



Master of Computer Applications

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

Semester	Odd (I)	Even (II)	Total Credits
First Year	23	23	46
Second Year	20	18	38

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| Course Type | Description |
|--------------------------|--|
| Programme Major [PM] | Courses dealing with foundations, depth and breadth of the major in which a 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. |
| Program Research [PR] | Includes credits from internship, thesis, seminar, mini project, and research. |
| University Core [UC] | Courses that reflect the core MIT-WPU values and the mission of Life Transformation of students. |

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 | PM | Lab on Java Programming | 1 |
| I | PM | Lab on Advanced Database Management System | 1 |
| I | UC | Research Methodology | 4 |
| I | UC | Scientific Studies of Mind, Matter, Spirit and Consciousness | 2 |
| I | UC | Yoga | 1 |
| | | Total Credits: | 23 |

Semester II

| Semester | Course Type | Course Name / Course Title | Total Credits |
|----------|-------------|--------------------------------------|---------------|
| II | PM | Advanced Java | 3 |
| II | PM | Data Structure and Algorithms | 3 |
| II | PM | Statistics and Probability | 4 |
| II | PM | Lab on Advanced Java | 1 |
| II | PM | Lab on Data Structure and Algorithms | 1 |
| II | PE | Program Elective - I (PE - I) | 4 |
| II | PE | Program Elective - II (PE - II) | 4 |
| II | PR | Cognitive Skills | 1 |
| II | UC | Peace Building: Global Initiatives | 2 |
| | | Total Credits: | 23 |

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 | PM | Lab on Full Stack Development | 1 |
| III | PE | Program Elective - III (PE - III) | 4 |
| III | PE | Program Elective - IV (PE - IV) | 4 |
| III | PR | Research Paper Writing | 1 |
| III | PR | Mini Project | 1 |
| | | Total Credits: | 20 |

SEMESTER - IV

| Semester | Course Type | Course Name / Course Title | Total Credits |
|----------|-------------|-----------------------------|---------------|
| IV | PM | MOOC | 3 |
| IV | PR | Internship/Capstone Project | 15 |
| | | Total Credits: | 18 |

Program Elective Tracks

| Semester | Course Type | Course Name / Course Title | Total Credits |
|----------|-------------|--|---------------|
| II | PE - I | Data Science and Analytics | 4 |
| II | PE - I | Mobile Application Development - iOS Programming | 4 |
| II | PE - I | Next Generation Database | 4 |
| II | PE - I | Cloud Computing | 4 |
| II | PE - II | Artificial Intelligence and Machine Learning | 4 |
| II | PE - II | Advanced Software Development Methodologies | 4 |
| II | PE - II | Data Mining and Data Warehousing | 4 |
| II | PE - II | Internet of Things | 4 |
| III | PE - III | Deep Learning and Introduction to NLP | 4 |
| III | PE - III | Advanced Internet Technology | 4 |
| III | PE - III | Data Engineering | 4 |
| III | PE - III | Information Security Audit | 4 |
| III | PE - IV | Computer Vision & Digital Image Processing | 4 |
| III | PE - IV | ReactJS | 4 |
| III | PE - IV | Big Data Analytics | 4 |
| III | PE - IV | Data Privacy and Security | 4 |

*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.