

**Faculty of Technology**  
**B. Tech. Polymer Technology**  
**(R 2017) Semester – II**  
**ME8261 COMPUTER AIDED DRAFTING AND MODELING LABORATORY**  
**Requirements for a batch of 30 students**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Pentium IV computer or better hardware, with suitable graphics facility	30		
2.	Licensed software for Drafting and Modeling	30		
3.	Laser Printer or Plotter to print / plot drawings	2		

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**B. Tech. Polymer Technology**  
**(R 2017) Semester – III**  
**PT8361 CHEMICAL ENGINEERING LABORATORY**  
**Requirements for a batch of 30 students**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Fluidized bed	1		
2.	Packed bed	1		
3.	Stop watch	2		
4.	Measuring cylinder (1 Lit)	2		
5.	Sieve shaker and sieve set	1		
6.	Ball mill	1		
7.	Jaw crusher	1		
8.	Electronic balance	1		
9.	Plastics tray	2		
10.	Friction pipe apparatus	1		
11.	Single speed centrifugal pump	1		
12.	Venturi meter apparatus	1		
13.	Orifice/mouth piece apparatus	1		
14.	Meter scale	2		

15.	Vernier caliper	2		
16.	Flow measuring meters	3		
17.	Thermometer	5		
18.	Tacho meter	1		
19.	Measuring jar (2 lit and 1 Lit each one)	2		
20.	Air compressor	1		
21.	Parallel and counter flow heat exchanger	1		
22.	Stephen Boltzman apparatus	1		
23.	Thermal conductivity Apparatus	1		

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**B. Tech. Polymer Technology**  
**(R 2017) Semester – III**  
**PT8311 POLYMER IDENTIFICATION AND ANALYSIS LABORATORY**  
**Requirements for a batch of 30 students**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Bunsen Burner	15		
2.	Electronic Balance	1		
3.	Thermostatic Water bath	2		
4.	Melting Point Apparatus	1		
5.	Retort Stand	15		
6.	Polymer Samples and Glassware	15		
7.	Burette	15		
8.	Pipette	15		
9.	Funnel	15		

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**B. Tech. Polymer Technology**  
**(R 2017) Semester – IV**  
**PT8461 MOULD MANUFACTURING TECHNOLOGY LABORATORY**  
**Requirements for a batch of 30 students**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Shaping machine	2		
2.	Vertical milling machine	1		
3.	Horizontal milling machine	1		
4.	Lathe	10		
5.	Plain surface grinding machine	1		
6.	Bench grinder	2		
7.	Vernier caliper	2		
8.	Vernier height gauge	2		
9.	Vernier Depth Gauge	1		
10.	Micrometer	2		
11.	Sine bar	1		

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**(R 2017) Semester – V**  
**PT8561 POLYMER PREPARATION LABORATORY**  
**Requirements for a batch of 30 students**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Magnetic stirrer	10		
2.	Thermostatic Water bath	2		
3.	Vacuum Pump	1		
4.	Heating Mantle	8		
5.	Water distillation set up	1		
6.	Bunsen burner	15		
7.	Electronic balance	2		
8.	Air oven	1		
9.	Melting point apparatus	1		
10.	Retard stands	15		
11.	Burette	15		
12.	Pipette	15		
13.	Funnel	15		

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**(R 2017) Semester – V**  
**PT8511 PLASTICS PROCESSING LABORATORY**  
**Requirements for a batch of 30 students**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Injection moulding (Hand injection moulding machine, Semi Automatic injection moulding machine, Fully automatic injection moulding machine)	1		
2.	Extruder for compounding of thermoplastics	1		
3.	Hand blow moulding machine	1		
4.	Fully automatic blow moulding machine	1		
5.	Air compressor	1		
6.	Scrap grinder	1		
7.	Crane for mould handling	1		
8.	Bench grinding and buffing machine	1		
9.	Bench wise	1		
10.	Sheet cutter	1		
11.	Moulds for hand injection moulding	3		
12.	Mould for automatic injection moulding	1		
13.	Mould for semiautomatic injection moulding	1		

14.	Mould for hand blow moulding	1		
15.	Mould for fully automatic blow moulding	1		
16.	Thermo Forming Unit	1		
17.	Electronic balance	1		



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**(R 2017) Semester – VI**  
**PT8611 RUBBER PROCESSING LABORATORY**  
**Requirements for a batch of 30 students**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Two roll mill for rubber mixing	1		
2.	Ball mill	1		
3.	Compression moulding machine	1		
4.	Sheet cutter	1		
5.	Moulds for sheet moulding	1		
6.	Moulds for M/C sheet moulding	1		
7.	Moulds for play ball	1		
8.	Moulds for Hand gloves	1		
9.	Moulds for Ballon	1		
10.	Moulds for Rubber band	1		
11.	Moulds for play thread	1		
12.	Moulds for flex specimen moulding	1		
13.	Electronic balance	1		

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**(R 2017) Semester – VI**  
**PT8612 POLYMER TESTING LABORATORY**  
**Requirements for a batch of 30 students**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Universal tensile testing machine (UTM)	1		
2.	Shore - A hardness tester	1		
3.	Shore - D hardness tester	1		
4.	Izod and charpy impact tester	1		
5.	Falling dart impact tester	1		
6.	Din Abrader	1		
7.	Rebound Resilience tester	1		
8.	De-Mattia Flex Resistance tester	1		
9.	Vicat softening point tester (VSP)	1		
10.	HDT Tester	1		
11.	Environmental stress crack resistance tester (ESCR)	1		
12.	Volume and surface resistivity tester	1		
13.	Arc resistance tester	1		
14.	Dielectric Strength tester	1		
15.	Opacity tester	1		

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**(R 2017) Semester – VII**  
**PT8711 COMPUTER AIDED POLYMER PRODUCT DESIGN LABORATORY**  
**Requirements for a batch of 30 students**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Computers with LAN	8		
2.	Pro-E	1		
3.	Printer	1		