



FACULTY OF  
ENGINEERING AND  
TECHNOLOGY



## **M.Sc. Blockchain Technology**

Division	Faculty of Engineering and Technology
School Name	School of Computer Science & Engineering
Department Name	Department of Computer Science and Applications
Programme Name	M.Sc. Blockchain Technology

+ + + + + + + + + + + + + + + **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          | Advanced-Data Structure                                      | 4             |
| I        | PM          | Advanced Database Management System                          | 3             |
| I        | PM          | Fundamentals of Blockchain Ecosystem                         | 3             |
| I        | PM          | Transaction Management using Software Applications           | 3             |
| I        | PR          | Mini Project I   | 2             |
| I        | UC          | Research Methodology   | 4             |
| I        | UC          | Scientific Studies of Mind, Matter, Spirit and Consciousness | 2             |
| I        | UC          | Yoga   | 1             |
|          |             | <b>Total:</b>  | <b>22</b>     |

### Semester II

| Semester | Course Type | Course Name / Course Title         | Total Credits |
|----------|-------------|------------------------------------|---------------|
| II       | PM          | Full Stack Development             | 4             |
| II       | PM          | Smart Contracts Program            | 4             |
| II       | PR          | Mini Project II                    | 2             |
| II       | PR          | Research Paper Writing             | 1             |
| II       | PR          | Cognitive Skills                   | 1             |
| II       | PE          | Program Elective I (PE I)          | 4             |
| II       | PE          | Program Elective II (PE II)        | 4             |
| II       | UC          | Peace Building: Global Initiatives | 2             |
|          |             | <b>Total:</b>                      | <b>22</b>     |

### Semester - III

| Semester | Course Type | Course Name / Course Title    | Total Credits |
|----------|-------------|-------------------------------|---------------|
| III      | PM          | Blockchain Architecture       | 3             |
| III      | PM          | Hyperledger Technology        | 3             |
| III      | PM          | Cloud Computing               | 4             |
| III      | PR          | Mini Project III              | 2             |
| III      | PR          | NodeJS                        | 2             |
| III      | PE          | Program Elective III (PE III) | 4             |
| III      | PE          | Program Elective IV (PE IV)   | 4             |
|          |             | <b>Total:</b>                 | <b>22</b>     |

### SEMESTER - IV

| Semester | Course Type | Course Name / Course Title      | Total Credits |
|----------|-------------|---------------------------------|---------------|
| IV       | PR          | Full-Time Industrial Internship | 22            |
|          |             | <b>Total Credits:</b>           | <b>22</b>     |

## Program Elective Tracks

| Semester | Course Type            | Course Name / Course Title        |
|----------|------------------------|-----------------------------------|
| II       | Program Elective - I   | Python Programming                |
| II       | Program Elective - I   | Digital Forensic                  |
| II       | Program Elective - I   | Advanced DevOps                   |
| II       | Program Elective - I   | Ethereum Technology               |
| II       | Program Elective - II  | Cryptocurrency Mining             |
| II       | Program Elective - II  | Network Security and Cryptography |
| II       | Program Elective - II  | Mobile Application Programming    |
| II       | Program Elective - II  | Blockchain Applications in IoT    |
| III      | Program Elective - III | iOS Programming                   |
| III      | Program Elective - III | Big Data Security                 |
| III      | Program Elective - III | RUST Programming                  |
| III      | Program Elective - III | Data Analytics                    |
| III      | Program Elective - IV  | API Interfacing                   |
| III      | Program Elective - IV  | Machine Learning                  |
| III      | Program Elective - IV  | R Programming                     |
| III      | Program Elective - IV  | TypeScript Programming            |
|          |                        |                                   |

\*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.