

**ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT  
(AUTONOMOUS)**

Approved by AICTE, Accredited by NBA & NAAC, Recognized under 2(f) and 12(b) of UGC  
Permanently Affiliated to JNTUGV, Vizianagaram  
K. Kotturu, Tekkali, Srikakulam-532201, Andhra Pradesh, India

---

**Academic Regulations 2023 (AR23) for B. Tech (Regular-Full time)**  
(Effective for the students admitted into I year from the Academic Year 2023-24 onwards)

**1. Award of B.Tech Degree:**

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

Registered for **160** credits and he/she must secure total **160** credits.

In case of B.Tech Degree with Honors, student has to secure additional 15 credits fulfilling all the requisites of a B.Tech program i.e., 160 credits. Registering for Honors is optional and Honors is to be completed simultaneously with B.Tech programme.

Students, who fail to complete their four-year course of study within **8** years or fail to acquire the **160** Credits for the award of the degree within **8** academic years from the year of their admission, shall forfeit their seat in B.Tech programme and their admission shall stand cancelled.

**2. Courses of study:**

The following courses of study are offered at present with specialization in the B.Tech Programme:

S. No.	Branch Code-Abbreviation	Branch
01	01-CE	Civil Engineering
02	02-EEE	Electrical and Electronics Engineering
03	03-ME	Mechanical Engineering
04	04-ECE	Electronics and Communication Engineering
05	05-CSE	Computer Science and Engineering
06	12-IT	Information Technology
07	42-CSM	CSE (Artificial Intelligence and Machine Learning)
08	44-CSD	CSE (Data Science)

And any other course as approved by the authorities of the University from time to time.

**3. Program related terms:**

**Credit:** A unit by which the course work is measured. It determines the number of hours of instruction required per week. One credit is equivalent to one hour of teaching (Lecture/Tutorial) or two hours of practical work/field work per week.

### Credit Definition:

1 Hr. Lecture (L) per week	1 credit
1 Hr. Tutorial (T) per week	1 credit
1 Hr. Practical (P) per week	0.5 credit
2 Hrs. Practical (Lab) per week	1 credit

**Semester:** A semester comprises 90 working days and an academic year is divided into two semesters.

**Academic Year:** Two consecutive (one odd + one even) semesters constitute one academic year.

**Choice Based Credit System (CBCS):** The CBCS provides a choice for students to select from the prescribed courses.

#### 4. Course pattern:

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

A student is eligible to appear for the end examination in a subject, but when absent for it or failed in the end examinations he/she may appear for that subject's supplementary examinations, when offered.

#### 5. Evaluation Methodology:

The performance of a student in each semester shall be evaluated subject wise with a maximum of **100** marks for theory and **100** marks for practical subject. Summer Internships shall be evaluated for **100** marks, Full Internship & Project work in final semester shall be evaluated for **200** marks, and mandatory courses with no credits shall be evaluated for **100** marks.

A student has to secure not less than **35%** of marks in the end examination (in fraction rounded to lower digit) and a minimum of **40%** of marks in the sum total of the mid semester and end examination marks taken together for the theory, practical, design, drawing subject or project etc. In case of a mandatory course, he/she should secure **40%** of the total marks.

#### Theory Course:

Assessment Method	Marks
Continuous internal assessment	30
Semester end examination	70
Total	100

### Continuous internal assessment:

For theory subjects, during the semester, there shall be two midterm examinations. Each midterm examination shall be evaluated for **30** marks of which **5** marks for objective paper (10X0.5=5 marks) (10 minutes duration), **20** marks for subjective paper (90 minutes duration) and **5** marks for assignment.

Each subjective paper is to be held for **30** marks, with the duration of **90** minutes and scale down to **20** marks.

Subjective paper contains three descriptive type questions with internal choice.

