

PARUL UNIVERSITY

R/Notification-1473/2024-25

Office of the Registrar
January 20, 2025

NOTIFICATION

Sub: - Syllabus and course structures of M.Sc. in Industrial Chemistry and M.Sc. in Industrial Chemistry with specialization in Production in Faculty of Applied Sciences from AY 2024-25 onwards

**Ref: (i) Proposal submitted by Dean, Faculty of Applied Sciences and Principal, PIAS
(ii) Approval of the Provost**

Dean, Faculty of Applied Sciences proposed syllabus and course structures of M.Sc. in Industrial Chemistry and M.Sc. in Industrial Chemistry with specialization in Production with the explanation that after completion of semester 1, specialization in "Production" under M.Sc. in Industrial Chemistry will be offered.

The Provost has approved the proposal. Hence, the order.

ORDER:

Specialization viz "Production" will be offered under M.Sc. in Industrial Chemistry after completion of semester 1.

Course structures of M.Sc. in Industrial Chemistry and M.Sc. in Industrial Chemistry with specialization in Production for batch of students admitted from AY 2024-25 onwards are enclosed in the annexure.

Dean, Faculty of Applied Sciences shall arrange to upload syllabus of M.Sc. in Industrial Chemistry and M.Sc. in Industrial Chemistry with specialization in Production on MIS.

This is subject to the approval of the Academic Council and the Governing Body.

By Order


Registrar

To,

Dean, Faculty of Applied Sciences and Principal, PIAS

Copy to,

- The Controller of Examinations
- Director (IQAC)
- PUMIS Coordinator

Submitted to,

- The President
- The Provost

ANNEXURE

Course Structure of M.Sc. Industrial Chemistry			
Semester-I			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11223101	Advanced Petrochemical Technology	4
2	11223102	Advancement in Industrial Operations	4
3	11223103	Industrial Polymer	4
4	11223104	Introduction of Synthetic Dyes & Drugs	4
5	11223130	Environmental Pollution Control Tech	4
6	11223105	Lab-1 (Petrochemical & Operational Tech)	4
7	11223106	Lab-2 (Synthesis of Dyes & Drugs)	4
			28
Semester-II			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11223151	Materials and Utilities in Chemical Technology	4
2	11223152	Pharmaceutical Technology	4
3	11223153	Advanced Spectroscopy and Chromatography	4
4	11223154	Industrial Safety	4
5	11223181/11223180	Chemical Reactor Engineering/ Green Chemistry	4
6	11223155	Lab-1 (Reaction Process Control)	4
7	11223156	Lab-2 (Synthesis of Organic Chemicals)	4
			28
Semester-III			
Sr.No.	Subject Code	Name of the Subjects	Credits

1	11223201	Industrial Process Control Technology	4
2	11223202	Process Development Technology	4
3	11223203	Basic Name Reactions in Chemistry	4
4	11223204	Intellectual Property Rights	4
5	11223230	Nanomaterial Chemistry	4
6	11223205	Dissertation	6
			26
Semester-IV			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11223251	Industrial Internship	20
		Total Credit	102

Course Structure of M.Sc. Industrial Chemistry (Production)			
Semester-I			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11223101	Advanced Petrochemical Technology	4
2	11223102	Advancement in Industrial Operations	4
3	11223103	Industrial Polymer	4
4	11223104	Introduction of Synthetic Dyes & Drugs	4
5	11223130	Lab – 1 (Petrochemical & Operational Technology)	4
6	11223105	Lab – 2 (Synthesis of Dyes & Drugs)	4
7	11223106	Environmental Pollution Control Technology	4
			28
Semester-II			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11238151	Chemical Process Plant Design	4

2	11238152	Process intensification	4
3	11238153	Introduction to process control and Control system	4
4	11238154	Introduction to process modeling and simulation	4
5	11238155	Numerical method for estimation-1	4
6	11238156	Mechanical design of process equipment-1	4
7	11238157	Tutorial: Chemical process Plant design	4
			28
Semester-III			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11238201	Chemical process plant Economics	4
2	11238202	Numerical method for estimation-2	4
3	11238203	Mechanical design of process equipment-2	4
4	11238204	Tutorial-1 Mechanical design of Process equipment-2	4
5	11238205	Lab-1 Simulation & Optimization	4
6	11238206	Dissertation	6
			26
Semester-IV			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11238251	Industrial Internship	20
		Total Credit	102