



M.Tech Computer Science and Engineering

(Artificial Intelligence and Optimization Methods)

Division	Faculty of Engineering and Technology
School Name	School of Computer Science & Engineering
Department Name	Department of Computer Engineering and Technology
Programme Name	M.Tech. Computer Science and Engineering- Artificial Intelligence and Optimization Methods

+++++ 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 specialise in a particular area connected to their major.
University Core	Courses that reflect the core MIT-WPU 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 I

Sr. No.	Course Type	Course Name / Course Title	Total Credits
I	PM	Numerical Methods	4
I	PM	Optimization Methods	4
I	PM	Artificial Intelligence & Machine Learning	4
I	PM	Research Methodology & Statistics	4
I	PM	Fuzzy logic	4
I	UC	Scientific Studies of Mind, Matter, Spirit and Consciousness	2
I	UC	Yoga	1
		Total	23

Semester II

Semester	Course Type	Course Name / Course Title	Total Credits
II	PM	Technical Writing & Presentation	3
II	PM	Nature Inspired Optimization Methods-I	4
II	PE	Program Elective-I • Analytical Tools • Programming and Problems Solving	4
II	PM	Artificial Neural Networks	4
II	PR	Seminar	2
II	UC	Peace Building: Global Initiatives	2
		Total	19

Semester - III

Semester	Course Type	Course Name / Course Title	Total Credits
III	PM	Deep Learning Methods and Applications	4
III	PE	Program Elective-II <ul style="list-style-type: none">• Operations Research• Nature Inspired Optimization-II	4
III	PE	Program Elective III <ul style="list-style-type: none">• Natural Language Processing• Big Data Analytics	4
III	PR	Research Project I	8
		Total	20

SEMESTER - IV

Semester	Course Type	Course Name / Course Title	Total Credits
IV	PE	Program Elective IV <ul style="list-style-type: none">• Intelligent Control Systems• Internet of Things• Generative Artificial Intelligence	4
IV	PR	Research Internship	4
IV	PR	Research Project II	12
		Total	20

Professional Elective Tracks

Semester	Course Type	Course Name / Course Title
II	PE I	Analytical Tools
II	PE I	Programming and Problems Solving
III	PE II	Operations Research
III	PE II	Nature Inspired Optimization-II
III	PE III	Natural Language Processing
III	PE III	Big Data Analytics
IV	PE IV	Intelligent Control Systems
IV	PE IV	Internet of Things
IV	PE IV	Generative Artificial Intelligence

*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.