

# Krishna University

(Established by Govt. of A.P., Act. No. 29 of 2008)

Academic Regulations (R24) for

Master of Technology (M. Tech) Computer Science & Engineering

Regular-Full Time

Semester & CBCS Pattern

(Effective for the students admitted with effect from the Academic Year 2024-2025 onwards)

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## Machilipatnam-521004 Krishna District

#### 1. Award of M. Tech Degree

A student will be declared eligible for the award of the M. Tech degree if he/she fulfils the following academic regulations:

- Pursues a course of study for not less than two academic years and not more than four academic years.
- ii) Registers for a minimum of 70 credits.
- Students, who fail to fulfill all the academic requirements for the award of the degree within four academic years from the year of their admission, shall forfeit their seat in M. Tech courses and their admission stands cancelled.

## 3. Programs offered by the University:

The M. Tech (CSE) programme offered for constituent (KRUCET) college w.e.f from 2024-2025.

## 4. About Program related terms:

- Credit: A unit by which the course work is measured. It determines the number of hours
  of instructions required per week. One credit is equivalent to one hour of teaching
  (Lecture/Tutorial) or two hours of practical work/field work per week.
- ii. Academic Year: Two consecutive (one odd + one even) semesters constitute one academic year.
- iii. Choice Based Credit System (CBCS): The CBCS provides choice for students to select from the prescribed courses.
- iv. Each course is assigned certain number of credits based on following criterion:

	Semester	
	Periods / Week	Credits
Theory (Lecture/Tutorial)	03	03
Practical	03	02
Project	**	26
Project midterm review	XX	10
Project evaluation	XX	16

## 5. Weights for Course Evaluation:

#### 5.1 Course Pattern:

 The entire course of study is for two academic years. Semester pattern shall be followed in all the academic years

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 If a student is absent or has failed in the <u>semester</u> end examination subject in any subject, he/she may be eligible to appear for the same, <u>when the next examination offered</u>/ <u>when</u> it is conducted

When a student is detained due to lack of credits/shortage of attendance he/she maybe re-admitted when the semester is offered after fulfillment of academic regulations. In such case, he/she shall be in the academic regulations into which he/she is readmitted.

#### 5.2 Evaluation Process:

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.

- i. For theory subjects the distribution shall be 30 marks for mid semester Evaluation and 70 marks for the End-Examination.
- ii. For practical subjects the distribution, 30 marks for day to day assessment / continuous assessment and 70 marks for the semester end practical examination.
- iii. If any subject is having both theory and practical components, they will be evaluated separately as theory subject and practical subject. However, they will be given same subject code with an extension of 'T' for theory subject and 'P' for practical subject.
- iv. Only two midterm examinations per theory subject. Average of two mid examinations will be considered for 30 marks.
- v. For first midterm examination fifty percent of the syllabus should be covered, the rest of the syllabus will be covered in second midterm examination.

#### 5.3 Mid Semester Examination Evaluation:

- Two mid-term examinations shall be conducted for each theory subject in a semester.
   The assessment is for 30 marks in each mid-term examination and the average will be considered for the final marks.
- ii. The pattern for the mid examination is 30 marks will be divided into 10 marks of the objective (Short questions/MCQ& 30 minutes duration) and 20 marks descriptive (four questions each carries 5 marks' with internal choice for each question& 60 minutes duration)

## \*Note 1: If the final marks are in fraction, it shall be rounded off to the next number

- If the student is absent for the mid-term examination, no re-exam shall be conducted
- If the student failed to attend both the midterm examinations, his aggregate marks shall be considered zero. If the student is failed to attend any one mid-term examination, that marks will be averaged as per below calculation for calculating his aggregate marks.
- Out of the five chapters of the syllabus, two and half units are considered for the first midterm examination and two and half units are considered for the second midterm Examination.

Final midterm semester marks shall be arrived at by considering the marks secured by the student i.e., average of the two mid examinations.

