



SAVEETHA ENGINEERING COLLEGE

AUTONOMOUS


Affiliated to Anna University | Approved by AICTE

REGULATIONS 2019

DEPARTMENT OF INFORMATION TECHNOLOGY

M.E - SOFTWARE 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	19MSE01	Software Architecture	3	0	0	3	-
4	PC	19MCS04	Advanced Software Engineering	3	0	0	3	-
5	PC	19MSE02	Software Requirements Engineering	3	0	0	3	-
6	PC	19MCS06	Data Structures Laboratory	0	0	4	2	-
7	PC	19MSE04	Software Testing Methodologies and Quality Assurance	3	0	2	4	-
8	PC	19MSE05	Software Industrialization	3	0	0	3	-
9	PC	19MSE06	Software Reliability Metrics and Models	3	0	0	3	-
10	PC	19MCS15	Advanced Databases	3	0	0	3	-
11	PC	19MSE07	Software Development Laboratory	0	0	4	2	-
12	PC	19MSE08	Integrated Software Project Management	3	0	0	3	-
13	EEC	19MSE03	Term Paper Writing and Seminar	0	0	2	1	-
14	EEC	19MSE09	Project Work Phase I	0	0	12	6	-
15	EEC	19MSE10	Project Work Phase II	0	0	24	12	-
16	PE	19MSE11	Agile Software Engineering	3	0	0	3	-
17	PE	19MSE12	Business Intelligence	3	0	0	3	-
18	PE	19MCS19	Cloud Computing Technologies	3	0	0	3	-
19	PE	19MSE13	Software Test Automation	3	0	0	3	-
20	PE	19MCS10	Big Data Analytics	3	0	0	3	-
21	PE	19MSE14	Knowledge Management	3	0	0	3	-
22	PE	19MSE15	Software Verification and Validation	3	0	0	3	-
23	PE	19MCS05	Machine Learning Techniques	3	0	0	3	-
24	PE	19MSE16	Virtualization Techniques and Applications	3	0	0	3	-
25	PE	19MCS09	Internet of Things	3	0	0	3	-
26	PE	19MSE17	Web Design and Management	3	0	0	3	-
27	PE	19MSE18	Social Network Mining and Analysis	3	0	0	3	-
28	PE	19MSE19	Test Driven Development	3	0	0	3	-
29	PE	19MSE20	Personal Software Process	3	0	0	3	-
30	PE	19MSE21	Software Security	3	0	0	3	-
31	PE	19MSE22	Enterprise Application Integration	3	0	0	3	-
32	PE	19MSE23	Managing Human Resource	3	0	0	3	-
33	PE	19MSE24	Principles of Supply Chain Management	3	0	0	3	-
34	PE	19MSE25	Software Agents	3	0	0	3	-
35	PE	19MSE26	User Interface Design and Evaluation	3	0	0	3	-
36	PE	19MSE27	Service Oriented Architecture and Design	3	0	0	3	-
37	PE	19MCS20	Real Time Systems	3	0	0	3	-
38	PE	19MCS08	Security Practices	3	0	0	3	-
39	PE	19MCS23	Information Retrieval Techniques	3	0	0	3	-

40	PE	19MAE02	Embedded System Design	3	0	0	3	-
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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	19MSE01	Software Architecture	3	0	0	3
4	19MCS04	Advanced Software Engineering	3	0	0	3
5	19MSE02	Software Requirements Engineering	3	0	0	3
6	19MCS06	Data Structures Laboratory	0	0	4	2
7	19MSE03	Term Paper Writing and Seminar	0	0	2	1
SEMESTER II						
S.No.	Course Code	Course Title	Contact Hours per Week			Credits
			L	T	P	
1	19MSE04	Software Testing Methodologies and Quality Assurance	3	0	2	4
2	19MSE05	Software Industrialization	3	0	0	3
3	19MSE06	Software Reliability Metrics and Models	3	0	0	3
4	19MCS15	Advanced Databases	3	0	0	3
5		Professional Elective I	3	0	0	3
6		Professional Elective II	3	0	0	3
7	19MSE07	Software Development Laboratory	0	0	4	2
SEMESTER III						
S.No.	Course Code	Course Title	Contact Hours per Week			Credits
			L	T	P	
1	19MSE08	Integrated Software Project Management	3	0	0	3
2		Professional Elective III	3	0	0	3
3		Professional Elective IV	3	0	0	3
4		Professional Elective V	3	0	0	3
5	19MSE09	Project Work Phase I	0	0	12	6
SEMESTER IV						
S.No.	Course Code	Course Title	Contact Hours per Week			Credits
			L	T	P	
1	19MSE10	Project Work Phase II	0	0	24	12

TOTAL CREDITS: 71