



FACULTY OF
SCIENCE AND
HEALTH SCIENCE



2024 - 25

M.Sc. Chemistry (IPC)

Programme Structure

Division	Faculty of Sciences and Health Science
School Name	School of Science and Environmental Studies
Department Name	Department of Chemistry
Programme Name	M.Sc. Chemistry (IPC)

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.

Semester 1

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

Semester 2

Sr. No.	Course Type	Course Name / Course Title	Total Credits
1	PM	Instrumental Methods of Analysis	3
2	PM	Polymer Physics & Structure Property Relationship	3
3	PM	Polymer Rheology and Processing	3
4	PM	Rubber & Elastomer Science	3
5	PM	Lab III - Polymer Processing	1
6	PM	Lab IV - Raw Materials & Polymer Analysis	1
7	PE	Programme Elective-02	4
8	UC	Peacebuilding: Global Initiatives	2

Semester 3

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

Semester 4

Sr. No.	Course Type	Course Name / Course Title	Total Credits
1	PM	Scientific Communication	3
2	PE	Programme Elective-04*	4
3	PR	Internship	14

Elective Tracks

Semester	Course Code	Course Name / Course Title	Type
I	IPC7PE11A	Polymer Packaging	Programme Elective - 01
I	IPC7PE21A	Fiber Technology	Programme Elective - 01
I	IPC7PE31A	Sustainability and Biodegradable Polymers	Programme Elective - 01
II	IPC7PE12A	Specialty Polymers	Programme Elective - 02
II	IPC7PE22A	Polymer Additives & Compounding	Programme Elective - 02
II	IPC7PE32A	Polymer Waste Management	Programme Elective - 02
III	IPC8PE13A	Adhesive and Sealants	Programme Elective - 03
III	IPC8PE23A	Polymer Blends and Composites	Programme Elective - 03
III	IPC8PE33A	Rubber Compounding & Product Development	Programme Elective - 03
IV	IPC8PE14A	Advanced Polymer Materials and Applications	Programme Elective - 04
IV	IPC8PE24A	Modeling and Simulations	Programme Elective - 04
IV	IPC8PE34A	Industrial Management, Entrepreneurship and Ethics	Programme 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.