ACADEMIC REGULATIONS
COURSE STRUCTURE
AND
DETAILED SYLLABUS
(Choice Based Credit System)

R19

For
MCA THREE YEAR PG COURSE

(Applicable for batches admitted from 2019-2020)

SWARNANDHRA
COLLEGE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)

SEETHARAMAPURAM, NARSAPUR-534 280, W.G.DT., A.P.

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

ACADEMIC REGULATIONS

1. INTRODUCTION

Academic Program of the institute are governed by rules and regulations approved by the Academic Council, which is the highest Academic body of the Institute. These academic rules and regulations are applicable to the students admitted from the academic year 2019-20 into first year of three years postgraduate program offered by the college leading to Master of Computer Applications (MCA) degree in the respective discipline.

The MCA Degree of the Swarnandhra College of Engineering & Technology shall be conferred on candidates who are admitted to the program and fulfill all the requirements for the award of the Degree. Swarnandhra College of Engineering & Technology, an autonomous institution, follows Semester pattern for all the three years of its Postgraduate MCA programme with internal and external evaluation.

Semester Pattern: Each academic year shall be divided into two semesters: each semester consists of 22 weeks duration with a minimum of 110 working days which includes instruction, mid examinations and final examinations.

2. ADMISSIONS:

2.1 Admission into first year MCA : Admissions into first year of MCA Program of Swarnandhra College of Engineering & Technology (Subsequently referred to as SCET) will be as per the norms stipulated by Jawaharlal Nehru Technological University Kakinada & Govt. of Andhra Pradesh. Admissions into the program in the Institution are classified into CATEGORY – A, through convener, ICET and CATEGORY- B filled by the college management.

2.2 Admission into Second Year/Third Semester (Lateral Entry) : The candidates should have passed the qualifying exam. (B.sc (CS, IT), BCA graduation) for admission into the 3rd semester directly. Admissions into Lateral Entry of MCA Program of SCET will be as per the norms stipulated by Jawaharlal Nehru Technological University Kakinada & Govt. of Andhra Pradesh. Admissions into the program in the Institution are classified

into CATEGORY – A, through convener, ICET and CATEGORY- B filled by the college management.

2.3 **Admissions with advance standing:** These may arise in the following cases:

a) When a student seeks transfer from other colleges to SCET and desirous to pursue the study at SCET in an eligible branch of study.

b) When students of SCET get transferred from one regulation to another regulation or from previous syllabus to revised syllabus.

c) When a student after long discontinuity rejoins the college to complete his/her Program of study for the award of degree.

d) When a student is not able to pursue his/her existing Programme of study but wishes to get transferred to another Program of study.

These admissions may be permitted by the Academic Council of SCET as per the norms stipulated by the statutory bodies and Govt. of Andhra Pradesh. In all such cases for admission, when needed, permissions from the statutory bodies are to be obtained and the Program of study at SCET will be governed by the transitory regulations.

3. <u>AWARD OF MCA DEGREE</u>

3.1 A student shall be declared eligible for the award of MCA degree, if he pursues a course of study and completes it successfully for not less than three academic years and not more than six academic years. For Lateral Entry students, they have to completer not less than two years and not more than four academic years

3.2 A Student, who fails to fulfill all the academic requirements for the award of the degree with in six academic years from the year of their admission, shall forfeit his seat in MCA course.

3.3 For MCA course a student shall register for 110 credits and secure the same. For Lateral Entry a Student shall register for 71 credits and secure the same

4. <u>ATTENDANCE</u>

4.1 A candidate shall be deemed to have eligibility to write End Semester examinations if he has put in a minimum of 75% of attendance in aggregate of all the subjects.

4.2 Condonation of shortage of attendance up to 10% i.e. 65% and above, and below 75%

may be given by the College academic committee.

4.3 Condonation of shortage of attendance shall be granted only on genuine and valid reasons representations by the candidate with supporting evidence

4.4 Shortage of attendance below 65% shall in NO case be condoned

4.5 A candidate shall not be promoted to the next semester unless he fulfills the attendance requirements of the previous semester.

4.6 A stipulated fee shall be payable towards condonation of shortage of attendance

5. <u>DISTRIBUTION AND WEIGHTAGE OF MARKS:</u>

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

(a) External Evaluation

For the theory subjects 70 marks shall be awarded based on the performance in the End Examination Marks. External examination shall be conducted for duration of 180 minutes with 5 questions from all units with internal choice.

