

## **Continuous Internal Evaluation (CIE):**

As an affiliated institution of JNTUK, evaluation norms of the university are followed. The university has adopted major reform in evaluation by introducing Credit based grading system from the academic year 2016-17 and the institute has adopted the same. The college has adopted a method of assessing the academic performance of the students on a continuous basis.

Continuous assessment in theory subjects:

- As per the JNTUK regulations, two internal midterm exams will be conducted. As per R13 regulations the better performance in either of the examinations is considered. Whereas, as per R16 regulation the better performance will carry 80% and other one carries 20% of weightage
- The marks allotted for internal exams are 25, Assignment for 5 marks and to that of external exams are 70. In this frame work, the college conducts the following components as part of internal exams. Objective Question Paper (10 marks). Multiple choice and fill in the blank questions are given by university. Descriptive Question Paper (15 marks) and Assignments (5 marks) comprises of class tests, written assignments, seminars and classroom interaction.
- Marks will be awarded for all the above activities and the average is taken as the assignment marks. Pre-final exams are conducted for I year students which serves as a prelude to the university end semester examination.
- To bring uniformity in evaluation in scripts by fresh recruits, the scripts are scrutinized by seniors randomly and anomalies are pointed out to them.
- Special tests for slow learners.
- More assignments are given for practice.
- The students will be informed the mistakes committed and guided to improve their performance in next examinations.
- Each students is encouraged to give seminars in the class

Continuous assessment in practical subjects:

- For practical subjects, there shall be a continuous evaluation during the semester for 25 sectional marks and 50 end examination marks. To improve the outcome of laboratory

work done in a semester, out of the 25 marks for internal, day-to-day work in the laboratory shall be evaluated for 15 marks and internal examination for practical shall be evaluated for 10 marks conducted by the concerned laboratory teacher.

- In this regard, the faculty will do the keen evaluation of day to day performance of the student for every experiment which includes regularity, procedure, results, viva and promptness in submission of records and the marks obtained are recorded against each experiment in the student record.
- Continuous assessment in projects: As part of the internal assessment of projects which are done in III & IV years, college follows the following framework. Project Review Committee (PRC) is formed for every department consisting of Head of the Department, Project In charge and two senior faculty members to identify the projects.
- Students are formed into groups of 2 or 3. The groups collect the literature on a topic and review the literature and submit the title with objective, plan of action for title approval to PRC.
- Project Review Committee assesses and approves projects for each group. After obtaining the approval of the PRC the groups are allotted with a faculty member as their guide for the project and can start up the Project work.
- Review meetings are conducted for the continuous assessment in project Review 1 covers abstract & block diagram, Review 2 covers implementation and Review 3 covers final results with code.
- Grades will be given for all the reviews. The average of all is taken and internal marks for projects will be awarded.
- Additional experiments are introduced
- Students are allowed to utilize the laboratory even after the college hours.

**Internal assessment is transparent and robust in terms of frequency and variety:**

There is complete transparency in the internal assessment. The criterion adopted is as directed by the university.

- At the beginning of the semester, faculty members inform the students about the various components in the assessment process during the semester.

- The internal assessment test schedules are prepared as per the university and communicated to the students well in advance.
- To ensure proper conduct of formative tests, two invigilators are assigned to each hall. Evaluation is done by the course handling faculty members within three days from the date of examination.
- The corrected answer scripts at random are verified by HOD to ensure the standard evaluation process.
- The corrected answer papers of the students are distributed to them for the verification by the students and any grievance is redressed immediately. The marks obtained by the students in internal assessment tests are displayed on the department notice board.
- The marks obtained by the students in internal assessment tests are uploaded periodically on the university web portal along with their attendance.
- Noting the values in observation and validating the theoretical aspects student must submit lab record regularly.
- Day to day performance of the students is assessed for every experiment which includes regularity, performance, viva and the promptness in submitting the record.
- For lab courses, the marks/grade scored by the student for each experiment is indicated in the observation/record. The independent learning, practical approach to the real-time applications is tested by viva voce for laboratory courses.
- For the quality of the projects, the evaluation is done by Project Review Committee along with the project guides.
- To ensure the transparency and curb the mal practices the university has introduced jumbling system and theory end examinations are conducted at a center other than the college.
- The end examination for the laboratory and projects shall be conducted with internal and external examiner appointed from the other colleges as decided by the University.

