MIT-WPU
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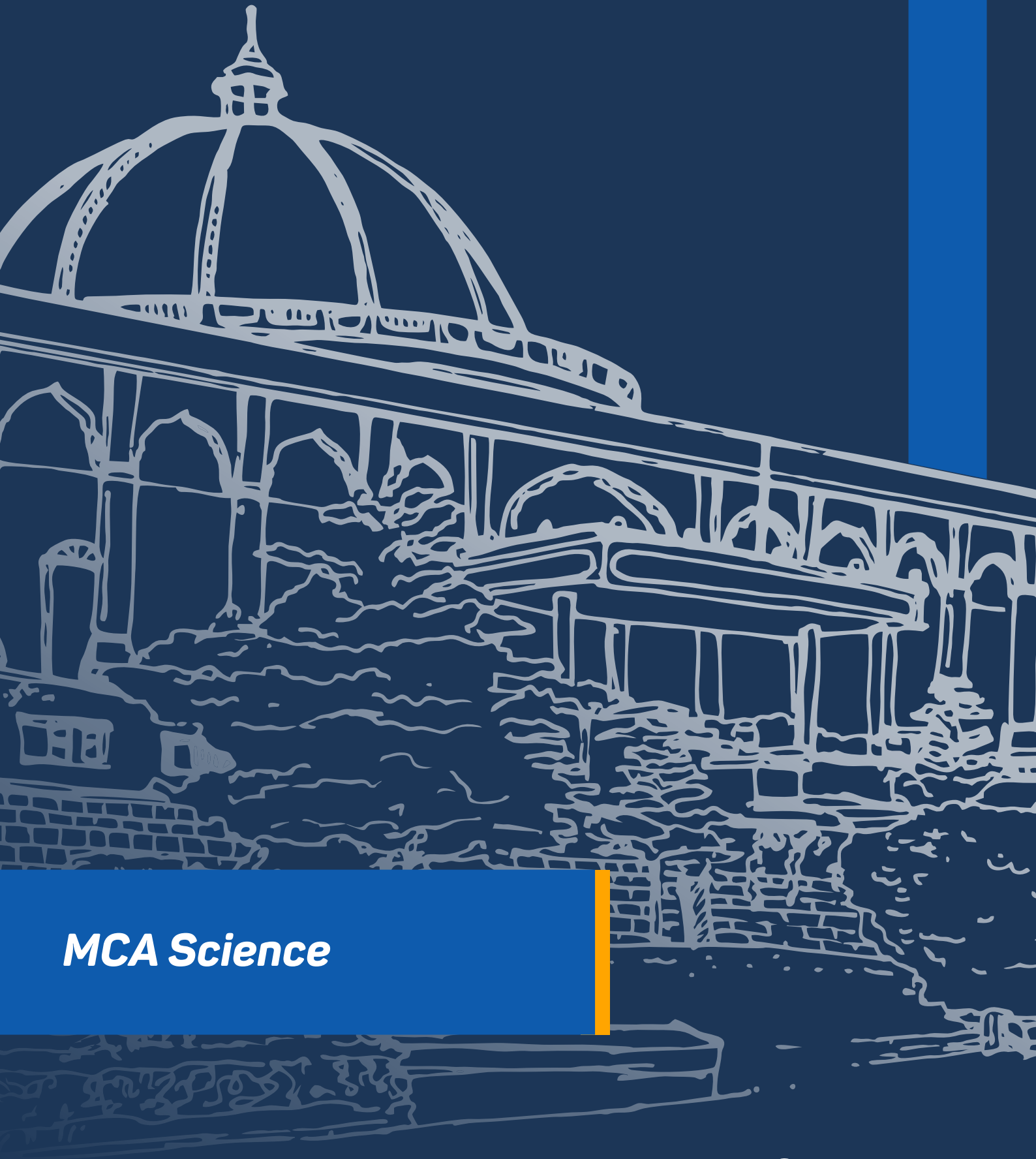
FACULTY OF ENGINEERING AND TECHNOLOGY



MCA Science

Programme Structure

mitwpu.edu.in

Division	Faculty of Engineering and Technology
School Name	School of Computer Science & Engineering
Department Name	Department of Computer Science and Applications
Programme Name	MCA Science

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

Semester	Course Type	Course Name / Course Title	Total Credits
I	PM	Data Communication and Security	4
I	PM	Java Programming	3
I	PM	Advanced Database Management System	3
I	PM	Python Programming	4
I	PR	Lab on Java Programming	1
I	PR	Lab on Advanced Database Management System	1
I	UC	Scientific Studies of Mind, Matter, Spirit, and Consciousness	2
I	UC	Yoga	1
I	UC	Research Methodology	4
		Total	**23**

Semester II

Semester	Course Type	Course Name / Course Title	Total Credits
II	PM	Advanced Java	3
II	PM	Data Structures and Algorithms	3
II	PM	Statistics and Probability	4
II	PE	Program Elective – I (PE1)	4
II	PE	Program Elective – II (PE2)	4
II	PR	Lab on Advanced Java	1
II	PR	Lab on Data Structures and Algorithms	1
II	PR	Research Paper Writing	1
II	PR	Career Essentials	1
II	UC	Peace Building: Global Initiatives	2
		Total	**24**

Semester - III

Semester	Course Type	Course Name / Course Title	Total Credits
III	PM	Devops	3
III	PM	Full Stack Development	3
III	PM	Software Testing and Quality Assurance	3
III	PE	Program Elective – III (PE3)	4
III	PE	Program Elective – IV (PE4)	4
III	PR	Lab on Full Stack Development	1
III	PR	Mini Project	1
		Total	**19**

SEMESTER - IV

Semester	Course Type	Course Name / Course Title	Total Credits
IV	PR	Full-time Industrial Internship	22
		Total Credits:	**22**

Program Elective Tracks

Semester	Course Type	Course Name / Course Title
II	Program Elective-I	Data Science and Analytics
II	Program Elective-I	Mobile Application Development - iOS Programming
II	Program Elective-I	Next Generation Database
II	Program Elective-I	Cloud Computing
II	Program Elective-II	Artificial Intelligence and Machine Learning
II	Program Elective-II	Advanced Software Development Methodologies
II	Program Elective-II	Data mining and Data Warehousing
II	Program Elective-II	Internet of Things
III	Program Elective-III	Deep Learning and Introduction to NLP
III	Program Elective-III	Advanced Internet Technology
III	Program Elective-III	Data Engineering
III	Program Elective-III	Information Security Audit
III	Program Elective-IV	Computer Vision & Digital Image Processing
III	Program Elective-IV	ReactJS
III	Program Elective-IV	Big Data Analytics
III	Program Elective-IV	Data Privacy and Security

*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.