

**Semester - 1**

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Environmental Science	0	1	0	0	-	-	50	-	-	20	-	50
	Computational Thinking for Structured Design-1	4	3	2	-	20	20	20	60	30	40	25	150
	Fundamentals of Information Security	2	1	2	-	20	20	20	60	30	40	25	150
	Mathematics-I	4	4	-	-	20	-	20	60	-	40	-	100
	Communication Skills	2	-	-	2	-	-	100	-	-	40	-	100
	First Year Elective-1 (Compulsory Subjects :1)	4	3	2	0	20	20	20	60	30	40	25	150
	Total	16	12	6	2								700

Semester - 1 First Year Elective-1

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Electrical and Electronics Engineering	4	3	2	0	20	20	20	60	30	40	25	150
	Engineering Physics-II	4	3	2	0	20	20	20	60	30	40	25	150

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50



Semester - 2

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Computational Thinking for Structured Design-2	4	3	2	-	20	20	20	60	30	40	25	150
	Global Certifications - Fundamentals (Azure, AWS, GCP)	2	2	-	-	20	-	20	60	-	40	-	100
	Mastering Kali Linux and OSINT	3	2	2	-	20	20	20	60	30	40	25	150
	ICT workshop	1	0	2	0	-	20	-	-	30	-	25	50
	Mathematics-II	4	4	-	-	20	-	20	60	-	40	-	100
	Advanced Communication & Technical Writing	2	-	-	2	-	-	100	-	-	40	-	100
	First Year Elective-2 (Compulsory Subjects :1)	4	3	2	0	20	20	20	60	30	40	25	150
	Total	20	14	8	2								800

Semester - 2 First Year Elective-2

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Electrical and Electronics Engineering	4	3	2	0	20	20	20	60	30	40	25	150
	Engineering Physics-II	4	3	2	0	20	20	20	60	30	40	25	150

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50

**Semester - 3**

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Design of Data Structures	3	3	0	0	20	-	20	60	-	40	-	100
	Design of Data Structures Laboratory	2	0	4	0	-	20	-	-	30	-	25	50
	Database Management System	3	3	0	0	20	-	20	60	-	40	-	100
	Database Management System Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Object Oriented Programming with JAVA	2	2	0	0	20	-	20	60	-	40	-	100
	Object Oriented Programming with JAVA Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Networking Concepts and Security	3	3	0	0	20	-	20	60	-	40	-	100
	Networking Concepts and Security Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Discrete Mathematics	4	4	0	0	20	-	20	60	-	40	-	100
	Professional Communication Skills	2	0	0	2	-	-	100	-	-	40	-	100
	Total	22	15	10	2								800

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50



						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Operating System	3	3	0	0	20	-	20	60	-	40	-	100
	Operating System Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Software Engineering	3	3	0	0	20	-	20	60	-	40	-	100
	Software Engineering Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Kali Linux and shell scripting	3	3	0	0	20	-	20	60	-	40	-	100
	Kali Linux and shell scripting Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Programming in Python with Full Stack Development	3	3	0	0	20	-	20	60	-	40	-	100
	Programming in Python with Full Stack Development Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Cryptography	3	3	0	0	20	-	20	60	-	40	-	100
	Cryptography Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Professional Grooming and Personality Development	1	0	0	1	-	-	100	-	-	40	-	100
	Total	21	15	10	1								850



						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Design and Analysis of Algorithms	3	3	0	0	20	-	20	60	-	40	-	100
	Design and Analysis of Algorithms Laboratory	2	0	4	0	-	20	-	-	30	-	25	50
	Web Application Security	3	3	0	0	20	-	20	60	-	40	-	100
	Web Application Security Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Mobile Application security	3	3	0	0	20	-	20	60	-	40	-	100
	Mobile Application security Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Metasploit-Frame work	3	3	0	0	20	-	20	60	-	40	-	100
	Metasploit-Frame work Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Professionalism & Corporate Ethics	1	0	0	1	-	-	100	-	-	40	-	100
	Quant, and Reasoning	3	3	0	0	20	-	20	60	-	40	-	100
	Open Elective 01 (Compulsory Subjects :1)	2	2	0	0	20	-	20	60	-	40	-	100
	Total	23	17	10	1								900



Semester – 5 - Open Elective 01

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Basic Aircraft Science	2	2	0	0	20	-	20	60	-	40	-	100
	Disaster Preparedness and Planning	2	2	0	0	20	-	20	60	-	40	-	100
	Cyber Security	2	2	0	0	20	-	20	60	-	40	-	100
	Fundamentals of Communication Engineering	2	2	0	0	20	-	20	60	-	40	-	100
	Internet of Things	2	2	0	0	20	-	20	60	-	40	-	100

