

R21 Curriculum and Syllabus
2 Years MSc in Polymer Science and Technology
The Centre for Interdisciplinary Sciences (CIS), JISIASR Kolkata



JIS University
Agarpara, Kolkata



JIS UNIVERSITY

Curriculum and Syllabus of 2 Years MSc in Polymer Science and Technology, The Centre for Interdisciplinary Sciences (CIS), JISIAR Kolkata

SEMESTER 1							
Sl. No	Type	Course No.	Course Name	L	T	P	Credits
THEORY							
1.	PC	PPS1001	Introduction to Polymer Science and Technology	3	1	0	4
2.	PC	PPS1002	Basic Polymer Chemistry	3	1	0	4
3.	OE	PPS1003	Polymer Nanotechnology	3	1	0	4
		PPS1004	Biopolymer				
4.	OE	PDS1001	Course from other department (Probability and Statistics)	4	0	0	4
PRACTICAL							
5.	PC	PPS1101	Laboratory on Basic Polymer Science and Technology	0	0	2	2
6.	PC	PPS1102	Laboratory on Polymer Chemistry	0	0	2	2
TOTAL				13	3	4	20

SEMESTER 2							
Sl. No	Type	Course No.	Course Name	L	T	P	Credits
THEORY							
1.	PC	PPS2001	Basic Characterization Techniques of Polymers	3	1	0	4
2.	PC	PPS2002	Surface Coating with Polymers, Paints and Dyes	3	1	0	4
3.	OE	PPS2003	Specialty Polymers for advanced applications	3	1	0	4
		PPS2004	Rheology and Mechanical Properties of Polymer				
		PPS2005	Advanced Organic Synthetic Chemistry				
		PPS2006	Heterocycles: their role in Polymer				
4.	OE	PDS2007	Database Design	4	0	0	4
PRACTICAL							
5.	PC	PPS2101	Laboratory on Polymer Characterizations	0	0	2	2
6.	PC	PPS2102	Laboratory on Surface Coating	0	0	2	2
TOTAL				13	3	4	20

SEMESTER 3							
Sl. No	Type	Course No.	Course Name	L	T	P	Credits
THEORY							
1.	PC	PPS3001	Imaging Techniques and Applications	3	1	0	4
2.	PC	PPS3002	Biomaterials and 3D printing	3	1	0	4
3.	PC	PPS3003	Polymers and Environment	2	1	0	3
4	OE	PPS3004	Research Methodology and Ethics	3	0	0	3
		PPS3005	Rubber and Textile Technology				
		PPS3006	Industrial Process Management				
PRACTICAL							
5.	PC	PPS3101	Laboratory on Term Paper	0	0	06	06
TOTAL				11	3	6	20

Semester 4

SEMESTER 4							
Sl. No	Type	Course No.	Course Name	L	T	P	Credits
PROJECT							
1.	PC	PPS4101	Project Final Thesis	0	0	14	14
2.	PC	PPS4102	Project Final Viva-voce	0	0	06	06
TOTAL						20	20