

# **R19-ACADEMIC REGULATIONS**

## **FOR B.TECH FOUR YEAR DEGREE COURSE**

**(Applicable for the batches admitted from 2019-20)**



## **PRAGATI ENGINEERING COLLEGE (AUTONOMOUS)**

Permanently Affiliated to JNTUK, Kakinada and Approved by AICTE, New Delhi

Accredited by NAAC with “A” Grade

Recognized by UGC 2(f) and 12(b) under UGC act, 1956

1-378, ADB Road, Surampalem- 533437, near Peddapuram

E.G.District, Andhra Pradesh.



**PRAGATI ENGINEERING COLLEGE : SURAMPALEM**  
**(Autonomous)**

**R19-ACADEMIC REGULATIONS FOR B.TECH (REGULAR)**

Applicable for the students of B.Tech (Regular) Admitted from the academic year 2019-2020.

**1. AWARD OF B.TECH DEGREE**

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

1.1 A Student shall be declared eligible for the award of the B.Tech Degree, if he/she pursues a course of study for not less than four and for not more than eight academic years.

1.2 The candidate shall register for 160 credits and secure all the 160 credits.

**2. PROGRAMMES OF STUDY**

Following B.Tech Programmes are offered with English as medium of instruction.

S. No.	Name of the Programme	Code
1	Civil Engineering (CE)	01
2	Electrical and Electronics Engineering (EEE)	02
3	Mechanical Engineering (ME)	03
4	Electronics and Communications Engineering (ECE)	04
5	Computer Science and Engineering (CSE)	05
6	Information Technology (IT)	12

**3. INDUCTION PROGRAMME.**

At the beginning of the first year in the zero semester there shall be three weeks induction programme to help new students adjust and feel comfortable in the new environment, inculcate in them the culture of the institution.

**4. DISTRIBUTION AND WEIGHTAGE OF MARKS**

4.1 The performance of a student in each semester shall be evaluated subject – wise with a maximum of 100 marks for theory/drawing/design courses and 75 marks for laboratory courses. The project work shall be evaluated for 200 marks. The mini project/Socially relevant activity has a weightage of 50 marks and evaluated internally.

**4.2 Theory Courses**

**a) Internal assessment : 30 marks**

For the Mid examinations there shall be two tests, one conducted in the middle and the other at the end of each semester. Each mid examination consists of an examination and assignment. The question paper contains **Part-A** and **Part-B**. The duration for the answering the question paper is 100 minutes. For first Mid examination Part-A consists



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of three questions, one question from first unit, one question from second unit each for 8 marks and one question from first half of third unit for 4 marks. For second Mid examination Part-A consists of three questions, one question from second half of third unit for 4 marks, one question from fourth unit and one question from fifth unit each for 8 marks. Part-B consists of ten objective type questions each carries half mark totaling to 5 marks. Answering all questions is compulsory.

Students shall submit two assignments in a semester. The first assignment will be on first two units and first half of the third unit. The second assignment will be on the second half of third unit and last two units. The marks allotted for each assignment is 5.

Internal Marks based on mid examinations including assignments (30 Marks) are calculated with 80% weightage for best of the two mid examinations and 20% weightage for other mid examination.

The formula for finding the total marks of internal assessment (30 marks) = [ 0.80 x higher marks scored between the two internal tests + 0.20 x marks scored in the other test ]

**b) External assessment: 70 Marks**

The end semester examination is of 3 hours duration and it covers the topics in 5 units and weightage is 70 marks.

End examination consists of 5 questions and each question for 14 marks. Two Questions from each unit with internal choice i.e, either or choice (total 10 questions with 2 questions from each unit)

**4.3 Laboratory Courses**

**a) Internal assessment : 25 marks**

There shall be continuous evaluation during the semester for 25 marks as shown below:

Day-to-Day work	-	10 marks
Laboratory record	-	5 marks
One internal test at the end of the semester	-	10 marks
<b>Total</b>		<b>- 25 Marks</b>

**b) External Assessment : 50 marks**

At the end of the semester an examination for 3 hours duration shall be conducted for 50 marks by the concerned teacher and an external examiner.