For Example:

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If the student attended both the mid-term examinations:

Marks obtained in first mid: 30 Marks obtained in second mid: 30

Final mid semester Marks: (30+30) = 60/2 = 30

#### If the student attended only one mid-term examination:

 If the student is absent for any one midterm examination, the final mid semester marks shall be is as follow for Example:

Marks obtained in first mid : Absent
Marks obtained in second mid : 30

Final mid semester Marks: (30+0) = 30/2 = 15

#### 5.4 Semester End Examination Evaluation:

- i. Semester end examination of theory subjects shall have the following pattern:
- There shall be 6 questions and all questions are compulsory.
- b. Question I shall contain 08 short answer questions, out of 05 questions need to be answer for a total of 20 marks, such that each question carries 4 marks. There shall be at least 01 short answer questions from each unit.
- c. In each of the questions from 2 to 6, there shall be either/or type questions of 10 marks each. Student shall answer any one of them.
- d. The questions from 2 to 6 shall be set by covering one unit of the syllabus for each question.
- 5.5 Evaluation of Practical examination/ labs be aggregated to 100 marks. These 100 marks are divided as below.
  - > 70 marks for the final semester end examination in each semester. The examination will be conducted jointly by the concerned laboratory teacher / internal examiner and the external examiner nominated by University. Both internal and external examiners have to sign on the marks sheet.
  - > 30 marks for the continuous assessment (Day to day work in the laboratory shall be evaluated for 30 marks by the concerned laboratory teacher based on the regularity/ record/viva). Laboratory teachers are mandated to ensure that every student completes 80%-90% of the lab assessments.
- 5.6. Laboratory marks and the sessional marks awarded by the college are not final. They are subject to scrutiny and scaling by the University wherever necessary. In such cases, the sessional and laboratory marks awarded by the college will be referred to a committee. The committee will arrive at a scaling factor and the marks will be scaled as per the scaling factor. The recommendations of the Committee are final and binding.
- 5.7 The laboratory records and mid semester test papers shall be preserved for a minimum of 4 years in the respective institutions as per the University norms and shall be produced to the Committees of the University as and when the same are asked for.

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- 5.8 There shall be two <u>Open Electives</u>, which are <u>Choice Based Credit Courses</u> (<u>CBCC</u>) in II and III semesters, wherein the students have to choose inter-disciplinary electives offered by other departments.
  - The student has to select one Two open elective in second (II) and one open elective in third (III) semesters.
  - Each department has to provide three (3) electives for the second (II) semester and three electives for the third (III) semesters.

Common slots should be allotted to open electives and inter-disciplinary electives from other departments in the time table.

- 5.9 An Internship/Industrial Training/Research Projects in National Laboratories/Academic Institutions/Seminar
  - > Internship/ Industrial Training
    - Summer Internship (Optional)

It is introduced for 2 credits in the curriculum. It is introduced at the end of <u>II semester</u> i.e., during summer vacation for a period of 4 weeks. The student shall submit a diary and a technical report for evaluation. This shall be evaluated in the <u>III semester</u> for 50 marks by a committee consisting of Head of the Department along with two senior faculty members of the Department. A student shall acquire 2 credits assigned, when he/she secures 40% or more marks for the total of 50 marks. In case, if a student fails, he/she shall reappear as and when the <u>IV semester</u> regular examinations are conducted. There shall be no external evaluation.

#### > Research Projects/Project works

All the candidates shall undertake a Project work of five months duration in the fourth semester. The project should have industry orientation and the work should be certified by the concerned organization where the student has undertaken the project work. The project work shall be guided and certified by the teacher-guide.

#### 5.10 Procedure for Conduct and Evaluation of Project Midterm review:

After selecting the specific project topic, the student shall collect the information and prepare an abstract, showing his/her understanding of the proposed project topic as a summary and submit the same to the department before implementation of the project in the beginning of the III Semester. The status of the project work will be reviewed and the presentation shall be evaluated by the departmental committee consisting of Head of the Department, Project supervisor and a senior faculty member after two months of the project. It shall be evaluated as 50 Marks for Project review (Internal/Internal review/Project Mid-term review) and 100 Marks shall be for Project review (External) Dissertation-I. The Dissertation-I shall be conducted by a committee consisting of HOD, Project Supervisor and an External Examiner nominated by the University.

