

List of equipment available in each laboratory.

No.	Laboratory Category	Laboratory Code	Laboratory	Pic	Capacity	Equipment	Quantity	Subjects Involved
1	Workshop	MPU 1	Product Design Workshop	Mr.Suhelmi bin Senawi	50	Belt And Disc Sanding Machine	1	EPT 191 (Product Design) Workshop and Studio Practice EPT 192 (Product Design) Product Innovation EPT 393 (Product Design) Engineering Product Design II
2						Oscilattng Belt Edge Sender	1	
3						Bench Grinder	1	
4						Circular Table Saw with Tilting Blade	1	
5						Double Round Disc Sander	1	
6						Heavy Duty Vacuum Cleaner	2	
7						Mini Metal Working Lathe	2	
8						Line Saw	1	
9						Milling Drilling Centre	2	
10						Milling/Drilling Machine	2	
11						Radial Drill Press Machine	1	
12						Sliding Table Saw	1	
13						Scroll Saw	1	
14						Undercut Mitre Saws	1	
15						Water Spray Booth	1	
16						Wood Lathe	5	
17						Woodworking Band saw	1	

No.	Laboratory Category	Laboratory Code	Laboratory	Pic	Capacity	Equipment	Quantity	Subjects Involved	
18	Laboratories	MPU 2	Rapid Prototyping Laboratory	Mr.Narzrezal bin Abdul Razak	50	RP machine	1	EPT 183 (Manufacturing) Engineering Workshop	
19						Vacuum Casting Machine	1		
20						Ultrasonic Tank	2		
21						Laboratory Oven	2		
22						3D Scanner	1		
23						Desktop Computer	71		EPT 184 (Manufacturing) Manufacturing Technology
24						Desktop RP Machine	6		
25						RP Machine POLY JET	1		
26						Laboratories	MPU 3		Ergonomic & Metrology Laboratory
27	Ergonomic Tools	4							
28	Micro Scratch Tester	1							
29	Surface Roughness Tester	1	EPT 385 (Manufacturing) Metrology and Quality Control						
30	Coordinate Measuring Machine	1							
31	Universal Testing Machine	1							
32	Torsion Testing Machine	3	EPT 486 (Manufacturing) Ergonomics						
33	Scanning Electron Microscope	1							
34	Computer Laboratories	MPU 5	Design Laboratory	Mrs.Misni bt Rosli	70			ALIAS Software	
35						ILLUSTRATOR Software	1		
36						IRONCAD Software	1	EPT 393 (Product Design) Engineering Product Design II	
37						PHOTOSHOP Software	1		
38						Desktop Computer	85		

No.	Laboratory Category	Laboratory Code	Laboratory	Pic	Capacity	Equipment	Quantity	Subjects Involved
39	Computer Laboratories	MPU 6	Cadcaml 1 Laboratory	Mr.Shukri bin Nordin	70	AutoCad 2007	40	EPT 481 (Manufacturing) Tools and Die Design
40						MoldFlow	35	
41						NX UG	35	EPT 371 (Manufacturing/Product Design)
42						CATIA	38	Finite Element Analysis
43						Desktop Computer	80	EPT 162 (Product Design) Computer Programming
44	Laboratories	MPU 7	Process Control Laboratory	Mr.Shukri bin Nordin	30	Computer HP/Dell	58	EPT 361 (Manufacturing) Instrumentation And Control
45						Witness Software	40	
46						ManneQuin Pro Ink Software	40	
47						Matlab 7.0 Software	40	EPT 485 (Manufacturing) Production Planning and Control
48						SPC IV Excel Software	40	
49						PLC Editor Ink Software	40	
50	Laboratories	MPU 8	Electronic & Instrumentation Laboratory	Mr.Rashid bin Ramli	50	Digital Oscilloscope	50	EPT 261 (Manufacturing / Product Design) Electronics
51						Digital Function Generator	50	
52						Laboratory DC Power Supply Unit	50	EPT 361 (Manufacturing) Instrumentation and Control
53						Digital Multimeter	50	EPT 161 (Manufacturing) Electrical Technology
54						Desktop Computer	10	

No.	Laboratory Category	Laboratory Code	Laboratory	Pic	Capacity	Equipment	Quantity	Subjects Involved
55	Studio	MPU 9	Design Studio	Mr.Rashid bin Ramli	50	Studio With Partition	30	EPT 152 (Manufacturing / Product Design) Engineering Drawing EPT 191 (Product Design) Workshop and Studio Practice
56						Drafting Table	75	
57						Drawing Board with T Square	75	
58	Workshop	MPU 13	Manufacturing & Casting Workshop	Mr.Fairuz bin Karim	30	Crucible Furnace	1	EPT 183 (Manufacturing) Engineering Workshop
59						Heat Treatment Machine	1	
60						Drill Grinder	1	
61						End Mill Re-Sharpener	1	EPT 282 (Manufacturing) Manufacturing Process II
62						Bench Tapping Machine	1	EPT 184 (Product Design) Manufacturing Technology
63						Drilling & Tapping Machine	1	
64						Lathe Machine	10	
65						Milling Machine	10	
66	Workshop	MPU 14	Manufacturing Engineering Workshop	Mr.Nazri bin Hamid	30	Plasma Cutting Machine	1	EPT 183 (Manufacturing) Engineering Worksypop EPT 184 (Product Design) Manufacturing Technology
67						TIG Welding Unit	6	
68						Arc Welding Machine	10	
69						MIG Welding Machine	6	
70						Oxy-acetylene gas welding machine	10	
71						Pedestal Drilling Machine	3	
72						Bench Tapping Machine	3	
73						Shearing Machine	1	
74						Bending-Plate Machine	1	
75						Bending-Pipe Machine	1	
76						Lathe Machine	1	
77						Milling Machine	1	