Semester – 6

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Project – 1	3	0	6	0	-	100	-	-	100	-	100	200
	Security Monitoring	3	3	0	0	20	-	20	60	-	40	-	100
	Security Monitoring Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Cloud Computing and Security	3	3	0	0	20	-	20	60	-	40	-	100
	Cloud Computing and Security Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Reverse Engineering and Malware Analysis	3	3	0	0	20	-	20	60	-	40	-	100
	Reverse Engineering and Malware Analysis Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	PEC 01 (Compulsory Subjects :1)	3	3	0	0	20	-	20	60	-	40	-	100



	PEC 01-LAB (Compulsory Subjects :1)	1	0	2	0	-	20	-	-	30	-	25	50
	PEC 02 (Compulsory Subjects :1)	3	3	0	0	20	-	20	60	-	40	-	100
	PEC 02-LAB (Compulsory Subjects :1)	1	0	2	0	-	20	-	-	30	-	25	50
	Employability Skills	1	0	0	1	20	-	20	60	-	40	-	100
	Total	24	15	16	1								1050

Semester – 6 PEC 01

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Artificial Intelligence	3	3	0	0	20	-	20	60	-	40	-	100
	Digital Forensics and Incident Response	3	3	0	0	20	-	20	60	-	40	-	100
	Data Visualization and Data Analytics	3	3	0	0	20	-	20	60	-	40	-	100

Semester 6 PEC 01 LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Artificial Intelligence Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Digital Forensics and Incident Response Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Data Visualization and Data Analytics Laboratory	1	0	2	0	-	20	-	-	30	-	25	50



Semester – 6 PEC 02

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Mobile Application Development	3	3	0	0	20	-	20	60	-	40	-	100
	MEA(R)N Stack Web Development	3	3	0	0	20	-	20	60	-	40	-	100
	Devops	3	3	0	0	20	-	20	60	-	40	-	100

Semester 6 PEC 02 LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Mobile Application Development Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	MEA(R)N Stack Web Development Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Devops Laboratory	1	0	2	0	-	20	-	-	30	-	25	50



						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Summer Internship	2	0	0	0	-	100	-	-	-	-	50	100
	Blockchain and Web 3.0 Security	3	3	0	0	20	-	20	60	-	40	-	100
	Blockchain and Web 3.0 Security Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Project – II	6	0	12	0	-	100	-	-	100	-	100	200
	Fundamental of OT Security	3	3	0	0	20	-	20	60	-	40	-	100
	Fundamental of OT Security Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	PEC 03 (Compulsory Subjects :1)	3	3	0	0	20	-	20	60	-	40	-	100
	PEC 03-LAB (Compulsory Subjects :1)	1	0	2	0	-	20	-	-	30	-	25	50
	PEC 04 (Compulsory Subjects :1)	3	3	0	0	20	-	20	60	-	40	-	100
	PEC 04-LAB (Compulsory Subjects :1)	1	0	2	0	-	20	-	-	30	-	25	50
	Open Elective-2	3	3	0	0	20	-	20	60	-	40	-	100
	Total	27	15	20	0								1000



Semester – 7 PEC 03

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Software Testing and Quality Assurance	3	3	0	0	20	-	20	60	-	40	-	100
	Deep Learning	3	3	0	0	20	-	20	60	-	40	-	100
	Modern Networks	3	3	0	0	20	-	20	60	-	40	-	100

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Semester 7 PEC 03 LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Software Testing and Quality Assurance Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Deep Learning Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Modern Networks Laboratory	1	0	2	0	-	20	-	-	30	-	25	50

Semester – 7 PEC 04

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	



	Image Processing	3	3	0	0	20	-	20	60	-	40	-	100
	Information Security Management System	3	3	0	0	20	-	20	60	-	40	-	100
	Augmented Reality and Virtual Reality	3	3	0	0	20	-	20	60	-	40	-	100

Semester 7 PEC 04 LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Image Processing Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Information Security Management System Laboratory	1	0	2	0	-	20	-	-	30	-	25	50
	Augmented Reality and Virtual Reality Laboratory	1	0	2	0	-	20	-	-	30	-	25	50

Semester - 7 Open Elective 02

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	Remote Sensing and Geo Informatics	3	3	0	0	20	-	20	60	-	40	-	100
	Real Time Systems	3	3	0	0	20	-	20	60	-	40	-	100
	Cyber Physical Systems	3	3	0	0	20	-	20	60	-	40	-	100
	Computational Number Theory	3	3	0	0	20	-	20	60	-	40	-	100
	VLSI System Design	3	3	0	0	20	-	20	60	-	40	-	100

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