

Department of Computer Science and Engineering
M.Tech (Software Engineering) Course Structure and Syllabus
Academic Regulations: 2015-2016

I Year		COURSE STRUCTURE	I Semester					
S. No.	Subject Code	Subject Name	L	T	P	C	Marks	
							Internal	External
1	5S101	Software Requirements and Estimation	3	1	-	3	25	75
2	5S102	Software Development Methodologies	3	1	-	3	25	75
3	5S103	Software Testing	3	1	-	3	25	75
4	5P102	Advanced Data Structures and Algorithms	3	1	-	3	25	75
5		PROFESSIONAL ELECTIVE I	3	1	-	3	25	75
6		PROFESSIONAL ELECTIVE II	3	1	-	3	25	75
7	5P118	Research Methodology	2	-	-	2	25	75
8	5S171	Software Testing and ADS Lab	-	-	4	2	25	75
9	5S172	Literature Review and Seminar-1	-	-	3	1	100	-
10	5S173	Comprehensive Viva – Voce -1	-	-	-	1	100	-
Total			20	6	7	24	400	600

PROFESSIONAL ELECTIVE I		PROFESSIONAL ELECTIVE II	
Subject Code	Subject Name	Subject Code	Subject Name
5PC06	Cloud Computing	5P113	Artificial Intelligence
5P110	Information Retrieval Systems	5PC20	Network Security and Cryptography
5S104	Cyber Security & Cyber Laws	5P117	Mobile Computing
5P112	Advanced Computer Networks	5P108	Advanced Operating Systems
5P103	Advanced Databases	5P109	Human Computer Interaction
5P111	Software metrics and Quality Assurance	5P119	Software Reuse
5S105	Software Configuration Management	5S106	Secure Software Engineering

I Year	COURSE STRUCTURE	II Semester
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S. No.	Subject Code	Subject Name	L	T	P	C	Marks	
							Internal	External
1		OPEN ELECTIVE	3	1	-	3	25	75
2	5S207	Software Architecture and Design Patterns	3	1	-	3	25	75
3	5S208	Software Process and Project Management	3	1	-	3	25	75
4	5P222	Web Technologies & Services	3	1	-	3	25	75
5	5PC23	Data warehousing and Data Mining	3	1	-	3	25	75
6		PROFESSIONAL ELECTIVE III	3	1	-	3	25	75
7	5P273	Web Technologies and Informatica Lab	-	-	4	2	25	75
8	5S274	Literature Review and Seminar-2	-	-	3	1	100	-
9	5S275	Project Seminar – I (Abstract Seminar)	-	-	3	2	100	-
10	5S276	Comprehensive Viva – Voce-2	-	-	-	1	100	-
11		Total	18	6	10	24	475	525

PROFESSIONAL ELECTIVE III		OPEN ELECTIVE	
Subject Code	Subject Name	Subject Code	Subject Name
5PC24	Image Processing and Pattern Recognition	5ZC03	Banking Operations, Insurance and Risk Management
5P225	Machine Learning	5QC33	Intellectual Property Rights
5RC16	Big data Analytics	5T217	Embedded Systems
5P226	Wireless Networks	5ZC13	Entrepreneurship and Innovation
5PC14	Semantic Web and Social Networks	5H233	Ethics, Morals, Gender Sensitization and Yoga
5P221	Mobile Application Development	5QC47	Bio-informatics
5P228	Software Risk Management And Maintenance		

II Year	COURSE STRUCTURE	I Semester
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S. No.	Subject Code	Subject Name	L	T	P	C	Marks	
							Internal	External
1	5S377	Project Seminar - II (Design & Development)	-	-	-	4	100	-
3	5S378	Project Work (PART- I) (Project Status Report) (Excellent/ Good/ Satisfactory/ Un-Satisfactory)	-	-	-	20	grading	-
Total			-	-	-	24	100	-

II Year	COURSE STRUCTURE	II Semester
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S. No.	Subject Code	Subject Name	L	T	P	C	Marks	
							Internal	External
1	5S479	Project Seminar - IV (Execution)	-	-	-	2	100	-
2	5S480	Pre – Project Submission Seminar (Final)	-	-	-	2	100	-
2	5S481	Project Work and Dissertation (Excellent/ Good/ Satisfactory/ Un-Satisfactory)	-	-	-	20	-	grading
Total			-	-	-	24	200	-

Note: Eligibility for admission to this course is B.E./B.Tech. In CSE or IT

L - Lectures; T = Tutorial; P = Practical; C = Credits