage of attendance to the Institute as decided by the College Academic Committee.

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7. Minimum Academic Requirements

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in Section No.6

- **7.1** A student shall be deemed to have satisfied the minimum academic requirements and earned the credits allotted to each theory, practical, design, drawing subject or project, if he/she secures not less than 35% of marks in the end-semester examination and a minimum of 40% of marks in the total of the internal evaluation and end-semester examination taken together. In case of the audit course he/she should secure 40% of the internal marks.
- **7.2** A student shall be promoted from II to III year only if he/she acquires 40% of credits up to II year I semester from the following examinations, irrespective of whether the student takes the end-examinations or not as per the normal course of the study

I year B.Tech I Sem - one regular and two supplementary

I year B.Tech II Sem - one regular and one supplementary

II year B.Tech I Sem - one regular only

7.3 A student shall be promoted from III to IV year only if he/she acquires 40% of credits up to III year I semester from the following examinations, irrespective of whether the student takes the end-examinations or not as per the normal course of the study

I year B.Tech I Sem - one regular and four supplementary

I year B.Tech II Sem - one regular and three supplementary

II year B.Tech I Sem - one regular and two supplementary

II year B.Tech II Sem - one regular and one supplementary

III year B.Tech I Sem - one regular only

In case if a student is detained for want of credits for particular academic year as per Section No. 7.2 and 7.3 above, the student may make up the credits through supplementary examinations and only after securing the required credits he/she shall be permitted to join in the III or IV year I semester as the case may be.

8. With-Holding of Results

If the candidate has any dues to the Institute or indiscipline or malpractice is pending against him/her, the result of the candidate shall be withheld and he/she will not be allowed / promoted to the next semester. The award of degree is liable to be withheld in such cases.

9. Grading

After each subject is evaluated, the percentage of marks obtained in each subject will be converted to a corresponding letter grade as given in Table 1.

Range in which the % of marks Fall	Grade	Grade Points Assigned
\geq 90	S (Outstanding)	10
80-89	A (Excellent)	9
70-79	B (Very Good)	8
60-69	C (Good)	7
50-59	D (Fair)	6
40-49	E (Satisfactory)	5
< 40	F (Fail)	0
Absent	Ab (Absent)	0

Table 1: Conversion into Grades and Grade Points

- i. A student obtaining Grade F shall be considered failed and will be required to reappear for that subject as and when the next supplementary examination is offered.
- ii. However, for audit courses grading shall be given but will not be counted for the computation of SGPA/CGPA.

9.1. Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)

(i) Semester Grade Point Average (SGPA)

The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e., SGPA (S_i) = Σ ($C_i \ge C_i \ge C_i$)

Where C_i is the number of credits of the ith course and G_i is the grade point scored by the student in the ith course.

(ii) Cumulative Grade Point Average (CGPA)

The Cumulative Grade Point Average (CGPA) will be computed in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.,

$$\mathbf{CGPA} = \Sigma \left(\mathbf{C}_{\mathbf{i}} \times \mathbf{S}_{\mathbf{i}} \right) / \Sigma \mathbf{C}_{\mathbf{i}}$$

Where S_i is the SGPA of the i^{th} semester and C_i is the total number of credits in that semester.

- The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.
- While computing the CGPA the subjects in which the student is awarded Zero grade points will also be included.
- *Grade Point:* It is a numerical weight allotted to each letter grade on a 10-point scale.
- *Letter Grade:* It is an index of the performance of students in a said course, Grades are denoted by letters S, A, B, C, D, E and F.

EXAMPLE: Computation of SGPA and CGPA

Course	Credit	Grade letter	Grade point	Credit Point (Credit x Grade Point)
Course-I	3	S	10	3x10 = 30
Course-II	3	А	9	3x9 = 27
Course-III	3	В	8	3x8 = 24
Course-IV	3	D	6	3x6 = 18
Course-V	2	В	8	2x8 = 16
Course-VI	1	С	7	1x7 = 7
	15			122

Illustration for SGPA

Thus, SGPA = 122/15 = 8.14

Semester 1	Semester 2	Semester 3	Semester 4
Credit : 18	Credit : 20	Credit : 20	Credit : 20
SGPA: 6.8	SGPA: 6.9	SGPA: 7.3	SGPA: 6.8
Semester 5	Semester 6	Semester 7	Semester 8
Credit : 20	Credit : 20	Credit : 20	Credit : 22
cicuit : 20	Cicuit . 20	Cicuit . 20	Cicuit . 22