Weightage of Marks					
	I MID	I OBJECTIVE		II MID	II OBJECTIVE
I Unit	12 Marks	2 Marks	III Unit	6 Marks	1 Mark
II Unit	12 Marks	2 Marks	IV Unit	12 Marks	2 Marks
III Unit	6 Marks	1 Mark	V Unit	12 Marks	2 Marks

The objective paper shall be conducted along with subjective paper test.

Sum of marks obtained in objective paper and subjective paper is taken as MID term exam marks.

Final mid semester marks (**25** marks) shall be arrived by considering the marks secured by the student in both the mid examinations with 80% weightage given to the better mid exam and 20% to the other.

Assignment marks awarded based on minimum of two assignments (5 marks for each assignment) or one case study (group-wise). It should be continuous assessment throughout the semester and the average marks shall be considered.

### Semester end examination:

The question paper shall have descriptive type questions held for **70** marks, with the duration of **180** minutes. There shall be one question from each unit with internal choice. Each question carries **14** marks (5X14M=70 marks).

### **Laboratory Course:**

Assessment Method	Marks
Continuous internal assessment	30
Semester end examination	70
Total	100

### Continuous internal assessment:

Day-to-day work in the laboratory shall be evaluated for **15** marks by the concerned laboratory teacher based on the regularity/record/viva and **15** marks for the internal test.



(a) Semester end examination:

The end examination shall be conducted by the teacher concerned and external examiner from outside the college.

Procedure **20** marks, experimental work **10** marks, Results **20** marks and Viva voce **20** marks (or)

Description **10** marks, Programming Code **20** marks, Output **20** marks and Viva voce **20** marks.

**Engineering Graphics/Engineering Drawing:**

Assessment Method	Marks
Continuous internal assessment	30
Semester end examination	70
Total	100

Continuous internal assessment:

Day-to-day work shall be evaluated for **20** marks by the concerned teacher based on the submission of sheets prepared in the class and **10** marks for the MID term test.

During the semester, there shall be two midterm examinations. Each midterm examination shall be evaluated for **30** marks subjective paper (120 minutes duration).

Subjective paper contains three descriptive type questions with internal choice.

Weightage of Marks			
I MID		II MID	
I Unit	12 Marks	III Unit	6 Marks
II Unit	12 Marks	IV Unit	12 Marks
III Unit	6 Marks	V Unit	12 Marks

MID term marks (**10** marks) shall be arrived by considering the marks secured by the student in both the mid examinations with 80% weightage given to the better mid exam and 20% to the other.

Semester end examination:

In case of Engineering Graphics the question paper shall have descriptive type questions for **70** marks. There shall be one question from each unit with internal choice. Each question carries **14** marks (5X14M=70 marks).

In case of Engineering Drawing the end examination shall be conducted by the teacher concerned and external examiner from outside the college for **50** marks. The question paper shall have descriptive type questions for **50** marks. There shall be one question from each unit with internal choice. Each question carries **10** marks (5X10M=50 marks) and viva voce **20** marks

### **Mandatory course:**

Mandatory course is one among the compulsory courses and does not carry any Credits. The list of mandatory courses is as below:

- Induction Program
- Constitution of India
- Environmental Science
- Human Values

Mandatory courses are evaluated through continuous evaluation and there is no semester end examination. No marks or letter grade shall be printed in the transcripts for all mandatory non-credit courses, but only Completed (Y)/Not-completed (N) will be specified.

A minimum of 75% attendance is required to complete Induction program and there is no evaluation.

The Mandatory courses Constitution of India, Environmental Science and Human Values shall be evaluated for **100** marks. For evaluation two Midterm examinations (each **30** marks and question paper pattern is similar to theory course) will be conducted along with theory midterm examinations and two assignments (each 4X5M=**20** marks). A minimum of **40** marks is required to complete these courses form out of 100 marks (30+30+20+20 marks).

### **Health and Wellness, Yoga and Sports/ NSS/NCC/Scouts&Guides/Community Service:**

Evaluated for a total of **100** marks.

A student can select 6 activities of his/her choice with a minimum of 01 activity per unit. Each activity shall be evaluated by the concerned teacher for 15 marks, totalling to 90 marks.

