PART - A

Regulations for Four-Year Bachelor of Technology (B.Tech) Degree programme for the batches admitted from the academic year 2017-18 & for B.Tech Lateral Entry batches admitted from the academic year 2018-2019

1 Minimum Qualifications for Admission:

A candidate seeking admission to the first semester of the eight semester B.Tech. Degree programme should have passed the Intermediate Examination of the Board of Intermediate Education of Andhra Pradesh with Mathematics and Physical Sciences (Physics and Chemistry) as optional subjects or any other equivalent examination thereto recognized by Jawaharlal Nehru Technological University Anantapur, Ananthapuramu / Govt. of Andhra Pradesh.

For admissions into the third semester of B.Tech Degree programme under lateral entry scheme a candidate should have passed diploma in the respective branch of study or should have passed three year degree with Mathematics as optional subject.

2 Four Year B .Tech Degree UG Programs:

The programs of study prescribed for B.Tech. Degree are

1. Civil Engineering (CE)

2. Computer Science and Engineering (CSE).

3. Electrical and Electronics Engineering (EEE).

4. Electronics and Communication Engineering (ECE).

5. Mechanical Engineering (ME).

6. Any other program offered by the college

The duration of B.Tech program is four academic years divided into eight semesters comprising two semesters in each academic year. A student is required to choose a branch of study at the time of admission.

Students under lateral entry admission will be admitted straightaway into Third semester of B.Tech program in the respective branch.

No change of branch shall be allowed after the admissions are closed.

3 Structure of the Programme

By course in this context we mean a subject

Every programme will have a curriculum consisting of Foundation Courses, Core Courses, Elective Courses, Theory Courses, Laboratory Courses, Design and Drawing Courses, Mini-Project Work, Project Work and Practice School / Internship, Mandatory Learning Courses which are classified as shown in Table 3.1 below. Each course is allotted certain number of credits based on its importance to the programme and the number of contact periods per week allotted to it in the time-table.

The credits adopted in the design of our curriculum are shown below.

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
Mini Project	2 Credits
Project work	6 Credits
Employability Enhancement Courses	1 Credit
Mandatory Learning Courses	Nil

The curriculum is designed for every programme so that the total credits will be 160 (118 for lateral-entry students). To become eligible for the award of degree, every student shall earn all the credits of 160/118 specified in the curriculum of the programme.

Table 3.1 Classification of Courses:

S.No	Broad Course Classification	Course Group / Category	Course Description
1	Foundation Courses	BS- Basic Sciences	Includes Mathematics, Physics and Chemistry
		ES-Engineering Sciences	Includes fundamental Engineering courses
		HS–Humanities and Social Sciences	Includes courses related to Humanities, Social Sciences and Management
2	Core Courses	PC–Professional Core	Includes core courses related to the parent department / branch of Engineering
		Laboratories/Mini- Project/Project Work	Work related to the Parent/Interdisciplinary departments
3	Elective Courses	PE–Professional Electives	Elective courses relevant to chosen specialization/programme
		OE – Open Electives	Electives from other technical and/ or emerging subjects
4	Mandatory Learning Courses		Professional Ethics and Human Values, Environmental Studies, Indian Constitution and Society, Essence of Indian Traditional Knowledge
5	Employability Enhancement Courses		Two Courses on Employability Skills

Every student has to study all the courses specified in Foundation and Core Courses, however the student will have the choice in the Elective courses only.

Every student will have the choice to opt for Six professional elective courses spanned across 5th to 8th semesters from the list of professional electives as prescribed in the curriculum. The students shall have the choice to opt for four open electives spanned across 5th to 8th semesters from the list of other technical and/or emerging subjects. Further, student is required to give the options through on-line registration for these elective courses in advance (at least one week) before the commencement of every semester.

Each semester curriculum shall normally have a blend of lecture courses not exceeding 7 and practical courses not exceeding 3. The total number of courses per semester shall not exceed 10 (including mandatory

learning courses, Employability Enhancement courses etc.)

Mini-project will be offered during V- VII semesters. Elective courses will be introduced in the curriculum from V semester onwards.

In the VIII semester there will be two professional elective courses and Project Work. Students selected for the internship as per the guidelines of the college will be exempted from attending the class work in the eighth semester as they will be doing the internship in the industry. They must do the Project Work as the other regular students do. The internship they have undergone under the supervision of the external guide from the industry will be treated as equivalent to the other two professional courses they missed and the internship will have the credits equal to the credits allotted to these two courses together.

The medium of instruction for all course work, Examination, Seminar Presentations, Project Reports and all academic activities shall be English.

The curriculum in the first year shall be common for all the B.Tech. Programmes. Although, all the B.Tech. programmes have a common curriculum in the first year, some of the courses offered in the first semester to one group of branches are offered in the second semester to the other group and vice versa.

