

STUDY & EVALUATION SCHEME
B.TECH: COMPUTER SCIENCE & ENGINEERING
I YEAR: I SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	UPH1801	Physics	3	1	0	40	60	200	5.5
			0	0	3	80	20		
2	UMA1003	Mathematics-I	3	1	0	40	60	100	4
3	UEE1801	Basic Electrical Engineering	3	1	0	40	60	200	5
			0	0	2	80	20		
4	UME1801	Engineering Graphics and design	1	0	4	80	20	100	3
5	UCE1801	Environment Science	2	0	0	20	30	50	2
TOTAL			12	3	9	380	270	650	19.5

L - Lecture

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ESE-End Semester Exam

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STUDY & EVALUATION SCHEME
B.TECH: COMPUTER SCIENCE & ENGINEERING
I YEAR: II SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	UCY2801	Chemistry	3	1	0	40	60	200	5.5
			0	0	3	80	20		
2	UMA2003	Mathematics-II	3	1	0	40	60	100	4
3	UCS2802	Programming for Problem Solving	3	1	0	40	60	200	5
			0	0	2	80	20		
4	UME2802	Workshop Practices	1	0	4	80	20	100	3
5	UEG2801	English	2	0	0	40	60	200	3
			0	0	2	20	80		
TOTAL			12	3	11	420	380	800	20.5

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II YEAR: III SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
THEORY									
1	UCS3011	Data Structures and Algorithms	3	1	-	40	60	100	4
2	UCS3209	Data Structures and Algorithms Labs	-	-	2	80	20	100	1
3	UCS3012	Software Engineering	3	-	-	40	60	100	3
4	UCS3210	Software Engineering Labs	-	-	2	80	20	100	1
5	UMA3007	Discrete Mathematics	3	1	-	40	60	100	4
6	UEC3001	Digital Electronics	3	-	-	40	60	100	3
7	UEC3201	Digital Electronics Labs	-	-	2	80	20	100	1
8	UCS3018	Python Programming	3	-	-	40	60	100	3
9	UCS3215	Python Programming Lab	-	-	2	80	20	100	1
10	UEG3005	Effective Technical Communication	3	-	-	40	60	100	3
TOTAL			18	2	8	560	440	1000	24
11	UCS3001BD	*Computational Mathematics for Data Analytics	2	1	-	40	60	100	3
	UCS3001SE	**Object Oriented Analysis and Design	2	1	-	40	60	100	3
	UCS3001IO	***IOT Development Boards and Sensors	2	-	-	40	60	100	2
	UCS3201IO	***IOT Development Boards and Sensors Lab	-	-	2	80	20	100	1
	UCS3001ML	****Applied Python and Data Science	2	1	-	40	60	100	3
	UCS3002BD	*Big Data Fundamentals	2	1	-	40	60	100	3
	UCS3002ML	****Clean Coding	2	1	-	40	60	100	3

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*Big Data Analytics-BD

**Software Engineering-SE

***Internet of Things-IoT

****Machine Learning-ML

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II YEAR: IV SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
THEORY									
1	UCS4012	Computer Organization and Architecture	3	1	-	40	60	100	4
2	UCS4210	Computer Organization and Architecture Labs	-	-	2	80	20	100	1
3	UCS4013	Operating System	3	1	-	40	60	100	4
4	UCS4211	Operating System Labs	-	-	2	80	20	100	1
5	UCS4014	Formal Language and Automata Theory	3	1	-	40	60	100	4
6	UCS4019	Unix and Shell Programming	3	-	-	40	60	100	3
7	UCS4212	Unix and Shell Programming Lab	-	-	2	80	20	100	1
8	UMG4008	Organizational Behavior	3	-	-	40	60	100	3
9	ULA4401	Constitution of India	2	-	-	Satisfactory/ Unsatisfactory			0
10	UCS4602IV	Industrial Visit-I	-	-	-	Satisfactory/Unsatisfactory			0
TOTAL			17	3	6	440	360	800	21
11	UCS4001BD	*Programming for Data Analytics	2	1	-	40	60	100	3
	UCS4201BD	*Programming for Data Analytics Lab	-	-	2	80	20	100	1
	UCS4001SE	**Software Project Management	3	1	-	40	60	100	4
	UCS4001IO	***IOT Board and Communication Modules	1	1	-	40	60	100	2
	UCS4001IO	***IOT Board and Communication Modules Lab	-	-	4	80	20	100	2
	UCS4001ML	****Basic of AI and Machine Learning	3	1	-	40	60	100	4
	UCS4002BD	*Predictive Analytics	3	1	-	40	60	100	4
	UCS4002ML	****Machine Intelligence	3	1	-	40	60	100	4

