

DELHI TECHNOLOGICAL UNIVERSITY
SCHEME OF TEACHING AND EVALUATION
M.TECH SOFTWARE ENGINEERING

The following alphanumeric coding scheme has been adopted

Core Courses XXXYMN

Elective Courses XXXYCMN

XXX abbreviates a particular M. Tech. program, Y – (5 for M. Tech. 1 st year, 6 for M. Tech. 2 nd year),

C – credit of the course (4/3/2),

MN – Subject code (Odd number for odd semester and even number for even semester courses)

Semester-I														
	S. No.	Course Code	Course Name	Type/ Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
Group A	1	SWE501	Software Requirement Engineering	Core	4	3	0	2	15	25	20	40	-	17
	2	SWE503	Object Oriented Software Engineering	Core	4	3	0	2	15	25	20	40	-	
Group B	3	SWE5401/5403/.....	Elective 1	Elective	4	3	0	2	15	25	20	40	-	
	4	SWE5301/5303/.....	Elective 2	Elective	3	3	0	0	20	-	30	50	-	
	5	SWE5201/5203/..... / UEC5201/5203/.....	Elective 3	Elective	2	2	0	0	20	-	30	50	-	
Semester-II														
	S. No.	Course Code	Course Name	Type/ Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
Group C	1	SWE502	Software Testing	Core	4	3	0	2	15	25	20	40	-	17
	2	SWE504	Empirical Software Engineering	Core	4	3	0	2	15	25	20	40	-	

Group D	3	SWE5402/5404/.....	Elective 4	Elective	4	3	0	2	15	25	20	40	-		
	4	SWE5302/5304/.....	Elective 5	Elective	3	3	0	0	20	0	30	50-	-		
	5	SWE5202/5204/..... / UEC5202/5204/.....	Elective 6	Elective	2	2	0	0	20	0	30	50	-		
Semester-III															
	S.N o.	Course Code	Course Name	Type/ Area	Cr	L	T	P	CWS	PRE	MTE	ETE	PRE	Total Credits	
	Track 1													12	
Group E	1	SWE651	Research Project	Core	12	0		12	0	0	-	100	-	12	
	Track 2														
	1	SWE601	Major Project I	Core	3				0	0	40	60	-		
	2	SWE6401/6403/.....	Elective 7	Elective	4	3	0	2	15	25	20	40	-		
	3	SWE6301/6303/.....	Elective 8	Elective	3	3	0	0	20	0	30	50	-		
	4	SWE6201/6203/.....	Elective 9	Elective	2	2/0	0	0/4	20/ 0	0/ 40	30/0	50/0	0/60		
Semester-IV															
	S.N o.	Course Code	Course Name	Type/ Area	Cr	L	T	P	CWS	PRE	MTE	ETE	PRE	Total Credits	
Group F	Track 1														
	1	SWE652	Research Project	Core	12	0		12	0	0	-	100	-	12	
	Track 2														
	1	CSE602	Major Project II	Core	12	0		12	0	0	40	60	-	12	

LIST OF ELECTIVES :													
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 1	1	SWE5401	Advanced Database Management Systems	Elective	4	3	0	2	15	25	20	40	-
	2	SWE5403	Programming Languages		4	3	0	2	15	25	20	40	-
	3	SWE5405	Advanced Operating System		4	3	0	2	15	25	20	40	-
	4	SWE5407	Advanced Data Structures		4	3	0	2	15	25	20	40	-
	5	SWE5409	Data Warehousing Data Mining		4	3	0	2	15	25	20	40	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 2	1	SWE5301	Project Work	Elective	3	0	0	-	-	40	-	-	60
	2	SWE5303	Artificial Intelligence		3	3	0	0	20	-	30	50	-
	3	SWE5305	Information Retrieval		3	3	0	0	20	-	30	50	-
	4	SWE5307	Fuzzy Logic and Neural Networks		3	3	0	0	20	-	30	50	-
	5	SWE5309	Software Project Management		3	3	0	0	20	-	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 3	1	SWE5201	SEMINAR	Elective	2	2	0	0	2	-	100	-	-
	2	SWE5203	Probability and Statistics		2	2	0	0	20	-	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 4	1	SWE5402	Software Design Patterns	Elective	4	3	0	2	15	25	20	40	-
	2	SWE5404	Soft Computing		4	3	0	2	15	25	20	40	-
	3	SWE5406	Machine Learning		4	3	0	2	15	25	20	40	-

	4	SWE5408	Big Data Analytics		4	3	0	2	15	25	20	40	-
	5	SWE5410	Wireless and Mobile Computing		4	3	0	2	15	25	20	40	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 5	1	SWE5302	MINOR PROJECT	Elective	3	0	0	-	-	40	-	-	60
	2	SWE5304	Optimization Techniques		3	3	0	0	20	-	30	50	-
	3	SWE5306	Pattern Recognition		3	3	0	0	20	-	30	50	-
	4	SWE5308	Distributed Systems		3	3	0	0	20	-	30	50	-
	5	SWE5310	Natural Language Processing		3	3	0	0	20	-	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 6	1	SWE5202	Research Methodology	Elective	2	2	0	0	20	-	30	50	-
	2	SWE5204	Predictive Modelling		2	2	0	0	20	-	30	50	-
	3	SWE5206	Operational Research		2	2	0	0	20	-	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 7	1	SWE6401	Advances in Software Engineering	Elective	4	3	0	2	15	25	20	40	-
	2	SWE6403	Cloud Computing		4	3	0	2	15	25	20	40	-
	3	SWE6405	Things of the Internet		4	3	0	2	15	25	20	40	-
	4	SWE6407	Multimedia Applications		4	3	0	2	15	25	20	40	-
	5	SWE6409	Information Theory and Coding		4	3	0	2	15	25	20	40	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective	1	SWE6301	Agile Methods	Elective	3	3	0	0	20	-	30	50	-
	2	SWE6303	Software Reliability		3	3	0	0	20	-	30	50	-

	3	SWE6305	Cluster and Grid Computing		3	3	0	0	20	-	30	50	-
	4	SWE6307	Software Quality & Metrics		3	3	0	0	20	-	30	50	-
	5	SWE6309	Swarm and Evolutionary Computing		3	3	0	0	20	-	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 9	1	SWE6201	Data Security & Privacy	Elective	2	2	0	0	20	-	30	50	-
	3	SWE6203	Bio Informatics		2	2	0	0	20	-	30	50	-
	5	SWE6205	Statistical Tools		2	0	0	4	-	40	-	-	60