3.1 *Extra-Academic (EAA) & Co-Academic (CAA) Activities:*

In addition to completion of the academic requirements, to become eligible for the award of degree, every student should successfully complete Extra Academic Activity and Co-Academic Activity by choosing among those activities which are designed to help the students develop the personality, character and professional outlook and which are listed out here.

3.1.1 *Extra-Academic Activity(EAA):*

During first and second semesters every student is required to register for sports/games activity and shall maintain at least 75% attendance, independent of overall attendance to earn satisfactory grade which is mandatory

During third and fourth semesters every student is required to register for one of the following activities which are mandatory.

    i) NSS/ NCC   ii) Yoga/ Meditation iii) Extension Activities

    iv) Literary/ Cultural Activities v) Vivekananda Community Service Activities

The activities shall be carried out beyond the class hours. The activities will be monitored by the respective faculty incharge and HOD. Evaluation shall be on the basis of participation, attendance, performance and behaviour. Grade shall be entered in the grade sheet as satisfactory and unsatisfactory and shall not be used while computing CGPA (explained later in clause 5.9)

If a student fails to get the satisfactory grade in any of these chosen activities, he/she has to repeat the same in subsequent years.

3.1.2 *Co-Academic Activity (CAA) :*

Every student is required to register for any one of the following co-academic activities during V - VI semesters of study, which is mandatory.

3.1.2.a *Industry Lectures / Workshops organized by the respective department:*

Each department shall arrange at least 15 hours of guest lectures by the experts from industry/research organizations / higher learning institutions. Besides these, the department faculty can also offer training in some specialized topics. Students can register for this activity and are expected to maintain at least 75% attendance. The evaluation methodology, will in general, be based on quizzes at the end of each lecture/group of lectures/end of the semester. Due weightage shall be given to the attendance also. However, the HOD or his nominee may devise suitable methodology for evaluation and the same shall be informed to the student.

3.1.2.b *Industrial Training*

A student can opt for industrial training in a reputed industry/organization for a minimum period of three weeks during 2nd or 3rd year vacation periods. The student shall approach the respective Head of the department with a request that he/she is interested to carry out an Industrial Training / Internship, with the details of the industry/organisation. The Head of the department issues a letter to the industry with a request to permit the students for Industrial Training / Internship. On completion of training the student shall submit the proof of participation/training completion certificate issued by the organization. In addition the student shall submit a report and evaluation shall be done through presentation and viva voce by a three member committee constituted by Head of the Department. In lieu of industrial training a student can opt for project work / training offered by reputed academic institutes like IISC/IITs/NITs, etc

3.1.2.c *Training and Certification Courses on Latest Technologies*

A student can register for training and certificate courses offered by the college or any other recognised agency. The student shall submit course completion certificate for evaluation.

3.1.2.d Term Paper

A student can do an in depth study in a specialized area (preferably on emerging technologies) by doing extensive literature survey. The student is expected to study relevant research papers, correlate work of various authors/researchers, study concepts, techniques, results etc., analyze and present it in the form of a report. It is mandatory to give a seminar presentation before a panel constituted for the purpose. The evaluation shall be done on the basis of the depth of the work done, report and presentation given by the student.

3.1.2e Development of Working Model

Students (not exceeding three) can opt to translate theoretical concept/innovative ideas and develop working model. Working models developed as a part of Mini Project/ Project work will not be considered under CAA category.

3.1.2 f Foreign Language Certification

Students can enroll for foreign language courses (online/distance mode) and upon successful completion the students shall submit foreign language proficiency certificate to the head of the department for assessment

Grade shall be entered in the consolidated grade sheet as satisfactory and unsatisfactory and shall not be used while computing CGPA.

If a student fails to get the satisfactory grade in the chosen activities, he/she has to repeat the same activity or another activity with the approval of HOD in the subsequent years.

The heads of the department shall submit the grades awarded to the students during their final semester of study to the Controller of Examinations.

4. **Eligibility for promotion:**

Promotion to the next semester depends on (i) the aggregate attendance put in by the student in the current semester and (ii) the no. of credits cleared by the student in the earlier semesters .For this purpose the aggregate attendance in any semester is calculated as (total number of classes attended by the student in all the courses of that semester put together divided by the total number of classes held in all the courses of that semester put together) multiplied by 100.

4.1   Attendance requirement

In any semester a student is considered to have completed the regular course of study only when he/she puts in an aggregate attendance of 75%.

Condonation of shortage of attendance in genuine cases on health grounds may be recommended by the Principal, if a student puts in an aggregate attendance of at least 65%. However the student has to make an application and pay the prescribed fee.

A student cannot avail the condonation for more than THREE times throughout his/her entire course of study. In case of Lateral Entry students, Condonation cannot be availed for more than TWO times throughout his/her entire course of study.

A student who has not satisfied these requirements of attendance in any semester will not be allowed to write the end examination and shall have to repeat that semester. The attendance under this clause does not include attendance at any examinations/test/extra academic/co-academic activities

Students who represent the college in intercollegiate tournaments organized by JNTUA and those who represent University or State or Nation shall be given attendance exemption as per the University / Government norms.

