Academic Rules and Regulations

2016

Undergraduate Programmes



GMR Institute of Technology

Rajam 532 127, Andhra Pradesh (An Autonomous Institute, Affiliated to JNTU, Kakinada, AP) Accredited by NAAC & NBA

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The Vision of GMRIT

- ❖ To be among the most preferred institutions for engineering and technological education in the country
- ❖ An institution that will bring out the best from its students, faculty and staff to learn, to achieve, to compete and to grow among the very best
- ❖ An institution where ethics, excellence and excitement will be the work religion, while research, innovation and impact, the work culture

The Mission of GMRIT

- ❖ To turnout disciplined and competent engineers with sound work and life ethics
- ❖ To implement outcome based education in an IT-enabled environment
- ❖ To encourage all-round rigor and instill a spirit of enquiry and critical thinking among students, faculty and staff
- ❖ To develop teaching, research and consulting environment in collaboration with industry and other institutions

Academic Regulations for B. Tech. Programme

(For all the batches of candidates admitted in the Academic Year 2016–2017 and subsequently)

1. Eligibility for Admission

The total seats available as per the approved intake are grouped into two categories viz. category A and Category B with a ratio of 70:30 as per the state government guidelines vide G.O No.52

- a. The admissions for category A and B seats shall be as per the guidelines of Andhra Pradesh State Council for Higher Education (APSCHE) in consonance with government reservation policy.
 - ❖ Under Category A: 70% of the seats are filled through EAMCET counseling.
 - ❖ Under Category B: 30% seats are filled based on 10+2 merits in compliance with guidelines of APSCHE

b. Admission eligibility-Under Lateral Entry Scheme

Students with diploma qualification have an option of direct admission into 2nd year B. Tech. (Lateral entry scheme). Under this scheme 20% seats of sanctioned intake will be available in each course as supernumerary seats. Admissions to this three year B Tech later entry Programme will be through ECET. The maximum period to complete B. Tech. under lateral entry scheme is six consecutive academic years from the date of joining.

2. Duration of the Programme

The course duration for the award of the Degree in **Bachelor of Technology** will be four academic years, with two semesters in each year. However if a student is unable to complete the course within 4 years, he/ she can do so by giving more attempts but within 8 consecutive academic years from the date of admission.

Academic Calendar

For all the eight semesters a common academic calendar shall be followed in each semester by having sixteen weeks of instruction, one week for the conduct of practical exams and with three weeks for theory examinations and evaluation. Dates for registration, sessional and end semester examinations shall be notified in the academic calendar of every semester. The schedule for the conduct of all the curricular and co-curricular activities shall be notified in the planner.

3. Branches of Study

B. Tech. Programmes

- I. Chemical Engineering (CH)
- II. Civil Engineering (CE)
- III. Computer Science and Engineering (CS)
- IV. Electrical and Electronics Engineering (EE)

- V. Electronics and Communication Engineering (EC)
- VI. Information Technology (IT)
- VII. Mechanical Engineering (ME)
- VIII. Power Engineering (PE)

4. Programme Structure

The curriculum will consist of courses of study (Theory, Practical, Contemporary Courses, Mini Project, Term Papers, Project, Audit Courses, Self-study Courses, MOOCs, Summer Internship and Full Semester Internship and Courses related Employability Skills) and syllabi as prescribed by the respective Boards of Studies from time to time. The curriculum is bifurcated into FSI and Non-FSI modes from 7th semester onwards.

Every student will be required to opt for six elective courses spanned across the semester from 4^{th} to 8^{th} semester from the list of electives as prescribed in the curriculum. Under Choice Based Credit System (CBCS), the students may take one elective from the list of open electives offered by other branches of engineering technology in consultation with their respective department.