Illustration for CGPA

Thus, CGPA = $\frac{(18 \times 6.8) + (20 \times 6.9) + (20 \times 7.3) + (20 \times 6.8) + (20 \times 8.2) + (20 \times 7.4) + (20 \times 7.2) + (22 \times 7.8)}{160} = 7.31$

10. Award of Class

After a student has satisfied the requirement prescribed for the completion of the program is eligible for the award of B.Tech degree and he/she shall be placed in one of the following four classes:

Class Awarded	CGPA Secured
First Class with Distinction	\geq 7.5
First Class	$\geq 6.5 < 7.5$
Second Class	\geq 5.5 < 6.5
Pass Class	\geq 4.5 < 5.5

Equivalent conversion of percentage of marks = (CGPA - 0.5) * 10

For example, student got CGPA = 7.31, he /she secures equivalent of percentage of marks

$$= (7.31-0.5) * 10 = 68.1\%$$

11. Gap Year

Concept of Student Entrepreneur in Residence shall be introduced and outstanding students who wish to pursue entrepreneurship are allowed to take a break of one year at any time after II year to pursue entrepreneurship full time. This period may be extended to two years at the most and these two years would not be counted for the time for the stipulated maximum time for graduation. Such proposal submitted by the students to the Principal will be evaluated. An evaluation committee shall be constituted by the Principal to evaluate the proposal submitted by the student and the committee shall decide whether or not to permit the student(s) to avail the Gap Year.

12. Transitory Regulations

Discontinued, detained, or failed candidates are eligible for readmission as and when the semester is offered after fulfillment of academic regulations. Candidates who have been detained for want of attendance or not fulfilling academic requirements or who have failed after having undergone the course in earlier regulations or have discontinued and wish to continue the course are eligible for admission into the unfinished semester from the date of commencement of class work with the same or equivalent subjects as and when subjects are offered, subject to Section No. 3.3 and they will be in the academic regulations into which they get re-admitted.

Candidates who were permitted with Gap Year shall be eligible for rejoining into the succeeding year of their B.Tech from the date of commencement of class work, subject to Section No. 3.3 and they will be in the academic regulations into which the candidate is presently rejoining.

13. Massive Open Online Courses (MOOCs)

The college in line with the developments in Learning Management Systems (LMS) intends to encourage the students to do online courses in MOOCs. The main intention to introduce MOOCs is to obtain enough exposure through online tutorials, self-learning at one"s own pace, attempt quizzes, discuss with professors from various universities and finally obtain certificate of completion for the course from the MOOCs providers. The regulations for MOOCs are as follows:

- 13.1 The respective departments shall give the existing relevant programme course (not less than 12 weeks duration) list from the SWAYAM/NPTEL, from II year I semester onwards whose credentials are endorsed by the HOD.
- **13.2** Each department shall appoint Coordinators/Mentors and allot the students to them who shall be responsible to guide students in selecting online courses and provide guidance for the registration, progress and completion of the same.
- **13.3** The students must register and submit pass certificate of MOOC course before the end-semester examinations of the semester where the MOOC course is listed. Otherwise student shall be treated as failed in that course.

- **13.4** The award of grading for 100 marks as per the regulations is based on the percentage of marks obtained in the MOOC course.
- **13.5** The Provisional Certificate (PC) and/or Consolidated Grade Sheet (CGS) shall be issued only to those students, who have submitted proof of completion of MOOC, for thecourse they have registered with.

Note: Institute will not conduct any Internal/External examinations for the above MOOC course.

14. Virtual Labs

With the help of Virtual Labs the student will be given additional exposure to laboratory practice. This helps in better understanding the concepts and practical significance of engineering.

15. Choice Based Credit System (CBCS)

The CBCS provides choice for students to select from the prescribed courses (professional elective/ open elective/ minor degree/ honor degree). The CBCS provides a "cafeteria" type approach in which students can take courses of their choice, learn at their own pace and adopt an interdisciplinary approach to learning.

16. Minor Degree in a Discipline

• This concept is introduced in the curriculum of all conventional B.Tech. programmes offering a major degree. The main objective of Minor Degree in a discipline is to provide additional learning opportunities for academically motivated students and it is an optional feature of the B.Tech. programme. In order to earn a Minor Degree in a discipline, a student has to earn 20 additional credits by studying any seven theory subjects from the programme core & professional elective courses of the minor discipline or equivalent MOOC courses available under SWAYAM platform. The list of courses to be studied either in MOOCs or conventional type will be decided by the Institute at the time of registration for Minor Degree.