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III YEAR: V SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
THEORY									
1	UCS5012	Database Management System	3	1	-	40	60	100	4
2	UCS5208	Database Management System Labs	-	-	2	80	20	100	1
3	UCS5013	Design and Analysis of Algorithms	3	1	-	40	60	100	4
4	UCS5209	Design and Analysis of Algorithms Labs	-	-	2	80	20	100	1
5	UCS5014	Object Oriented Programming	2	1	-	40	60	100	3
6	UCC5210	Object Oriented Programming Labs	-	-	2	80	20	100	1
7	UEC5002	Signal & System	3	-	-	40	60	100	3
8	-	Open Elective-I	3	-	-	40	60	100	3
9	-	Elective-I	3	-	-	40	60	100	3
10	ULA5402	Essence of Indian Traditional Knowledge	2	-	-	Satisfactory/ Unsatisfactory			0
11	UAP5403	Aptitude and Reasoning and online Test	-	-	2	Satisfactory/ Unsatisfactory			0
TOTAL			19	3	8	480	420	900	23
11	UCS5001BD	*Advanced Algorithms for Data Analytics	2	1	-	40	60	100	3
	UCS5201BD	*Advanced Algorithms for Data Analytics lab	-	-	2	80	20	100	1
	UCS5001SE	**Advance Software Engineering	2	1	-	40	60	100	3
	UCS5201SE	**Advance Software Engineering Lab	-	-	2	80	20	100	1
	UCS5001IO	***Advance Practices In IOT-I	1	1	-	40	60	100	2
	UCS5201IO	***Advance Practices In IOT-I Lab	-	-	2	80	20	100	2
	UCS5001ML	****Neural Network and Deep Learning	3	1	-	40	60	100	4

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III YEAR: VI SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
THEORY									
1	UCS6006	Compiler Design	3	1	-	40	60	100	4
2	UCS6205	Compiler Design Labs	-	-	2	80	20	100	1
3	UCS6007	Computer Networks	3	1	-	40	60	100	4
4	UCS6206	Computer Networks Labs	-	-	2	80	20	100	1
5	-	Elective-II	3	-	-	40	60	100	3
6	-	Elective-III	3	-	-	40	60	100	3
7	USS6402	Soft-Skill and Interpersonal Communication	2	-	-	100	-	100	2
8	UCS6702 PJ	Project-I	-	-	4	100	-	100	1
9	UCS6703SM	Seminar	-	-	2	100	-	100	1
10	UAP6403	Aptitude and Reasoning and online Test	-	-	2	Satisfactory/ Unsatisfactory			0
TOTAL			14	2	12	620	280	900	21
11	UCS6001BD	*Big Data Security	2	1	-	40	60	100	3
	UCS6201BD	Big Data Security Lab	-	-	2	80	20	100	1
	UCS6001SE	Software Quality Management	3	1	-	40	60	100	4
	UCS6001IO	***Advance Practices In IOT-II	1	1	-	40	60	100	2
	UCS6201IO	***Advance Practices In IOT-II Lab	-	-	4	80	20	100	2
	UCS6001ML	****Advanced Deep Learning	3	1	-	40	60	100	4