A student shall be evaluated by the concerned teacher for **10** marks by conducting viva voce on the subject.

### **6. Attendance Requirements:**

A student shall be eligible to appear for the semester-end examinations, if he/she acquires a minimum of **75%** of attendance in aggregate of all the subjects.

Condonation of shortage of attendance in aggregate up to **10%** (**65%** and above and below **75%**) in each semester with genuine reasons shall be approved by a committee duly appointed by the college. A fee stipulated by the college shall be payable towards condonation of shortage of attendance.

Shortage of Attendance below **65%** in aggregate shall in **NO** case be condoned.

A Student will not be promoted to the next semester unless he satisfies the attendance requirement of the present semester. He/she may seek re-admission for that semester when offered next.

The overall attendance in each semester of regular B.Tech course and Honors course shall be computed separately.

A student shall maintain an attendance of 75% in course of Honors to appear for semester end examination of Honors

A student detained due to lack of attendance in Honors course shall not be permitted to continue Honors programme, but he/she can continue regular B.Tech programme.

## **7. Minimum Academic Requirements:**

### **Conditions for pass and award of credits for a course:**

A candidate shall be declared to have passed in individual course if he/she secures not less than **35%** of marks in the end examination (in fraction rounded to lower digit) and a minimum of **40%** of marks in the sum total of the mid semester and end examination marks taken together for the theory, practical, design, drawing subject or project etc. In case of a mandatory course, he/she should secure **40%** of the total marks.

On passing a course of a programme, the student shall earn assigned credits in that Course.

### **Method of Awarding Letter Grades and Grade Points for a Course:**

A letter grade and grade points will be awarded to a student in each course based on his/her performance as per the grading system given below.

Table: Grading System for B.Tech Programme

<b>Marks Range</b>	<b>Level</b>	<b>Letter Grade</b>	<b>Grade Points</b>
$\geq 90\%$	Superior	S	10
80 – 89%	Excellent	A	9
70 – 79%	Very Good	B	8
60 – 69%	Good	C	7
50 – 59%	Average	D	6
40 – 49%	Pass	E	5
$< 40\%$	Fail	F	0
-	Absent	Ab	0

### **Calculation of Semester Grade Points Average (SGPA) for semester:**

The performance of each student at the end of the each semester is indicated in terms of SGPA.



The SGPA is calculated as below:

$$\text{SGPA} = \frac{\Sigma(\text{CR} \times \text{GP})}{\Sigma\text{CR}} \quad (\text{for all courses passed in a semester})$$

Where CR = Credits of a Course

GP = Grade points awarded for a course

### Calculation of Cumulative Grade Points Average (CGPA) and Award of Division for entire programme:

The CGPA is calculated as below:

$$\text{CGPA} = \frac{\Sigma(\text{CR} \times \text{GP})}{\Sigma\text{CR}} \quad (\text{for the entire programme})$$

Where CR = Credits of a course

GP = Grade points awarded for a course

Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

### Award of Class:

Class Awarded	CGPA to be secured	Remarks
First Class with Distinction	$\geq 7.5$ (Without any supplementary appearance)	From the CGPA secured from 160 Credits
First Class	$\geq 6.5$	
Second Class	$\geq 5.5$ and $< 6.5$	
Pass Class	$\geq 5.0$ and $< 5.5$	

**CGPA to Percentage conversion Formula –  $(\text{CGPA} - 0.5) \times 10$**

### 8. Supplementary Examinations:

Supplementary examinations will be conducted in every semester.

### 9. With-holding of Results:

If the candidate has any dues not paid to the university or if any case of indiscipline or malpractice is pending against him/her, the result of the candidate shall be withheld in such cases.

### 10. Conditions for Promotion:

A student will be promoted from one semester to another semester if he/she satisfies the minimum attendance requirement.