- **a. Integrated Courses:** Integrated courses are exclusively designed to provide a unique learning experience to the students with the concept of layered learning where in the students have the chances to practice while learning. These courses designed by blending both theory and laboratory components in their core curriculum and will be evaluated for 130 marks.
- b. **Contemporary Courses:** These courses are designed with the help of experts from industries and driven by experts from industries along with the internal faculty members on the recent developments in core areas of engineering and technology. These courses shall be registered as an elective course during their course of study
- c. **Mini Project**: The curriculum offers Mini Projects in two different forms viz: (i) Mini Project as a mandatory component in all lab courses (ii) 2 credit Mini Project during 5th or 6th semester. With respect to second one (ii) students will take mini project batch wise and the batches will be divided as similar to lab courses. The report will be evaluated by a committee as nominated by CoE constituted with internal & external panels
- d. **Term Paper**: The Term Paper is a self-study report and shall be carried out either during 5th or 6th semester in choice with Mini Project. Every student will take up this term paper individually and submit a report. The scope of the term paper could be an exhaustive literature review choosing any engineering concept with reference to standard research papers or an extension of the concept of earlier course work in consultation with the term paper supervisor. The report will be evaluated by a committee as nominated by HoD with the approval of CoE
- e. **Project work**: The final project work shall be carried out during the 8th semester in the non- FSI Model. Projects will be taken up batch wise. Internal evaluation will be

- done by the Project Review Committee (PRC), comprising of HOD and two senior faculty members along with the project supervisor. Semester end evaluation will be done by Project Evaluation Committee (PEC) comprising of three members including HOD, project guide and an external examiner nominated by the CoE
- f. Audit Courses: Audit courses are among the compulsory courses and do not carry any credits. All the students shall register for one Audit courses in the beginning of 3rdsemester. List of the courses will be notified at the beginning of the third semester for all students and the student has to choose one audit course under self-study mode at the beginning of third semester. By the end of sixth semester, all the students (regular and lateral entry students) shall complete the audit course. The students will have total four chances to clear the audit course beginning from third semester. Further, the student has an option to change the audit course in case if s/he is unable to clear the audit course in the first two chances. However, the audit course should be completed by 6th semester and its notification will be given in the 6th semester marks memo. Its result shall be declared with "Satisfactory" or "Not Satisfactory" performance. In case, if any student could not clear the Audit course in four attempts , the case may be presented before the Academic council for an appropriate action before the completion of 8th semester
- g. **Self-Study Courses**: Self-study courses are the courses which are more similar to theory courses where in the students learn the courses on independent mode. The evaluation and assessment pattern for such courses shall be carried out as similar to regular theory course. These courses shall be opted after getting proper approval from the respective head of the department as well from the other head of the department which is offering the course. The credits earned through these self-study courses over and above the mandatory courses, and it will not be accounted in CGPA calculation.
- h. **MOOCs:** Meeting with the global requirements, to inculcate the habit of self-learning and in compliance with UGC guidelines, MOOC (Massive Open Online Course) have been introduced as electives
 - The proposed MOOCs would be additional choices in all the elective groups subject to the availability during the respective semesters and respective departments will declare the list of the courses at the beginning of the semester, which are having a minimum of 45 hours in a given semester
 - ❖ Course content for the selected MOOCs shall be drawn from respective MOOCs links or shall be supplied by the department. Course will be mentored by faculty members and Assessment & evaluation of the courses shall be done by the department
 - Three credits will be awarded upon successful completion of each MOOCs

- i. **Summer Internship:** As a part of curriculum in all branches of Engineering, it is mandatory for all students to undergo summer internship Programme at industries (core or allied) / R & D organization to get practical insight of their subject domain during summer break after the 4th semester. This summer internship Programme shall be availed to a maximum duration of 4 weeks and the assessment shall be carried out with both internal and external experts leading to "Satisfactory" and "Non-Satisfactory Performance" and it will not be accounted for the calculation of CGPA
- **j. Employability Skills:** It is mandatory for all students to take a course on Employability Skills from 3rd Semester to 6th Semester. The Employability Skills are covered under two broad streams viz. Aptitude skills and Soft Skills. The credits earned through these courses will be indicated in the grade sheet and will not be taken into account for CGPA calculation.
- **k. Industry Driven One Credit Courses (IDC):** Meeting with the industry requirements, to reduce the gap between industry and academia this one credit (15 hrs.) course has been introduced over and above regular courses from 3rd Semester to 6th Semester for the interested students. The credits earned through these courses will be indicated in the grade sheet and will not be taken into account for CGPA calculation.
- l. **Full Semester Internship:** Students can opt for full semester Internship Programme at industries based on their self-interest either during 7th or 8th semester to get practical insight relevant to their core branch of engineering or in allied branch of study under the guidance of internal and external expert members in the institute and at Industries respectively. All Students who wish to choose FSI pattern shall exercise this option well before the commencement of 7th semester. Students who wish to take FSI during 8th semester will have to take one additional course in 7th semester when compared with Non FSI stream. In case of some extraordinary cases, students may be permitted to choose the FSI pattern even before the commencement of 8th semester. In all such cases student shall take one additional course offered during 8th semester under self-study mode and acquire the required credits.
 - i. Minimum CGPA cut-off up to 5th semester as prescribed by CDC
 - ii. Competency mapping
 - iii. Students who opt for FSI either in 7th or 8th will be provided with Internship subject the availability/selection by the industries

