

Prayas Centre Name Amrita Technology Business Incubator PRAYAS SHALA,

City Kollam

State Kerala

Fablab Page Link <https://www.amritatbi.com/fablab/index.html>

Equipment available at Amrita TBI DST PRAYAS SHALA

Section		Prototyping Facility
Sr. No.	Equipment Name	Equipment detail
1	3D Printer 1	<p>Brand - Ultimaker S5 Model – S5 Specification – Build Volume : 330 x 240 x 300 mm, Print Technology : Fused Filament Fabrication (FFF) , Materials : PLA, ABS & Tough PLA, Dual Color Settings, Nozzle Diameter : 0.4mm, Files Supported .STL Operational area – Robotics Parts, Enclosures, Mounts, DIY 3D models etc. Link of the user manual - https://ultimaker.com/3d-printers/ultimaker-s5</p>
2	3D printer 2	<p>Brand - Form Labs Model – Form 3 Specification – Build Volume : 144 x 144 x 185 mm Material : clear resin only Print Technology: Low Force Stereolithography (LFS) , Files Supported .STL Operational area – Biomedical Models, Miniature 3D design, Anatomy Models. Link of the user manual - https://formlabs.com/asia/3d-printers/form-3/</p>
3	Laser Cutter	<p>Brand - SIL1325 Model – 1325 Specification – Work Area : 1220 mm x 2440 mm , Laser Power : 100 Watt (Co2 Glass tube type) , Materials : MDF, Acrylic, Plastic and Paper. File Format : DXF Operational area – Sign Boards, Pivoting Boxes, Enclosures, Keychains, Mementos, Robotics Arms, Wheeled robot Chassis etc. Link of the user manual - https://www.sureshindulasers.com/</p>

Metalworking Facility		
Section		
Sr. No.	Equipment Name	Equipment detail
4	CNC Lathe	Brand - ACE Micromatic Model – J-300 - LM Specification - Controller : Fanuc ; No. of stations : 8, Material : Metals, Type : Semi-Production Operational area – Facing, Turning, Drilling, Knurling & Chamfering. Link of the user manual - https://www.acemicromatic.net/acedesigners/products/2-axes-lathes/j-300-lm
5	CNC Milling	Brand - ACE Micromatic Model – AMS 430v Specification - Controller : Fanuc ; No. of Tools : 20, Material : Metals, Type : Semi-Production Operational area – End Milling, Face Milling and Side Milling. Link of the user manual - https://www.acemicromatic.net/ams/products/small-vmc/430-v

Power Tools		
Section		
Sr. No.	Equipment Name	Equipment detail
6	Jigsaw Machine	Brand - Smith Model - V8-4TMN-6LA7
7	Bench Drill	Brand - Ingco Model - DP133505 350W,13mm,580,2650rpm
8	Angle Grinder	Brand - Dewalt Model - DW801 850W,100mm
9	Bench Grinder	Brand - Ingco Model - BG61502 6 inch
10	Face Milling Cutter	Brand - Taegu Tec Model - TFM90TP 650-22R-11 (22785) & TD8(T-8/51)
11	Die Grinder	Brand - Craftsman Corporation Model - GD0601
12	Cutoff Saw	Brand - Ingco Model - COS4051 16inch
13	Impact Drill Kit	Brand - Bosch Model - GSB 500RE Kit

Section	Measuring Instruments
Sr. No.	Equipment Name
14	Plunger Type Dial Gauge Indicator 2046 (Mitutoyo Corporation)
15	Digital Vernier Caliper (Model-CD-6"ASX)
16	External Digimatic Micrometer { (APB-2D) with Cell Model - MDC-25SX (293-851-30) }
17	Lever Type Dial Gauge Test Indicator (AFNF53)
18	Range Finder (Bosch GLM 40)
19	Infrared Thermometer (Ingco HIT015501)
20	Digital Test Pencil (Ingco)
21	Tachometer Digital (ORIMART)
22	Clamp Meter (ORIMART)
23	Pumpkin Voltage Tester (Craftsman Corporation)
24	Peak Digital Multimeter (Craftsman Corporation)
25	EEE Tech Clamp Meter (Craftsman Corporation)

Section	Electronics Facility	
Sr. No.	Equipment Name	Equipment detail
26	DIY Robotics Kit	Brand - WitBlox Model – Mega DIY Robotics Kit Specification - Electronic Sensors, power modules etc. Operational area – Line follower Robot and other DIY projects. Link of the user manual - https://witblox.com/
27	Robotics Kit	Brand - National Instruments Model – NI MyRio Specification - Processor: FPGA, Software: LabView, Wifi enabled, 40 channels digital I/O, 6 channels analog output, stereo audio I/O. Operational area – Rover Vehicle Assembly, Balancing Arm, Selfbalancing robot, IoT sensor projects. Link of the user manual - https://www.ni.com/en-in/shop/engineerededucation/portable-student-devices/myrio-student-embeddeddevice/what-is-myrio.html

28	Augmented reality (AR) and Virtual Reality (VR)	<p>Brand - HTC VIVE PRO STARTER KIT(VR equipment)</p> <p>Model - HTC VIVE PRO</p> <p>Specification - VIVE Pro headset: Headset cable (attached),Face cushion (attached),Cleaning cloth, Earphone hole cap x 2,Documentation ,Link Box for VIVE Pro: Power adapter, DisplayPort™ cable, USB 3.0 cable, Mounting pad Base Station 1.0 x 2:Base station power adapter x 2 , Controller 1.0 x 2:Power adapter x 2,Micro-USB cable x 2,Lanyard x 2</p> <p>Operational area – AR VR Game Development & Educational Tutorials.</p> <p>Link of the user manual - https://www.vive.com/eu/product/vivepro-starter-kit/</p>
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