No.	Laboratory Category	Laboratory Code	Laboratory	Pic	Capacity	Equipment	Quantity	Subjects Involved
78	Laboratories	MPU 15	Fluid Engineering Laboratory	Mr.Mohamad Nazry bin Nayan	40	Study Of Flow Measurement Devices	1	EPT 228 (Manufacturing / Product Design) Fluid Mechanics EPT 424 (Manufacturing / Product Design) Heat Transfer
79						Bernoulli's Theorem Demonstration Unit	1	
80						Hydrostatic Pressure	1	
81						Shell & Tube Heat Exchanger Apparatus	1	
82						Demonstration Of Pelton Turbine	1	
83						Reynolds Apparatus	1	
84						Hydraulics Bench	1	
85						Losses In Pipe Friction	1	
86						Pressure Measurement Method Apparatus	1	
87						Impact Of Jet Apparatus	1	
88						Free & Force Convection Heat Exchanger	1	
89						Radiation Heat Transfer Apparatus	1	
90						Heat Conduction Study Bench	1	
91						Apparatus For Determination Of Gear Efficiency	1	
92						Centrifugal Force Set	1	
93						Free And Force Vibration	1	
94						Gyroscope	1	
95						Static And Dynamic Balancing	1	

No.	Laboratory Category	Laboratory Code	Laboratory	Pic	Capacity	Equipment	Quantity	Subjects Involved
96	Laboratories	MPU 16	Thermodynamics Laboratory	Mr,Roszi Anuar	40	Temperature Measurement Training Set	1	EPT 235 (Manufacturing / Product Design) Thermodynamics EPT 114 (Manufacturing / Product Design) Statics
97						Air Conditioning Training Unit	2	
98						Refrigeration Training Unit	3	
99						Internal Combustion Engine Test Bed	1	
100						Marcet Boiler	2	
101						Small Engine Test Bed Petrol	1	
102						Small Engine Test Bed Diesel	1	
103	Laboratories	MPU 17	Cnc Laboratory	Mr Mohamad Nazmi bin Radzi	30	CNC Die Sinker Machine	1	EPT 384 (Manufacturing) Advanced Manufacturing Technology EPT 447 (Manufacturing) Manufacturing Integrated Project
104						CNC Milling Machine	2	
105						CNC Turning Machine	2	
106						CNC Super Drill	1	
107						CNC Wire Cut	1	
108						Injection Molding Machine	1	
109						Rapid Granulator Machine	1	
110						Mixer Machine	1	
111						Drilling Machine	1	
112						Stand Grinder Machine	1	
113						End Mill Re-Sharpener	1	

No.	Laboratory Category	Laboratory Code	Laboratory	Pic	Capacity	Equipment	Quantity	Subjects Involved
114	Laboratories	MPU 18	AUTOMATION & ROBOTICS LABORATORY	Mr.Mohamad Nazmi bin Radzi	30	CNC Edu Lathe Ii Machine	1	EPT 383 (Manufacturing) Automation and Robotics
115						CNC Edu Mill Ii Machine	1	
116						ABB Robotic Arm C/W Robot Controller	2	
117						Basic Training Pneumatics	8	
118						Electro-pneumatics Starter Kit - Tp201	8	
119						Fluid Sim (Pneumatics / Hydraulic)	5	
120						Hydraulics Equipment Set	5	
121						Robot Studio Software	12	
122						Desktop Computer	22	

No.	Laboratory Category	Laboratory Code	Laboratory	Pic	Capacity	Equipment	Quantity	Subjects Involved
123	Laboratories	MPU 19	Advanced Manufacturing Laboratory	Mr.Mohamad Jasmin bin Shaari	40	3D Shaker Mixer	1	EPT 103 (Manufacturing / Product Design) Materials
124						Electronic Densi-meter	3	
125						Electronic Scale	3	
126						Hand Press	4	
127						High Power Microscope	2	
128						Low Speed Diamond Saw	1	
129						Microwave Sintering furnace	1	
130						Mounting Press	3	
131						Grinding/Polishing	3	
132						Rockwell Hardness Tester	2	
133						Rotational Moulding	1	
134						Single zone tube Furnace	2	
135						Hot Pres Machine	1	
136						Basic Light-Microscope	3	
137						Magnetic Stirrer	1	
138						Oven	1	
139						Hot Plate	1	
140						Dry Cabinet	2	
141						Ultra Sonic	2	
142						Purification Walter Filter	1	