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IV YEAR: VII SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
THEORY									
1	-	Elective-IV	3	-	-	40	60	100	3
2	-	Elective-V	3	-	-	40	60	100	3
3	-	Open Elective-II	3	-	-	40	60	100	3
4	UBS7012	Biology	2	-	-	40	60	100	2
5	UCS7702 PJ	Project-II	-	-	10	100	-	100	5
6	UCS7601 ST	Summer Training	-	-	2	100	-	100	1
TOTAL			11	0	12	360	240	600	17
7	UCS7001BD	*Hadoop Framework	3	1	-	40	60	100	4
	UCS7201BD	*Hadoop Framework Lab	-	-	2	80	20	100	1
	UCS7001SE	**Software Testing	3	1	-	40	60	100	4
	UCS7201SE	**Software Testing Lab	-	-	2	80	20	100	1
	UCS7001IO	***Research Project in IOT	-	-	10	80	20	100	5
	UCS7201ML	Research Project in Machine Learning	-	-	10	80	20	100	5

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IV YEAR: VIII SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
THEORY									
1	-	Elective-VI	3	-	-	40	60	100	3
2	-	Open Elective-III	3	-	-	40	60	100	3
3	-	Open Elective-IV	3	-	-	40	60	100	3
4	UCS8702 PJ	Project-III	-	-	12	80	20	100	6
TOTAL			9	0	12	200	200	400	15

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LIST OF ELECTIVES

ELECTIVE-I			
S. NO.	SUBJECT CODE	SUBJECT	SEMESTER
1	UCS5107	Ecommerce	V
2	UCS5108	Graph Theory	V
3	UCS5109	Management Information System	V
4	UCS5110	Computer Graphics	V
ELECTIVE-II			
1	UCS6107	MOOC: Operations Research	VI
2	UCS6108	Computer Based Numerical and Statistical Techniques	VI
3	UCS6109	Geographical Information System	VI
4	UCS6110	Artificial Intelligence	VI
ELECTIVE-III			
1	UCS6111	Digital Image Processing	VI
2	UCS6112	Information Security and Cyber Law	VI
3	UCS6113	Cryptography and Network Security	VI
4	UCS6114	MOOC: Cloud Computing	VI
5	UCS6115	Machine Learning	VI
ELECTIVE-IV			
1	UCS7101	Mobile Application Development	VII
2	UCS7102	Parallel Algorithm	VII
3	UCS7103	Microprocessor	VII
4	UCS7104	MOOC: Real Time System	VII
5	UCS7105	Distributed System	VII
ELECTIVE-V			
1	UCS7106	Data Mining and Data Warehousing	VII
2	UCS7107	MOOC: Soft Computing	VII
3	UCS7108	Semantic Web and Web Service	VII
4	UCS7109	Data Compression	VII
5	UCS7110	Mobile Computing	VII
6	UCS7111	Pattern Recognition	VII

ELECTIVE-VI

1	UCS8101	Embedded System	VIII
2	UCS8102	Neural Networks	VIII
3	UCS8103	Simulation and Modeling	VIII
4	UCS8104	MOOC: Big Data Computing	VIII
5	UCS8102	Information storage Management	VIII

LIST OF OPEN ELECTIVES**OPEN ELECTIVE-I**

S. NO.	SUBJECT CODE	SUBJECT	DEPARTMENT	SEMESTER
1	UMG5301	Principles of Management	MGMT	V
2	UEM5301	Economics	MGMT	V

OPEN ELECTIVE-II

1	UEC7301	Satellite Communication	EC	VII
2	UME7301	Total Quality Management	ME	VII
3	UCS7301	MOOC: Block chain Arthecture	CS	VII

OPEN ELECTIVE-III

1	UME8305	Six Sigma	ME	VIII
2	UEE8301	Fuzzy Systems and Its application	EE	VIII
3	UBS8303	Bioinformatics	IBST	VIII

OPEN ELECTIVE-IV

1	UEC8301	Mobile Communication and Network	EC	VIII
2	UCS8301	Green Computing	CS	VIII
3	UMG8301	Digital Marketing	CS	VIII