Having satisfied the minimum attendance requirements in any semester, a student may repeat that semester, after obtaining written permission from the principal and cancelling the previous record of attendance and sessional work of the semester. Student who wants to utilize this facility has to give the option within seven days of the commencement of the semester. However, this facility may be availed by any student maximum twice (Only once in case of the lateral entry students) during the entire course of study.

Eligibility for appearing for the end examinations: All students who have satisfied the attendance requirement in any semester with or without condonation are eligible to appear for the regular end examinations of that semester. They shall register for the end examinations of that semester by paying the prescribed examination fee. However, they have to clear all the dues to the college and hostel before they collect their hall tickets. It is mandatory for all the eligible students to register for the regular end examination. If a student does not register for any semester and desires to register for subsequent semesters he will be required to pay the prescribed fee along with stipulated fine of all the semesters he/she skipped.

4.2 Credit requirements for promotion

The promotion from I to II sem , II to III sem and from every odd semester to the next immediate even semester, shall be automatic for all the students except for those detained due to shortage of attendance and there will be no credit requirements and restrictions for a student to progress. Example (I to II, III to IV, V to VI and VII to VIII semester). However for promotion to V semester (Regular students only) and VII semester (Regular and Lateral entry students), in addition to attendance requirement mentioned above in clause 4.1, the following credit requirements have to be satisfied.

(The credit requirements specified here are to make the students not to carry too many backlogs.)

4.2.1 For Four Year B.Tech (Regular) students

(i) Promotion to V semester

A student shall be promoted from IV semester to V semester only if he/she secures 40% of credits (up to and including III semester) from the following Examinations, whether the candidate takes the examinations or not.

a) One Regular and Two subsequent Supplementary Examinations of semester – I

b) One Regular and One subsequent Supplementary Examinations of semester – II

c) One Regular Examination of Semester – III

(ii) Promotion to VII semester

A student shall be promoted from VI semester to VII semester only if he/she secures 40% of credits (up to and including V semester) from the following Examinations, whether the candidate takes the examination or not.

One Regular & Four subsequent Supplementary Exams of semester -I

One Regular & Three subsequent Supplementary Exams of semester -II

One Regular & Two subsequent Supplementary Exams of semester -III

One Regular & One subsequent Supplementary Exam of semester -IV

One Regular Exam of semester - V

4.2.2   *For Lateral Entry Students*:

Promotion to VII semester

A student shall be promoted from VI semester to VII semester only if he/she secures 40% of total credits of III semester, IV semester and V semester from the following Examinations, whether the candidate takes the examination or not.

One Regular & Two subsequent Supplementary Exams of semester - III

One Regular & One subsequent Supplementary Exam of semester - IV

One Regular Exam of semester - V

The above promotion criteria is also depicted in a tabular form in Table 4.2

Table 4.2 : Promotion Criteria

For Promotion to	Minimum Credits required	
	For Four Year B.Tech Students	For Lateral Entry Students
V Semester	Students should earn 40% of the credits up to and including III semester before they register for IV semester regular exams	---
VII Semester	Students should earn 40% of the credits upto and including V semester before they register for VI semester regular exams	Students should earn 40% of the total credits of III, IV and V semesters before they register for VI semester regular exams

If 40% credit value results into a non-integer number, then the integer part of the number shall be used for arriving at the decision.

When a student is detained due to lack of credits in any semester, he/she shall be eligible for promotion to the next semester after obtaining required number of credits .

4.3   *Maximum Period for Completion of Programme*

The normal duration of B.Tech programme shall be Four academic years (Three academic years in case of Lateral entry admission). The maximum period which a student can take to complete a B.Tech programme shall be double the normal duration of the programme, i.e., eight years (excluding period of Gap Year, explained in clause 4.4) for regular and six years (excluding period of Gap Year) for lateral entry students reckoned from the commencement of the semester to which the student was first admitted to the programme.

A student is required to complete the B.Tech Programme of study satisfying the attendance and academic/credit requirements in all the eight semesters of the course within a period of eight (six in case of lateral entry) academic years (excluding period of Gap Year) from the year of admission, failing which he/she shall be declared ineligible to pursue B.Tech degree course.

Completing the programme of study shall mean not only satisfying the attendance and academic/credit requirements but also passing of all the courses and earning the credits prescribed in the curriculum within the respective stipulated period.

4.4   *Gap year*

The concept of Student Entrepreneur in Residence is being introduced and outstanding students who wish to pursue entrepreneurship are allowed to take a break of one year at any time after IV semester to pursue entrepreneurship full time. This period may be extended to two years at the most and this period would not be counted for the time for the maximum time for graduation. A sub-committee appointed by the principal shall evaluate the proposal submitted by the student and the committee shall recommend whether or not to permit student(s) to avail the Gap Year. The students permitted to rejoin the programme after break of study shall be governed by the Curriculum and Regulations in force at the time of rejoining.