In case, if a student fails in Project midterm review, a re-review shall be conducted within a month. In case if he/she fails in the re-review also, he/she shall not be permitted for Project Evaluation. Further, such students shall reappear as and when IV semester regular examinations are conducted.

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## 5.11 Procedure for Conduct and Evaluation of Project Evaluation: Dissertation-II

Out of a total of 200 marks, 50 marks for Project Review and for the Project Evaluation, 100 marks shall be for Project report/thesis/record and 50 marks for the End Semester Examination (Viva-voce). The Viva- Voce shall be conducted by a committee consisting of HOD, Project Supervisor and an External Examiner nominated by the University.

## 5.12 Mini Project with Seminar:

The student will undergo mini project with seminar in the II semester by faculty Incharge and the student has to present the mini project report along with the seminar, submit the hard copy of mini project report at the end of the II semester. Out of a total of 100 marks, for the mini project Evaluation,50 marks shall be for Seminar report/record and 50 marks for the End Semester Examination (Viva-voce). The Viva-Voce shall be conducted by a committee consisting of HOD, faculty in charge and a senior faculty member.

## 6. Attendance Requirements in Academics:

- 6.1. A student shall be eligible to appear for University examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the subjects in a semester.
- 6.2. 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.
- 6.3 Shortage of Attendance below 65% in aggregate shall in NO CASE be condoned.
- 6.4 A stipulated fee shall be payable towards condonation of shortage of attendance to the University.
- 6.5 Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examination of that class and their registration shall stand cancelled.
- 6.6 A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester. They may seek readmission for that semester when offered next.

#### 7. Minimum Academic Requirements and Award of the Degree:

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in section 6.

- 7.1 A student shall be deemed to have satisfied the minimum academic requirements and earned the credits allotted to each theory, practical or project if he secures not less than 35% of marks in the end examination and a minimum of 40% of marks in the sum total of the mid semester and end examination marks taken together. In case of mandatory courses he/she should secure 40% of the total marks.
- 7.2 A student shall register and put up minimum attendance in all respective credits and earn all the 100 credits.
- 7.3 Students who fail to earn 100 credits as indicated in the course structure within four academic years from the year of their admission shall forfeit their seat in respective course and their admission shall stand cancelled.

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#### 8. 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 or candidate or student, the result of the candidate shall be withheld.

9. Award of Grades: Appropriate letter grades are awarded in each theory and practical subject to only such candidates who have passed in the university examinations. Internal assessment marks and university examination marks put together will be taken into account for the letter grading system in each subject separately.

A Candidate registered for the university examination but fails to appear or fails to score the minimum required 40% marks in the university examination will get a grade "F", indicating failure or grade of incompletion.

A subject successfully completed cannot be repeated. Final evaluation of each subject (theory and practical separately) will be carried out on a 10- point grading system corresponding to the marks obtained in that subject. Each subject letter grade is converted into a specific grade value associated with the letter grade as given below (Table).

#### Performance in a paper

(Conversion of marks to grade points and letter grade)

S.No	Range of Marks	Grade Points	Letter Grade
1	>85%	10.0	0
2	75%-85%	9.0	A
3	67%-74%	8.0	В
4	58%-66%	7.0	С
5	50%-57%	6.0	D
6	40%-49%	5.0	Е
7	<40%	0.0	F

#### Calculation of SGPA and CGPA

The Semester Grade Point Average (SGPA) = 
$$\frac{\sum (C \times GP)}{\sum C}$$

The Cumulative Grade Point Average (CGPA)= 
$$\frac{\sum (C \times GP)}{\sum C}$$

Where,

C = Credits of the Subject

GP = Grade Points of the Subject

SGPA is calculated considering only the subjects of that semester.

CGPA is calculated considering all the subjects up to this semester.

