Campus houses the main academic building, hostels for boys and girls, Student Activity Centre (SAC), library, residential quarters for faculty and staff, medical centre, playgrounds and a shopping complex. The main building comprises of centrally air conditioned classrooms, Central library, Auditorium, laboratories, lecture theatres, faculty chambers and administrative offices.

Student Housing

BITS Pilani, Hyderabad Campus is a fully residential campus outside the bustle of the city, yet not far from the attractions of the city during weekends. BITS Hyderabad boasts 9 boys & 3 girls' hostels accommodating both UG & PG students and provides 64 quarters for married research scholars. The campus provides spacious well-ventilated double/single room Non-AC accommodation to each student. Each room is provided with modern furniture, internet connectivity and round the clock security. Floor wise common room is facilitated with cable TV, magazines, newspapers, Table Tennis, Chess and carom boards. Other recreational facility like volley ball is also available in each hostel QTs. Potable drinking water is available in each floor and telephones are provided in all the hostel offices.

The central dining facility is available for all the students. There are two independent large dining halls with modern and well-equipped kitchens with RO plant for drinking water. A variety of food and beverage joints spread across the campus.

Computer Centre (CC):

The Computer Centre provides IT facilities and services to support students, faculty and staff for teaching, research, learning and administration. It facilitates and maintains the state-of-art networking and computational environment for the Institute. The Computer Centre has three operational sub-divisions- (i) CCIT (ii) CC Lab and (iii) Website Maintenance.

The CCIT maintains the server room, which contains four Dell PowerEdge 540 servers are populated on the network supporting Pentium-based PCs and Workstations of Lenovo/HP/Dell with Windows and/or Linux environments supporting a variety of software applications. The Computer Centre has supplied approximately 450 laptops and desktops for office use to our faculty and non-teaching staff. In addition to the above, we have installed approximately 1500 desktop computers for academic use in various labs. Operating Systems (Windows 10 or Windows 11/Ubuntu/Linux/Centos) and Microsoft Office are installed on all computers, along with e-scan comprehensive security.

The CCIT manages and maintains the campus-wide network which is built using Cisco three-tier architecture with wired and Wi-Fi access to users. At present, the campus LAN is connected to 3.0 Gbps dedicated fiber leased line (taken from four different ISPs) for Internet connectivity to the entire campus community, and one 2 Mbps PRI line for telephones at various offices within the campus. Provision is made to increase the total Internet bandwidth to 4.0 Gbps, if needed.

Recently, the SSL-VPN has been configured for accessing our network resources remotely and securely.

The ISP WAN (from different vendors) links are load balanced through a Radware Alteon load-balancer for better monitoring of WAN links, bandwidth allocation to different VLANs, and to provide application level QoS to users. Two Sophos XGS7500 UTM devices sit on the periphery of the network for authenticating users, performing web and spam filtering etc.

The CCIT is also responsible for creating and managing official e-mail IDs for all students, staff, departments and divisions, using Google's centralized e-mail solutions.

The CCIT also maintains the Voice over IP (VoIP) infrastructure and the Telepresence (TP) infrastructure in the campus. Using the TP facility, BITS Hyderabad campus establishes connectivity with three other BITS campuses to conduct conferences, meetings and online live lecture sessions.

The CCIT provides necessary technical support for various divisions/wings (including WILP) in their operations.

The **Central Computing Laboratory (CC Lab)** facilitates the computational requirements for teaching and research in BITS Pilani Hyderabad campus. It manages eight computational laboratories for teaching and research. The CC-Labs facility with approximately 500 PCs is accommodating integrated teaching with computational/ numerical tools. In each academic year, CC Lab facilitated 50 courses (approx.) from engineering and science departments, and the number may increase in the next academic year. A dedicated research lab equipped with 50 desktops is serving the research needs of the faculty and students working on funded projects, dissertations as well as on design-oriented-projects. The CC Lab maintains 30 network-based software/numerical tools, including the course-specific software and the general application software. The course-specific licenses include Design Tools- Auto CAD, FLEXSIM and PTC Creo, Numerical Computing Tools- MATLAB, MATHEMATICA and MATHCAD, Computational Fluid Dynamics (CFD) Tools- ANSYS CFD, Open Foam and COMSOL, Finite Element Method (FEM) analysis Tools- ABAQUS and ANSYS Mechanical, Civil Engineering Design Software- Bentley, and several other Statistical and Geographical Information System (GIS) tools. The CC Lab is also involved in the procurement and maintenance of computer-aided tools or software and the supporting hardware infrastructure for educational use. The vision of the CC Lab is to facilitate advanced computing facilities for faculty and students to enhance the teaching and research endeavors of the institute. To achieve its aim, the CC lab is constantly conducting training to staff/students that impart knowledge on basics and advancements in software/numerical tools. Further, the CC Lab helps AUGSD and AGSRD divisions in online instruction and Admissions Division in conducting the BITSAT online entrance examination. The CC Lab also supports various departments and student associations in conducting workshops, conferences, and seminars.

