School of Engineering & Technology
Department of Computer Application
M.Sc. – Computer Science
With Specialization in Cyber Security
Semester I, II, III & IV
AY 2023-2025

Semester I

Theory/ Practical	Sl. No	Course Type	Course Code	Course Name	Hours per week			Credit	Mark	
					L	T	P	C	CA	FA
T	1.	DSCC		Computational Techniques using Python	3	0	0	3	40	60
T	2.	DSCC		Advanced Data Structures & Algorithms	3	0	0	3	40	60
T	3.	OEC		Introduction to Cyber Security	3	1	0	4	40	60
T	4.	DSCC		Mathematical and Statistical Foundations	3	0	0	3	40	60
T	5.	AEC		Personality and Soft Skill development	3	0	0	3	40	60
P	6.	DSCC		Advanced Data Structures & Algorithms LAB	0	0	4	2	50	50
P	7	DSCC		Web Technology Lab	0	0	4	2	50	50
				Total	15	1	8	20	300	400

Semester II

Theory/ Practical	Sl. No	Course Type	Course Code	Course Name	Hours per week			Credit	Mark	
					L	T	P	C	CA	FA
T	1.	**DSCC**		Computer Organization and architecture	**3**	**0**	**0**	**3**	40	60
P	2.	**DSCC**		Advanced Database management system	**3**	**0**	**0**	**3**	40	60
T	3.	**DSCC**		Software Engineering	**3**	**0**	**0**	**3**	40	60
T	4.	**OEC**		Cloud Computing/ Malware analysis and detection	**3**	**1**	**0**	**4**	40	60
T	5.	**DSCC**		Machine Learning	**3**	**0**	**0**	**3**	40	60
P	6.	**DSCC**		Machine Learning Lab	**0**	**0**	**4**	**2**	50	50
T/P	7.	**DSCC**		Advanced DBMS Lab (SQL/ NoSQL)	**0**	**0**	**4**	**2**	50	50
				Total	15	1	8	20	300	400

Semester III

Theory/ Practical	Sl. No	Course Type	Course Code	Course Name	Hours per week			Credit	Mark	
					L	T	P	C	CA	FA
T	1.	**DSCC**		Deep Learning	**3**	**0**	**0**	**3**	40	60
P	2.	**DSCC**		Operating Systems	**3**	**0**	**0**	**3**	40	60
T	3.	**DSCC**		Cyber forensic, audit and investigation	**3**	**1**	**0**	**4**	40	60
T	4.	**OEC**		Advanced Web Technology	**3**	**0**	**0**	**3**	40	60
T	5.	**DSCC**		Deep learning Lab	**0**	**0**	**4**	**2**	50	50
P	6.	**DSCC**		Minor Project	0	0	8	4	50	50
T/P	7.	**DSCC**		Seminar paper	0	0	2	1	00	100
				Total	**12**	**1**	**14**	**20**	260	440

Semester IV

Theory/ Practical	Sl. No	Course Type	Course Code	Course Name	Hours per week			Credit	Mark	
					L	T	P	C	CA	FA
T	1.	VAC		Universal Human Values	2	1	0	3	00	100
P	2.	IC		Elective-I (As per Table)(As per SWAYAM)	3	0	0	3	00	100
T	3.	**DSCC**		Elective-II(As per Table)(As per SWAYAM)	3	0	0	3	00	100
T	4.	AEC=7 SEC =7		System Development Project	-	-	22	11	200	200
				Total	**8**	**0**		**20**	200	500

OPEN ELECTIVE COURSES (SPECIALIZATION)

(MOOCS: SWAYAM COURSES)

CODE	Elective-I	CODE	Elective-II
	Quantum Computing		Internet of Things
	Molecular Computing		Computer network and Internet security
	Nano Technology		Wireless Networks
	Robotics		Android Mobile Application Dev
	Remote Sensing & GIS		Database and content organization

(or any other Course added time to time)

Abbreviations Used:

DSCC   : Discipline Specific Core Courses
AEC : Ability Enhancement Compulsory Course
VAC : Value Addition Courses
OEC : Open Elective Courses
SEC   : Skill Enhancement Courses
CE   : Continuous Evaluation
ESE   : End Semester Examination
L/T/P: Lecture / Tutorial / Practical