



FACULTY OF
ENGINEERING AND
TECHNOLOGY



2024 - 25

B.Tech. Computer Science & Engineering (Cyber Security & Forensics)

Programme Structure

Division	Faculty of Engineering and Technology
School Name	School of Computer Science & Engineering
Department Name	Department of Computer Engineering and Technology
Programme Name	B.Tech. CSE-Cyber Security & Forensics

Category-wise Credit Distribution

Category	Credits
Programme Foundation	34
Programme Major	48
Programme Electives	16
Programme Capstone Project/Problem-Based Learning/Seminar and Internships	32
University Core	24
University Electives	9

Course Basket

Course Type	Description
Programme Core	Courses dealing with foundations, depth and breadth of the major in which student is admitted at MIT-WPU
Programme Electives	Open electives under the programme allow students to specialize in a particular area connected to their major.
University Core	Courses that reflect the core MITWPU values and the mission of Life Transformation of students.
University Electives	Multidisciplinary courses across the faculties at MIT-WPU and outside the programme core.

Semester	Course Type	Course Name / Course Title	Total Credits
I	University Core	Effective Communication	1
I	University Core	Critical Thinking	1
I	University Core	Environment and Sustainability	1
I	University Core	Foundations of Peace	2
I	University Core	Yoga - I	1
I	University Core	SLDP	1
I	Programme Foundation	Linear Algebra and Differential Calculus	3
I	Programme Foundation	Chemistry	3
I	Programme Foundation	Physics	3
I	Programme Foundation	Engineering Graphics	3
I	Programme Foundation	Ideas and Innovations in Manufacturing	1
I	Programme Foundation	Indian Knowledge Systems-II	2
II	University Core	Advanced Excel	1
II	University Core	Financial Literacy	1
II	University Core	Yoga - II	1
II	University Core	Co-creation	1
II	University Core	Indian Constitution	1
II	University Core	IKS(General)	2
II	Programme Foundation	Engineering Mechanics	3
II	Programme Foundation	Programming and Problem Solving	3
II	Programme Foundation	Biology for Engineers	2
II	Programme Foundation	Discrete Mathematics with Graph Theory	3
II	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Foundations of Computer Architecture and System Design	4

Semester	Course Type	Course Name / Course Title	Total Credits
III	University Core	Sports	1
III	University Core	Research Innovation Design Entrepreneurship (RIDE)	1
III	University Core	Spiritual & Cultural Heritage; Indian Experience	2
III	University Electives	UE - I	3
III	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Project Based Learning - I	1
III	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Object Oriented Concepts using C++	2
III	Programme Foundation	Differential Equations and Transform Techniques	4
III	Programme Major	Data Structures	3
III	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Data Structures Laboratory	1
III	Programme Major	Computer Networks	3
IV	University Electives	UE-II	3
IV	University Core	Rural Immersion	1
IV	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Project Based Learning - II	1
IV	University Core	Life Transformation Skills	1
IV	Programme Foundation	Probability and Statistics	4
IV	Programme Major	Database Management System	3
IV	Programme Major	Database Management System Laboratory	1

Semester	Course Type	Course Name / Course Title	Total Credits
IV	Programme Major	Operating Systems	3
IV	Programme Major	Operating Systems Laboratory	1
IV	Programme Major	Information and Cyber Security	4
V	University Electives	UE-III	3
V	University Core	Managing Conflicts Peacefully: Tools and Techniques	2
V	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Project Based Learning - III	1
V	Programme Electives	Programme Elective-I	4
V	Programme Major	Full Stack Development Laboratory	1
V	Programme Major	Design and Analysis of Algorithms	3
V	Programme Major	Artificial Intelligence and Machine Learning Techniques	4
V	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Software Project Planning and Management	2
V	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Embedded Systems and Internet of Things Laboratory	1
VI	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Project Based Learning - IV	1
VI	University Core	National Academic Immersion	2
VI	Programme Electives	Programme Elective-II	4
VI	Programme Major	Cloud Infrastructure and Security	3
VI	Programme Major	Ethical Hacking	3
VI	Programme Major	Theory of Computation	3

Semester	Course Type	Course Name / Course Title	Total Credits
VI	Programme Major	Digital Forensics and Investigation	3
VI	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Mini Project using Java Programming	1
VI	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Seminar	1
VII	Programme Electives	Programme Elective-III	4
VII	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Capstone Project	6
VII	Programme Major	Blockchain Technology Concepts and Application	3
VII	Programme Major	Security Management, Cyber Laws and Ethics	2
VII	Programme Major	System Software and Compiler Design	4
VIII	Programme Electives	Programme Elective-IV	4
VIII	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Internship	10

*Modifications to the programmes and courses are contingent upon adherence to university guidelines and procedures. Any proposed changes must undergo a thorough review process, including consultation with relevant academic departments, approval from the appropriate administrative bodies, and compliance with accreditation standards.

Additionally, consideration will be given to feedback from students, faculty, and other stakeholders to ensure that modifications align with the overall educational objectives and mission of the university. The implementation of any approved changes will be communicated transparently to the university community, and appropriate measures will be taken to facilitate a smooth transition for all affected parties.