

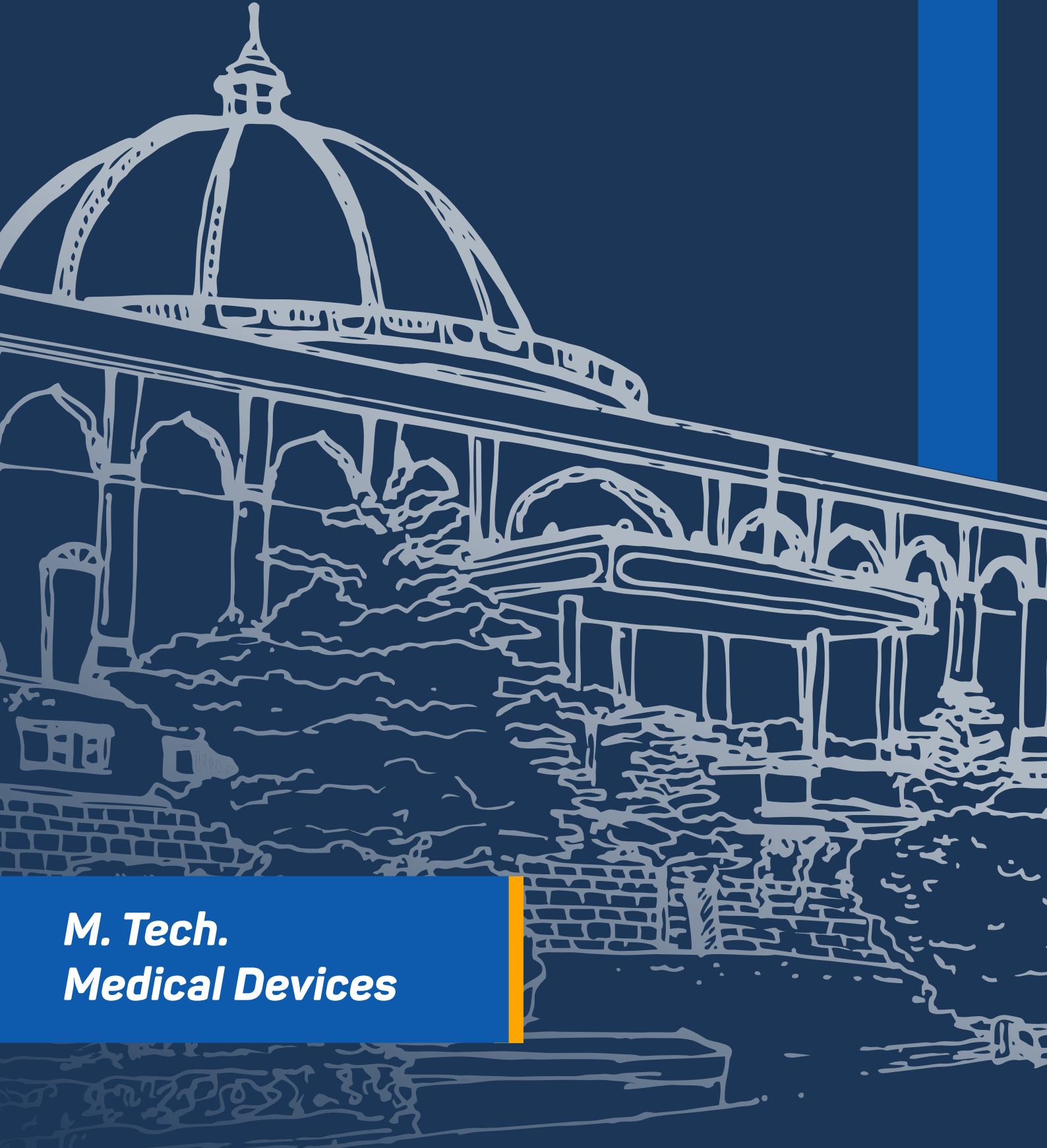


Since 1983

Dr. Vishwanath Karad

**MIT WORLD PEACE
UNIVERSITY** | PUNE

TECHNOLOGY, RESEARCH, SOCIAL INNOVATION & PARTNERSHIPS



M. Tech. Medical Devices

Programme Structure

 mitwpu.edu.in

Division	Faculty of Engineering and Technology
School Name	School of Engineering and Technology
Department Name	Department of Bioengineering
Programme Name	M. Tech. Medical Devices

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| Course Type | Description |
|----------------------|--|
| Programme Core | Courses dealing with foundations, depth and breadth of the major in which a 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 MITWPU values and the mission of Life Transformation of students. |
| University Electives | Multidisciplinary courses across the faculties at MIT-WPU and outside the Programme core. |

**M. Tech. (Medical Devices)
Semester – I**

| Sr. No | Name of Course | Type | Credits |
|--------|--|------|-----------|
| 1 | Medical Device Technology I | PC | 3 |
| 2 | Biomedical Engineering Fundamentals | PC | 3 |
| 3 | Biomaterials and Biocompatibility | PC | 3 |
| 4 | Research Methodology and Statistics | PC | 2 |
| 5 | Medical Device Technology Lab I | PC | 5 |
| 6 | Yoga | UC | 1 |
| 7 | Scientific Studies of Mind, Matter, Spirit and Consciousness | UC | 2 |
| 8 | Program Elective I | PE | 3 |
| | Total Credits: Semester I | | 22 |

**M. Tech. (Medical Devices)
Semester – II**

| Sr. No | Name of Course | Type | Credits |
|--------|---|------|-----------|
| 1 | Medical Device Technology II | PC | 3 |
| 2 | Diagnostics and Therapeutics | PC | 3 |
| 3 | Regulatory Affairs and Quality Assurance | PC | 3 |
| 4 | Structure and Management of Clinical trials | PC | 2 |
| 5 | Medical Device Technology Lab II | PC | 4 |
| 6 | Peace Building: Global Initiative | UC | 2 |
| 7 | Program Elective II | PE | 3 |
| 8 | Program Elective III | PE | 2 |
| | Total: | | 22 |

**M. Tech. (Medical Devices)
Semester – III**

| Sr. No | Name of Course | Type | Credits |
|--------|--|------|-----------|
| 1 | Entrepreneurship Ideation and Planning | PC | 2 |
| 2 | Additive and Subtractive Manufacturing | PC | 2 |
| 3 | Design Thinking | PC | 2 |
| 4 | Research Ethics | PC | 1 |
| 5 | Scientific Writing | PC | 1 |
| 6 | Research Project / Industry Internship | PC | 12 |
| 7 | Program Elective IV | PE | 2 |
| | Total: | | 22 |

**M. Tech. (Medical Devices)
Semester – IV**

| Sr. No | Name of Course | Type | Credits |
|--------|--|------|-----------|
| 1 | Scientific Presentation | PC | 2 |
| 2 | Intellectual Property Rights | PC | 2 |
| 3 | Research Project / Industry Internship | PC | 12 |
| 4 | Dissertation | PC | 4 |
| | Total: | | 20 |

*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.