Further the credits earned through FSI Programme will be indicated in the grade sheet and will be accounted for the calculation of CGPA.

FSI final evaluation will be done by the FSI Review Committee (FSIRC), comprising of HOD, one senior faculty member and External (Industry) expert nominated by HOD.

4.1. Credit Distribution for Courses Offered

No	Course	Credits
1	Theory Course	3
2	Integrated Course	4
3	Laboratory/Drawing Course	2
4	MOOCs	3
5	Elective courses	3
6	Audit Course	0
7	Term Paper	2
8	Mini Project	2
9	Summer Internship	0
10	Project work	10
11	Full Semester internship	16
12	Co-curricular and Extra-Curricular	2
12	Activities(CCEC)	
13	Employability Skills (ES)	2
14	Industry Driven One Credit Courses (IDC)	1

4.2. Structure of curriculum

Following are the TWO models of course patterns out of which any student shall choose one model based on the notified criteria for selection.

- a. Full Semester Internship (FSI) Model
- b. Non Full Semester Internship Model

In the Full semester internship Model, the students selected/opted for internship will be distributed in both the 7^{th} and 8^{th} semester based on the internships available. In the Non Full Semester Internship Model, all the selected students shall carry out the Project work as per the norms.

A. Course Pattern for Four year Regular Programme (FSI)

Sem.	No. of Theory Courses	No. of Lab Courses	Total Credits
I	F		21
II	5	3	21
III		3 + Employability Skills+ CCEC	25
IV	6(5 Theory + 1 Integrated)	3+ CCEC Activities+ Employability Skills	25 + 1 + 1
Summ	Summer Internship (Audit course)		0
V	6 (4 Compulsory Theory + 1 Integrated + 1 Elective)	1+ Term paper/Mini Project + Employability Skills + CCEC	23

VI	6 + Audit course 1 + Term paper/Mini project + CCEC Activities + Employability Skills		23 + 1+1
VII	Full semester internship	^	16
VIII	4 (2 Compulsory + 2 Elective)	2	16
Total	34+4+1 Audit courses	16+Term paper +Mini project+ Internship +CCEC + Employability Skills+ Audit Course	174

B. Course Pattern for Four Year Regular Programme (Non - FSI)

Sem.	No. of Theory Courses	No. of Lab Courses	Total Credits
I	2		21
II	5		21
III	((TTheory 1 1 Integrated)	3+ Employability Skills + CCEC	25
IV	6 (5 Theory + 1 Integrated)	3+ Employability Skills +CCEC	25 + 1+1
Summ	er Internship (Audit course)		0
V	6 (4 Compulsory Theory + 1 Integrated + 1 Elective)	+ 1 1+ Term paper/Mini Project + Employability Skills+ CCEC	
VI	6+ Audit course (3 Compulsory Theory + 1 Integrated + 2 Elective)	1 + Term paper/Mini project+ CCEC Activities + Employability Skills	23 + 1+1
VII	3 (1 Compulsory + 2 Elective)	2	13
VIII	3 (2 Compulsory + 1 Elective)	Project work	19
Total	36+4+1 Audit courses	16+Term paper + Mini project + Project work + CCEC + Employability Skills	174

