

DEPARTMENT OF CS&IT
TEACHING LOAD OF EVEN SEMESTER SESSION 2015-2016

Semester I

S. No	Course Code	Course Name Subject	L	T	P	Credits	Internal Marks	External Marks	Total Marks
1	BT 111	English Communication	3	1	0	4	30	70	100
2	BT 112	Engineering Mathematics-1	3	1	0	4	30	70	100
3	BT 113	Engineering Physics	2	1	0	3	30	70	100
4	BT 114	Engineering Chemistry	2	1	0	3	30	70	100
5	BT 115	Basic Electrical Engineering	3	1	0	4	30	70	100
6	BT116	Computer Fundamentals and Programming	3	1	0	4	30	70	100
7	BTL 11	Engineering Physics Lab.	0	0	3	2	50	50	100
8	BTL 12	Engineering Chemistry Lab.	0	0	3	2	50	50	100
9	BTL 13	Basic Electrical Engineering Lab	0	0	3	2	50	50	100
10	BTL 14	Basic Programming Lab	0	0	3	2	50	50	100
11		Tarseel-e-Urdu.	2	0	0	-	30	70	100
Total						30	410	690	1100

Semester II

S. No	Course Code	Course Name Subject	L	T	P	Credits	Internal Marks	External Marks	Total Marks
1	BT 121	Mathematics – II	3	1	0	4	30	70	100
2	BT 122	Basic Engineering Mechanics	3	0	0	3	30	70	100
3	BT 123	Engineering Graphics	2	0	3	4	30	70	100
4	BT 124	Basic Electronics	3	1	0	4	30	70	100
5	BT 125	Environmental Studies	3	0	0	3	30	70	100
6	BT 126	Computer Programming using C++	3	1	0	4	30	70	100
7	BTL 21	English Language Communication Skills Lab	0	0	3	2	50	50	100
8	BTL 22	Engineering workshop & IT work shop	0	0	3	2	50	50	100
9	BTL 23	Computer Programming using C++ Lab	0	0	3	2	50	50	100
Total						28	330	570	900

Semester III

S. No	Course Code	Course Name Subject	L	T	P	Credits	Internal Marks	External Marks	Total Marks
1	BT 231	Probability & Statistics	3	1	0	4	30	70	100
2	BT 232	Mathematical Foundations of Computer Science	3	1	0	4	30	70	100
3	BT 233	Data Structures	3	1	0	4	30	70	100
4	BT 234	Computer Organization	3	1	0	4	30	70	100
5	BT 235	Digital Logic Design	3	1	0	4	30	70	100
6	BTL 31	Data Structures Using C/C++ Lab.	0	0	3	2	50	50	100
7	BTL 32	Computer Organisation and Digital Logic Design Lab.	0	0	3	2	50	50	100
Total						24	250	450	700

Semester IV

S. No	Course Code	Course Name Subject	L	T	P	Credits	Internal Marks	External Marks	Total Marks
1	BT 241	Java Programming	3	1	0	4	30	70	100
2	BT 242	Data Base Management System	3	1	0	4	30	70	100
3	BT 243	Operating System	3	1	0	4	30	70	100
4	BT 244	Formal Languages and Automata Theory	3	1	0	4	30	70	100
5	BT 245	Managerial Economics And Financial Analysis	3	1	0	4	30	70	100
6	BTL 41	Java Programming Lab	0	0	3	2	50	50	100
7	BTL 42	Data Base Management Systems Lab	0	0	3	2	50	50	100
Total						24	250	450	700

Semester V

S. No	Course Code	Course Name Subject	L	T	P	Credits	Internal Marks	External Marks	Total Marks
1	BT 351	Data Communication & Computer Networks	3	1	0	4	30	70	100
2	BT 352	Design Analysis and Algorithms	3	1	0	4	30	70	100
3	BT 353	Compiler Design	3	1	0	4	30	70	100
4	BT 354	Principles of programming Languages	3	1	0	4	30	70	100
5	BT 355	Microprocessors & Assembly Language	3	1	0	4	30	70	100
6	BTL 51	Compiler Design & Computer Networks Lab	0	0	3	2	50	50	100
7	BTL 52	Microprocessors & Assembly language Lab	0	0	3	2	50	50	100
Total						24	250	450	700