4.5   *Minor Degree in Engineering/ Undergraduate Degree with Honors*

A student will be eligible to get Undergraduate Degree with Honours or additional minor Engineering degree if he/she completes an additional 20 credits. The students can acquire these 20 additional credits through MOOC's/SWAYAM etc. The students who wish to enroll for Minor Degree shall have a minimum CGPA of 7.5 (upto and including IV sem) . The students who wish to enroll for Undergraduate Degree with Honors shall have a minimum CGPA of 8.0 (upto and including IV sem) and should have cleared all the subjects upto IV semester in first attempt i.e. he/she should not have any history of backlog subjects

5.   **Evaluation:**

The performance of the students in each semester shall be evaluated course-wise for 100 marks. The break-up of marks between the continuous internal assessment (CIA) and the end examination (EE) for various types of courses (as explained in clause 3.1) are as given below.

For Theory, Design and Drawing courses out of 100 marks 40 marks will be for the CIA and 60 marks will be for the EE.

In case of Practical courses 50 marks will be for CIA and 50 marks will be for the EE.

In case of Mini Project/Employability Enhancement courses all the 100 marks will be for CIA only and there will be no marks for EE.

For Project Work there shall be 50 marks for CIA and 50 marks are for the end viva – voce examination.

For internship 50 marks will be for the assessment by the external supervisor from the industry where the candidate is doing the internship and the remaining 50 will be allotted by the dept. concerned based on the report submitted by the student and viva voce.

5.1   **Continuous Internal Assessment:**

CIA for theory courses including Professional and Open Electives:

In case of theory courses there shall be two sessional examinations for 30 marks each with the first exam (for first 50% of the syllabus) conducted in the middle of the semester and the second exam (for remaining 50% syllabus) conducted towards the end of the semester and the sessional marks are awarded giving a weightage of 0.75 for the better score and 0.25 for the other score.

For remaining 10 marks evaluation will be done continuously throughout the semester by respective faculty in charge

This continuous evaluation can be made through Online Exam, Quiz, Home/Group Assignments, Seminars and any other such evaluation methods designed for specific courses depending on the course content and on the type of course. The faculty in charge will announce the mode of the assessment to the respective class at the beginning of the course. The faculty shall conduct at least two assessments with 10 marks for each assessment. The total marks obtained in the two assessments put together shall be reduced to 10. The first assessment marks should be submitted before the conduct of the first sessional examination, and the second assessment marks should be submitted before the conduct of the second sessional exam.

5.1.2   *CIA for the practical courses* :

In case of practical courses out of 50 marks, 20 marks are awarded based on the performance in the day to day laboratory work, 10 marks for record work, 15 marks for viva-voce and internal practical examination conducted at the end of the semester and remaining 5 marks for additional work beyond prescribed experiments/exercises, creating a model/mini project, solutions to undefined problems/new findings etc.

5.1.3   *CIA for the Design/Drawing/Estimation courses :*

For these courses the distribution shall be 30 marks for sessional exams, 10 marks for day to day work. There shall be two sessional exams and the marks shall be finalized with a weightage of 0.75 for the better score and 0.25 for the other.

5.1.4   CIA for Project Work:

50 marks are awarded based on the continuous evaluation by the guide / supervisor and Project review committee. For minor project the internal evaluation for 100 marks shall be based on the report, model if any and seminar presented before the evaluation committee.

5.1.5   *CIA for Employability Enhancement courses :*

These courses with CIA only shall be evaluated for 100 marks. The faculty -incharge shall award the marks through continuous assessment made through objective test, group discussion, group tasks, reading/listening comprehension tests or any other mode of evaluation depending upon the nature of the course. The faculty in-charge shall spell out the method of assessment and weightage for each assessment to the respective class in advance.

5.1.6   *CIA for Internship:*

The internal evaluation for 50 marks will be done by the dept based on the report submitted by the student and a viva-voce examination.

For any course the sessional marks computed as per the above procedure will be finally rounded off to next higher integer.

5.1.7   *CIA for Mini Project*

The mini project shall be submitted in a report form along with a project model/ prototype if any, and a seminar should be presented before the committee comprising HOD/nominee and two senior faculty members. The topic for mini project and project work shall preferably be different from one another.

The faculty imparting instruction is solely responsible for continuous internal assessment and he/she shall be responsible for maintaining all records to justify his/her evaluation scheme and score thereof. Every teacher shall maintain an 'ATTENDANCE RECORD' which consists of attendance marked in each Theory/Laboratory/Electives, the assessment marks and the record of class work (topics covered), separately for each course handled by the teacher. This should be submitted to the Head of the Department periodically (at least three times in a semester) for verifying the syllabus coverage and the records of assessment marks and attendance. The Head of the Department will affix his/her signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Department who shall keep this document in safe custody.

5.2 **End Examination (EE) :**

5.2.1 *EE for the theory, professional electives, open electives and design/drawing courses* :

There shall be a comprehensive end written examination of Three hours duration for each Theory, Design and /or Drawing courses for 60 marks. Question paper setting shall be done by the external examiners.