- Students having a CGPA of 8.0 (for SC/ST students CGPA of 7.5) or above up to II year-I semester and without any backlog subjects will be permitted to register for Minor Degree discipline programme. An SGPA and CGPA of 7.5 (for SC/ST students CGPA of 7.0) has to be maintained in the subsequent semesters without any backlog subjects in order to keep the Minor Degree discipline registration live or else it will be cancelled.
- Student aspiring for a Minor Degree must register in V semester only and must opt for a Minor Degree in a discipline other than the discipline he/she is registered in.
- Students will not be allowed to register and pursue more than two subjects in any semester.
- The Evaluation pattern of theory subjects will be similar to the regular programme evaluation.
- Students may enlist their choice of Minor Degree discipline programmes, in order of preference, for which they wish to register. It will not be permissible to alter the choices after the application has been submitted. However, students are allowed to opt for only one Minor Degree discipline programme in the order of preference given by them.
- Minimum strength required for offering a Minor Degree in a discipline is considered as 20% of the class size and Maximum would be 80% of the class size.
- Completion of a Minor Degree discipline programme requires no addition of time to the regular Four-year Bachelors" programme. That is, Minor Degree discipline programme should be completed by the end of final year B.Tech program along with the major discipline.
- The HOD concerned of the department offering Minor Degree discipline shall arrange separate course/class work and time table. The regulations for these Minor Degree discipline programmes will be as per regular courses.
- Reservations shall be followed as per the rules of Government of Andhra Pradesh i.e., State-wide Universities Presidential Order 371 Article D in consonance to Section 95 of the A.P. Reorganization Act, 2014 for admissions to Minor Degree programmes.

- A student registered for Minor Degree in a discipline shall pass in all subjects that constitute the requirement for the Minor Degree programme. No class/division (i.e., second class, first class and distinction, etc.) shall be awarded for Minor Degree programme.
- The Minor Degree in a discipline will be mentioned in the degree certificate as Bachelor of Technology in XXX with Minor Degree in YYY. For example, Bachelor of Technology in Computer Science & Engineering with Minor Degree in Electronics & Communication Engineering. This fact will also be reflected in the transcripts, along with the list of courses taken for Minor Degree programme with CGPA mentioned separately.

17. Honors degree in a discipline

- This concept is introduced in the curriculum for all conventional B.Tech. programmes. The main objective of Honors degree in a discipline is to provide additional learning opportunities for academically motivated students and it is an optional feature of the B.Tech. programme. In order to earn an Honors degree in his/her discipline, a student has to earn 20 additional credits by studying five advanced courses for 15 credits and by carrying out a mini project for 5 credits in the branch of Engineering concerned. In place of advanced courses, he/she can study equivalent MOOC courses available under SWAYAM platform, as decided by the Institute from time to time. The Evaluation pattern of theory subjects will be similar to the regular programme evaluation. The mini project shall be evaluated by the committee consisting of Head of the department, Supervisor and External examiner. Students aspiring for Honors degree must register from V semester onwards. However, Honors degree registrations are not allowed before V semester and after VI semester. Student may register for mini project from V semester onwards and complete the same before VIII semester after completing at least two advanced courses or equivalent.
- Procedure for Conduct and Evaluation of Honors degree Mini project: Out of a total of 100 marks for the Mini project, 40 marks shall be for Internal Evaluation and 60 marks for the end-semester examination (viva-voce). The viva-voce shall be conducted by a committee consisting of HOD, Project Supervisor and an External Examiner nominated by the Principal. The evaluation of project work shall be

conducted at the end of the VIII semester. The Internal Evaluation shall be made by the departmental committee (Head of the Department and one senior faculty member of the Department and Supervisor).

- Students having a CGPA of 8.0 (for SC/ST students CGPA of 7.5) or above up to II year-I semester and without any backlog subjects will be permitted to register for degree with Honors. An SGPA and CGPA of 7.5 (for SC/ST students CGPA of 7.0) has to be maintained in the subsequent semesters without any backlog subjects in order to keep the degree with Honors registration live or else it will be cancelled.
- Minimum strength required for offering a Honor Degree in a discipline is considered as 5% of the class size

Note: The institute will offer the Minor/ Honor Degree as per the AICTE guidelines.

