



शैक्षणिक अफेयर्स कार्यालय/ Academic Affairs Office
भारतीय प्रौद्योगिकी संस्थान रुड़की/ Indian Institute of Technology Roorkee
रुड़की - 247667/ Roorkee - 247667

संख्या: शैक्षणिक / 9924 / सीनेट-108
 No. Acad. / 9924 / Senate-108

दिनांक: अप्रैल 15, 2026
 Dated: April 15, 2026

Head, Department of Polymer and Process Engineering

Subject: Introduction of the 'M.Sc. Programme in Polymer Science' of the Department of Polymer and Process Engineering. (Item No. 108.11)

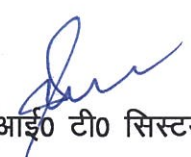
The Senate, in its 108th meeting held on 18.02.2026, has approved to introduce the 'M.Sc. Programme in Polymer Science' in the department of Polymer & Process Engineering alongwith the program structure as given in Appendix-A and the following seat matrix:

Deptt.	Programme	Code	JAM Paper code	Gen (Non-PwD)	Gen (PwD)	EWS (Non-PwD)	EWS (PwD)	OBC (Non-PwD)	OBC (PwD)	SC (Non-PwD)	SC (PwD)	ST (Non-PwD)	ST (PwD)	Total Intake
Polymer and Process Engineering	M.Sc. Polymer Science	1807	CY	5	1	2	0	4	0	2	0	1	0	15

Minimum Educational Qualification (MEQ): The candidates should have a Bachelor's degree (Science) in the relevant field.

Admission: Through JAM

Test paper Code: Chemistry (CY).


 सहायक कुलसचिव (आईटी सिस्टम्स एवं प्रवेश)
Assistant Registrar (IT Systems & Admission)

प्रतिलिपि / Copy to:

1. Chairman, Senate & Director
2. Head of all Departments/Centres/School
3. All faculty
4. Dean, Academic Affairs
5. ADoAA (IT Systems & Admission)/ (Curriculum)/ Evaluation)
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7. Assistant Registrar (Curriculum)/ Evaluation)
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**DEPARTMENT OF POLYMER AND PROCESS ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Program Code : **XXX M.Sc. in Polymer Science**
 Department : **Department of Polymer and Process Engineering**
 Year : **I**
 Model : **1-A**

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
Semester-I (Autumn)									
1.	PEC-521	Polymer Chemistry-I	PCC	4	3	1	2/2	3	0
2.	PEC-523	Polymer Characterization Techniques-I	PCC	3	3	0	2/2	3	0
3.	PEC-525	Properties of Macromolecules	PCC	3	2	0	2	3	0
4.	PEC-527	Polymer Composites & Blends	PCC	2	2	0	0	2	0
5.	PEC-529	Polymer Recycling & Waste Management	PCC	3	3	0	0	3	0
6.	PEC-531	Polymer Characterization Techniques-II	PCC	2	2	0	2/2	2	0
7.		Social Science Course	SSC	2	-	-	-	-	-
		Total		19					
Semester-II (Spring)									
1.	PEC-522	Polymer Rheology	PPI	3	2	0	2/2	3	0
2.	PEC-524	Sustainable Polymeric Materials & Biopolymers	PPI	3	3	0	0	3	0
3.	PEC-526	Polymer Electrochemistry & Applications in Renewable Energy	PPI	3	3	0	2/2	3	0
4.	PEC-528	Polymer Physics	PPI	2	2	0	0	2	0
5.	PEC-530	Industrial Polymers	PPI	4	3	1	0	3	0
6.		Science, Technology, and Advanced Research-tools	STAR	3	-	-	-	-	-
7.	PEC-700	Seminar	SEM	2	-	-	-	-	-
		Total		20					

**DEPARTMENT OF POLYMER AND PROCESS ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Program Code : **XXX M.Sc. in Polymer Science**
 Department : **Department of Polymer and Process Engineering**
 Year : **II**
 Model : **1-A**

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
Semester-I (Autumn)									
1.	PEC-691	Internship Social Activity	ISA	3	-	-	-	-	-
2.	PEC-533	Polymer Chemistry-II	PPI	3	3	0	0	3	0
3.		Program Elective-I	PPI	4	3	1	0	3	0
4.		Program Elective-II	PPI	4	3	1	0	3	0
5.		Program Elective-III	PPI	4	3	1	0	3	0
6.	PEC-601	Project Stage-I	PROJECT	4	-	-	-	-	-
		Total		22					
Semester-II (Spring)									
1.	PEC-602	Project Stage-II	PROJECT	12	-	-	-	-	-
		Total		12					

Summary				
Semester	1	2	3	4
Semester-wise Total Credits	19	20	22	12
Total Credits	73			



M.Sc. in Polymer Science

Program Elective Courses

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
1.	PEL-531	Fiber and Textile Technology	PEC	4	3	1	0	3	0
2.	PEL-532	Polymer Modelling and Simulation	PEC	4	3	1	0	3	0
3.	PEL-533	Polymer Network	PEC	4	3	1	0	3	0
4.	PEL-534	Adhesive and Coatings	PEC	4	3	1	0	3	0
5.	PEL-535	AI Assisted Polymer Technology	PEC	4	3	1	0	3	0
6.	PEL-536	Soft Macromolecules for Advanced Applications	PEC	4	3	1	0	3	0
7.	PEL-537	Elastomeric Science	PEC	4	3	1	0	3	0
8.	PEL-539	Biomedical Applications of Polymers	PEC	4	3	1	0	3	0
9.	PEL-540	Emulsion Polymers and Surface Coating Science	PEC	4	3	1	0	3	0

Science, Technology, and Advanced Research-tools Basket

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
1.	PET-501	Polymers for Advanced Applications	STAR	3	3	0	0	3	0
2.	PET-502	Membrane Fabrication & Applications	STAR	3	3	0	0	3	0