5.2.2 *EE for practical courses*:

For each practical course the end examination with duration as specified in the scheme shall be conducted for 50 marks by one internal and one external examiner nominated by the Principal. However if external examiner is not available HOD with approval of the Principal may nominate a faculty member from among the same department competent in the course and preferably who had not handled that practical for that class as an external examiner

5.2.3 *EE for the Project*:

The end viva-voce examination in the Project Work shall be conducted by one external and two internal examiners for 50 marks.

5.2.4 *EE For the Internship*:

The assessment for 50 marks given by the external supervisor shall be taken as the end exam marks.

The weightages for the CIA and EE are also presented in the form of a table in Table 5.1

Table 5.1 : Distribution of Weightages for CIA and EE in Tabular form

S.No	Nature of the course	Marks	Type of examination and Mode of assessment	Scheme of examination	
1.	Theory (including Professional and Open Elective Courses)	40	Internal Assessment	Two sessional exams for 30 marks each shall be conducted and shall be finalized with a weightage of 0.75 for the better score and 0.25 for the other score. For remaining 10 marks there shall be continuous evaluation throughout the semester by respective faculty in charge through Online Exam, Quiz, Assignments, Seminars etc based on the type of course.	
		60	End Examination	This end examination in theory courses will be for a maximum of 60 marks.	
2.	Practical	50	Internal Assessment	**a)** 20 marks are allotted for day to day laboratory work, 10 marks for Record work and 15 marks for Viva voce & internal practical exam, remaining 5 marks additional work beyond prescribed experiments /exercises, creating a model/ mini project, solutions to undefined problems/ new findings etc.	
		50	End Examination	This end examination in practical courses will be for a maximum of 50 marks. In this 30 Marks are allotted for procedure, experiment, result etc and 20 marks for Viva Voce	
3.	Practice School / Internship	100	Out of 100 marks, evaluation for 50 marks shall be done by external supervisor of the concerned company based on attendance / Day to Day performance. For remaining 50 marks, evaluation will be done by the concerned department of the college based on the report submitted by the student and viva-voce		
4.	Project Work	100	50	Internal Assessment	Continuous evaluation by guide / supervisor/ Evaluation review committee with the following guide lines for the breakup: i) Evaluation by the Supervisor : (Max Marks: 30) (a) Problem identification/Literature Review : 10 marks (b) Thesis preparation : 20 marks ii) Evaluation by the Project Review committee (Max Marks: 20) (a) Presentation : 10 marks (b) Defence of the topic/problem: 10 Marks
			50	End Examination	Thesis Presentation / Viva Voce Examination conducted by one external and two internal (one of them being HOD) examiners.
5.	Design / Drawing / Estimation	100	40	Internal Assessment	Sessional exam marks : 30 Day to day work : 10 Two sessional exams for 30 marks each shall be conducted and shall be finalized with a weightage of 0.75 for the better score and 0.25 for the other score.
			60	End Examination	This end examination will be for a maximum of 60 marks

S.No	Nature of the course	Marks	Type of examination and Mode of assessment	Scheme of examination
6.	Employability Enhancement Courses	100	Internal Assessment	Continuous internal assessment through assessment methods like group tasks, group discussion, etc.
7.	Mini Project	100	Internal Assessment	The mini project shall be submitted in a report form along with a project model/ prototype if any, and a seminar should be presented before the committee comprising HOD/nominee and two senior faculty members. The topic for mini project and project work shall preferably be different from one another.
8	Mandatory Learning Courses	--	--	Offered as an Audit Course

5.3 Question Paper Pattern

Internal Assessment:

The Sessional Examination Question paper is for 30 marks. The question paper shall contain One Compulsory Question (with three short answer sub-questions of 2 marks each) and three EITHER / OR type questions which carry 8 marks each.

However to meet the specific course requirement a different pattern of question paper can be recommended by the course teacher with the approval of HOD/Chairman BOS. But this must be informed to the students well in advance.

End Examination:

For theory courses, there will be six questions with following pattern .

All Questions have to be answered compulsorily.

Question 1 shall contain 5 short Answer sub-questions each of 2 marks. (Total 10 marks) each sub-question covering one unit.

The remaining five questions shall be Either/OR type questions carrying 10 marks each. Each of these questions is from one unit and may contain sub-questions. i.e there will be two questions from each unit and the student should answer any one question

Model Question paper for each theory course shall be prepared by the course teacher/expert within 15 days from the commencement of the semester and the same shall be forwarded to the Controller of Examinations through the Chairman, BOS concerned.

5.4 **Massive open online Courses (MOOCs')**

B.Tech students can avail the facility of earning up to a maximum of 5% credits of their degree requirements through MOOCs. MOOC courses eligible for this purpose are the courses offered by NPTEL/ SWAYAM/EDX/Course by any other reputed organisation approved by the department only.