The **Website Maintenance Wing** of the Computer Centre manages the website specific to Hyderabad Campus. At present our Website maintenance team is heavily involved in Website upgradation activity proposed by the University. The proposed upgradation is almost complete.

The **Central Workshop**

The Central Workshop provides comprehensive training to students and handles the maintenance and fabrication needs of the Institute. The "Workshop Practice" course equips all first-degree students with essential skills in various manufacturing processes, such as machining, casting, rapid prototyping (3D printing & 3D scanning), and trades like fitting, metrology, carpentry, smithy, foundry, sheet metal, welding, and mechatronics. Additionally, students undertake two computer-oriented exercises: CNC Programming using CNC Simulation software (by CIMCO) and Manufacturing Simulation software (FlexSim).

Students pursuing a B.E. in Mechanical Engineering receive advanced training in courses like "Manufacturing Processes", "Advanced Manufacturing Process", and "Computer-Aided Manufacturing". For M.E. students, the curriculum includes "Flexible Manufacturing Systems" and "Machine Tool Engineering". Beyond routine maintenance and training, the workshop also supports students' project fabrication needs and offers technical support for TBI works.

The Central workshop comprises various labs and sections namely Computer Aided Manufacturing Lab(CAM), Advanced Machining Lab, Metal Forming Lab, Powder Metallurgy Lab, Additive Manufacturing Lab, Metrology Lab, Machine shop, Welding, Fitting, Smithy, Sheet Metal, Carpentry, Foundry and Mechatronics. Major equipment include 1 Vertical Machining Center (Bridgeport VMC GX600), 1 EDM Wire cut facility (Model: SPRINT CUT), 1 CNC Lathe (Model PTC- 200), 1 Hydraulic press with computer control (40T), 9 Lathes, 2 Shapers, 1 Radial Drilling Machine, 1 Universal Milling Machine (Batlibai make) with indexing attachment, 1 Cylindrical Grinding Machine with internal grinding attachment, 1 Surface Grinding Machine, 1 Tool and Cutter Grinder, 1 Pedestal Grinder, 1 Slotting

Machine, 1 Power Shearing Machine (Vivek Brand), 1 Portable Drilling Machine, 1 Injection Moulding Machine, 1 TIG Welding Machine, 1 MIG Welding Machine, 1 Spot Welding Machine, 1 Universal Milling Machine (BFW make), 1 Shaper (Sagar make), 1 Surface Roughness Tester (Mitutoyo make) and 1 Hydraulic Bulge Test Rig, 1 Electro Chemical Machining (ECM) setup, 1 Lathe Tool Dynamometer, and 1 Rotational Moulding Machine, 1 M TAB CNC Lathe Trainer, 1 3-D Coordinate Measuring Machine (CMM) "Spectra", 1 HMT PRAGA Universal Tool & Cutter Grinding Machine, 1 FRITSCH Vibratory Sieve Shaker, Magnesium metal stir casting Furnace, 1 Milling tool dynamometer, 1 Drilling tool dynamometer, 1 Lathe tool dynamometer, 1 200 TON capacity Compression testing machine, Mold Testing Equipment, 1 Open-hearth furnace for smithy, 1 Gas-fired furnace for foundry, 5 Wood-working Lathes, 2 Arc-welding equipment's, 1 Oxy-Acetylene gas welding equipment, 1 Gauge planner for wood works, 1 Power Hacksaw, metrology instruments,1 Sand Muller (Capacity-75kg), 5 Panther make lathe machines, 1 HMT make High Speed Precision Lathe Machine and two 3D Printers, 13 Lenovo make desktops, 15 Dell make desktops, a CNC Simulation software by CIMCO (20 Licenses),and a NC programming software called MASTER CAM (15 Licenses), 1 Plasma arc cutting machine, 3 AC Welding Transformers, 1 Powder mixing unit, 1 Metal foam fabrication set up, 1 Muffle Furnace,1 Balance(Sartorius),1 Trolley, 1 Precision Micro Machining Center,1 FRITSCH Ball Mill (Planetary Micro Mill), 1 RETSCH Pellet Press, 1 NABERTHERM High temperature Furnace,1 Voltammetry, Corrosion, and Energy System (software included) (VERSASTAT3-500),1 BFW CNC Milling, 1 Vision Measuring Machine and 1 3D Scanner with Geo magic software(Space Spider), 1 Deep Drawing Hydraulic Press(200T) ,1 Three zone split furnace, 1 CNC Router, 1 Fiber Laser cutting machine, 1 Robotic welding setup(6-axis),1 Ultrasonic assisted milling setup and 1 fourth axis CNC rotory table. To strengthen the Workshop Practice course this financial year, we will acquire CNC modular kits (Lathe & Milling with 4th axis), a 3D scanner, and a Selective Laser Sintering machine.

