

USEL Equipment and Tools list

(as of 5 Sept 2022)

Located in Engineering Experiential Learning Lab CYT 1002

Equipment Name	Qty.	Description
UPBox 3D Printers	3	TierTime UP BOX 3D Printer ABS + PLA
FDM 3D Printer	1	AnyCubic S
SLA 3D Printer	1	AnyCubic Photon S
3D Scanner	2	Arctec Eva + Arctec Spider
Food 3D Printer	1	Wiiibox Sweetin Printing Size 100mm x 100mm x 75mm
Laser Cutter	1	HSG Z1390 Laser Cutter
Small Laser Cutter	2	Makeblock Laser Cutter
CNC Router	1	Tormach Benchtop Router
Benchtop Vise	3	IRWIN No. 6 Mechanics' Vise 6" / 150 mm Jaw Width 32 kg / 71 Lbs
Oscilloscopes	4	Tektronix Oscilloscope 100 MHz, 2 channelTBS11102B
BOSCH Cordless Drills	2	BOSCH Cordless Drill GSR 1440-LI Professional
Soldering irons	4	HAKKO Red
Digital multi-meters	10	UNI-T UT61 Series
Soldering Stations	5	HAKKO FX-888D Soldering Stations
Refrigerator	1	Samsung RT22FARAD 181L Refrigerator Capacity + 53L Freezer Capacity
Orbital Shaker	1	Orbital Shaker Stuart SSL1
Incubator	1	Lovibond model TC1358, 135 L, 2-40 deg. C
Hotplate	1	STUART hotplate with magnetic stirrer, model UC152 with glass ceramic plate 15 cm x 15 cm; max temp. 450C, 100-2000 rpm; 15L. Temperature Control Unit 50-200 deg C.
Hacksaws	4	CK T0905 Professional Hacksaw, 300mm
Oven	1	Yiheng drying oven #DHG9240A, 2 shelves
Mantle	1	GLAS-COL spherical flask mantle, 100B TM107, 500ml
Electronic Balance	1	SHINKO model GS1202, 1200x0.01g
Vortex Genie	1	Vortex Genie, 3 platforms and Pop-off cup
Leap Motion Controller	3	Leap Motion Controller
Kinect Sensor	3	Kinect Sensor and Xbox 360 gaming console
IAQ monitor	1	Internal Air Quality Monitor - TSI Model 7545
Sound and Vibration monitor	1	G.R.A.S. Sound and Vibration Monitor type 12AX with microphones
Resin Infusion Catch Pot	1	Easycomposites Professional Resin Infusion Catch-Pot
Cordless Multitool	1	Milwaukee Brand 12v Multi-tool Sander and Cutter
Hacksaw, Cordless	1	Milwaukee Brand Cordless Hackzall Recipricating Saw
Cordless Drills	3	Milwaukee Brand Hand Drills 12v(x2) and 18v(x1)
Compact Bandsaw, Cordless	1	Milwaukee Brand 12v Cordless Compact Bandsaw

Equipment Name	Qty.	Description
Cordless Screwdrivers	2	Milwaukee Brand 4v (x1) and 12v (x1) Cordless Screwdriver
Vacuum Cleaners, AC and Cordless	5	Various Milwaukee Brand 12v Cordless Compact Vacuum + Makita
Cordless Blower	2	Milwaukee Brand 18v Cordless Blower
Cordless Hex Impact Driver	1	Milwaukee Brand 12v Cordless Hex Impact Driver
Cordless Screw/Hex Driver	1	Milwaukee Brand 12v Cordless Screw/Hex Driver
Cordless Jigsaw	1	Milwaukee Brand 12v Cordless Jigsaw
Cordless Vacuum 7.5L	1	Milwaukee Brand 18v Cordless Vacuum Cleaner
Angle Grinder, Cordless	1	Milwaukee Brand 18v Fuel Brushless Angle Grinder
Straight grinder	1	Milwaukee Brand 12v Straight Grinder
Belt Sander	1	Boky Belt and Disk Sander BD-46N
Wind Tunnel	1	Armfield C15-10 Computer Controlled Subsonic Wind Tunnel
Cordless Angle Grinder	1	Makita DGA408Z Cordless Angle Grinder
Cordless Planer	1	Makita DPK1802Z Cordless Planer
Cordless Stapler	1	Makita DST221Z Cordless Stapler
Cordless Trimmer	4	Makita DRT50 Cordless Trimmer
Cordless Multi-tool	4	Makita TM30DZKX1 + 18V Cordless Multi-tool
Cordless Jigsaw	4	Makita DJV103DC and DJV182Z Cordless Jigsaws
Cordless Pin Nailer	4	Makita PT354DZ + 18V Cordless Pin Nailer
Cordless Recipro Saw	1	Makita JR103DC Cordless Recipro Saw
Cordless Hammer Driver Drill	4	Makita HP332DZ Cordless Hammer Driver Drill
Table Saw	1	Makita 2704 Table Saw
Cordless Die Grinder	1	Cordless Die Grinder Makita DGD801Z
Cordless Orbit Sander	1	cordless random orbit sander DBO180Z 125mm
Corderless Portable Band Saw	1	corderless portable band saw DPB180Z
Impact Wrench	1	Impact Wrench DTD171Z
Impact driver	1	Makita Cordless 18V Makita Impact Driver
Driver Drill	1	Cordless Makita 18V Driver Drill
Rotary Hammer	1	18V Cordless Rotary Hammer
Plate Joiner	1	18V Cordless Plate Joiner
Angle Drill	1	18V Cordless angle drill Makita DDA351Z
Drill press	1	220V drill press Makita TB131
Band saw	1	220V band saw Makita LB1200F
Planer	1	Planer Makita DKP180Z
Cordless Track Saw	1	Cordless Track Saw Makita DSP601Z
Blade Sharpener	1	Blade Sharpener Makita 9820-2
5MHz Function Generator	2	AFG 2005 GW Instek Arbitrary Function Generator
DC Power Supply	2	2CH Quad-output DC Power Supply - GW Instek 2303C
700W Soldering Stations	10	Soldering stations 700W with hot air gun
Electronic Microscope	2	Electronic Microscope, 1200x magnifying power, 7-inches 1080FHD 720P VGA Display
PCB Heat plate	2	PCB Heat plate, 500W Heat plate 0-500°C, 150mm x 150mm
PCB Etching Set	10	PCB Etching Set with Etching Tank

Equipment Name	Qty.	Description
Portable Power Sander	1	Portable Power Sander 220v 650W Weiruite 187mm x 90m abrasive service
Small Foam Cutter / Hot Knife	1	Foam Cutter Model AIK-S 603 24V/40w cutting wire dia: 0.2mm
Heat Gun	3	Makita 2000w + Hakko No. 882 heat gun; 220v 1000w
Mitre Saw	1	Makita Mitre Saw
Vise Grips	6	Vise Grips - Various Sizes
Bubble Level	2	Bubble Level
Combination Square	5	Combination Square
Heating Plate	1	Heating Plate UCHEN Brand
Vacuum Pump	1	Vacuum Pump
6in1 Tool	2	Unimat ALLINE TECHNIC (6 IN 1) Unit 1