Semester VI

S. No	Course Code	Course Name Subject	L	T	P	Credits	Internal Marks	External Marks	Total Marks
1	BT 361	Object Oriented Analysis and Design	3	1	0	4	30	70	100
2	BT 362	Computer Graphics	3	1	0	4	30	70	100
3	BT 363	Software Engineering	3	1	0	4	30	70	100
4	BT 364	Data Ware Housing and Data Mining	3	1	0	4	30	70	100
5	BT 365	E-Commerce / Operation Research	3	1	0	4	30	70	100
6	BTL 61	Unified Modeling Language Lab	0	0	3	2	50	50	100
7	BTL 62	Computer Graphics Lab	0	0	3	2	50	50	100
Total						24	250	450	700

Semester VII

S. No	Course Code	Course Name Subject	L	T	P	Credits	Internal Marks	External Marks	Total Marks
1	BT471	Linux Programming	3	1	0	4	30	70	100
2	BT472	Software Testing Methodologies	3	1	0	4	30	70	100
3	BT473	Web Technologies	3	1	0	4	30	70	100
4	BTL71	Linux Programming Lab	0	0	3	2	50	50	100
5	BTL72	Web Technologies Lab	0	0	3	2	50	50	100
6	BTD71	Minor Project	0	0	8	4	50	50	100
		ELECTIVE - I	3	1	0	4	30	70	100
Total						24	270	430	700

S.No.	ELECTIVE - I
1	BTE71- Cloud Computing
2	BTE72- Distributed Computing
3	BTE73- Mobile Computing
4	BTE74- Software Project Management
5	BTE75 - Soft Computing

Semester VIII

S. No	Course Code	Course Name Subject	L	T	P	Credits	Internal Marks	External Marks	Total Marks
1	BT481	Network Security	3	1	0	4	30	70	100
2	BTD81	Major Project	0	0	24	12	200	200	400
3		ELECTIVE - III	3	1	0	4	30	70	100
4		ELECTIVE - IV	3	1	0	4	30	70	100
Total						24	290	410	700

S.No.	ELECTIVE - III	ELECTIVE - IV
1	BTE81- Web Services	BTE86-Adhoc and Sensor Networks
2	BTE82-Semantic Web and Social networks	BTE87-Storage area Networks
3	BTE83-Scripting Languages	BTE88-Database Security
4	BTE84-Multimedia and Rich Internet applications	BTE89-Embedded System
5	BTE85 - Artificial Intelligence	

CURRICULUM OF M. TECH. IN COMPUTER SCIENCE

Course No.	Course Title	Contact periods per week			Credits	Internal Marks	External Marks	Total Marks
		Lecture L	Tutorial T	Practical P				
Semester - 1								
MT111	Network and Computer Security	3	1	0	4	30	70	100
MT112	Advanced Computer Architecture	3	1	0	4	30	70	100
MT113	Neural Networks	3	1	0	4	30	70	100
MT114	Distributed Databases	3	1	0	4	30	70	100
	Elective-I	3	1	0	4	30	70	100

MTL11	Distributed Databases Lab	0	0	4	2	50	50	100
MTL12	Seminar	0	0	4	2	50	50	100
	Total	15	5	8	24	250	450	700
	Semester - 2							
MT121	Advanced Operating Systems	3	1	0	4	30	70	100
MT122	Data Structure and Algorithm Design	3	1	0	4	30	70	100
MT123	Distributed Systems	3	1	0	4	30	70	100
	Elective-II	3	1	0	4	30	70	100
	Open Elective	3	1	0	4	30	70	100
MTL21	Data Structure and Algorithm Design Lab	0	0	4	2	50	50	100
MTL22	Comprehensive Viva	-	-	-	2	50	50	100
	Total	15	5	4	24	250	450	700

List of electives

Course No.	Course Title	Contact periods per week			Credits
		Lecture L	Tutorial T	Practical P	
	Elective-I				
MTE11	Parallel Algorithm	3	1	0	4
MTE12	Pattern Recognition	3	1	0	4
MTE13	Cluster and Grid Computing	3	1	0	4
MTE14	Wireless & Mobile Communication	3	1	0	4
MTE15	Machine Learning	3	1	0	4
MTE16	Fuzzy Systems	3	1	0	4
	Elective-II				
MTE21	Real Time System	3	1	0	4
MTE22	Software Metrics	3	1	0	4
MTE23	Software Quality Engineering	3	1	0	4
MTE24	Wireless Mobile Network	3	1	0	4
MTE25	Natural Language Processing	3	1	0	4
MTE26	Applied Cryptography	3	1	0	4
	Elective-III				
MTE31	Human Computer Interaction	3	1	0	4
MTE32	Bioinformatics	3	1	0	4
MTE33	Information Security and Cyber Laws	3	1	0	4
MTE34	Advanced Networks	3	1	0	4

