

**13. Courses of Study and Scheme of Assessment
ME BIOMETRICS AND CYBER SECURITY**

**(2021 REGULATIONS)
(Minimum No. of credits to be earned: 71*)**

Course Code	Course Title	Hours / Week			Credits	Maximum Marks			CAT
		Lecture	Tutorial	Practical		CA	FE	Total	
III SEMESTER									
21NB__	Professional Elective – IV	3	0	0	3	50	50	100	PE
21_____	Open Elective	3	0	0	3	50	50	100	OE
21NB71	Project Work - I	0	0	12	6	50	50	100	EEC
Total 18hrs		6	0	12	12	150	150	300	
IV SEMESTER									
21NB81	Project Work - II	0	0	24	12	50	50	100	EEC
Total 24hrs		0	0	24	12	50	50	100	
PROFESSIONAL ELECTIVE THEORY COURSES (Four to be opted)									
21NB21	Information System Security Management	3	0	0	3	50	50	100	PE
21NB22	Information Ethics and Cyber Laws	3	0	0	3	50	50	100	PE
21NB23	Block Chain and Crypto Currencies	3	0	0	3	50	50	100	PE
21NB24	Cyber Warfare	3	0	0	3	50	50	100	PE
21NB25	Mobile Security and Device Forensics	3	0	0	3	50	50	100	PE
21NB26	Data Analytics for Cyber Security	3	0	0	3	50	50	100	PE
21NB27	Advanced Persistent Threat	3	0	0	3	50	50	100	PE
21NB28	Pattern Recognition	3	0	0	3	50	50	100	PE
21NB29	Design and Analysis of Security Protocols	3	0	0	3	50	50	100	PE
21NB30	Cyber Security Governance, Risk Management and Compliance.	3	0	0	3	50	50	100	PE
21NB31	Human Computer Interaction	3	0	0	3	50	50	100	PE
21NB32	Network Security	3	0	0	3	50	50	100	PE
21NB33	Operating System Hardening	3	0	0	3	50	50	100	PE
21NB34	Cyber Security for IoT and Edge Computing	3	0	0	3	50	50	100	PE
21NB35	Cloud Security	3	0	0	3	50	50	100	PE
21NB36	Cyber Physical Systems	3	0	0	3	50	50	100	PE
21NB37	Data Visualization	3	0	0	3	50	50	100	PE
21NB38	Software Crash Analysis and Disaster Recovery	3	0	0	3	50	50	100	PE
21NB39	Data Privacy and Protection	3	0	0	3	50	50	100	PE
21NB40	E-Commerce Security	3	0	0	3	50	50	100	PE
OPEN ELECTIVE THEORY COURSE									
21NN91	Computational Finance	3	0	0	3	50	50	100	OE

* Indicated is the minimum number of credits to be earned by a student.

CAT – Category; PC – Professional Core; PE - Professional Elective; RMC - Research Methodology and IPR; EEC – Employability Enhancement Course; MC - Mandatory Course; Grade – Completed / Not Completed; OE – Open Elective.

