Since 1983

MIT-WPU
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Dr. Vishwanath Karad
MIT WORLD PEACE UNIVERSITY | PUNE
TECHNOLOGY, RESEARCH, SOCIAL INNOVATION & PARTNERSHIPS

M.Sc. Chemistry (Industrial Polymer Chemistry)

Programme Structure

mitwpu.edu.in

Division	Faculty of Science & Health Science
School Name	School of Science & Environmental Studies
Department Name	Department of Chemistry
Programme Name	M.Sc. Chemistry(Industrial Polymer Chemistry)

CREDIT DISTRIBUTION

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.Sc. Chemistry (Industrial Polymer Chemistry) (2025-2027)
Semester I

Sr. No	Name of the Course	Type	Credits
1	Organic Chemistry	PF	3
2	Physical & Inorganic Chemistry	PF	3
3	Lab I - Chemistry	PF	2
4	Fundamentals of Polymer Science	PM	3
5	Research Methodology	PM	4
6	Lab II - Polymer Synthesis	PM	2
7	Program Elective-01	PE	4
8	Scientific Studies of Mind, Matter, Spirit and Consciousness	UC	2
9	Yoga	UC	1
	Total:		**24**

M.Sc. Chemistry (Industrial Polymer Chemistry) (2025-2027)
Semester – II

Sr. No	Name of the Course	Type	Credits
1	Instrumental Methods of Analysis	PM	3
2	Polymer Physics & Structure Property Relation-ship	PM	3
3	Polymer Rheology and Processing	PM	3
4	Rubber & Elastomer Science	PM	3
5	Lab III - Polymer Processing	PM	1
6	Lab IV - Raw Materials & Polymer Analysis	PM	1
7	Program Elective-02	PE	4
8	Peace Building: Global Initiatives	UC	2
	Total:		**20**

M.Sc. Chemistry (Industrial Polymer Chemistry) (2025-2027)
Semester – III

Sr. No	Name of the Course	Type	Credits
1	Advanced Polymer Chemistry	PM	3
2	Industrial Manufacture of Polymers & Safety	PM	2
3	Paint Technology & Surface Coating	PM	3
4	Polymer Testing & Characterization	PM	3
5	Lab V - Polymer Testing & Characterization	PM	1
6	Program Elective-03	PE	4
7	On Job Training (OJT)/ Internship	PR	4
8	Research Project	PR	4
	Total:		**24**

M.Sc. Chemistry (Industrial Polymer Chemistry) (2025-2027)
Semester – IV

Sr. No	Name of the Course	Type	Credits
1	Scientific Communication*	PM	2
2	Program Elective-04*	PE	4
3	Internship	PR	14
	Total:		**20**

Program Elective Tracks

Semester	Name of the Course	Type
I	Polymer Packaging	Program Elective - 01
I	Fiber Technology	Program Elective - 01
I	Sustainability and Biodegradable Polymers	Program Elective - 01
II	Specialty Polymers	Program Elective - 02
II	Polymer Additives & Compounding	Program Elective - 02
II	Polymer Waste Management	Program Elective - 02
III	Adhesive and Sealants	Program Elective - 03
III	Polymer Blends and Composites	Program Elective - 03
III	Rubber Compounding & Product Development	Program Elective - 03
IV	Advanced Polymer Materials and Applications	Program Elective - 04
IV	Modeling and Simulations	Program Elective - 04
IV	Industrial Management, Entrepreneurship and Ethics	Program Elective - 04

*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.