

Faculty of Technology
M. Tech. Plastics Technology
Regulation 2021 Semester: I

Course Code: PA4111		Course Title: Polymer Characterization Laboratory
Sl. No.	Description of Equipment	Required numbers (for batch of 25 students)
1.	Glasswares – Test tubes, test tube holder, Mortar and pestle, filter paper, Spatula, dropper, Funnel, Glass rod, China dish, Beaker, Ignition tube, Polymerization Tube, 3 neck RB flask, Liebig Condenser, Burette, Pipette, Conical flask, Standard measuring flask, Measuring cylinder	As required
2.	Pycnometer	1
3.	Ostwald and Ubbelohde viscometer	25
4.	GPC	1
5.	Silica crucible	25
6.	Muffle Furnace	2

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Course Code: PA4112		Course Title: Plastic Processing Laboratory
Sl. No.	Description of Equipment	Required numbers (for batch of 25 students)
1.	Injection moulding machine (conventional)	2
2.	Plastic tube extrusion machine	1
3.	Plastic film extrusion machine	1
4.	Compression moulding machine	1
5.	Microprocessor controlled Injection moulding machine	1
6.	Blow moulding machine	1
7.	Vacuum forming machine	1
8.	Rotational moulding machine	1
9.	Plastics coating machine	1
10.	Ultrasonic welding machine	1
11.	Plastic sealing machine	1
12.	Printing machine (on plastics)	1
13.	Machine maintenance kit	1
14.	Moulds maintenance kit	2
15.	Moulds for plastic products	1
16.	FRP hand layup kit	1
17.	Plastic co-extrusion film plant	1

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Regulation 2021 Semester: II
PA4211 Plastics Testing Laboratory

Sl. No.	Description of Equipment	Required numbers (for batch of 25 students)
1.	Carbon black content tester	1
2.	Environmental stress cracking resistance tester	1
3.	Specimen Preparation Laboratory	1
4.	Injection moulding machine	1
5.	Compression moulding machine	1
6.	Two roll mill	1
7.	Contour cutter	1
8.	Scrap grinder	1
9.	Blender	1
10.	Universal testing machine	1
11.	Shore A – Hardness tester	1
12.	Shore D – Hardness tester	1
13.	Rockwell Hardness tester	1
14.	Abrasion resistance tester	1
15.	Folding endurance tester	1
16.	Burst strength tester	1
17.	Humidity chamber	1
18.	Gas permeability tester	1
19.	Sieve analysis apparatus -	1
20.	Volume and Surface resistivity	1
21.	Dielectric strength	1
22.	Arc Resistance	1
23.	Haze meter	1

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Regulation 2021 Semester: II
PA4212 Product Design Laboratory

Sl. No.	Description of Equipment	Required numbers (for batch of 25 students)
1.	Computers with CAD, CAM and Mold flow Analysis Software	25 Nos.