18. Student Transfers

Student transfers shall be as per the guidelines issued by the Government of Andhra Pradesh from time to time.

19. General

- **19.1** The academic regulations should be read as a whole for purpose of any interpretation.
- 19.2 Malpractices rules- nature and punishments are appended.
- **19.3** Where the words "he", "him", "his", occur in the regulations, they also include "she", "her", "hers", respectively.
- **19.4** In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal is final.
- **19.5** The Institute, with the approval of the Academic Council, may change or amend the academic regulations / structure / credits / syllabi at any time and the changes or amendments shall be made applicable to all the students on rolls with effect from the dates notified by the Institute.

Academic Regulations (R19)

for

B. Tech (Lateral Entry)

(Effective for the students admitted into II year from the Academic Year 2020-21 onwards)

NOTE: All the regulations adopted for B.Tech (Regular-Full Time) programme are applicable to lateral entry students in addition to the following:

1. Award of B.Tech Degree

A student will be declared eligible for the award of the B.Tech. Degree if he/she fulfills the following academic regulations:

- i. Pursues a course of study for not less than three academic years and in not more than six academic years from the year of admission. However, for the students availing "gap year" facility, this period shall be extended by two years at the most, and in such a case, the maximum period for graduation will be extended by the period of gap availed by the student.
- ii. Registers for 122 credits and secures all 122 credits.
- iii.Students, who fail to fulfill all the academic requirements for the award of the degree within the stipulated maximum duration from the year of admission, shall forfeit their seats in B.Tech. Course and their admission stands cancelled.

2. Minimum Academic Requirements

Students need to acquire necessary credits to get promoted to the subsequent academic year, in addition to the attendance requirements mentioned above.

2.1 A student shall be promoted from III to IV year only if he/she acquires 40% of credits up to III year I semester from the following examinations, irrespective of whether the candidates takes the end-semester examinations or not as per the normal course of the study

II year B.Tech I Sem - one regular and two supplementary II year B.Tech II Sem - one regular and one supplementary III year B.Tech I Sem - one regular only **2.2** In case if a student is detained for want of credits for particular academic year as per Section No. 2.1 above, the student may make up the credits through supplementary examinations and only after securing the required credits he/she shall be permitted to join in the IV year I semester.

3. Course Pattern

- **3.1** The entire course of study is for three academic years. All years shall be on semester pattern.
- **3.2** A student eligible to appear for the end-semester examination in a subject, but absent or has failed in the end-semester examination may appear for that subject at the next supplementary examination when offered.
- **3.3** When a student is detained due to lack of credits/shortage of attendance he may be readmitted when the semester is offered after fulfillment of academic regulations. In such case, he/she shall be in the academic regulations into which he/she is readmitted.

RULES FOR

DISCIPLINARY ACTION FOR MALPRACTICES / IMPROPER CONDUCT IN EXAMINATIONS

C N-	Nature of Malpractices/Improper	Devision
S. No.	conduct	Punishment
1. (a)	Possesses or keeps accessible in	Expulsion from the examination hall and
	examination hall, any paper, note book,	cancellation of the performance in that
	programmable calculators, Cell phones,	course only.
	pager, palm computers, blue tooth or any	
	other form of material concerned with or	
	related to the course of the examination	
	(theory or practical) in which he/she is	
	appearing but has not made use of	
	(material shall include any marks on the	
	body of the candidate which can be used	
	as an aid in the course of the	
	examination)	
(b)	Gives assistance or guidance or receives	Expulsion from the examination hall and
	it from any other candidate orally or by	cancellation of the performance in that
	any other body language methods or	course only of all the candidates involved. In
	communicates through cell phones with	case of an outsider, he/she will be handed
	any candidate or persons in or outside	over to the police and a case is registered
	the examination hall in respect of any	against him.
	matter.	
2	Has copied in the examination hall from	Expulsion from the examination hall and
	any paper, book, programmable	cancellation of the performance in that
	calculators, palm computers or any other	course and all other courses the candidate
	form of material relevant to the course of	has already appeared including practical
	the examination (theory or practical) in	examinations and project work and shall not
	which the candidate is appearing.	be permitted to appear for the remaining
		examinations of the courses of that
		Semester/year. The Hall Ticket of the
		candidate is to be cancelled.