### **A. Minimum Academic Requirements for the regulation: R13**

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned.

1. A student is deemed to have satisfied the minimum academic requirements if he has earned the credits allotted to each theory/practical design/drawing subject/project and secures not less than 35% of marks in the end semester exam, and minimum 40% of marks in the sum total of the internal marks and end semester examination marks.

2. A student shall be promoted from first year to second year if he fulfills the minimum attendance requirement.

3. A student will be promoted from II year to III year if he fulfills the academic requirement of 40% of the credits up to II year I semester from all the examinations, whether or not the candidate takes the examinations and secures prescribed minimum attendance in II year II semester.

4. A student shall be promoted from III year to IV year if he fulfills the academic requirements of 40% of the credits up to III year I semester from all the examinations, whether or not the candidate takes the examinations and secures prescribed minimum attendance in III year II semester.

5. A student shall register and put up minimum attendance in all 180 credits and earn all 180 credits. Marks obtained in all the 180 credits shall be considered for the calculation of percentage of marks.

### **B. Course pattern:**

(i.) The entire course of study is of four academic years and each year will have TWO Semesters (Total EIGHT Semesters).

(ii.) A student eligible to appear for the end examination in a subject, but absent for it or has failed in the end examinations may appear for that subject's supplementary examinations, when offered.

(iii.) When a student is detained due to lack of credits / shortage of attendance, he may be re-admitted when the semester is offered after fulfillment of academic regulations. Whereas the academic regulations hold good with the regulations he/she first admitted.

**C. Award of Class:** After having satisfied the requirements prescribed for the completion of the program, the student shall be eligible for the award of B. Tech Degree and shall be placed in one of the following grades:

<b>Class Awarded</b>	<b>% of marks to be secured</b>	<b>From the aggregate marks secured from 180 Credits.</b>
First Class with Distinction	70% and above	
First Class	Below 70 but not less than 60%	
Second Class	Below 60% but not less than 50%	
Pass Class	Below 50% but not less than 40%	

**Minimum Academic Requirements for the Regulation: R16**

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no.4.

1. A student is deemed to have satisfied the minimum academic requirements if he has earned the credits allotted to each theory/practical design/drawing subject/project by securing not less than 35% of marks in the end semester exam, and minimum 40% of marks in the sum total of the internal marks and end semester examination marks.
2. A student shall be promoted from first year to second year if he fulfills the minimum attendance requirement.

3. A student will be promoted from II year to III year if he fulfills the academic requirement of 40% of the credits up to either II year I semester or II year II semester from all the examinations, whether or not the candidate takes the examinations and secures prescribed minimum attendance in II year II semester.

4. A student shall be promoted from III year to IV year if he fulfills the academic requirements of 40% of the credits up to either III year I semester or III year II semester from all the examinations, whether or not the candidate takes the examinations and secures prescribed minimum attendance in III year II semester.

5. A student shall register and put up minimum attendance in all 180 credits and earn all 180 credits.

➤ **Course Pattern**

1. The entire course of study is for four academic years; all the years are on semester pattern.
2. A student eligible to appear for the end semester examination in a subject, but absent from it or has failed in the end semester examination, may write the exam in that subject when conducted next.
3. When a student is detained for lack of credits / shortage of attendance, he may be re-admitted into the same semester / year in which he has been detained. However, the academic regulations under which he was first admitted shall continue to be applicable to him.