C. Course Pattern for Three Year Lateral Entry Programme (FSI)

Sem.	No. of Theory Courses	No. of Lab Courses	Total Credits
III		3 + Employability Skills+ CCEC	
IV	6 (5 Theory + 1 Integrated)	3+ CCEC Activities+ Employability Skills	25 + 1+1
Summer Internship (Audit course)			00
V	V 6 (4 Compulsory Theory + 1 Integrated + 1 Elective) 1+ Term paper/Mini Project + Employability Skills+ CCEC		23
VI	6+ Audit course (3 Compulsory Theory + 1 Integrated + 2 Elective)	1 + Term paper/Mini project CCEC Activities + Employability Skills	23 + 1+1

VII	Full semester internship		16
VIII	4 (2 Compulsory + 2 Elective) 2		16
Total	24+4+1 Audit courses	10 + Term paper +Mini project+ Internship report +CCEC + Employability Skills	132

D. Course Pattern for Three year Lateral Entry Programme (Non FSI)

Sem.	No. of Theory Courses	No. of Lab Courses	Total Credits	
III		3 + Employability Skills+ CCEC		
IV	6 (5 Theory + 1 Integrated)	3+ CCEC Activities+ Employability Skills	24 + 1+1	
Summe	er Internship (Audit course)		00	
V	6 (4 Compulsory Theory + 1 Integrated + 1 Elective) 1+ Term paper/Mini Project + Employability Skills+ CCEC		23	
VI	6 + Audit course (3 Compulsory Theory + 1 Integrated + 2 Elective)	1 + Term paper/Mini project + CCEC Activities + Employability Skills	24 + 1+1	
VII	3 (1 Compulsory + 2 Elective)	(1 Compulsory + 2 Elective) 2		
VIII	3 (2 Compulsory + 1 Elective)	Project work 19		
Total	tal 26+4+1 courses 10 + Term paper +Mir Internship report +CC Employability Skills		132	

4.3 Credit Break-up for Various Category of Courses

a. For Four year regular Programme (FSI)

Total Theory Courses : 34 @ 3 credits each = 102 (29 Core Courses + 5 Elective Courses) **Total Integrated Courses** : 4 @ 4 credits each = 16 **Total Laboratory Courses** : 16 @ 2 credits each = 32 Term Paper with self-study report : 1 @ 2 credits = 2 Mini Project with self-study report: 1@ 2 credits = 2 = 2 **CCEC Activities** : 2 @ 1 credits Employability skills : 2@ 1 credits = 2 FSI internship : 1 @ 16 credits = 16

b. For Four year regular Programme (Non FSI)

Total Theory Courses : 36 @ 3 credits each = 108

(30 Core Courses + 6 Elective Courses)

Total Integrated Courses : 4 @ 4 credits each = 16 **Total Laboratory Courses** : 16 @ 2 credits each = 32 2 Term Paper with self-study report : 1 @ 2 credits Mini Project with self-study report: 1@ 2 credits 2 = **CCEC Activities** : 2 @ 1 credits = 2 : 2@ 1 credits = 2 **Employability skills** = 10 Project work : 1 @ 10 credits

c. For three year lateral entry Programme (FSI)

Total Theory Courses : 24 @ 3 credits each = 72(19 Core Courses + 5 Elective Courses) **Total Integrated Courses** : 4 @ 4 credits each = 16 : 10 @ 2 credits each = 20 **Total Laboratory Courses** Term Paper with self-study report : 1 @ 2 credits = 2 Mini Project with self-study report : 1@ 2 credits = 2 **CCEC Activities** : 2 @ 1 credits = 2 : 2@ 1 credits = 2 Employability skills Internship report : 1 @ 16 credits = 16

d. For three year lateral entry Programme (Non FSI)

Total Theory Courses : 26 @ 3 credits each = 78(20 Core Courses + 6 Elective Courses) **Total Integrated Courses** : 4 @ 4 credits each = 16 **Total Laboratory Courses** : 10 @ 2 credits each = 20 2 Term Paper with self-study report : 1 @ 2 credits 2 Mini Project with self-study report : 1@ 2 credits **CCEC Activities** : 2 @ 1 credits = 2 Employability skills : 2@ 1 credits = 2 Project work : 1 @ 10 credits = 10