3	Impersonates any other condidate in	The candidate who has impersonated shall
5	Impersonates any other candidate in	
	connection with the examination	be expelled from examination hall. The
		Candidate is also debarred for four
		consecutive semesters from class work and
		all end-semester examinations. The
		continuation of the course by the candidate
		is subject to the academic regulations in
		connection with for feature of seat. The
		performance of the original candidate, who
		has been impersonated, shall be cancelled in
		all the courses of the examination (including
		practical's and project work) already
		appeared and shall not be allowed to appear
		for examinations of the remaining courses of
		that Semester/year. The candidate is also
		debarred for four consecutive Semesters
		from class work and all Semester end-
		semester examinations if his involvement is
		established. Otherwise the candidate is
		debarred for two consecutive semesters from
		class work and all end-semester
		examinations. The continuation of the
		course by the candidate is subject to the
		academic regulations in connection with
		forfeiture of seat. If the imposter is an
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		outsider, he/she will be handed over to the
4		Police and a case is registered against him.
4	Smuggles in the Answer book or	Expulsion from the examination hall and
	additional sheet or takes out or arranges	cancellation of performance in that course
	to send out the question paper during the	and all the other courses the candidate has
	examination or answer book or	already appeared including practical
	additional sheet, during or after the	examinations and project work and shall not
	examination.	be permitted for the remaining examinations
		of the courses of that Semester/year. The

		Candidate is also debarred for two
		consecutive Semesters from class work and
		all Semester end-semester examinations.
		The continuation of the course by the
		candidate is subject to the academic
		regulations in connection with forfeiture of
		Seat.
5	Uses objectionable, abusive or offensive	Cancellation of the performance in that
	language in the answer paper or in letters	course.
	to the examiners or writes to the	
	examiner requesting him to award pass	
	Marks.	
6	Refuses to obey the orders of the any	In case of students of the college, they shall
	officer on duty or misbehaves or creates	be expelled from examination halls and
	disturbance of any kind in and around	cancellation of their performance in that
	the examination hall or organizes a	course and all other courses the candidate(s)
	walkout or instigates others to walk out,	has (have) already appeared and shall not be
	or threatens the officer-in charge or any	permitted to appear for the remaining
	person on duty in or outside the	examinations of the courses of that
	examination hall of any injury to his	Semester. If candidate physically assaults
	person or to any of his relations whether	the invigilator or/officer in charge of the
	by words, either spoken or written or by	examination, then the candidate is also
	signs or by visible representation,	barred and forfeit their seats. In case of
	assaults the officer-in-charge, or any	outsiders, they will be handed over to the
	person on duty in or outside the	police and a police case is registered against
	examination hall or any of his relations,	them.
	or indulges in any other act of	
	misconduct or mischief which result in	
	damage to or destruction of property in	
	the examination hall or any part of the	
	College campus or engages in any other	
	act which in the opinion of the officer on	
	duty amounts to use of unfair means or	
	misconduct or has the tendency to	

	disrupt the orderly conduct of the Examination.	
7	Leaves the examination hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that course and all the other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester/year. The candidate is also debarred for two consecutive Semesters from class work and all Semester end-semester examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8	Possess any lethal weapon or firearm in the examination hall	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester/year. The candidate is also debarred and forfeits the seat.
9	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the Courses of that Semester/year. The candidate is also debarred and forfeits the seat. Person(s) who

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		do not belong to the College will be handed
		over to police and, a police case will be
		registered against them.
10	Comes in a drunken condition to the	Expulsion from the examination hall and
	examination hall.	cancellation of the performance in that
		course and all other courses the candidate
		has already appeared including practical
		examinations and project work and shall not
		be permitted for the remaining examinations
		of the courses of that Semester/year.
11	Copying detected on the basis of internal	Cancellation of the performance in that
	evidence, such as, during valuation or	course and all other courses the candidate
	during special scrutiny.	has appeared including practical
		examinations and project work of that
		Semester examinations depending on the
		Recommendation of the committee.
12	If any malpractice is detected which is	
	not covered in the above clauses 1 to 11	
	shall be reported to the Principal for	
	further action to award suitable	
	Punishment.	

Note:

- i. All malpractices cases are to be handled by the Chief Controller with a committee consist of Controller of Examinations, HOD concerned and subject expert.
- ii. Whenever the performance of a student is cancelled in any course/ courses due to Malpractice, he has to register for the End Examination in those course/courses consequently and has to fulfill all the norms required for award of Degree.
