

**Department of Computer Science and Engineering**  
**M.Tech (Software Engineering) Course Structure and Syllabus**

**Academic Regulations: 2014-2015**

I Year		COURSE STRUCTURE					I Semester		
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S.No.	Subject Code	Subject Name	L	T	P	C	Marks		
							Internal	External	
1	4S101	Software Requirements and Estimation	3	1	-	3	40	60	
2	4S102	Software Process and Project Management	3	1	-	3	40	60	
3	4S103	Software Quality Assurance and Testing	3	1	-	3	40	60	
4	4SC04	Cloud Computing	3	1	-	3	40	60	
5		PROFESSIONAL ELECTIVE I	3	1	-	3	40	60	
6		PROFESSIONAL ELECTIVE II	3	1	-	3	40	60	
7	4S171	Software Testing Lab	-	-	4	2	40	60	
8	4S172	Technical paper writing and Seminar	-	-	3	2	50	-	
<b>Total</b>			<b>18</b>	<b>6</b>	<b>7</b>	<b>22</b>	<b>330</b>	<b>420</b>	

PROFESSIONAL ELECTIVE I		PROFESSIONAL ELECTIVE II	
Subject Code	Subject Name	Subject Code	Subject Name
4S105	Secure Software Engineering	4SC08	Storage Area Networks
4SC06	Information Retrieval Systems	4S109	Adhoc and Sensor Networks
4S107	Cyber Security and Cyber Laws	4R103	Advanced Computer Networks
		4S120	Network Security and Cryptography

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	40	60
2	4S211	Software Architecture and Design Patterns	3	1	-	3	40	60
3	4S212	Software Development Methodologies	3	1	-	3	40	60
4	4S213	Web Technologies & Services	3	1	-	3	40	60
5	4S214	Advanced Data Mining	3	1	-	3	40	60
6		PROFESSIONAL ELECTIVE III	3	1	-	3	40	60
7	4S273	Web Technologies and Services Lab	-	-	4	2	40	60
9	4S274	Technical Seminar (Independent Review Paper)	-	-	3	2	50	-
<b>Total</b>			<b>18</b>	<b>6</b>	<b>7</b>	<b>22</b>	<b>330</b>	<b>420</b>

PROFESSIONAL ELECTIVE III		OPEN ELECTIVE	
Subject Code	Subject Name	Subject Code	Subject Name
4SC16	Image Processing and Pattern Recognition	4ZC03	Banking Operations, Insurance and Risk Management
4S217	Machine Learning and Artificial Intelligence	4GC33	Intellectual Property Rights , Values and Ethics
4S218	Neural Networks and Fuzzy logic	4T217	Embedded Systems
		4GC42	Fundamentals of Bio-informatics

II Year	COURSE STRUCTURE	I Semester
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S.No.	Subject Code	Subject Name	L	T	P	C	Marks	
							Internal	External
1	4S375	Comprehensive Viva voce	-	-	-	2	-	50
2	4S376	Project Seminar - I	-	-	-	2	50	-
3	4S377	Project Work ( PART- I ) (Project Status Report) ( Excellent/ Good/ Satisfactory/ Un-Satisfactory )	-	-	-	18	grading	-
		<b>Total</b>	-	-	-	<b>22</b>	<b>50</b>	<b>50</b>

II Year	COURSE STRUCTURE	II Semester
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S.No.	Subject Code	Subject Name	L	T	P	C	Marks	
							Internal	External
1	4S478	Project Seminar - II	-	-	-	2	50	-
2	4S479	Project Work and Dissertation ( Excellent/ Good/ Satisfactory/ Un-Satisfactory )	-	-	-	20	-	grading
		<b>Total</b>	-	-	-	<b>22</b>	<b>50</b>	<b>-</b>

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

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