**4.4 Drawing/Similar Course**

**i) For Engineering Drawing course,**

**a) Internal assessment : 30 marks**

There shall be continuous evaluation with a weightage of 30 marks as shown below :



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Day-to-Day work - 15 marks

Internal tests :

There shall be two internal tests One in the middle of the semester and the other at the end. Marks for Internal Tests =  $0.8 \times$  higher marks scored between the two tests +  $0.2 \times$  marks scored in the other test.

- 15 marks

**Total**

- **30 Marks**

**b) External assessment : 70 Marks**

Same as for theory courses given in 4.2 (b)

**ii) For Machine Drawing course,**

**a) Internal assessment : 30 marks**

There shall be continuous evaluation with a weightage of 30 marks as shown below :

Day-to-Day work

- 15 marks

Internal tests :

There shall be two internal tests One in the middle of the semester and the other at the end. Marks for Internal Tests =  $0.8 \times$  higher marks scored between the two tests +  $0.2 \times$  marks scored in the other test.

- 15 marks

**Total**

- **30 Marks**

**b) External assessment : 70 Marks**

The end semester examination is of 3 hours duration and it covers the topics in two parts and weightage is 70 marks.

End examination consists of two parts i.e PART-A and PART-B. PART-A consists of 3 questions and out of which two questions are to be answered and each carries 14 marks. PART-B contains one compulsory question for 42 marks.

**iii) Courses such as Building Planning and Drawing, Design and Detailing of Reinforced Concrete Structures, Design and Detailing of Steel Structures, Estimation, Specifications and Contracts.**

**a) Internal assessment : 30 marks**

There shall be continuous evaluation with a weightage of 30 marks as shown below :

Assignments

- 10 marks

Internal tests :

There shall be two internal tests One in the middle of the semester and the other at the end. Marks for Internal Tests =  $0.8 \times$  higher marks scored between the two tests +  $0.2 \times$  marks scored in the other test.

- 20 marks

**Total**

- **30 Marks**

**b) External assessment : 70 Marks**

The end semester examination is of 3 hours duration and it covers the topics in 5 units and weightage is 70 marks.



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End examination consists of two parts i.e PART-A and PART-B. PART-A consists of 2 questions and out of which one question has to be answered and carries 28 marks. PART-B contains 5 Questions out of which three questions has to be answered and each carries 14 marks.

#### **4.5 Socially Relevant Activity**

To enhance social responsibility among students a Socially relevant Activity is introduced in the II year I / II semester. Each student has to participate in various social awareness programmes viz. Swach Bharat, Water Harvesting, Health and Hygiene. Each student has to work 15 hours continuously in the semester for this work. It has a weightage of 50 marks and evaluated internally at the end of the semester.

#### **4.6 Mini Project**

There shall be a Mini Project in the III year I / II semester. It has a weightage of 50 marks and evaluated internally at the end of the semester.

#### **4.7 Project Work**

Out of a total of 200 marks for the Project work, 60 marks shall be for Internal Evaluation and 140 marks for the End Semester Examination. The End Semester Examination (Viva-voce) shall be conducted by the committee. The committee consists of an external examiner, Head of the Department and Supervisor of the Project. The Evaluation of project work shall be conducted at the end of the IV year. The Internal Evaluation shall be on the basis of two seminars given by each student on the topic of his project and evaluated by an internal committee.

#### **4.8 Mandatory Audit/Non Credit Courses**

Following are the mandatory audit courses offered to all the programmes.

- i. Environmental Science
- ii. Constitution of India
- iii. Essence of Indian Traditional Knowledge
- iv. Professional Ethics and Human Values
- v. IPR and Patents
- vi. MOOCs/Industry course approved by the department.

##### **4.8.1 Evaluation Procedure:**

##### **4.8.1.1 Mandatory Audit/Non Credit Courses (i - v):**

For the Mandatory Audit/Non credit courses i-v listed above an internal test shall be conducted at the end of the semester. A student is required to score minimum 40 marks out of 100 marks in each of the mandatory audit/non credit courses.