➢ The student shall obtain prior approval of the Head of the Department before registering for MOOC's.

➢ MOOC courses can be taken in lieu of Elective courses such as Open Electives & Professional Electives (pertaining to their branch only), and Employability Enhancement Courses. No Core, Lab or Project Course can be dropped in lieu of MOOC.

➢ The student shall submit course Title, institute which offered MOOC, Examination system and Credits of the Course, duration of course

➢ After deciding on the MOOC and a course which is approved as its equivalent in the curriculum a student can enroll for it and clear it any time as per his/her convenience and obtain the assessment certificate.

➢ If the assessment certificate is submitted

(i) before the commencement of the semester in which the equivalent course is offered , the student will be exempted from attending the regular class work and internal assessment exams of the equivalent subject.

(ii) during the semester the student is permitted to withdraw from the remaining part of the course work and internal assessment tests.

(iii) after the semester is over but before the results of that semester are declared the student can request for considering his performance in the MOOC in lieu of its equivalent.

➢ The student shall submit to the HOD the original certificate issued by MOOC authorities along with a photocopy of the same. The original will be returned after verification and verification shall be certified by the Head of the Department on the photocopy which shall be kept in records.

➢ An equivalent Grade corresponding to grade/marks awarded by MOOC agency shall be determined by a committee consisting of Principal, Controller of Examinations, Dean Student affairs and HoD concerned. This equivalent Grade shall be shown in the grade sheet and accounted in the SGPA and CGPA calculations.

5.5 Grading

After each course is evaluated for 100 marks, the marks obtained by the student in each course will be converted to a corresponding letter grade as given below, depending on the range in which the marks fall.

Table 5.3 – Conversion into Grades and Grade Points assigned

Range in which the marks in the course fall	Grade	Grade points assigned	Performance
≥ 95	S	10	Out Standing
90 to 94	A1	9.5	Excellent
85 to 89	A2	9	
80 to 84	A3	8.5	Very Good
75 to 79	B1	8	
70 to 74	B2	7.5	Good
65 to 69	B3	7	
60 to 64	C1	6.5	Average
55 to 59	C2	6	
50 to 54	C3	5.5	Satisfactory
45 to 49	D	5	
40 to 44	E	4.5	
< 40	F or G*	0	F for fail
ABSENT	AAA	0	
* Explained in clause 5.6			

5.6   Requirement for clearing any course:

In the theory and practical courses the students have to obtain a minimum of 35% marks in the end examinations and also minimum 40% of marks in the sum of the continuous internal assesment and end examination taken together, otherwise they will be awarded grade-F in that course. F is considered as a fail grade indicating that the student has to reappear for the end supplementary examination in that course and obtain a non fail grade for clearing that course.

In other words to pass in a course, a student shall score 21 marks or more out of 60 marks in the end examination and also shall score 40 marks or more out of 100 in the end examination and the continuous internal assessment put together.

In case of Employability Enhancement courses as there is no end exam and as all the marks are for internal assessment only, and since there is no stipulated minimum for internal assessment, only for these courses an additional grade namely G is used with grade points of zero whenever the marks scored by the student is less than 40%.

To become eligible for the award of degree a student must obtain a minimum CGPA of 4.0 (explained in clause 5.9)

5.7   Supplementary Examinations

Apart from the regular end examinations, the college will also schedule and conduct supplementary examinations for all courses for the benefit of students with backlogs. Such of the students writing supplementary examinations as supplementary candidates, may have to write more than one examination per day.

Instant examination for eighth semester courses will be conducted only for the benefit of those outgoing students who failed in or who are absent for only one course of Final semester and who do not have any other backlogs. The instant exam will be conducted normally within one month of the announcement of the final semester revaluation results.

5.8   Improvement

A student is permitted to improve his/her performance in any end examination of theory courses that belong to immediately preceding semester only. For example, a student appearing for regular exams of III semester can improve in the courses of II semester only. Similarly a student appearing for regular exams of VI semester can improve in the courses of V semester only. Students can improve their performance in theory courses only. However, this facility shall not be availed by a student who has taken the Original Provisional / Degree Certificate.

5.9   **Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):**

The Semester Grade Point Average (SGPA) for each semester and Cumulative Grade Point Average (CGPA) up to any semester are calculated as follows:

A Semester Grade Point Average will be computed as follows

$$SGPA = \frac{\sum_{i=1}^{n} c_i \; x \; GP_i}{\sum_{i=1}^{n} c_i}$$

here 'n' is the number of courses in that semester, C_i = Credits for the course i , GP_i = the Grade Point obtained for the course i. and the summation is over all the courses in that semester.

A Cumulative Grade Point Average (CGPA) will be computed for every student at the end of each semester. The CGPA would give the cumulative performance of a student from the first semester up to the end of the semester to which it refers and is calculated as follows.

$$CGPA = \frac{\sum_{j=1}^{m} SGPA_j \; x \; TC_j}{\sum_{j=1}^{m} TC_j}$$

Where 'm' is the number of semesters under consideration. TC_j the total number of credits for a particular semester and $SGPA_j$ is the Semester Grade Point Average of that semester. Both SGPA and CGPA will be rounded off to the second digit after decimal and recorded as such.

