School of Engineering and Applied Sciences

B. Tech Computer Science and Engineering

AY: 2017-2018

Department of Computer Science and Engineering
SRM University-AP, Amaravati

Department of Computer Science Engineering
SRM University-AP

Semester I

CODE	COURSE NAME	CREDIT	L - T - P
COM101 (HS)	Introduction to Communication	3	3-0-0
ECO122 (HS)	Principle of Economics	3	3-0-0
BIO101 (BS)	Introduction to Biology	4	2-0-2
CHE101 (BS)	Principle of Chemistry	4	2-0-2
MAT141 CSEC	Discrete Mathematics	3	3-0-0
CSE 101 (ES)	Introduction to Computer Science and Programming	5	3-0-4
	Total	**22**	**16-0-8**

Semester II

CODE	COURSE NAME	CREDIT	L - T – P
EGL101 (HS)	English	3	3-0-0
ECO221 (HS)	Economics	3	3-0-0
MAT111 (BS)	Single-variable calculus	3	3-0-0
PHY111 (BS)	Introduction to Classical Mechanics	4	3-0-2
ENG111 (ES)	Basic Electronics	4	3-0-2
CSE103 (ES)	Introduction to Electrical Engineering and Computer Science	4	2-0-2
CDC1002	Soft Skill 1	1	1-0-1
	Total	**22**	18-0-7

Semester III

CODE	COURSE NAME	CREDIT	L - T – P
MAT 151 (BS)	Linear Algebra	3	3-0-0
HS	Environmental Science	3	2-0-2
ENG 101 (ES)	Engineering Fundamentals	3	3-0-0
PHY 112 (BS)	Introduction to Electricity and Magnetism	3	2-0-2
CSE 223	Data Structures and Algorithms using C	4	3-0-2
CSE 221	Digital Systems Design	4	3-0-2
CDC 1002	Soft Skill 2	1	1-0-0
	Total	**21**	**17-0-8**

Semester IV

CODE	COURSE NAME	CREDIT	L - T – P
BS	Multi Variable Calculus	3	3-0-0
BS	Signals and Systems	3	3-0-0
CSEC	Design and Analysis of Algorithms	4	3-0-2
CSEC	Computer Organization and Architecture	4	3-1-2
CSEC	Object Oriented Programming	4	3-0-2
CDC	Soft Skill 3	1	1-0-0
	Total	**19**	**16-0-6**

Semester V

CODE	COURSE NAME	CREDIT	L - T – P
ES	Probability and Statistics	3	3-0-0
CSEC	Operating Systems	4	3-0-2
CSEC	Formal Languages and Automata Theory	3	3-0-0
CSEC	Computer Networks	4	3-0-2
CSESE	CS Stream Elective 1	4	3-0-2
CDC	Soft Skill 4	P/F	1-0-0
	Total	**18**	**16-0-6**

Semester VI

CODE	COURSE NAME	CREDIT	L - T – P
CSE 304	Database Management Systems	4	3-0-2
BS	Differential Equations	3	3-0-0
CSE 305	Software Engineering	4	3-0-2
CSESE	CS stream Elective 2	4	3-0-2
CSE 306	Compiler Design	4	3-0-2
PR	UROP	3	0-0-6
CDC	Soft Skill 5	P/F	1-0-0
	Total	**22**	**16-0-14**

Semester VII

CODE	COURSE NAME	CREDIT	L - T – P
CSESE	CS Stream Elective 3	4	3-0-2
CSETE	CS Technical Elective 1	4	3-0-2
OE	Open Elective 1	3	3-0-0
OE	Open Elective 2	3	3-0-0
PR	Capstone Project Phase I	6	0-0-12
		20	12-0-16

Semester VIII

CODE	COURSE NAME	CREDIT	L - T – P
CSESE	CS Stream Elective 4	4	3-0-2
CSETE	CS Technical Elective 2	4	3-0-2
OE	Open Elective 3	3	3-0-0
PR	Capstone Project Phase II	6	0-0-12
		17	9-0-16

SPECIALIZATION STREAMS

1. Artificial Intelligence and Machine Learning
   a. Introduction to Machine Learning
   b. Principle of Soft Computing
   c. Digital Image Processing
   d. Artificial Intelligence

2. Cyber Security
   a. Network Security
   b. Mobile and Wireless Security
   c. Internet Protocols and Networking
   d. Introduction to Cryptography

3. Data Science
   a. Introduction to Data Science
   b. Big Data
   c. Machine Learning
   d. Inference and Representation

GENERAL COMPUTER SCIENCE ELECTIVES

1. Data and Web Mining

2. Natural Language Processing

3. Image Processing

4. Human Computer Interaction

5. Advanced Computer Architecture

6. Distributed Operating Systems

7. Fog Computing

8. Parallel Algorithms

9. Web Services

10. Advanced Database Management Systems

11. Complexity Theory

12. Computer Graphics and Multimedia

13. Advanced Data Structures and Algorithms

MINOR PROGRAMME

CSE Departments offers Minor in Computer Science and curriculum is given below.

Sl. No.	Subject Name	L-T-P	Credit
1	Object oriented programming with Java	3-0-2	4
2	Algorithm Analysis and Design	3-0-2	4
3	Web Technology	3-0-2	4
4	Database Management Systems	3-0-2	4
5	Software Engineering	3-0-2	4