4.4 Division of Marks for Continuous and Semester End Assessment

Course	Marks Continuous	Marks for Semester end
	Assessment	Assessment
Theory	40	60
Integrated Course	40	(60T+30L)
Drawing courses	25	50
Laboratory	25	50
Term Paper	50	
Audit Courses	50	

Mini Project	25	50
Industry Driven Courses (IDC)	25	
Full semester Internship	200	200
Project work	100	100

5. Evaluation Methodology

- a. The assessment will be based on the performance in the semester-end examinations and / or continuous assessment, carrying marks as specified in Clause 10
- b. At the end of each semester, final examinations will normally be conducted during October/November and during April / May of each year. Supplementary examinations may also be conducted at such times as may be decided by the Institute
- c. Continuous Assessment Marks will be awarded on the basis of Continuous Evaluation made during the semester as per the scheme given in Clause 10
- d. The letter grade and the grade points are awarded based on the hybrid grading system having earned grades and awarded grades. Grading is done based on the percentage of marks secured by a candidate in individual course as detailed below:

Range of Percentage	Letter	Qualitative	Grade	
of Marks	Grade	Meaning	Point	
90-100	A+	Outstanding	10	Earned grade
85-89	Α	Excellent	9	Earneu graue
Due to relative	B+	Very Good	8	
grading system the	В	Good	7	
ranges of marks may	C+	Average	6	Awarded grade
vary for each course	С	Satisfactory	5	
based on the normal	D	Pass	4	
distribution of marks				
< 40 for theory and	F	Fail	0	Earned grade
< 50 for Lab				Earlieu graue

e. After completion of the Programme, the Cumulative Grade Point Average (CGPA) from the I Semester to VIII Semester (from III to VIII semester for lateral entry) is calculated using the formula:

$$CGPA = \frac{\sum_{i=1}^{n-1} (c_i \times g_i)}{\sum_{i=1}^{n-1} c_i}$$

Where n is the number of courses registered for, ' c_i ' is the credits allotted to the given course and ' g_i ' is the grade point secured in the corresponding course.

Continuous Assessment Pattern for all Courses

a. Theory Course

• Out of 40 marks allotted for continuous assessment 30 marks will be awarded based on two tests(Each Test will be conducted for 40 marks and scale down to 30 marks) conducted and 10 marks shall be awarded based on conduct of one comprehensive test as given below:

Internal Test 1 & Test 2 : 30 Marks (80 % of marks secured in 1^{st} best internal tests and 20% marks secured in 2^{nd} best internal test)

Comprehensive Test : 10 Marks (Test will be conducted for 20 marks and scale down to 10 marks)

- The duration of each internal test will be 90 minutes and shall covers two units of syllabus in each test
- All the students will be notified with the marks secured within one week after the completion of the sessional exams
- Students are permitted for reconciliation with in a period of two working days after the notification of marks
- The evaluation methodology of Design and Drawing Courses coming under theory will be given in their respective course handouts which will be approved by department HOD.

b. Integrated Course

40 marks allotted for continuous assessment as given below:

Theory Course

20 marks will be awarded based on two tests conducted similar to theory(Each Test will be conducted for 40 marks and scale down to 20 marks) as given below:

Internal Test 1 & Test 2 : 20 Marks (80 % of marks secured in 1^{st} best internal tests and 20% marks secured in 2^{nd} best internal test)

Laboratory

20 marks are awarded for continuous assessment and following is the pattern for the award of 20 marks

Preparation, Observation & Result : 10 Marks
Record : 05 Marks
Internal Test : 05 Marks
External Exam (Lab) : 30 Marks
External Exam (Theory) : 60 Marks

c. Laboratory Course:

25 marks are awarded for continuous assessment and following is the pattern for the award of 25 marks

Without Mini Project:

Preparation, Observation & Result : 10 Marks
Record : 05 Marks
Internal Test : 05 Marks
Viva – Voce : 05 Marks

With Mini Project (through Augmented Experiments):

Preparation, Observation & Result : 05 Marks
Record : 05 Marks
Internal Test : 05 Marks
Viva – Voce : 05 Marks