While computing the SGPA/CGPA the courses in which the student is awarded Zero grade points will also be included.

For any academic/employment purpose the following formulae shall be used for conversion of CGPA to % of marks.   % of marks = (CGPA – 0.5) x 10

5.10   **Grade Sheet**

A grade sheet (Memorandum) will be issued to each student indicating his performance in all courses of that semester in the form of grades and also indicating the SGPA and CGPA up to that semester.

Transcripts :

After successful completion of the total course of study, a Transcript containing performance of all academic years will be issued as a final record. Duplicate transcripts will also be issued if required after the payment of requisite fee. Partial transcript will also be issued up to any semester to any student on request and by paying the stipulated fee in force.

6. **Award of Degree**

After having admitted into the program, B.Tech degree shall be conferred on a student who has satisfied the following conditions.

(i) The student joining with Intermediate qualification must have, after admission into the Regular B.Tech programme of the college, pursued a regular course of study for not less than four academic years and not more than eight academic years.

(ii) The student joining under lateral entry scheme with diploma qualification must have, after admission into III Semester B.Tech, pursued a regular course of study for not less than three academic years and not more than six academic years.

(iii) The student must have satisfied the minimum academic requirements in appropriate branch of engineering in each semester of the program, herein after prescribed

(iv) Students must register for all the courses and earn the credits specified

(v) Students who fail to fulfill all the academic requirements for the award of degree within the specified period from the year of their admission shall forefeit their seat in B.Tech course and their admission stands cancelled.

(vi) The student shall successfully complete non credit courses like EAA/CAA.

(vii) The student has no dues to the institution, library, hostels etc

(viii) The student has no disciplinary action pending against him/her

The Degree will be conferred and awarded by Jawaharlal Nehru Technological University Anantapur, Ananthapuramu on recommendations by the Academic council of GPREC(Autonomous) basing on the eligibility as in clause 7.

7. **Minimum Academic Requirements**

7.1 A student is deemed to have satisfied the minimum academic requirement if he/she scores not less than 35% marks in the end examinations and also minimum 40% of marks in the sum total of the internal evaluation and end examination together in each of the theory and practical courses including project work etc., and obtains a minimum CGPA of 4.0 which is calculated considering all the semesters. However, lateral entry students must obtain a CGPA of 4.0 which is calculated considering the performance from third semester to eighth semester

7.2 A student shall be declared to have satisfied the minimum academic requirements and has become eligible for the award of degree if he/she fulfills each of the following conditions.

i) Satisfies minimum requirements as stated in clause 7.1.

ii) Satisfies the minimum requirement of attendance as stipulated in clause 4 and

iii) Satisfies all other regulations, academic or otherwise stipulated by the college from time to time.

8. **Award of Class**

After a student has satisfied the minimum requirements prescribed for the completion of the Course as stipulated in clause 7 and has become eligible for the award of degree he/she shall be placed in one of the following classifications based on CGPA.

Division / Class	CGPA
First Class with Distinction	≥7.5
First Class	≥6.5 and< 7.5
Second Class	≥5.5 and<6.5
Pass Class	≥4.0 and< 5.5

9. **With holding of Results**

The result of a candidate shall be withheld if:

He/she has not cleared any dues to the Institution/ Hostel /University

A case of disciplinary action against him/her is pending disposal.

10. **Exam Hall Culture**

Students are not permitted to use mobile phones in the examination halls.

Any attempt by any student to influence the examiners, faculty and staff or Controller of Examinations for undue favours in the exams, and bribing them either for marks or attendance will be treated as malpractice case and the student can be debarred from the college.

When a student absents himself/herself, he/she is treated as to have appeared and obtained zero marks in that course(s) and Grading is done accordingly.

When a student's answer book is confiscated for any kind of attempted or suspected malpractice, the decision of the examination committee is final.

11. **Minimum Instruction Weeks**

Each semester shall consist of 15 instruction weeks excluding the days allotted for examinations

12. **Transitory Regulations :**

Candidates who have been detained for want of attendance/lack of credits or who wish to repeat the same semester and who have availed gap year/s are eligible for readmission into the respective semester and shall be governed by the curriculum and academic regulations in force at the time of re-joining.

13. **Amendment of Regulations**

The college may, from time to time, revise, amend or change the regulations, scheme of examinations and syllabi.

14. **Ragging**

Ragging of any kind is strictly prohibited. A Student who indulges in ragging shall be punished as per the provisions of the ragging act.

15. **Rules of Discipline**

   ➢ Use of mobile phones with camera, in the campus is strictly prohibited.

   ➢ Students shall behave and conduct themselves in a dignified and courteous manner in the campus/Hostels.

   ➢ Students shall not bring outsiders to the institution or hostels.

