Maulana Abul Kalam Azad University of Technology, West Bengal
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Syllabus for B. Tech in Computer Science and Engineering
(Cyber Security)
(Applicable from the academic session 2022-2023)

Curriculum Structure

Semester III (Second year)								
Sl No		Type of Course	Code	Course Title	Hours per week			Credits
					L	T	P	
1	THEORY	Engineering Science Course	ESC301	Analog and Digital Electronics	3	0	0	3
2		Professional Core Course	PCC-CS301	Data Structure and Algorithms	3	0	0	3
3		Professional Core Course	PCC-CS302	Computer Organization	3	0	0	3
4		Basic Science Course	BSC-CS301	Discrete Mathematics	2	0	0	2
5		Humanities Social Science including Management Course	HSMC301	Economics for Engineers (Humanities II)	3	0	0	3
6	PRACTICAL	Professional Core Course	PCC-CS391	Data Structure and Algorithms	0	0	4	2
7		Engineering Science Course	ESC391	Analog and Digital Electronics	0	0	4	2
8		Professional Core Course	PCC-CS392	Computer Organization	0	0	4	2
9		Professional Core Course	PCC-CS393	IT Workshop (Python/Matlab/R)	0	0	4	2
TOTAL CREDITS								22

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Sl No		Type of Course	Code	Course Title	Hours per week			Credits
					L	T	P	
1	THEORY	Professional Core Course	PCC-CSY401	Probability and Statistics	3	0	0	3
2		Professional Core Course	PCC-ICB401	Data Communication and Networks	3	0	0	3
3		Professional Core Course	PCC-CS403	Formal Languageand Automata Theory	3	0	0	3
4		Professional Core Course	PCC-CS404	Design and Analysis of Algorithm	3	0	0	3
5		Basic Science Course	BSC401	Biology	2	1	0	3
6		Mandatory Course	MC401	Environmental Science	2	0	0	2
7	PRACTICAL	Professional Core Course	PCC-ICB491	Data Communication and Networks Lab	0	0	4	2
8		Professional Core Course	PCC-CS494	Design and Analysis of Algorithm Lab	0	0	4	2
TOTAL CREDITS								21

Semester IV (Second year)

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					Semester V (Third year)				

Sl No		Type of Course	Code *	Course Title	Hours per week			Credits
					L	T	P	
1	THEORY	Professional Core Course	PCCCS501	Cyber Security	3	0	0	3
2		Professional Core Course	PCCCS502	Cyber Law & Cyber Crime	3	0	0	3
3		Professional Core Course	PCCCS503	Operating System	3	0	0	3
4		Professional Core Course	PCCICB502	Object Oriented Programming	3	0	0	3
5		Humanities and Social Sciences including Management	HSMC501	Industrial Management	2	0	0	2
6		Professional Elective	PECICB501 (A/B/C)	Mobile Computing/ Internet Technology/Smart Sensors and IoT	3	0	0	3
7		Mandatory Course	MC-501	Constitution of India / Essence of Indian Knowledge Tradition	2	0	0	0
8	PRACTICAL	Professional Core Course	PCCCS591	System Security Lab	0	0	4	2
9		Professional Core Course	PCCCS592	Operating System Lab	0	0	4	2
10		Professional Core Course	PCCICB593	Object Oriented Programming Lab	0	0	4	2
TOTAL CREDITS								23

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Sl No		Type of Course	Code*	Course Title	Hours per week			Credits
					L	T	P	
1	Theory	Professional Core Course	PCCCS601	Cryptography and Network Security	2	1	0	3
2		Professional Core Course	PCCCS602	Infrastructure Security	3	0	0	3
3		Professional Core Course	PCCCS603	Database Management System	3	0	0	3
4		Professional Elective	PECICB601 (A/B/C /D/E)	Cloud Computing/ Software Engineering/ Ethical Hacking	3	0	0	3
5		Open Elective	OECICB601 (A/B/C)	Human Resource Development and Organizational Behaviour/ Design Thinking/ Economic Policies India	3	0	0	3
6	PRACTICAL	Project	PROJ-CS601	Research Methodology	2	0	0	2
7		Professional CoreCourse	PCCCS691	Network Security Lab	0	0	4	2
8		Professional Elective Course	PCCCS692	Database Management System lab	0	0	4	2
TOTAL CREDITS								21

Semester VI (Third year)

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SlNo		Type of Course	Code*	Course Title	Hours per week			Credits
					L	**T**	**P**	
1	T H E	Professional Elective Course	PECICB701 (A/B/C)	Digital Forensics/ Information Theory and Coding/ Blockchain Technology	3	0	0	3
2		Professional Elective Course	PECICB702 (A/B/C)	AI&ML/ Malware Analysis/ Mobile Application and Services	3	0	0	3
3		Open ElectiveCourse	OECICB701 (A/B/C)	Soft skill and Interpersonal Communication/Bio Informatics/ Business Analytics	3	0	0	3
4		Humanities and Social Sciences including Management	HSMC701	Project Management andEntrepreneurship	2	0	0	2
5		Sessional	PROJICB7 81	Project I	0	0	12	6
TOTAL CREDITS								17

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SlNo		Type of Course	Code*	Course Title	Hours per week			Credits
					L	**T**	**P**	
1	T H E	Professional Elective Course	PECICB801 (A/B)	Information Security Management System (ISMS)/ Distributed System	3	0	0	3
2		Open Elective Course	OECICB801(A/ B /C)	Security Operations Management/ E-commerce and Digital Payment System/Operations Research	3	0	0	3
3		Open Elective Course	OECICB802 (A /B/C)	Management Information System(MIS)/ Multimedia Technology/ Introduction to Arts and Aesthetics	3	0	0	3
4		Sessional-1	PROJICB881	Project II	0	0	12	6
TOTAL CREDITS								15

Semester VIII (Fourth year)