Augmented Experiment : 05 Marks

Engineering drawing course is evaluated in line with lab courses and the pattern of awarding 25 marks for continuous evaluation is as following

Day-to-day work : 15 marks
Internal test : 10 marks

There shall be two internal tests for 10 marks each during the semester and the average shall be considered.

d. Term Paper

Continuous Assessment : 50 Marks

Distribution

Literature Survey : 10 Marks
Review 1 : 15 Marks
Review 2 : 15 Marks
Final Presentation : 10 Marks

e. Audit Courses

Online Objective Test : 50 Marks

f. Mini Project

Continuous Assessment : 25 Marks

Distribution

Review 1 : 05 Marks
Review 2 : 05 Marks
Literature Survey : 05 Marks
Final Presentation : 05 Marks

g. Project

Continuous Assessment : 100 Marks

Distribution

Innovativeness of the Project : 05 Marks Literature Survey : 10 Marks Experimentation / Simulation : 20 Marks Result Analysis : 05 Marks Review 1 : 20 Marks : 20 Marks Review II Final Presentation : 10 Marks : 10 Marks Project Report

h. Full Semester Internship

Continuous Assessment : 200 Marks

Distribution

Internship Diary : 20 Marks

Quiz-1 : 20 Marks
Quiz-2 : 40 Marks
Review-1(Seminar & Viva-voce) : 60 Marks
Review-2(Seminar & Viva-voce) : 60 Marks
Final Assessment : 200 Marks

Distribution

Project Report : 120 Marks
Final Presentation : 80 Marks

i. Co-Curricular and Extra Curricular (CCEC) Activities

Students shall acquire 1 credit each in 2^{nd} and 3^{rd} years with the following scheme:

Scheme of evaluation for the CCEC activities:

No. of slots in each Semester @ 2 slots every week
No. of Stream (2-CC + 1-EC)
No. of slots allotted for each stream
: 8

Requirement for the award of 1- Credit

- Students shall choose at least two streams of events in each semester
- Students shall secure 75% attendance in each stream of events to obtain a certificate
- Students shall obtain 2 certificates of Participation in each semester.

The credits earned through these courses will be indicated in the grade sheet and will not be taken into account for CGPA calculation.

j. Employability Skills (ES)

Students have to take up these courses from $3^{\rm rd}$ – $6^{\rm th}$ semesters. In both streams i.e Aptitude Skills & Soft Skills (AS and SS) Students will be assessed in each semester. Based on the marks secured in continuous assessment, students will be assessed for AS. Based on the attendance for the various activities scheduled, students will be assessed for SS. 16 periods are allotted for each stream per semester.

Assessment for Aptitude skills

Continuous assessment : 30 Marks Comprehensive Test : 20 Marks

For continuous assessment one examination will be conducted after every 5 weeks for a maximum of 10 marks each (3x10=30). At the end of the semester a comprehensive test will conducted for 20 marks. The student shall secure at least 40% marks in each semester to get qualified.

Assessment of Soft Skills

Continuous Assessment for Soft skill is done based on the participation of the students in the various activities schedule during each semester. In every semester 6 activities under SS will be organized and students are expected to attend at least 4 activities to get qualified.

Student will secure 1 credit at the end of 4^{th} semester and at the end of 6^{th} semester subject to the condition that he/she secures 40% marks in AS and 75 attendance in SS in each semester.

h. Industry Driven One Credit Courses

Online Objective Test : 25 Marks

Grading:

Marks $25 \le$ and $20 \ge$: Excellent
Marks 20 < and $15 \ge$: Very Good
Marks 15 < and $10 \ge$: Good