   ➢ Students shall not steal, deface, damage or cause any loss to the institution property.

   ➢ Students shall not collect money either by request or coercion from others within the campus or hostels.

   ➢ Students shall not resort to plagiarism of any nature/extent. Use of material, ideas, figures, code or data without appropriate acknowledgement or permission of the original source shall be treated as cases of plagiarism. Submission of material, verbatim or paraphrased, that is authored by another person or published earlier by oneself shall also be considered as cases of plagiarism.

   ➢ Use of vehicles by the students inside the campus is prohibited.

   ➢ Any conduct which leads to lowering of the esteem of the organization is prohibited.

   ➢ Any student exhibiting prohibited behaviour shall be suspended from the institute. The period of suspension and punishment shall be clearly communicated to the student. The student shall lose the attendance for the suspended period

   ➢ Dress Code

   Boys : All the boy students should wear formal dresses. Wearing T-shirts and other informal dresses in the campus is strictly prohibited.

   Girls : All the girls students shall wear saree/churidhar with dupatta

16. **General**

   The academic regulations should be read as a whole for purpose of any interpretation.

   The college reserves the right of altering the regulations as and when necessary.

   The regulations altered may be applicable to all the Candidates on rolls.

   Wherever the word he, him or his occur, it will also include she, her, hers.

   Whenever ambiguities arise in interpreting the regulations, the joint board of studies shall have the powers to issue clarifications and /or to make new rule for removing such ambiguities which shall be final.

17. **Punishments for Malpractice cases – Guidelines**

The examinations committee may take the following guidelines into consideration while dealing with the suspected cases of malpractice reported by the invigilators/squad members etc; during end examinations. The punishment may be more severe or less severe depending on the merits of the individual cases.

S. No	Nature of Malpractice/Improper conduct	Punishment
1.	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the course of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the student which can be used as an aid in the course of the examination)	*For Possession of mobile phone*: Expulsion from the examination hall and cancellation of the performance in that course only. *For possession of any material relevant to the exam*: Expulsion from the examination hall and cancellation of the performance in 50% of the subjects.(In case of fraction, the integer part of the number). The subjects for cancellation will be selected in cyclic order starting with the subject in which the candidate is found to resort to malpractice
2.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that course.
3.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that course and all other courses the candidate has appeared including practical examinations and project work of that semester/year examinations.
4.	Gives assistance or guidance or receives it from any other student orally or by any other body language methods or communicates through cell phones with any other student or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that course only of all the students involved. In case of an outsider, he will be handed over to the police and a case shall be registered against him.
5.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the course of the examination (theory or practical) in which the student is appearing.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses including practical examinations and project work of that semester/year.
6.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses including practical examinations and project work of that semester/year.

S. No	Nature of Malpractice/Improper conduct	Punishment
7.	Smuggles in the Answer book or takes out or arranges to send out the question paper during the examination or answer book during or after the examination	Expulsion from the examination hall and cancellation of performance in that course and all the other courses including practical examinations and project work of that semester/year. The student is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the student is subject to the academic regulations in connection with forfeiture of seat.
8.	Refuses to obey the orders of the Chief Superintendent/Assistant – Superintendent / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the officer-in-charge, or any person on duty in or outside the examination hall or any of his relations, 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.	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that course and all other courses of that semester/year. The students also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case shall be registered against them.
9.	Leaves the exam hall taking away answer script or intentionally tears up 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 including practical examinations and project work of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
10.	Possesses 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 including practical examinations and project work of that semester/year. The student is also debarred and forfeits the seat.

S. No	Nature of Malpractice/Improper conduct	Punishment
11.	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 S.No. 7 to S.No. 9.	For Student of the college : Expulsion from the examination hall and cancellation of the performance in that course and all other courses including practical examinations and project work of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case shall be registered against them.
12.	Impersonates any other student in connection with the examination	The student who has impersonated shall be expelled from examination hall. The student is debarred from writing the remaining exams, and rusticated from the college for one academic year during which period the student will not be permitted to write any exam. If the imposter is an outsider, he will be handed over to the police and a case shall be registered against him. The performance of the original student who has been impersonated, shall be cancelled in all the courses of the examination including practicals and project work of that semsester /year. The student is rusticated from the college for two consecutive years during which period the student will not be permitted to write any exam. The continuation of the course by the student is subject to the academic regulations in connection with forfeiture of seat.
13.	If any malpractice is detected which is not covered in the above S.No. 1 to S.No. 12 items, it shall be reported to the college academic council for further action and award suitable punishment.	
14.	Malpractice cases identified during sessional examinations will be reported to the examination committee nominated by Academic council to award suitable punishment.	

These regulations supercede the regulations approved in BOS meeting held on 25th June 2017 with retrospective effect from the academic year 2017-2018. Necessary amendments are incorporated to see that regular B.Tech students admitted in 2017 will also fall in line with these regulations so that they will satisfy the AICTE model Curriculum