A student shall be promoted from II to III year only if he fulfills the academic requirement of total **50%** credits (if the number of credits is in fraction, it will be rounded off to a lower digit) from regular and supplementary examinations of I year and II year examinations, irrespective of whether the candidate takes the examination or not.

A student shall be promoted from III year to IV year only if he fulfills the academic requirements of total **50%** credits (if number of credits is in fraction, it will be rounded off to lower digit) from regular and supplementary examinations of I Year, II Year and III Year examinations, irrespective of whether the candidate takes the examinations or not.

#### **11. Transitory Regulations:**

Discontinued, detained, or failed candidates are eligible for readmission as and when the semester is offered after fulfillment of academic regulations. Candidates who have been detained for want of attendance or not fulfilled academic requirements or who have failed after having undergone the course in earlier regulations or have discontinued and wish to continue the course are eligible for admission into the unfinished semester from the date of commencement of class work with the same or equivalent subjects as and when subjects are offered, subject to Section 1 and they will follow the academic regulations into which they are readmitted.

#### **12. Minimum Instruction Days:**

The minimum instruction days for each semester shall be **90**.

#### **13. There shall be no branch transfer after the completion of admission process.**

#### **14. General:**

Wherever the words "he," "him," "his," occur in the regulations, they include "she," "her," "hers" as well.

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

In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal is final.

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

\*\*\*\*\*



## DISCIPLINARY ACTION FOR MALPRACTICES / IMPROPER CONDUCT IN EXAMINATIONS

	<b>Nature of Malpractices/Improper conduct</b>	<b>Punishment</b>
1	<p>If the student 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 subject 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 subject of the examination)</p>	Expulsion from the examination hall and cancellation of the performance in that subject only.
	<p>If the student gives assistance or guidance or receives it from any other student orally or by any other body language methods or communicates through cell phone with any student or students in or outside the exam hall with respect to any matter</p>	Expulsion from the examination hall and cancellation of the performance in that subject only. In case of an outsider, he will be handed over to the police and a case is registered against him.
2	<p>If the student has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the student is appearing</p>	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the student has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year.
3	<p>If the student impersonates any other student in connection with the examination</p>	The student who has impersonated shall be expelled from examination hall. The student is also debarred and forfeits the seat. The performance of the original student, who has been impersonated, shall be cancelled in all the subjects of the examination (including practical's and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The student is also debarred for two consecutive semesters from class work and all semester-end examinations. The

		continuation of the course by the student is subject to the academic regulations in connection with forfeiture of the seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.
4	If the student smuggles the answer book or additional sheet or takes out or arranges to send out the question paper or answer book or additional sheet during or after the examination	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the student has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The student is also debarred for two consecutive semesters from class work and all semester-end examinations. The continuation of the course by the student is subject to the academic regulations in connection with forfeiture of the seat.
5	If the student uses objectionable, abusive or offensive language in the answer script or in letters to the examiners or writes to the examiner requesting him to award pass marks	Cancellation of the performance in that subject.
6	If the student 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 walkout or instigates others to walk out or threatens the officer-in charge or any person on duty in or outside the examination hall or causes any injury to any of his relatives either by words 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 relatives, or indulges in any other act of misconduct or mischief which results in damage 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	In case of students of the college, they shall be expelled from examination hall and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects 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 is registered against them.

	misconduct or has the tendency to disrupt the orderly conduct of the examination	
7	If the student leaves the exam hall taking away answer script or intentionally tears off the script or any part thereof inside or outside the examination hall	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the student has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The student is also debarred for two consecutive semesters from class work and all university examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of the seat.
8	If the student possesses any lethal weapon or firearm in the examination hall	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the student has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The student is also debarred and forfeits the seat.
9	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clauses 6, 7, 8	In case of student of the college, expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the student has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects 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 will be registered against them.
10	If the student comes in a drunken condition to the examination hall	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the student has



		already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.
11	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny	Cancellation of the performance in that subject and all other subjects the student has already appeared including practical examinations and project work of that semester/year examinations.