Marks Range Theory (Max – 100)	Marks Range Lab (Max – 75)	Letter Grade	Level	Grade Point
≥ 90	≥ 67	O	Outstanding	10
≥80 to <90	≥60 to <67	S	Excellent	9
≥70 to <80	≥52 to <60	A	Very Good	8
≥60 to <70	≥45 to <52	B	Good	7
≥50 to <60	≥37 to <45	C	Fair	6
≥40 to <50	≥30 to <37	D	Satisfactory	5
<40	<30	F	Fail	0
			Absent	0

➤ **Computation of SGPA**

The following procedure is to be adopted to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

The **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

$$\text{SGPA (Si)} = \Sigma (C_i \times G_i) / \Sigma C_i$$

Where  $C_i$  is the number of credits of the  $i^{\text{th}}$  course and  $G_i$  is the grade point scored by the student in the  $i^{\text{th}}$  course.

➤ **Computation of CGPA**

• The **CGPA** is also calculated in the same manner taking into account all the courses undergone by a student over all the semester of a program, i.e.

$$\text{CGPA} = \Sigma (C_i \times S_i) / \Sigma C_i$$

Where  $S_i$  is the SGPA of the  $i^{\text{th}}$  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.
- Equivalent Percentage =  $(\text{CGPA} - 0.75) \times 10$

➤ **Award of Class**

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

<b>Class Awarded</b>	<b>CGPA to be secured</b>	<b>From the CGPA secured from 180 Credits.</b>
First Class with Distinction	$\geq 7.75$ with no subject failures	
First Class	$\geq 6.75$ with subject failures	
Second Class	$\geq 5.75$ to $< 6.75$	
Pass Class	$\geq 4.75$ to $< 5.75$	

## ACADEMIC REGULATIONS (R16) FOR B. TECH. (LATERAL ENTRY SCHEME)

Applicable for the students admitted into II year B. Tech. from the Academic Year 2017-18 onwards

### 1 Award of B. Tech. Degree

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

1.1 A student shall be declared eligible for the award of the B. Tech Degree, if he pursues a course of study in not less than three academic years and not more than six academic years.

1.2 The candidate shall register for 132 credits and secure all the 132 credits.

2. The attendance regulations of B. Tech. (Regular) shall be applicable to B.Tech.

### 3. Promotion Rule

A student shall be promoted from second year to third year if he fulfills the minimum attendance requirement.

A student shall be promoted from III year to IV year if he fulfills the academic requirements of 40% of the credits up to either III year I semester or III year II semester from all the examinations, whether or not the candidate takes the examinations and secures prescribed minimum attendance in III year II semester.

### 4. Award of Class

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

Class Awarded	CGPA to be secured	From the CGPA secured from 132 Credits from II Year to IV Year
First Class with Distinction	$\geq 7.75$ with no subject failures	
First Class	$\geq 6.75$ with subject failures	
Second Class	$\geq 5.75$ to $< 6.75$	
Pass Class	$\geq 4.75$ to $< 5.75$	

The marks obtained in the internal evaluation and the end semester examination shall be shown separately in the marks memorandum.

5. All the other regulations as applicable to **B. Tech. 4-year degree course (Regular)** will hold good for **B. Tech. (Lateral Entry Scheme)**.

## **EVALUATION for M.Tech:**

The performance of the candidate in each semester shall be evaluated subject-wise, with a maximum of 100 marks for theory and 100 marks for practical's, on the basis of Internal Evaluation and End Semester Examination.

- For the theory subjects 60 marks shall be awarded based on the performance in the End Semester Examination and 40 marks shall be awarded based on the Internal Evaluation. The internal evaluation shall be made based on the **average** of the marks secured in the two Mid Term-Examinations conducted-one in the middle of the Semester and the other immediately after the completion of instruction. Each mid term examination shall be conducted for a total duration of 120 minutes with 4 questions (without choice) each question for 10 marks. End semester examination is conducted for 60 marks for 5 questions to be answered out of 8 questions.
- For practical subjects, 60 marks shall be awarded based on the performance in the End Semester Examinations and 40 marks shall be awarded based on the day-to-day performance as Internal Marks.
- There shall be two seminar presentations during III semester and IV semester. For seminar, a student under the supervision of a faculty member, shall collect the literature on a topic and critically review the literature and submit it to the department in a report form and shall make an oral presentation before the
- Project Review Committee consisting of Head of the Department, Supervisor and two other senior faculty members of the department. For each Seminar there will be only internal evaluation of 50 marks. A candidate has to secure a minimum of 50% of marks to be declared successful.
- A candidate shall be deemed to have secured the minimum academic requirement in a subject if he secures a minimum of 40% of marks in the End semester Examination and a minimum aggregate of 50% of the total marks in the End Semester Examination and Internal Evaluation taken together.
- In case the candidate does not secure the minimum academic requirement in any subject has to reappear for the End semester Examination in that subject. A candidate shall be given one chance to re-register for each subject provided the internal marks secured by a

