B.E. Industrial Engineering and Management

(R 2017) Semester – III ME8361 MANUFACTURING TECHNOLOGY LABORATORY I Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Centre Lathes	7		
2.	Horizontal Milling Machine	1		
3.	Vertical Milling Machine	1		
4.	Shaper	1		
5.	Arc welding transformer with cables and holders	2		
6.	Oxygen and acetylene gas cylinders, blow pipe and other welding outfit	1		
7.	Moulding table, Moulding equipments	2		
8.	Sheet metal forming tools and equipments	2		

B.E. Industrial Engineering and Management

(R 2017) Semester – III IE8361 WORK SYSTEM DESIGN LABORATORY Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Graphic tools for method study (1 sheet each per student)	30		
2.	Peg board	3		
3.	Stop watch	10		
4.	Walking rating (Stop watch)	2		
5.	Card dealing (Set Cards)	3		
6.	Assembly video loaded to the computers	3		

B.E. Industrial Engineering and Management

(R 2017) Semester – III CE8481 STRENGTH OF MATERIALS LABORATORY Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	UTM of minimum 400 kN capacity	1		
2.	Torsion testing machine	1		
3.	Izod impact testing machine	1		
4.	Hardness testing machine - Rockwell / Vicker's	1		
5.	Brinnel	1		
6.	Beam deflection test apparatus	1		
7.	Extensometer	1		
8.	Compressometer	1		
9.	Dial gauges	1		
10.	Le Chatelier's apparatus	2		
11.	Vicat's apparatus	2		
12.	Mortar cube moulds	10		

B.E. Industrial Engineering and Management

(R 2017) Semester – IV CE8462 FLUID MECHANICS AND MACHINERY LABORATORY Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Orifice meter setup	1		
2.	Venturi meter setup	1		
3.	Rotameter setup	1		
4.	Pipe Flow analysis setup	1		
5.	Centrifugal pump/submergible pump setup	1		
6.	Reciprocating pump setup	1		
7.	Gear pump setup	1		
8.	Pelton wheel setup	1		
9.	Francis turbine setup	1		
10.	Kaplan turbine setup	1		

B.E. Industrial Engineering and Management

(R 2017) Semester – IV ME8462 MANUFACTURING TECHNOLOGY LABORATORY - II Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Turret and Capstan Lathes	1		
2.	Horizontal Milling Machine	2		
3.	Vertical Milling Machine	1		
4.	Surface Grinding Machine	1		
5.	Cylindrical Grinding Machine	1		
6.	Radial Drilling Machine	1		
7.	Lathe Tool Dynamometer	1		
8.	Milling Tool Dynamometer	1		
9.	Gear Hobbling Machine	1		
10.	Tool Makers Microscope	1		
11.	CNC Lathe	1		
12.	CNC Vertical milling machine	1		
13.	Gear Shaping machine	1		
14.	Centerless grinding machine	1		
15.	Tool and cutter grinder	1		

B.E. Industrial Engineering and Management

(R 2017) Semester – V AN8681 AUTOMATION LABORATORY Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	CNC Lathe	1		
2.	CNC Milling Machine	1		
3.	Pick and Place Robot	1		
4.	PLC Trainer	1		

B.E. Industrial Engineering and Management

(R 2017) Semester – V IM8511 INDUSTRIAL ENGINEERING LABORATORY Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Tread mill with Heart rate measurement and Energy Expenditure Measurement	1		
2.	Ergo Cycle with Heart rate measurement and Energy Expenditure Measurement	1		
3.	Step Test Arrangement	1		
4.	Sound Meter	1		
5.	Lux Meter	1		
6.	Height Measuring Tape and Weight Measuring Instrument.	1		
7.	Personal computer with C or equivalent language, MS Excel (1 per student)	30		
8.	Sampling Beads (boxes)	2		

B.E. Industrial Engineering and Management

(R 2017) Semester – VI IE8662 STATISTICAL APPLICATIONS AND OPTIMIZATION LABORATORY Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Personal Computer with following software, Language and Packages	30		
2.	MS Excel	30		
3.	TORA	30		
4.	LINDO	30		
5.	C or Other equivalent Language	30		

B.E. Industrial Engineering and Management

(R 2017) Semester – VII IE8761 DISCRETE SIMULATION LABORATORY Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Personal Computer	30		
2.	C or Other equivalent Language (for all Users)	30		
3.	GPSS (open source for all user)	30		