MCA New Syllabus

COURSE	SEM	CODE	COURSE TITLE	L-T-P	Credits	Internal Marks	External Marks	Total Marks	
PGDIT	I	CS111	Probability & Statistics	3-1-0	4	30	70	100	
		CS112	Mathematical Foundation of Computer Science	3-1-0	4	30	70	100	
		CS113	Programming with C	3-1-0	4	30	70	100	
		CS114	E-Commerce	3-1-0	4	30	70	100	
		CS115	English Language Communication Skills	3-1-0	4	30	70	100	
		CS116	**Tarseel-e-Urdu	3-0-0	---	30	70	100	
		CSL17	Lab-I : Computer Programming Using C	0-0-3	2	50	50	100	
		CSL18	Lab-II: PC Software	0-0-3	2	50	50	100	
		Total					24		
	II	CS121	Computer System Architecture	3-1-0	4	30	70	100	
		CS122	Object Oriented Programming Using C++	3-1-0	4	30	70	100	
		CS123	Data Structures	3-1-0	4	30	70	100	
		CS124	Operating Systems	3-1-0	4	30	70	100	
		Elective-I		3-1-0	4	30	70	100	
		CSL26	Lab III : OOPS Using C++	0-0-3	2	50	50	100	
		CSL27	Lab IV: Data structures Using C	0-0-3	2	50	50	100	
		Total					24		
	M. Sc IT	III	CS231	Data Base Management System	3-1-0	4	30	70	100
CS232			Analysis & Design of Algorithms	3-1-0	4	30	70	100	
CS233			Computer Networks	3-1-0	4	30	70	100	
CS234			Java Programming	3-1-0	4	30	70	100	
Elective-II			3-1-0	4	30	70	100		
CSL36			Lab V: DBMS	0-0-3	2	50	50	100	
CSL37			Lab VI: Java Programming	0-0-3	2	50	50	100	
Total					24			700	
IV		CS241	Software Engineering	3-1-0	4	30	70	100	
		CS242	Data Warehousing and Data Mining	3-1-0	4	30	70	100	
		CS243	Formal Language & Automata Theory	3-1-0	4	30	70	100	
		CS244	Computer Graphics	3-1-0	4	30	70	100	
		Elective-III		3-1-0	4	30	70	100	
		CSL46	Lab VII: UML	0-0-3	2	50	50	100	
	CSL47	Lab VIII: Linux Programming	0-0-3	2	50	50	100		
Total					24			700	
M.C.A	V	CS351	Cloud Computing and Virtualization	3-1-0	4	30	70	100	
		CS352	Web Technology	3-1-0	4	30	70	100	
		CS353	Cryptography & Network Security	3-1-0	4	30	70	100	
		CS354	Artificial Intelligence	3-1-0	4	30	70	100	
		Elective-IV		3-1-0	4	30	70	100	
		CSL56	Lab IX: Web Technology	0-0-3	2	50	50	100	
		CSL57	Lab -X: Artificial Intelligence	0-0-3	2	50	50	100	
		Total					24		
	VI	CSP61	Project	----	16	200	200	400	
		CSP62	Seminar	-----	4	50	50	100	
Total					20			500	
Elective-I			Elective-II			Elective-III		Elective-IV	

CSE21- Accounting and Financial Management CSE22- Multimedia Applications CSE23-Client Server Computing CSE24- Soft Computing CSE25- Information Security and Cyber Laws	CSE31- Mobile Computing CSE32- Advance Operating System CSE33-Componet Based Software Engineering CSE34- Information Retrieval Systems	CSE41- Distributed System CSE42- Software Testing and Quality Assurance CSE43- Software Project Management CSE44- Compiler Design	CSE51- Software Agent CSE52- Advance Computer Network CSE53- Software Quality Engineering CSE54- Distributed Database
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**Tarseel-E-Urdu is treated as a non credit course, hence the marks will not be added in the result.

* For M.Sc (IT) degree, the student will follow the sixth semester in place of fourth semester.

PGDIT (Valid Credits: 48)	M. Sc.(IT) (Valid Credit: 96)	MCA (Valid Credits: 140)
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