##### **4.8.1.2 MOOCs Course/ industry course approved by the department::**



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A student shall register either MOOCs or industry course approved by the department.

#### **i. MOOCs:**

There shall be a Discipline Centric mandatory Course through Massive Open Online Course (MOOC). The student shall register for the course (Minimum of 8 weeks) offered by authorized Institutions/Agencies through online with the approval of Head of the Department which is not covered in the curriculum,. For those students who have not cleared the online MOOCs course, respective Head of the Department shall appoint one mentor for each of the MOOC subjects offered and the mentor appointed shall conduct an internal test. A student is required to score 40 marks out of 100 marks.

#### **ii. Industry course approved by the department:**

For the industry course an industry trained faculty member nominated by the Head of the department shall conduct a course during the semester. At the end of the semester an internal test shall be conducted. A student is required to score 40 marks out of 100 marks.

The B.Tech degree shall only be awarded if a student gets satisfactory grade (CS-Completed Successfully) in each of the mandatory audit/non credit courses besides acquiring 160 (120 for lateral entry) credits.

### **5.0 ATTENDANCE REQUIREMENTS :**

- 5.1 A student shall be eligible to appear for semester end examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the subjects in a semester.
- 5.2 Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted by the College Academic Committee.
- 5.3 Shortage of Attendance below 65% in aggregate shall in NO CASE be condoned.
- 5.4 A stipulated fee shall be payable towards condonation of shortage of attendance to the College.
- 5.5 Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examinations of that semester and their registration shall stand cancelled.
- 5.6 A student will not be promoted to the next semester unless he/she satisfies the attendance requirements of the present semester. They may seek readmission for that semester when offered next.

### **6.0 MINIMUM ACADEMIC REQUIREMENTS**

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned under rule 5.0.

- 6.1 A Student is deemed to have satisfied the minimum academic requirements if he has **earned the credits allotted to each theory/laboratory, design/drawing subject/project by securing not less than 35% of marks in the end semester exam,**



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and minimum 40% of marks in the sum total of the internal marks and end semester examination marks.

6.2 A student shall register and put in minimum attendance in all 160 credits and earn all 160 credits.

**7.0 PROGRAMME PATTERN**

7.1 The entire programme of study is for four academic years, all the years are on semester pattern.

7.2 A student eligible to appear for the end semester examination in a subject, but absent or failed in the end semester examination, may write the examination in that subject when conducted next.

7.3 When a student is detained due to 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.

**8.0 PROMOTION TO NEXT HIGHER CLASS**

8.1 A Student shall be promoted from 1<sup>st</sup> year to II year if he fulfills the minimum attendance requirement under rule 5.

8.2 A Student shall be promoted from II year to III year, if he fulfills the academic requirement of **50% of the credits up to 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.**

8.3 A student shall be promoted from III year to IV year if he fulfills the academic requirements of **50% of the credits up to 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.**

**9.0 CUMULATIVE GRADE POINT AVERAGE (CGPA)**

Theory/Laboratory Design/Drawing/Project work/mini project/socially relevant activity (%)	Letter Grade	Level	Grade Point
≥ 90	O	Outstanding	10
≥ 80 to < 90	S	Excellent	9
≥ 70 to < 80	A	Very Good	8
≥ 60 to < 70	B	Good	7
≥ 50 to < 60	C	Fair	6
≥ 40 to < 50	D	Satisfactory	5
<40	F	Fail	0
--	--	Absent	0

**Computation of Semester Grade Point Average (SGPA)**

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

The **SGPA** is the ratio of sum of 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.



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

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 programme i.e.,

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

- 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 =  $(\text{CGPA} - 0.75) \times 10$

**10.0 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.

Class Awarded	CGPA to be secured	<b>From the CGPA secured from 160 credits</b>
First Class with Distinction	$\geq 7.75$	
First Class	$\geq 6.75$ to $< 7.75$	
Second Class	$\geq 5.75$ to $< 6.75$	
Pass Class	$\geq 4.75$ to $< 5.75$	

**11.0 MINIMUM INSTRUCTIONS DAYS.**

The minimum instruction days for each semester shall be 90 working days

**12.0 STUDENT TRANSFERS**

12.1 There shall be no branch transfers after the completion of the admission process.

12.2 Pragati Engineering College (Autonomous) follows the practice of JNTUK/ State Government guidelines for transfer of students.





