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| Prayas Centre Name | SCTIMST-TIMed |
| City | Trivandrum |
| State | Kerala |
| Fablab Page Link | https://www.timed.org.in/nidhiprayas.html |

Equipment available at TIMed DST PRAYASSHALA

| Section | Electronic/Prototyping Facility | |
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| Sr. No. | Equipment Name | Equipment detail |
| 1 | 3D Scanner | Brand - Occipital Model – Structure Sensor Mark II Specification – Depth Resolution – 1280 x 960 Recommended Range- 0.3m to 5m +, Weight – 65g, IMU – 6-Axis (Gyro & Accelerometer) Software support - https://support.structure.io/article/401-what-apps-can-i-use-with-structure-sensor-mark-ii Link of the user manual - https://structure.io/structure-sensor-pro/specs |
| 2 | 3D Printer 1 | Brand – Ultimaker Model- S5 Specification- Build volume: XYZ:330 x 240 x 300 mm, Layer Resolution- 0.25mm nozzle:150-60 micron, 0.4 mm nozzle: 200-20 micron, 0.8mm nozzle: 600-20 micron, Technology- FDM, File supported STL, OBJ, X3D, 3MF, BMP, GIF, JPG, PNG, Software: Ultimaker Cura, Filament diameter – 2.85 mm Material support – PLA, Tough PLA, Nylon, ABS, CPE, CPE+, PC, TPU 95A, PP Link of the user manual - https://ultimaker.com/3d-printers/ultimaker-s5 |
| 3 | 3D Printer 2 | Brand – Stratasys Model – F120 Specification – Build volume – 889 x 870 x 721 mm (35 x 35 x 29 in.) Material support – ABS-M30, ASA, QSR Software – GrabCAD Print, Weight- 124kg Link of the user manual - https://www.stratasys.com/3d-printers/f120 |
| 4 | PCB Milling Machine | Brand – Enthutech Technology Solutions India Pvt Ltd Model – ETS PCB MATE-300W Working Area- 220x330x120 mm, Software- Copper CAM and Mach3 Mill Resolution- 0.3125 Micro Meter File support- Gerber, DXF, Excellon Drill output Max working speed – 3500mm/min, Feeding height- 120mm Material support- FR4, Copper Clad, Acrylic Power- 220V AC, Weight- 52 kg Link of the user manual- https://www.enthutech.in/pcbmate-300w |
| 5 | Pick & Place Robot and Reflow oven | Brand – Zoid Labs (India) Pvt Ltd Model – Z620 Specification- Chips: SOT, SOP, QFN, QFP, Auto nozzle change, |

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| | Smallest Passive: 0201 (Imperial) BGA, LGA, Automatic Feeders: Eco-Feeder (Mechanical actuation) Max number of feeders: 12 Post Placement Inspection: Yes Link of the user manual: https://www.zoidlabs.com/products/placerbot/ |
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| Section | | Electronics |
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| Sr. No. | Equipment Name | Equipment detail |
| 6 | Arbitrary Function Generator | Brand - TEKTRONIX Model – AFG 1022 Specification – Range 1 Hz to 25 MHz Channels - 2 |
| 7 | Mixed Domain Oscilloscope | Brand – TEKTRONIX Model – MDO3024 Specification – Bandwidth 200MHz Channels - 4 |
| 8 | DC Power supply | Brand- TEKTRONIX Model – PWS2323 Specification – Voltage 0-32 V Current – 0 to 3A |
| 9 | Soldering Station | Brand – HAKKO Model- FX 888D Specification- Power consumption: 70W Temperature range – 200-480°C |
| | | Brand – WELLER Model – WT 1012 |
| 10 | Digital IC Tester | Brand – Minmax Model – MME-DIT 2040 |
| 11 | Fume Extraction System | Brand – HAKKO Model – FA400 |
| | | Brand – WELLER Model – FT91012699N |
| 12 | Rework Station | Brand- HAKKO Model- FR-810B Temperature range – 50 to 600°C |
| Section | | Metalworking facility |
| Sr. No. | Equipment Name | Equipment Detail |
| 13 | CNC Laser Cutting Machine | Brand- KAVONE Model- KLU1390 Specification- Max work area – 1300 x 900 mm |