(b) Internal Evaluation

30 marks shall be awarded based on the Internal Evaluation. Internal Evaluation shall be made based on the weighted 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. The weights are 80% for the mid in which the students secured highest marks and 20% for mid in which the student secured lowest marks. Each mid examination shall be conducted for duration of 90 minutes with 3 questions to be answered out of 3 questions from two and half units(without choice) and each question for 10 marks

5.2 For practical subjects, 30 marks for Internal Evaluation and 70 for external examination. Out of 30 Internal marks 15 marks shall be awarded for day-to-day work including Record work and the remaining 15 marks to be awarded by conducting internal laboratory test. The External Laboratory examination for MCA course must be conducted with two examiners. One of them is the Laboratory Class Teacher, and the second examiner will be external examiner. External examiner will be appointed by the COE.

5.3 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 Examination and a minimum aggregate of 50% of the total marks in the End Semester Examination and Internal Evaluation taken together.

5.4 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 he has failed in the end examination after the completion of fifth semester

5.5 In such case candidate must re-register for subjects(s) and secure required minimum attendance. Attendance in there-registered subjects(s) shall be calculated separately to decide upon the eligibility for writing the end examination in those subjects(s). In the event of taking another chance, the internal marks and end examination marks obtained in the previous attempt are nullified. For re-registration the candidate have to apply to the institute by paying the requisite fees and get approval from the concern authorities be fore the start of the semester in which re-registration is required.

5.6 In case the candidates secures less than the required attendance in any re-registered course(s), he shall not be permitted to write the End Examination in that course. He shall again re-register the subject when next offered

5.7 At a given time a candidate is permitted to re-register for maximum of two subjects in addition to the subjects of regular semester.

5.8 A candidate shall be allowed to submit the project report only after fulfilling the attendance requirements of all the semesters. The viva–voce examination shall be conducted at the end of the course work(6th semester).

5.9 Mini Project: Student must submit a report at the beginning of V semester for the assessment by an internal evaluation committee comprising Head of the Department, Supervisor and one Senior faculty of the department. A minimum of 50% of maximum marks shall be obtained to earn the corresponding credits.

5.10 Soft Skills Lab: This lab is internal evaluation and will be evaluated for 50 marks in a semester. A minimum of 50% of maximum marks shall be obtained to earn the corresponding credits.

5.11 Term Paper: There shall be a Term Paper presentation during VI semester. For Term paper, 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 Department Committee. The Department Committee consists of Head of the Department, supervisor and two other senior faculty members of the department. For Term Paper there will be only internal evaluation of 50 marks. A minimum of 50% of maximum marks shall be obtained to earn the corresponding credits.

5.12 MOOCS (NPTEL/SWAYAM): The student shall register for the course(Minimum of 12 weeks) offered by SWAYAM/NPTEL through online with the approval of committee comprising Head of the Department and two senior faculty members. The student need to submit all the assignments given and needs to take final exam at the proctor center. The student needs to earn a certificate by passing the exam. The student will be awarded the given credits in the curriculum only by submission of the certificate. There is no internal exam for the MOOCS (NPTEL/SWAYAM) course. Based on the marks in the MOOCS exam student will get the corresponding credits.

6 <u>EVALUATION OF PROJECT WORK</u>

Every candidate shall be required to submit thesis or dissertation after taking up 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 of the concerned department.

6.2 Registration of Project Work: A candidate is permitted to register for the project work after satisfying the attendance requirement of all the courses (theory and practical subjects) up to V semester.

6.3 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 to the Project Review Committee for its approval before the fifth semester end examinations. After obtaining the approval of the Committee the student can initiate the Project work after the fifth semester end examinations.

6.4 Every candidate shall work on projects approved by the PRC of the College

6.5 The duration of the project is for one semester.

6.6 If a candidate wishes to change his supervisor or topic of the project he can do so with

approval of the PRC. However, the Project Review Committee (PRC) shall examine whether the change of topic/supervisor leads to a major change of his initial plans of project proposal. If so, his date of registration for the project work starts from the date of change of Supervisor or topic as the case may be.

6.7 A candidate shall submit status report in two stages at least with a gap of one month between them.

6.8 The work on the project shall be initiated in the beginning of the Sixth semester and the duration of the project is for one semester. A candidate shall be allowed to submit the project report only with the approval of PRC and not earlier than 20 weeks from the date of registration of the project work. For the approval of PRC the candidate shall submit the draft copy of thesis to the Principal (through Head of the Department) and shall make an oral presentation before the PRC.