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**13.0 TRANSITORY REGULATIONS**

- 13.1 Discontinued or Detained Students are eligible for readmission as and when next offered. The readmitted students will be governed by the regulations under which the student has been admitted.
- 13.2 a) In case of transferred students from other universities/colleges, the credits shall be transferred to Pragati Engineering College (Autonomous) R19 Academic Regulations and course structure of the respective discipline.
- b) The students seeking transfer to Pragati Engineering College (Autonomous) from other universities/institutions have to obtain the credits of equivalent courses as prescribed by the college. In addition the transferred students have to pass the courses in which they failed at the earlier institute.

**14.0 GENERAL :**

- 14.1 Whenever the words “he”, “him”, “his” secure in the regulations, they include “she”, “her”, “hers”.
- 14.2 The academic rules and regulations should be read as a whole for the purpose of interpretation.
- 14.3 In case of any doubt or ambiguity in the interpretation of rules, the decision of the Principal of the college is final.
- 14.4 The college may change or amend the academic rules and regulations or syllabi at any time and the changed rules come into effect from the date of issue of such orders.

**ACADEMIC REGULATIONS FOR B.TECH LATERAL ENTRY SCHEME (LES)**

Applicable for the students admitted into II year B.Tech I semester from the Academic year 2020-21.

**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 for not less than three academic years and not more than six academic years.
- 1.2 The candidate shall register for 120 credits and secure all the 120 credits.
2. The attendance regulations of B.Tech (Regular) shall be applicable to B.Tech (LES) students as well.



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**3 PROMOTION RULES**

- 3.1.** A student shall be **promoted from III year to IV year** if he fulfills the academic requirements of **50% of the credits up to 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 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 120 credits</b>
First Class with Distinction	$\geq 7.75$	
First Class	$\geq 6.75$ to $< 7.75$	
Second Class	$\geq 5.75$ to $< 6.75$	
Pass Class	$\geq 4.75$ to $< 5.75$	

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



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**MALPRACTICES RULES**

The rules laid down in JNTUK R19 regulations will be followed in toto.








# Ragging

## Prohibition of ragging in educational institutions Act 26 of 1997

### Salient Features

- ⇒ Ragging within or outside any educational institution is prohibited.
- ⇒ Ragging means doing an act which causes or is likely to cause Insult or Annoyance of Fear or Apprehension or Threat or Intimidation or outrage of modesty or Injury to a student

	Imprisonment upto		Fine Upto
Teasing, Embarrassing and Humiliation	 6 Months	+	<b>Rs. 1,000/-</b>
Assaulting or Using Criminal force or Criminal intimidation	 1 Year	+	<b>Rs. 2,000/-</b>
Wrongfully restraining or confining or causing hurt	 2 Years	+	<b>Rs. 5,000/-</b>
Causing grievous hurt, kidnapping or Abducts or rape or committing unnatural offence	 5 Years	+	<b>Rs. 10,000/-</b>
Causing death or abetting suicide	 10 Months	+	<b>Rs. 50,000/-</b>

LET US MAKE PRAGATI RAGGING FREE COLLEGE



# Ragging

## ABSOLUTELY NO TO RAGGING

1. Ragging is prohibited as per Act 26 of A.P. Legislative Assembly, 1997.
2. Ragging entails heavy fines and/or imprisonment.
3. Ragging invokes suspension and dismissal from the College.
4. Outsiders are prohibited from entering the College and Hostel without permission.
5. Girl students must be in their hostel rooms by 7.00 p.m.
6. All the students must carry their Identity Cards and show them when demanded
7. The Principal and the Wardens may visit the Hostels and inspect the rooms any time.

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