Marks < 10 : Satisfactory

6. Attendance Requirements

- a) It is desirable for a candidate to put on 100% attendance in all the subjects. However, a candidate shall be permitted to appear for the semester end examination by maintaining at least 75% of attendance on an average in all the courses in that semester put together
- b) The shortage of attendance on medical grounds can be condoned to an extent of 10% provided a medical certificate is submitted to the Head of the Department when the candidate reports back to the classes immediately after the leave. Certificates submitted afterwards shall not be entertained. Condonation fee as fixed by the college for those who put on attendance between ≥ 65% and <75% shall be charged before the end examinations. Attendance may also be condoned as per the State Government rules for those who participate in sports, co-curricular and extracurricular activities provided their attendance is in the minimum prescribed limits for the purpose and recommended by the concerned authority
- c) In case of the students having overall attendance less than 65% after condonation shall be declared detained and has to repeat semester again
- d) In case of the student having less than 65% of attendance in any of the course during a particular semester, he/she is not permitted to appear for that particular course in the semester end examinations. In such cases, the students need to undergo extra classes during the vacation or at convenient time to earn the shortage of attendance. After completing the attendance requirements he/she may be permitted to appear for the examination and it will be treated as a second attempt
- e) His / her academic progress and conduct have been satisfactory

7. Promotion Policies

- ❖ In four year B. Tech. Programme, a student shall be promoted from 2nd year to 3rd year only if s/he fulfills the academic requirements and earning of minimum 50% of credits up to 2nd year
- ❖ In four year B. Tech. Programme, a student shall be promoted from 3rd year to 4th year only if s/he fulfills the academic requirements and earning of minimum 50% credits up to 3rd year
- ❖ In three year lateral entry B. Tech. Programme, a student shall be promoted from 3rd year to 4th year only if s/he fulfills the academic requirements and earning of minimum 50% credits up to 3rd year

8. Graduation Requirements

- a) The following academic requirements shall be met for the award of the B. Tech. Degree
 - Student shall secure 174 credits for regular B. Tech. Programme and 132 credits for the students who entered in second year through lateral entry scheme. However, the CGPA obtained for the best 167 credits (Excluding any one 3 credit course, CCEC and ES) and 125 credits(Excluding any one 3 credit course, CCEC and ES)respectively shall be considered for the award of Grade/Class/Division
 - A student of a regular Programme who fails to earn 174 credits within eight consecutive academic years from the year of his/her admission with a minimum CGPA of 4.0 shall forfeit his/her degree and his/her admission stands cancelled
 - A student of a lateral entry Programme who fails to earn 132 credits within six consecutive academic years from the year of his/her admission with a minimum CGPA of 4.0 shall forfeit his/her degree and his/her admission stands cancelled

b) Award of degree

Classification of degree will be as follows:

i. $CGPA \ge 7.5$: Degree with Distinctionii. $CGPA \ge 6.5$ and < 7.5: Degree with First Classiii. $CGPA \ge 5.0$ and < 6.5: Degree with Second Classiv. $CGPA \ge 4.0$ and < 5.0: Degree with Pass Class

- ❖ First Class with Distinction: A candidate who qualifies for the award of the Degree (vide clause 8 (a) having passed all the courses of study of all the eight semesters (six semesters for lateral entry candidates) at the first opportunity, within eight consecutive semesters (six consecutive semesters for lateral entry candidates) after the commencement of his /her study and securing a CGPA of 7.5 and above shall be declared to have passed in First Class with Distinction. For this purpose the withdrawal from examination (vide clause 9) will not be construed as an opportunity for appearance in the examination
- ❖ First Class: A candidate who qualifies for the award of the Degree (vide clause 8 (a) having passed all the courses of study of all the eight semesters (six semesters for lateral entry candidates) within maximum period of ten consecutive semesters

(eight consecutive semesters for lateral entry candidates) after the commencement of his /her study and securing a CGPA of 6.5 and above shall be declared to have passed in **First Class**

- ❖ Second Class: A candidate who qualifies for the award of the Degree (vide clause 8 (a) having passed all the courses of study of all the eight semesters (six semesters for lateral entry candidates) within maximum period of ten consecutive semesters (eight consecutive semesters for lateral entry candidates) after the commencement of his /her study and securing a CGPA of 5.0 and above shall be declared to have passed in Second Class
- ❖ **Degree with Pass Mark**: All other candidates who qualify for the award of the degree shall be declared to have passed in **Degree with Pass Mark**

c) Grafting

In order to extend the benefit to the students with one/ two backlogs after either 6th semester or 8th semester, GRAFTING option is provided to the students enabling their placements and fulfilling graduation requirements. Following are the guidelines for the Grafting:

- ❖ Grafting will be done among the courses within the semester. Shall draw a maximum of 7 marks from the any one of the cleared courses in the semester and will be grafted to the failed course in the same semester.
- ❖ Students shall be given a choice of grafting only once in the 4 years Programme, either after 6th semester (Option#1) or after 8th semester (Option#2)
- Option#1: Applicable to students who have maximum of TWO theory courses in 5th and/or 6th semesters
- Option#2: Applicable to students who have maximum of TWO theory courses in 7th and/or 8th semesters.
- **!** Eligibility for grafting:
 - i. Prior to the conduct of the supplementary examination after the declaration of the 6th or 8th semester results.
 - ii. She/he must appear in all regular or supplementary examinations as per the provisions laid down in regulations for the courses s/he appeals for grafting.
 - iii. The marks obtained by her/him in latest attempt shall be taken into account for grafting of marks in the failed course(s).

d) Betterment chance

Student who clears all the subjects up to 6^{th} semester and wish to improve their CGPA can register and appear for one betterment chance for maximum of any five theory courses up to 6^{th} semester. Betterment chance can be availed along with 7^{th} and 8^{th} semester examinations

e) Quick Supplementary Examination

Student who clears all the courses up to 7^{th} semester shall have a chance to appear for Quick Supplementary Examination to clear the failed courses of 8^{th} semester

f) All the candidates who register for the semester end examination will be issued memorandum of marks by the Institute. Apart from the semester wise marks memos, the institute will issue the provisional certificate subject to the fulfillment of all the academic requirements

9. Flexibility to Add or Drop Courses

- **a.** It is mandatory that all the students need to earn the minimum number of credits (as per clause 8) for the award of B. Tech. degree in their respective disciplines. However a student can earn more number of credits if they wish, by registering one additional course, from the list of courses available in the curriculum of all disciplines, over and above to the existing courses from 4th semester to 6th semester
- **b.** The students who are opting for full semester internship (FSI) in the 7th or 8th Semester, they are permitted to take the courses as listed in 7th and 8th semester of the curriculum are from the list of electives furnished in the curriculum
- **c.** The students, who are in non FSI mode, shall register for the project work in the 8th semester only
- d. The student shall be permitted to drop any SSC at any point of time
- e. All the courses registered and cleared by a student in this mode will be mentioned in the Cumulative Grade Memo (CGM) as additional acquired. However the CGPA is calculated for the best 171 credits only (as mentioned in the clause 7)

10. Withdrawal from the Examination

- a. A candidate may, for valid reasons, be granted permission by the Principal to withdraw from appearing for the examination in any course or courses of only one semester examination during the entire duration of the degree Programme. Also, only ONE application for withdrawal is permitted for that semester examination in which withdrawal is sought
- b. Withdrawal application shall be valid only if the candidate is otherwise eligible to write the examination and if it is made prior to the commencement of the examination in that course or courses and also recommended by the Head of the Department
- c. Such Withdrawal from the examination shall be treated as absent for the 1st attempt to the respective examination and will lose the eligibility for First Class with Distinction
- d. The student shall be allowed to drop FSI course either 7th or 8th semester within 4 weeks from the commencement of the FSI Programme due any uncertainty from either side. In such case s/he will automatically entered into Non-FSI pattern of curriculum, and s/he needs to register for respective courses in that semester and appear for semester end examinations. In case if s/he has earned equivalent number of credits or near to the equivalent number of credits with respect to clause 9, s/he shall forbid the courses either partially or fully
- e. If any student withdraws from FSI course after the stipulated period mentioned in the clause 10.d, s/he will be considered as detained from the semester. S/he needs to register for the semester in the next academic year

General

- a. s/he represents "she" and "he" both
- b. Where the words 'he', 'him', 'his', occur, they imply 'she', 'her', 'hers' also
- c. The academic regulations should be read as a whole for the purpose of any interpretation
- d. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Chairman, Academic Council will be final

The college may change or amend the academic regulations or syllabi from time to time and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the institute.

11. Curriculum: The curriculum of all the UG Programmes is given below