



ST.ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous Institution)

Bypass Road, Nayunipalli, Chirala, Bapatla District-523187

Accredited by NAAC With 'A' Grade | Accredited by NBA | Approved by AICTE | Permanently Affiliated to JNTUK |
Recognized by UGC U/s 2(f) & 12(B) | Approved with 'A' Grade by Andhra Pradesh State Government | Permanently Accredited by IE(I)

R22 Regulations
for
POST GRADUATE – TWO YEAR
DEGREE PROGRAMS
(M. Tech, MCA and MBA)
*(Applicable for batches
admitted from 2023-2025)*



**ACADEMIC
REGULATIONS
(R22)
PG PROGRAMS
(M. Tech, MCA & MBA)**

ACADEMIC REGULATIONS (R22) FOR POST GRADUATE DEGREE PROGRAMS

Applicable for the students of PG programs from the academic year 2022-23 onwards. The post graduate degree in M. Tech./MCA/MBA of Jawaharlal Nehru Technological University Kakinada shall be conferred on candidates who are admitted to the program and who fulfil all the requirements for the award of the degree.

1. ELIGIBILITY FOR ADMISSION

- 1.1 Admission to the above program shall be made subject to eligibility, qualification and specialization as prescribed by the University from time to time.
- 1.2 Admissions shall be made based on merit/rank obtained by the candidates in the qualifying entrance test conducted by the University or based on any other order of merit as approved by the University, subject to reservations as laid down by the Govt. from time to time.

2. AWARD OF DEGREE

- 2.1 A student shall be declared eligible for the award of the M. Tech/MCA/MBA degree, if he pursues a course of study in not less than two and not more than four academic years.
- 2.2 **The student shall register for all 68/80/102 credits and secure all the 68/80/102 credits in the M. Tech/MCA/MBA programs respectively**
- 2.3 The minimum instruction days in each semester are 90.

3. PROGRAM OF STUDY

- 3.1 M. Tech
- 3.2 MCA
- 3.3 MBA

3.1 M. Tech:

The following specializations are offered at present for the M. Tech program:

1. M. Tech- Transportation Engineering offered by the Department of Civil Engineering
2. M. Tech- Power Systems offered by the Department of Electrical and Electronics Engineering
3. M. Tech- Thermal Engineering offered by the Department of Mechanical Engineering
4. M. Tech- Embedded System offered by the Department of Electronics and Communication Engineering
5. M. Tech- Computer Science & Engineering offered by Department of Computer Science and Engineering

3.2 MCA:

Master of Computer Applications is offered by the Department of Master of Computer Applications

3.3 MBA:

Master of Business Administration is offered by the Department of Master of Business Administration

4. ATTENDANCE

- 4.1 A student shall be eligible to write the Semester End Examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the subjects/courses, and with minimum 50% in each course including practicals.
- 4.2 Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester shall be granted by the College Academic Committee.
- 4.3 Shortage of attendance **below 65%** in aggregate shall not be condoned and such candidates will not be eligible to write their semester end examination of that class.
- 4.4 Students whose shortage of attendance is not condoned in any semester are not eligible to write their semester end examination of that class.
- 4.5 A prescribed fee shall be payable towards condonation of shortage of attendance.
- 4.6 A student shall not be promoted to the next semester unless, he/she satisfies the attendance requirement of the present semester, as applicable. They may seek re-admission into that semester when offered next. If any candidate fulfills the attendance requirement in the present semester, he shall not be eligible for re-admission into the same class.

5. EVALUATION

- 5.1 A student shall be eligible to write the semester end examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the subjects/courses, and with minimum 50% in each course including practicals
- 5.2 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, based on Internal Evaluation and Semester End Examination.
- 5.3 For the theory subjects 60 marks shall be awarded based on the performance in the semester end examination and 40 marks shall be awarded based on the internal evaluation. The internal evaluation shall be made based on two mid term-examinations conducted one in the middle of the semester and the other immediately after the completion of instruction. Each midterm examination will be evaluated based on a descriptive examination for 20 marks and assignments/case study/mini project/seminar for 20 marks. The descriptive examination will be conducted for a total duration of 90 minutes with 4 questions (without choice), each question for 05 marks. End semester examination will be conducted for 60 marks for all FIVE (5) questions (one question from one unit) to be answered (either or). Internal marks can be calculated with 80% weightage for better of the two mid exams and 20% weightage for another mid exam.