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## 10. Overall Performance

(Conversion of CGPA to grade and classification of final result)

S. No	Range of CGPA	Grade	Classification of final result
1	8.00 to 10.00	0	First Class with Distinction
2	6.50  to < 8.00	A	First Class
3	5.50 to < 6.50	B	Second Class
4	< 5.50	D	Re-appear

## 11. Minimum Instruction Days for a Semester:

The minimum instruction days including exams for each semester shall be 90 days.

#### 12. Medium of Instruction:

The Medium of Instruction is English (expect language courses) for all courses, laboratories, mid semester and external examinations, Comprehensive Viva-Voce, seminar presentations and project reports.

#### 13. Student Transfers:

Student transfers shall be as per the guidelines issued by the Government of Andhra Pradesh and the University from time to time.

#### 14. General Instructions:

- a. The academic regulations should be read as a whole for purpose of any interpretation.
- b. Malpractices rules-nature and punishments are appended.
- c. Where the words "he", "him", "his", occur in the regulations, they also include "she", "her", "hers", respectively.
- d. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Vice-Chancellor is final.
- e. The University may change or amend the academic regulations or syllabi at any time and the changes or amendments shall be made applicable to all the students on rolls with effect from the dates notified by the University.

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#### KRISHNA UNIVERSITY, MACHILIPATNAM -521003 M. Tech (Computer Science & Engineering)

## 1/11 Midterm examination & Month & Year of exam

Semester:

Paper Title with paper code:

### (QUESTION PAPER PATTERN FOR MIDTERM EXAMINATION)

	(QUEST	ION PAPE	RPATIERNI	OR MIDTERM EXAMINAT	
Time: 90 m	inutes				Max. Marks: 30
Answer ALI	L objective	(Short ques	tions/MCQ)	(1 x 10 = 10 Marks)	
1.				9	The state of the s
a)	b)	a)	d)		The sale of
2.	U)	c)	d)		All Aller
a)	b)	c)	d)	A. T. Carrier	100
3.	U)	ς,	۵)		1
a)	b)	c)	d)		
4.				1 1000	
a)	b)	c)	d)	0 0 1	
5.					
a)	b)	c)	d)		
6.	141120		. "	All the said	
a)	b)	c)	d)		
7.	1.5	- \	d)	11 10	
a)	b)	c)	u)		
8. a)	b)	c)	(d)	and the second	
9.	0)	٠,	N POR		
a)	b)	c)	d)		
10.	4	The same of	Charles and the same		
a)	b)	c)	d)		
Answer For	r Ouestions	Choosing On	e Question from	Each Unit. All Questions Carry Eq	ualMarks.
	B 400	THE PERSON NAMED IN		$(4 \times 5 = 20 \text{ Marks})$	
1. (A) Ess	ay question				
4	1	1	9	(or)	
	ay question				
2. (A) Essa	ay question		7	(or)	
(B) Fee	ay question			(01)	
	ay question				
3. (A) E35.	., .			(or)	
(B) Essa	ay question				
4. (A) Ess	ay question				
	590 079			(or)	
			(B) Ess	ay question	

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## KRISHNA UNIVERSITY, MACHILIPATNAM -521004 M. Tech (Computer Science & Engineering)

#### Semester:

Paper Title with paper code: Month & Year of exam

(w.e.f admitted batch 2024-25)

## [QUESTION PAPER PATTERN FOR SEMESTER END (EXTERNAL) EXAMINATION]

Time: 3 Hours	Max. Marks: 70
Answer ALL questions	(5x4 = 20 Marks)
1. a)	0 16 19
b)	
c)	
d)	of gard of
e)	
f)	
g)	
h)	0 - 1 -
	1 10 1

(5x10 = 50 Marks)

	UNIT – I	
2. A)		
B)	(OR)	
3. A)	UNIT – II	
B)	(OR)	
4 1	UNIT – III	
4. A) B)	(OR)	
	UNIT – IV	
5. A)	(OR)	
В)	UNIT – V	
6. A)	(OR)	
B)	(-1-)	

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