



Department of Computer Science
SRR & CVR GOVT. DEGREE COLLEGE(A), Vijayawada
Board of studies for M. Sc Computer Science



Syllabus(Regulations2020)

Master of Science in Computer Science

For students admitted from academic year 2020-21 onwards

Under Choice Based Credit System

BOARD OF STUDIES FEBRUARY 2021



S.R.R. & C.V.R. GOVT.DEGREE COLLEGE (A)

(NAAC Accredited B+Grade(IIIcycle with CGPA 2.60) Institution & District Identified College)

Vijayawada- 520 004, Andhra Pradesh, INDIA

Minutes of Board of Studies in M.Sc(Computer Science)I & II Semester

The meeting of the P.G (BOS) Computer Science held at 08-03-2021 at 3PM at Department of Computers SRR &CVR Govt. Degree College (Autonomous) Vijayawada. The following members attended the meeting.

1. Dr. K. Sujatha - Chairperson BOS
2. Prof.Dr.Y.K..Sunder Krishna - University Nominee
3. Dr.T.S.Ravi Kiran - Subject Expert
4. Dr.P. Bharathi - Subject Expert
5. Sri T.Jaya Krishna - Faculty Member
6. Sri K.V.L.N.Prasad - Faculty Member
7. Sri. DPV.PhaniRaja Kumar - Faculty Member
8. Sri. M.Suresh Babu - Faculty Member
9. Sri. G. Sridhar - Faculty Member

Agenda :

1. Framing of Course structure and syllabus for the M.sc Computer Science course.
2. Procedure for evaluation for the M.Sc Computer Science.
3. Preparing model question paper for 1st and 2nd semesters.
4. Identifying the question paper setters and examiners.
5. Any other item with the permission of the Chair

The Chairperson welcomed the members and had discussion on the Agenda. She appraised the members of the guidelines of the UGC, Krishna University and the CCE regarding the framing of Syllabus, etc., and the proposed evaluation ratio for internals.

The members of board of studies meeting resolved:

- 1) It is resolved to recommend in SRR & CVR Govt. Degree College to implement the M.Sc(computer Science) course structure and syllabus with effect from 2020- 2021.
- 2) It is resolved to recommend the following subjects papers with titles for theory and practical in M.Sc Computer Science autonomous with effect from 2020-2021.

Theory Papers: I Semesters

- I. Data Structures
- II. Programming and Problem Solving using Python
- III. Computer Organization
- IV. Formal languages and Automata theory

Practical : I semesters

- Data structures lab
Python lab

Theory Papers: II Semesters

- I. Design and Analysis of algorithms
- II. Software Engineering
- III. Operating Systems
- IV. Data Base Management Systems
- V. Open Elective - I

Practical : II semesters

- Operating Systems lab
DBMS Lab

- 3) It is resolved to recommend to implement External - 60 Marks and Internal - 40 Marks out of 100 Marks for each theory paper and for each practical paper.
- 4) It is resolved to recommend the pattern of model question paper enclosed here with.
- 5) It is resolved to recommend to follow the recommended syllabus and evaluation procedure for the next two years.
- 6) It is resolved to recommend the following members as panel of external examiners in theory and practical for the first and second semesters.
 1. Dr.Y.K.Sunder Krishna(Krishna University Machilipatnam)
 2. Dr. R.Kiran Kumar(Krishna University Machilipatnam)
 3. Dr.M. Babu Reddy (Krishna University Machilipatnam)
 4. Dr. Vijaya lakshmi (Krishna University Machilipatnam)
 5. Dr. T.S.Ravi Kiran (P.B.Siddartha College Vijayawada)
 6. Dr.P.Barathi (K.B.N College Vijayawada)
 7. Dr. K.B.S Sastry (Andhra Loyola College Vijayawada)
 8. Dr.B.V.Subba Rao(P.V.P Siddartha Engineering college ,Vijayawada)

Details of members attended

S.No	Name /Designation	Status of the expert	Online/offline/Blended
1	Dr.K. Sujatha In-charge of the Department SRR&CVR, GDC, Vijayawada	Chairperson, BoS	Offline
2	Prof.Dr. Y.K..Sunder Krishna Krishna University.	University Nominee	Offline
3	Dr.T.S .Ravi Kiran HOD ,Dept.of Computer Science P.B.Siddartha college of Arts&Science ,vijayawada	Subject Expert	Offline
4	Dr P..Bharathi Asst.Professor Dept of Computer Science K.B.N college ,Vijayawada	Subject Expert	Offline
5	Sri. T. Jaya Krishna SRR&CVR, GDC, Vijayawada	Faculty Member	Offline
6	Sri K.V.L.N..Prasad SRR&CVR, GDC, Vijayawada	Faculty Member	Offline
7	Sri. DPV.Phani RajaKumar SRR&CVR, GDC, Vijayawada	Faculty Member	Offline
8	Sri.M.Suresh Babu SRR&CVR, GDC, Vijayawada	Faculty Member	Offline
9	Sri. G. Sridhar SRR&CVR, GDC, Vijayawada	Faculty Member	Offline

Signatures of the members of the BOS Meeting:

S. No	Name /Designation	Status	Signature
1.	Dr.K. Sujatha In-charge of the Department	Chairperson	
2.	Prof.Dr. Y.K.Sunder Krishna Krishna University.	University nominee	
3.	Dr.T.S.Ravi Kiran HOD ,Dept.of Dept Of Computer Science P.B.Siddartha . college ,Vijayawada	Subject Expert	
4.	Dr P..Bharathi Asst.Professor inComputer Science K.B.N college ,Vijayawada	Subject Expert	
5	Sri. T. Jaya Krishna SRR&CVR, GDC, Vijayawada	Faculty member	
6.	Sri K.V.L.N..Prasad SRR&CVR, GDC, Vijayawada	Faculty member	
7.	Sri. DPV.Phani RajaKumar SRR&CVR, GDC, Vijayawada	Faculty member	
8.	Sri.M.Suresh Babu SRR&CVR, GDC, Vijayawada	Faculty member	
9	Sri. G. Sridhar SRR&CVR, GDC, Vijayawada	Faculty member	

Principal
Counter signed by Principal SRR&CVR UG&PG(A) college Vijayawada

Department of Computer Science
SRR & CVR Govt.Degree College(A) Vijayawada

M.Sc(Computer Science)

Programme Objectives:

On successful completion of the **M.Sc Computer Science** Programme, students are able to:

- (i) Understand Systematic and fundamental concepts of Computer Science as a discipline.
- (ii) Acquire Skill and related developments of specialization in the subject.
- (iii) Identify Computer related problems, analysis and application of data using appropriate methodologies.
- (iv) Apply subject knowledge and skill to solve complex problems with defined solutions.
- (v) Find opportunity to apply subject-related skills for acquiring jobs and self employment.

Programme Specific Outcomes:

On successful completion of the **M.Sc Computer Science** Programme students are able to:

- (i) Understand new frontiers of knowledge in Computer Science for professional development.
- (ii) Apply subject knowledge for solving societal problems related to application of Computers in day to day life.
- (iii) Develop industry focused skills to lead a successful career.
- (iv) Express proficiency in oral and written communications to appreciate innovation in research.

Course structure and syllabus for M.Sc. Computer Science

1	Title of the course	M.Sc. (Computer Science)
2	Duration of the course	2 years (Four Semesters)
3	Eligibility criteria for admission	The candidate seeking admission in to M.Sc.(Computer Science) course should have passed Bachelor's Degree Examination not less than three years duration in any discipline with Computer as one of the subjects
4	Level of the course	Post Graduate
5	Mode of admission	The mode of admission is through KRUCET conducted by Krishna University.
6	Objectives of the course	The Objective of M.Sc., Computer Science course is to impart knowledge and skill-oriented training in the recent advancements in Computer Science with an aim to develop research and innovations.
7	Course requirement	The course shall include Theory papers, Labs, Assignments, Tests, Seminars and Project Work.
8	Number of working days	In each semester at least ninety working days must be dedicated for theory classes, practical classes and seminars.

COURSE STRUCYURE –SEMESTER-1

Course Code	Name of the Course	Hours			Credits	
		L	T	P	Theory	Practicals
YEAR/SUB /PAPER						
20MCS101	Data Structures	4	-	-	4	-
20MCS102	Programming and Problem Solving using Python	4	-	-	4	-
20MCS103	Computer Organization	4	-	-	4	-
20MCS104	Formal Languages and Automata Theory	4	-	-	4	-
20MCS105	Programming and Problem Solving using Python Lab	-	-	8	-	4
20MCS106	Data Structure Lab	-	-	8		4
		16	-	16	16	8
	Total	32hours per week			24 Credits per semester	

COURSE STRUCTURE SEMESTRE-II

Course Code	Name of the Course	Hours			Credits	
		L	T	P	Theory	Practicals
20MCS201	Design and Analysis of Algorithms	4	-	-	4	-
20MCS202	Software Engineering	3	1	-	4	-
20MCS203	Operating Systems	4	-	-	4	-
20MCS204	Database Management Systems	4	-	-	4	-
20OEMCS205	Open Elective –I	4			4	-
20MCS206	Unix Operating Systems Lab	-	-	8	-	4
20MCS207	DBMS – Lab	-	-	8	-	4

Open Elective offered by the Department

Course Code	Name of the course	Semester	Credits
20 OE MCS205	Basic skills in Information Technology	II	4

Total number of credits at the end of the course :

S.No	Semester	Credits
1	I semester	24
2	II semester	28
3	III semester	28
4	IV semester	28
	Total	108

Note : Open elective/ non core 8 credits will not be considered for division /percentage

I semester

Marks

1. Four theory papers 4 x 100 =

400

2. PythonLab practical-I =

100

3. Data Structures Lab -I 100

Total 600 M

II semester Marks

1. Four theory papers 4X 100 = 400

2. DBMS Lab = 100

3. Unix Operatig system lab = 100

Total 600 M

Practical :

Continuous assessment /Day to day work	Semester end exam	Total
40 marks	60 Marks	100 Marks

Summary of Course Structure:

Semester – I

Course Code	Name of the Course	Internal Marks	External Marks	Total Marks
20MCS101	Data Structures	40	60	100
20MCS102	Programming and Problem Solving using Python	40	60	100
20MCS103	Computer Organization	40	60	100
20MCS104	Formal Languages and Automata Theory	40	60	100
20MCS105	Programming and Problem Solving using Python Lab	40	60	100
20MCS106	Data Structure Lab	40	60	100

Semester-II

S.No	PaperCode.	Titleofthepaper	Internal Marks	External Marks	Total Marks
1.	20MCS201	Design and Analysis of Algorithms	40	60	100
2.	20MCS202	Software Engineering	40	60	100
3.	20MCS203	Operating Systems	40	60	100
4.	20MCS204	Database Management Systems	40	60	100
5.	20OEMCS205	Open Elective -I	40	60	100
6.	20MCS206	Unix Operating Systems Lab	40	60	100