6.9 Three copies of the Project Thesis certified by the supervisor & HOD shall be submitted to the College / Department.

6.10 The project work carried out by the candidate during 6th semester is evaluated for internal assessment and external examination

a) **Internal Assessment**: Internal Assessment will be carried out by the Project Review Committee consisting of 1) Head of the Department 2) Supervisor and 3) Senior faculty member appointed by the Principal. Internal Assessment shall be on the basis of two seminars given by the each student on the topic of his project.

b) **External Examination**: External Examination(Viva – Voce) will be conducted by Project External Examination committee consisting of 1) Head of the Department 2) Supervisor and 3) External member. External examiner will be appointed by the COE from the panel of examiners submitted by the HOD.

6.11 Out of a total of 150 marks for the project work, 50 marks shall be for internal assessment and 100 marks External examination (Viva-Voce). A minimum of 50% of maximum marks shall be obtained to earn the corresponding credits.

6.12 If he/she fails to secure those marks he/she will retake the viva-voce examination after three months. If he/she fails to secure those marks at this second viva-voce examination, he will not be eligible for the award of the degree unless the candidate is asked to revise and resubmit. If he/she fails to secure those marks again, the project shall be summarily

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

SEMESTER WISE DISTRIBUTION OF CREDITS

Semester	Theory	Lab	Total Credits
1st Semester	5	3	19.5
2nd Semester	5	3	19.5
3rd Semester	5	3	19.5
4th Semester	5	2+ Soft Skills	19.5
5th Semester	5	2 + Mini Project	20
6th Semester		Project + Term Paper	12
Total			110

7 GRADING SYSTEM

7.1 Award of Grade:

(i) Grade Point Average (GPA):

a) The Grade Point Average (GPA) will be calculated according to the formula.

$$GPA = \frac{\sum c_i G_i}{\sum c_i}$$

Where C_i = number of credits for the subject i

G_i = grade points obtained by the student in the subject.

b) To arrive at Cumulative Grade Point Average (CGPA), the formula is used considering the student's performance in all the courses taken in all the semesters completed up to the particular point of time.

$$CGPA = \frac{\sum c_i G_i}{\sum c_i}$$

Where C_i = number of credits for the subject i

G_i = grade points obtained by the student in the subject.

(ii) After a student satisfies the requirements prescribed for the award of UG/PG Program he/she shall be placed in one of the following four grades. The award of the degree is based on CGPA on a grade point scale of 10.

CGPA	Award of Division
≥ 7.75	First Class with Distinction
≥ 6.75	First Division
≥ 5.75	Second Division
< 5.75	Unsatisfactory

7.1 **Award of Grade in Each Semester:**

i) Based on the student performance during a given semester, a final letter grade will be awarded at the end of the semester for each subject. The letter grades and the corresponding grade points are as given in the Table.

Percentage of Marks Scored	Letter Grade	Level	Grade points
≥90	O	Outstanding	10
80 – 89	S	Excellent	9
70-79	A	Very Good	8
60-69	B	Good	7
50-59	C	Fair	6
<50	F	Fail	0
		Absent	0

ii) A student earns a minimum of 6 grade points (C grade) in a subject is declared to have successfully completed the subject, and is deemed to have earned the credits assigned to that subject. However it should be noted that a pass in any subject/term paper/project/mini project/labs shall be governed by the rules mentioned in against them

iii) Grade Sheet: A grade sheet (memorandum) will be issued to each student indicating his/her performance in all courses taken in that semester and also indicating the grades.

iv) Transcripts: After successful completion of the total programme of study, a Transcript containing performance of all academic years will be issued as a final record. Duplicate

transcripts will also be issued up to any point of study to any student on request and by paying the stipulated fee in force.

v) Candidates shall be permitted to apply for recounting/revaluation within the stipulated period with payment of prescribed fee.

vi) The Academic Council has to approve and recommend to the JNTUK, Kakinada for the award of a degree to any student.

8 WITH HOLDING OF RESULTS:

If the candidate has not paid any dues to the College or if any case of indiscipline is pending against him, the result of the candidate will be withheld. The issue of degree is liable to be withheld in such cases.

9 TRANSISTORY REGULATIONS

Candidates who have discontinued or have been detained for want of attendance or who have failed after having undergone the course are eligible for admission to the same or equivalent subjects as and when subjects are offered.

10 GENERAL

10.1 The academic regulations should be read as a whole for purpose of any interpretation.

10.2 In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal is final and which is to be ratified by the Chairman of the Governing Body.

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

10.4 Wherever the word he, him or his occur, it will also include she, her and hers.