Example:

$$\text{Final Internal Marks} = (\text{Best of (Mid-1/Mid-2) marks} \times 0.8 + \text{Least of (Mid-1/Mid-2) marks} \times 0.2)$$

- 5.4 For practical subjects, 60 marks shall be awarded based on the performance in the semester end examinations and 40 marks shall be awarded based on the day-to-day performance as internal marks. The internal evaluation of laboratory courses comprises of 20 marks for day-to-day laboratory work and the remaining 20 marks will be awarded based on laboratory examination conducted at the end of the semester. The end examination shall be conducted by the examiners, with a breakup mark of procedure-20, experimentation-20, results-10, viva-voce-10.
- 5.5 For mini project with 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/mentor and two other senior

faculty members of the department. For mini project with seminar, there will be only internal evaluation of 100 marks. A candidate must secure a minimum of 50% of marks to be declared successful.

- 5.6 For industry oriented internship the student shall do an internship in collaboration with any industry of their specialization. The internship report shall be submitted to the department and an oral presentation is to be made before the internal evaluation committee consisting of Head of the Department, supervisor/mentor and two other senior faculty members of the department. For the industry oriented internship, there will be only internal evaluation of 100 marks. A candidate must secure a minimum of 50% of marks to be declared successful.
- 5.7 For NPTEL/SWAYAM/MOOCs category of subjects, the student can opt for any 12 week engineering/management/mathematics course which is not taken in any of the semesters. The student can earn the required credits to complete these courses even in the previous semesters as well. The evaluation of such courses shall be done as per the equivalence of the course result with reference to the grading system of the parent institution, as agreed upon by the Academic Council.
- 5.8 For non-credit (zero credits) mandatory courses like Environmental Sciences, Universal Human Values, Ethics, Constitution of India etc., 60 marks shall be awarded based on the performance in the semester end examination (question paper will be set by the internal faculty) and 40 marks shall be awarded based on the evaluation criteria similar to other theory courses. The student shall deem to complete the mandatory course if he secures a minimum of 40% of marks in the semester end examination and a minimum aggregate of 50% of the total marks in the semester end examination and internal evaluation taken together. No marks or letter grades shall be printed in the grade cards/transcripts for all mandatory non-credit courses, but only Completed (Y)/Not-completed(N) will be specified.
- 5.9 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 semester end examination and a minimum aggregate of 50% of the total marks in the semester end examination and internal evaluation taken together.
- 5.10 In case the candidate does not secure the minimum academic requirement in any subject (as specified in 5.9) he must re-appear for the semester end 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 semester 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 re-registered 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 semester end examination marks obtained in the previous attempt shall stand cancelled. For re-registration the candidates must apply to the college by paying the requisite fees and get approval from the college before the start of the semester in which re-registration is required.
- 5.11 In case the candidate secures less than the required attendance in any re-registered subject(s), he shall not be permitted to write the semester end examination in that subject. He shall again re-register the subject when next offered.
- 5.12 Laboratory examination for PG programs must be conducted with two examiners, one of them being the laboratory class teacher or teacher of the respective college and the second shall be an external examiner appointed by the college from the panel of examiners submitted by the respective department.

6. 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.

- 6.1 A Project Review Committee (PRC) shall be constituted with Head of the Department and two other senior faculty members in the department.
- 6.2 Registration of Dissertation/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.
- 6.3 After satisfying 6.2, a candidate must 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).
- 6.4 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 PRC shall examine whether 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 will start from the date of change of Supervisor or topic.
- 6.5 Continuous assessment of Dissertation-I and Dissertation-II for M. Tech and Dissertation for MCA & MBA during the semester(s) will be monitored by the PRC.
- 6.6 A candidate shall submit his status report in two stages to the PRC, at least with a gap of 2 months between them.
- 6.7 For M. Tech, the work on the project shall be initiated at the beginning of the II year and the duration of the project is two semesters. For MCA & MBA the work on the project shall be initiated at the beginning of the IV year and the duration of the project is one semester. 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 20 weeks from the date of registration of the project work. The candidate must satisfy the requisite attendance criteria before submission of the thesis.
- 6.8 Three copies of the project thesis certified by the supervisor shall be submitted to the department.
- 6.9 The thesis shall be adjudicated by one external examiner selected by the college. For this, the Head of the Department shall submit a panel of 3 examiners, eminent in that field, with the help of the guide concerned (one panel may be considered for a maximum of 10 students).
- 6.10 If the report of the external 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 re-register for the project and complete the project within the stipulated time after taking the approval from the college.
- 6.11 The Head of the Department shall coordinate and make arrangements for the conduct of viva-voce examination.
- 6.12 If the report of the external examiner is favorable, viva-voce examination shall be conducted by a board consisting of the supervisor, Head of the Department and the external examiner who adjudicated the thesis. The board shall jointly report the candidate's work for a maximum of 100 marks.
- 6.13 If the report of the viva-voce is unsatisfactory (i.e., < 50 marks), 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 college.

