MIT-WPU
॥ विश्वशान्तिर्ध्रुवं ध्रुवा ॥

FACULTY OF ENGINEERING AND TECHNOLOGY

M.Tech Electronics and Communication Engineering (VLSI and Embedded Systems)

Programme Structure

mitwpu.edu.in

Division	Faculty of Engineering and Technology
School Name	School of Engineering & Technology
Department Name	Department of Electrical and Electronics Engineering
Program Name	M.Tech Electronics and Communication Engineering (VLSI and Embedded Systems)

COURSE BASKET

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

Semester I

Semester	Course Type	Course Name / Course Title	Total Credits
I	PC	Analog and Digital VLSI Design	4
I	PC	Embedded System Design and RTOS	4
I	PC	Artificial Intelligence Techniques and Applications	4
I	PC	Research Methodology	4
I	PC	Seminar	3
I	UC	Scientific Studies of Mind, Matter, Spirit and Consciousness	2
I	UC	Yoga	1
		Total Credits:	22

Semester II

Semester	Course Type	Course Name / Course Title	Total Credits
II	PC	Advanced Embedded Systems	4
II	PC	Industrial IoT	4
II	PE	Program Elective I	4
II	PE	Program Elective II	4
II	PC	Dissertation Stage – I	4
II	UC	Peace Building: Global Initiatives	2
		Total Credits:	**22**

Semester - III

Semester	Course Type	Course Name / Course Title	Total Credits
III	PC	Testing and Testability	4
III	PE	Program Elective - III	4
III	PC	Dissertation Stage – II	20
		Total Credits:	28

SEMESTER - IV

Semester	Course Type	Course Name / Course Title	Total Credits
IV	PC	Internship	4
IV	PE	Program Elective – IV - MOOC	4
		Total Credits:	8

Professional Elective Tracks

Semester	Name of the Course	Type
II	Advanced VLSI Design	Program Elective - I
II	Robotics and Automation	Program Elective - I
II	System Verilog	Program Elective - II
II	Automotive Embedded Systems	Program Elective - II
III	System on Chip	Program Elective – III
III	Deep Learning	Program Elective – III
IV	MOOC	Program Elective - IV

*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.