

M.Tech. (Cyber Security): Scheme of Teaching and Examinations 2022-24

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2022 - 23)

1st Year Scheme

I SEMESTER												
Sl. No	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Lecture	Tutorial	Practical/ Drawin	Duration in hours	CIEMarks	SEEMarks	Total Marks	
					L	T	P					
1	PCC	22CBS101	Introduction to Cyber Security and Secure Coding	CSE	4	0	0	3	50	50	100	4
2	PCC	22CBS102	Cyber Forensics	CSE	4	0	0	3	50	50	100	4
3	RETP	22CBS103	Research Experience Through Practice -I	CSE	Four contact hours /week for carrying out Research and Interaction between the faculty and students			-	100	0	100	2
4	PCC	22CBS104	Introduction to Cyber Security Lab	CSE	0	0	2	3	50	50	100	1
5	PCC	22CBS105	Cyber Forensics Lab	CSE	0	0	2	3	50	50	100	1
6	PEC	22CBS11X	Elective – I	CSE	3	0	0	3	50	50	100	3
7	PEC	22CBS12X	Elective - II	CSE	3	0	0	3	50	50	100	3
8	PEC	22CBS13X	Elective - III	CSE	3	0	0	3	50	50	100	3
9	AUDIT	22CBSAUXX	Audit Course-I	CSE	2	0	0	0	0	0	0	0
				Total	19	0	4	21	450	350	800	21

II SEMESTER												
Sl. No	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Lecture	Tutorial	Practical/ Drawin	Duration in hours	CIEMarks	SEEMarks	Total Marks	
					L	T	P					
1	PCC	22CBS201	Firewall & UTM Architecture	CSE	4	0	0	3	50	50	100	4
2	PCC	22CBS202	AI in Cyber Security	CSE	4	0	0	3	50	50	100	4
3	RETP	22CBS203	Research Experience Through Practice -II	CSE	Four contact hours /week for carrying out Research and Interaction between the faculty and students			-	100	0	100	2
4	PCC	22CBS204	Firewall & UTM Architecture Lab	CSE	0	0	2	3	50	50	100	1
5	PCC	22CBS205	AI in Cyber Security Lab	CSE	0	0	2	3	50	50	100	1
6	PEC	22CBS21X	Elective – IV	CSE	3	0	0	3	50	50	100	3
7	PEC	22CBS22X	Elective – V	CSE	3	0	0	3	50	50	100	3
8	PEC	22CBS23X	Elective – VI	CSE	3	0	0	3	50	50	100	3
9	AUDIT	22CBSAUXX	Audit Course-II	CSE	2	0	0	0	0	0	0	0
				Total	19	0	4	21	450	350	800	21

Note: PCC: Professional Core Course, PEC: Professional Elective Course, AUDIT (AU): Non-credit Audit course, RETP: Research Experience Through Practice.

L –Lecture, T – Tutorial, P- Practical/ Drawing, CIE: Continuous Internal Evaluation, SEE: Semester End Examination.


 Established under Section 3 of UGC Act 1956
 Accredited with 'A+' Grade by NAAC

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OF TECHNOLOGY**

Off-Campus Centre, Nitte - 574 110, Karkala

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(Effective from the academic year 2022 - 23)
 2nd Year Scheme

III SEMESTER												
Sl. No	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawin	Duration in hours	CIEMarks	SEEMarks	Total Marks	
					L	T	P					
1	UCC	22CBS301	Industry Internship/ Research Internship/Mini Project	CSE	8 Weeks Full Time [32Hrs/week]			3	100	0	100	8
2	UCC	22CBS302	Seminar on Special Topic	CSE	0	0	2	3	100	0	100	2
3	UCC	22CBS303	Project Part -1	CSE	8 Weeks Full Time [32Hrs/week]			3	200	0	200	8
				Total	0	0	2	9	400	0	400	18
Note: L –Lecture, T – Tutorial, P- Practical/ Drawing, S – Self Study Component, CIE: Continuous Internal Evaluation, SEE: Semester End Examination.												
Internship: CIE Evaluation is for 100 Marks where 50 Marks is for Report and 50 Marks for the Presentation												
Project Part-1: CIE Evaluation is for 200 Marks where 100 Marks is for Report and 100 Marks for the Presentation												

IV SEMESTER												
Sl. No	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawin	Duration in hours	CIEMarks	SEEMarks	Total Marks	
					L	T	P					
1	UCC	22CBS401	Project Part -2	CSE	20 Weeks Full Time [40Hrs/week]			3	200	200	400	20
				Total	0	0	0	3	200	200	400	20
Note: L –Lecture, T – Tutorial, P- Practical/ Drawing, S – Self Study Component, CIE: Continuous Internal Evaluation, SEE: Semester End Examination.												
Project Part-2: CIE Evaluation is for 200 Marks having Project Progress Evaluation (PPE)-1 and PPE-2 each for 100 Marks.												



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List of Domain Specific Skill Development Audit Course (AUDIT)	
Course Code	Course Title
22CBSAU11	Data Analytics using R Programming
22CBSAU12	Full stack Web Development
22CBSAU13	MOOC Course

List of Electives [PEC]			
Elective - I		Elective - II	
Code	Course Title	Code	Course Title
22CBS111	Cloud security & IOT Security	22CBS121	Ethical Hacking and Network Defense
22CBS112	Cyber Security Threats	22CBS122	Cryptography
Elective - III		Elective - IV	
Code	Course Title	Code	Course Title
22CBS131	Security Analytics	22CBS211	Malware Analysis and Detection
22CBS132	Secured Network Protocols and Standards	22CBS212	Operating Systems Security
Elective - V		Elective - VI	
Code	Course Title	Code	Course Title
22CBS221	Security and Resilience	22CBS231	Cyber security orchestration, automation and simulation
22CBS222	Internet Packet and Application Analysis	22CBS232	Cyber Law