7. CUMULATIVE GRADE POINT AVERAGE (CGPA)

The criteria for awarding the grades with respect to the marks obtained is as per the table given below:

Grade Table: For M.Tech, MCA, MBA			
Marks Range	Academic Performance	Letter Grade	Grade Point
≥ 90	Outstanding	O	10
≥80 to <90	Excellent	S	9
≥70 to <80	Very good	A	8
≥60 to <70	Good	B	7
≥50 to <60	Average	C	6
<50	Fail	F	0

7.1 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.

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

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

7.2 Computation of CGPA

- The **CGPA** is also calculated in the same manner considering all the courses undergone by a student over all the semester of a program, i.e.
- $$\text{CGPA} = \frac{\sum (C_i \times S_i)}{\sum C_i}$$
- Where S_i is the SGPA of the i^{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.

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

8. AWARD OF DEGREE AND CLASS

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of PG degree, he shall be placed in one of the following three classes:

Division or Class Table: For M.Tech, MCA, MBA	
CGPA	Equivalent Division
≥ 7.75	First Class with Distinction
≥ 6.75 and < 7.75	First Class
≥ 6.00 and < 6.75	Second Class

The grades secured, grade points obtained and credits obtained will be shown separately in the memorandum of marks.

9. WITHHOLDING OF RESULTS

If the student is involved in in discipline/malpractices/court cases, the result of the student will be withheld.

10. TRANSITORY REGULATIONS (For R22)

- 10.1 Discontinued or detained candidates are eligible for re-admission into same or equivalent subjects at a time as and when offered.
- 10.2 The candidate who fails in any subject will be given two chances to pass the same subject. Otherwise, he must identify an equivalent subject as per R22 academic regulations.

11. GENERAL

- 11.1 Wherever the words “he”, “him”, “his”, occur in the regulations, they include “she”, “her”, “hers”.
- 11.2 The academic regulation should be read 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.
- 11.3 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.

MALPRACTICES RULES
DISCIPLINARY ACTION FOR / IMPROPER CONDUCT IN EXAMINATIONS

	Nature of Malpractices/Improper conduct	Punishment
	<i>If the candidate:</i>	
1. (a)	Possesses or keeps accessible in examination hall, any paper, notebook, 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 candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	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 candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate 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. The Hall Ticket of the candidate is to be cancelled and sent to the institution exam cell.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all Semester End Examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination 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 candidate 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 for two consecutive semesters from class work and all Semester End Examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	Uses objectionable, abusive or offensive language in the answer paper 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.	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 walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either 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 relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the College campus or engages in any	In case of students at the college, they shall be expelled from examination halls 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 candidates 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.

	other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	
7.	Leaves the exam hall taking away answer script or intentionally tears 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 candidate 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 for two consecutive semesters from class work and all Semester End Examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8.	Possess 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 candidate 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.
9.	If student at the college, who is not a candidate for the examination, or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the college's expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate 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.	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 candidate 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 based on internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the institution for further action and impose suitable punishment.	

Malpractices identified by squad or special invigilators:

Punishments to the candidates as per the above guidelines.

JNTUK Code: F0
NAAC 'A' Grade – 1st Cycle
NAAC 'A' Grade – 2nd Cycle
Valid upto Dec. 2027



Counseling Code : ANSN
Recognized Under Section
2(f) & 12(B) of Ugc Act, 1956

St.ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY **AUTONOMOUS**

(Approved by AICTE, New Delhi & Permanently Affiliated to JNTUK, Kakinada)
ACCREDITED BY NBA & INSTITUTION OF ENGINEERS (INDIA)

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	+	Rs. 1,000/-
Assaulting or Using Criminal force or Criminal intimidation	 1 Year	+	Rs. 2,000/-
Wrongfully restraining or confine or cause	 2 Years	+	Rs. 5,000/-
Causing grievous hurt, kidnapping or Abducts or rape or committing unnatural offence	 5 Years	+	Rs. 10,000/-
Causing death or abetting suicide	 10 Months	+	Rs. 50,000/-

In Case of Emergency CALL TOLL FREE NO. : 1800 - 425 - 1288

LET US MAKE SACET A RAGGING FREE COLLEGE

JNTUK Code: F0

NAAC 'A' Grade – 1st Cycle
NAAC 'A' Grade – 2nd Cycle
Valid upto Dec. 2027



Counseling Code : ANSN

Recognized Under Section
2(f) & 12(B) of Ugc Act, 1956

St.ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY
AUTONOMOUS

(Approved by AICTE, New Delhi & Permanently Affiliated to JNTUK, Kakinada)

ACCREDITED BY NBA & INSTITUTION OF ENGINEERS (INDIA)

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.



St. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY
AUTONOMOUS

In Case of Emergency CALL TOLL FREE NO. : 1800 - 425 - 1288

LET US MAKE SACET A RAGGING FREE COLLEGE