candidate are less than 50% and has failed in the end examination. In such a case, the candidate must re-register for the subject(s) and secure the required minimum attendance. The candidate's attendance in the reregistered subject(s) shall be calculated separately to decide upon his eligibility for writing the end examination in those subject(s). In the event of the student taking another chance,

- His internal marks and end examination marks obtained in the previous attempt stand cancelled. For re-registration the candidates have to apply to the University through the college by paying the requisite fees and get approval from the University before the start of the semester in which re registration is required.
- In case the candidate secures less than the required attendance in any re registered subject (s), he shall not be permitted to write the End Examination in that subject. He shall again reregister the subject when next offered.
- Laboratory examination for M. Tech. courses must be conducted with two Examiners, one of them being the Laboratory Class Teacher or teacher of the respective college and the second examiner shall be appointed by the university from the panel of examiners submitted by the respective college.

### **EVALUATION OF PROJECT/DISSERTATION WORK**

Every candidate shall be required to submit a thesis or dissertation on a topic approved by the Project Review Committee.

- A Project Review Committee (PRC) shall be constituted with Head of the Department and two other senior faculty members.
- Registration of Project Work: A candidate is permitted to register for the project work after satisfying the attendance requirement of all the subjects, both theory and practical.
- After satisfying 6.2, a candidate has to submit, in consultation with his project supervisor, the title, objective and plan of action of his project work for approval. The student can initiate the
- Project work, only after obtaining the approval from the Project Review Committee (PRC).
- If a candidate wishes to change his supervisor or topic of the project, he can do so with the approval of the Project Review Committee (PRC). However, the Project Review

Committee (PRC) shall examine whether or not the change of topic/supervisor leads to a major change of his initial plans of project proposal.

- If yes, his date of registration for the project work starts from the date of change of Supervisor or topic as the case may be.
- A candidate shall submit his status report in two stages at least with a gap of 3 months between them.
- The work on the project shall be initiated at the beginning of the II year and the duration of the project is two semesters. A candidate is permitted to submit Project Thesis only after successful completion of theory and practical course with the approval of PRC not earlier than 40 weeks from the date of registration of the project work. The candidate has to pass all the theory and practical subjects before submission of the Thesis.
- Three copies of the Project Thesis certified by the supervisor shall be submitted to the College/School/Institute.
- The thesis shall be adjudicated by one examiner selected by the University. For this, the Principal of the College shall submit a panel of 5 examiners, eminent in that field, with the help of the guide concerned and head of the department.
- If the report of the examiner is not favorable, the candidate shall revise and resubmit the Thesis, in the time frame as decided by the PRC. If the report of the examiner is unfavorable again, the thesis shall be summarily rejected. The candidate has to reregister for the project and complete the project within the stipulated time after taking the approval from the University.
- If the report of the examiner is favorable, Viva-Voce examination shall be conducted by a board consisting of the Supervisor,

Head of the Department and the examiner who adjudicated the Thesis. The Board shall jointly report the candidate's work as one of the following:

- A. Excellent
- B. Good
- C. Satisfactory
- D. Unsatisfactory

The Head of the Department shall coordinate and make arrangements for the conduct of Viva-Voce examination.

- If the report of the Viva-Voce is unsatisfactory, the candidate shall retake the Viva-Voce examination only after three months. If he fails to get a satisfactory report at the second Viva-Voce examination, the candidate has to re-register for the project and complete the project within the stipulated time after taking the approval from the University.