



SAVEETHA ENGINEERING COLLEGE

AUTONOMOUS


Affiliated to Anna University | Approved by AICTE

REGULATIONS 2019

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

M.E. COMPUTER SCIENCE AND ENGINEERING

CURRICULUM and SYLLABUS

S.No.	Category	Course Code	Course Title	Contact Hours per Week			Credits	Prerequisite
				L	T	P		
1	FC	19MMA04	Applied Probability and Statistics	4	0	0	4	-
2	PC	19MCS01	Advanced Data Structures and Algorithms	4	0	0	4	-
3	PC	19MCS02	Advanced Computer Architecture	3	0	0	3	-
4	PC	19MCS03	Operating System Internals	3	0	0	3	-
5	PC	19MCS04	Advanced Software Engineering	3	0	0	3	-
6	PC	19MCS05	Machine Learning Techniques	3	0	0	3	-
7	PC	19MCS06	Data Structures Laboratory	0	0	4	2	-
8	PC	19MCS07	Network Design and Technologies	3	0	0	3	-
9	PC	19MCS08	Security Practices	3	0	0	3	-
10	PC	19MCS09	Internet of Things	3	0	0	3	-
11	PC	19MCS10	Big Data Analytics	3	0	0	3	-
12	PC	19MCS11	Data Analytics Laboratory	0	0	4	2	-
13	EEC	19MCS12	Term Paper Writing and Seminar	0	0	2	1	-
14	EEC	19MCS13	Project Work Phase I	0	0	12	6	-
15	EEC	19MCS14	Project Work Phase II	0	0	24	12	-
16	PE	19MCS15	Advanced Databases	3	0	0	3	-
17	PE	19MCS16	Principles of Programming Languages	3	0	0	3	-
18	PE	19MCS17	Image Processing and Analysis	3	0	0	3	-
19	PE	19MCS18	Web Engineering	3	0	0	3	-
20	PE	19MCS19	Cloud Computing Technologies	3	0	0	3	-
21	PE	19MCS20	Real Time Systems	3	0	0	3	-
22	PE	19MCS21	Mobile and Pervasive Computing	3	0	0	3	-
23	PE	19MCS22	Parallel Programming Paradigms	3	0	0	3	-
24	PE	19MCS23	Information Retrieval Techniques	3	0	0	3	-
25	PE	19MCS24	Software Architectures and Design	3	0	0	3	-
26	PE	19MCS25	Performance Analysis of Computer Systems	3	0	0	3	-
27	PE	19MCS26	Language Technologies	3	0	0	3	-
28	PE	19MCS27	Computer Vision	3	0	0	3	-
29	PE	19MCN21	Speech Processing and Synthesis	3	0	0	3	-
30	PE	19MCS29	Software Quality Assurance and Testing	3	0	0	3	-
31	PE	19MCS30	Formal Models of Software Systems	3	0	0	3	-
32	PE	19MCS31	Embedded Software Development	3	0	0	3	-
33	PE	19MCS32	Social Network Analysis	3	0	0	3	-
34	PE	19MCS33	Bio-inspired Computing	3	0	0	3	-
35	PE	19MCS34	Compiler Optimization Techniques	3	0	0	3	-
36	PE	19MCS35	Data Visualization Techniques	3	0	0	3	-
37	PE	19MCS36	Reconfigurable Computing	3	0	0	3	-
38	PE	19MCS37	Mobile Application Development	3	0	0	3	-
39	PE	19MCS38	Bio Informatics	3	0	0	3	-
40	PE	19MCS39	Information Storage Management	3	0	0	3	-
41	PE	19MCS40	Agile Methodologies	3	0	0	3	-
42	PE	19MCS41	Distributed Systems	3	0	0	3	-

43	PE	19MCS42	Knowledge Engineering	3	0	0	3	-
44	PE	19MCS43	Operations Research	3	0	0	3	-
45	PE	19MCS44	Research Methodologies	3	0	0	3	-
46	PE	19MMA05	Linear Algebra and Number Theory	3	0	0	3	-

SEMESTER I							
S.No.	Course Code	Course Title	Contact Hours per Week			Credits	
			L	T	P		
1	19MMA04	Applied Probability and Statistics	4	0	0	4	
2	19MCS01	Advanced Data Structures and Algorithms	4	0	0	4	
3	19MCS02	Advanced Computer Architecture	3	0	0	3	
4	19MCS03	Operating System Internals	3	0	0	3	
5	19MCS04	Advanced Software Engineering	3	0	0	3	
6	19MCS05	Machine Learning Techniques	3	0	0	3	
7	19MCS06	Data Structures Laboratory	0	0	4	2	
Total			20	0	4	22	

SEMESTER II							
S.No.	Course Code	Course Title	Contact Hours per Week			Credits	
			L	T	P		
1	19MCS07	Network Design and Technologies	3	0	0	3	
2	19MCS08	Security Practices	3	0	0	3	
3	19MCS09	Internet of Things	3	0	0	3	
4	19MCS10	Big Data Analytics	3	0	0	3	
5		Professional Elective –I	3	0	0	3	
6		Professional Elective –II	3	0	0	3	
7	19MCS11	Data Analytics Laboratory	0	0	4	2	
8	19MCS12	Term Paper Writing and Seminar	0	0	2	1	
Total			18	0	6	21	

SEMESTER III							
S.No.	Course Code	Course Title	Contact Hours per Week			Credits	
			L	T	P		
1		Professional Elective –III	3	0	0	3	
2		Professional Elective –IV	3	0	0	3	
3		Professional Elective –V	3	0	0	3	
4	19MCS13	Project Work Phase – I	0	0	12	6	
Total			9	0	12	15	

SEMESTER IV							
S.No.	Course Code	Course Title	Contact Hours per Week			Credits	
			L	T	P		
1	19MCS14	Project Work Phase II	0	0	24	12	
Total			0	0	24	12	

TOTAL CREDITS: 70