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| | | Laser Type- CO2 sealed laser tube Graphic format supported- AI, DXF, PLT, DST, DSB, EPS, BMP, GIF, JPG, PNG, TIFF, MNG, PPM, SKA, RAW etc. Materials- Non-Metal such as Acrylic, Soft wood, Paper, Cardboard, Cloth, Leather, Plastic, Rubber, Ceramic, MDF, ABS Sheets, Glass etc. |
| 14 | Bench Drill Machine | Brand – INGCO Model – DP1335050 |
| 15 | Bench Grinder | Brand – BOSCH Model – GBG 6020 Power input – 600 w |
| 16 | Mitre Saw | Brand- Proxxon Model- KGS 80 |

| Section | | Power Tools |
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| Sr. No. | Equipment Name | Equipment detail |
| 17 | Thermocut | Brand - Proxxon Model – 230/E Power – 230V 50/60 Hz |
| 18 | Thermal wire stripper | Brand – Sharang Model – 605 |
| 19 | High Performance Rotary Tool kit | Brand- DREMEL Model- 4300-5/40 |
| 20 | Vacuum Forming Machine | Brand- Mayku Model- Formbox |
| 21 | Table Saw | Brand- Proxxon Model- FET |
| 22 | Scroll Saw | Brand- Proxxon Model- DSH |
| 23 | Environment Control Device | Brand- PHILIPS Model- AC 2958 & AC 1217 |
| 24 | Jigsaw | Brand – BOSCH Model – GST 700 Power input – 500 w |
| 25 | Precision vise with clamp | Brand – Proxxon Model - FMZ |

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| 26 | Vacuum Cleaner | Brand- Eureka Forbes Model- Euroclean I clean |
| Section | Measuring equipment | |
| Sr. No. | Equipment Name | Equipment detail |
| 27 | Digital Multimeter | Brand - Sonel Model – CMM-11 |
| 28 | Conductivity Meter | Brand – Lutron Model – YK-22CTA |
| 29 | Dial Indicator | Brand – Mitutoyo Cat No. 2046S with stand |
| 30 | Vernier Caliper | Brand – Mitutoyo Cat No.: 500-196-30 |
| 31 | Hot Air Oven | Brand – Equitron Model- #7051-150 Specification – Capacity – 150L Inner Dimensions (WxDxH) – 500 x 500 x 600 mm Outer Dimensions (WxDxH) – 690 x 830 x 950 mm Temperature range – Ambient +5 °C to 250 °C |
| 32 | Weighting Balance – Precision | Brand – Sartorius Model – Quintix224 Weighing capacity – 220g |
| 33 | Weighting Balance - Gross | Brand- ATL CASIO Model- ATL PF with 4 load cell Max Capacity – 1000 kg Display – LED Platform size – 1m x 1m |
| 34 | Digital Ceramic Stirring Hot plate with counter reaction | Brand – Cole-Parmer Product No.: 15956-31 Specification – Capacity 15L Temperature range – Ambient to 550 °C Speed range – 0 to 1500 rpm Power – 230V 50Hz |
| 35 | Digital Micrometer | Brand- Mitutoyo Cat No.: 293-821-30 |
| 36 | LCR Meter | Brand – GWINSTEK Model – LCR-916 Specification – Test Frequency – 100Hz/120Hz/1kHz/10kHz/100kHz |
| 37 | Electrical Safety Analyzer | Brand – FLUKE Model: ESA615 |

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| Section | Designing Software |
| Sr. No. | Software Name |

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| 38 | Product Design & Manufacturing Collection IC Commercial New Single user ELD | Make - AUTODESK |
| | ECAD and Documentation Tools | Make- Cadence Cadence OrCAD Suite –v 17.4 |

| Section | | | BioLab Facility | | |
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| Sr. No. | Equipment Name | Equipment detail | | | |
| 39 | High End Workstation | Brand- DELL Model- Precision T3640 | | | |
| | | Brand- Lenovo Model- TS P520 | | | |
| 40 | Microscope | Brand - Magnus Analytics Model- INVI (HL) | | | |
| 41 | ESD Safe Work Table | Specification – Size: 1200 x 600 x 1500mm Powder coated MS 40x40 section, 5 Nos. 5/15 A socket and switch 16A MCB, Tube light, 4 Drawer | | | |
| 42 | ESD Safe Magnifier | Brand- LESNSEL Model- L104EVDX+L104B | | | |
| 43 | Bench Vice | Brand- DURATOOL Model- Swivel, 4" D02334 | | | |
| 44 | Vacuum Pump | Brand- Tarsons Model- ROCKYVAC 300 | | | |