Medical Centre

Welcome to our esteemed Health Center, where our community well-being is our top priority. With a team of highly qualified professionals, including five dedicated doctors, eight skilled nursing staff members, and a proficient lab technician, we ensure that students and the whole staff receive the best possible care. Additionally, we have visiting consultants such as Gynecologist, Pediatrician, and Cardiologist who visits weekly. Furthermore, our team is complemented by a female and male dentist who visits regularly and two physiotherapists who provides their expertise six days a week. Whether you require a routine check-up, consultation, or emergency treatment, we are here for the community 24 hours a day, 7 days a week. We are equipped with a state-of-the-art laboratory that is capable of performing a wide range of blood tests and diagnostics. Our health center had got separate inpatient wards for male, female and staff members.

As mental health is important along with physical health, we are providing mental wellness with help of M-power which compromises 3 psychologists' who offer their services 6 days a week and a psychiatrist who visits weekly once and extend their best services to our community and students. We strive to offer comprehensive healthcare services that cater to all our community needs and help all to achieve optimal health and wellness.

Shopping Complex & Bank

The Shopping complex (Connaught Place) comprises of Aggarwal Super Market, Gents Saloon, Beauty Parlor, Laundry, Medical Shop, Post Office, Book Shop, Stationery Shop with photocopying facilities, a Fruit and Vegetable Shop, and a bakery shop.

Laboratories

The **Department of Biological Sciences** at the BITS Pilani, Hyderabad Campus was started in 2008 and has achieved numerous milestones that are aligned with the goals and objectives of BITS Pilani University. The department has developed a robust research culture, evidenced by the long list of sponsored projects, high-impact publications, and patents in the targeted

thrust areas. The department offers various academic programs and research-oriented courses that have evolved into a perfect blend of theory and practical training for students. The department's assets are faculty members and students who continually work to improve the departmental academic and research outputs and are dedicated to making this department the country's best teaching, research and development facility. The department's students and research scholars are encouraged to do well in academics and find solutions to real-life problems. Since its inception, the department has successfully offered M.Sc., M.E., and Ph.D. programs, making it a popular choice for many undergraduate and graduate students nationwide. Several Ph.D. students in the department have received national fellowships from organizations, including CSIR, UGC, DBT, DST and ICMR. The faculty members have established startup companies that have spun off from their research. They also have established strong industry linkages and are working towards strengthening them and establishing more. The department has twenty-three faculty members holding Ph.D. degrees and post-doctoral training from reputed global institutes that are well-recognized in their fields. Many faculty members have received reputed fellowships, including the DBT - Ramalingaswamy, DST-Ramanujan, and DBT-Wellcome Trust and Scientific High-Level Visiting Fellowships from the Embassy of France in India. The research thrust areas of the department have become highly diversified and focus on various aspects including Medical Biotechnology, Agriculture Biotechnology, Food and Nutrition, Environment and Bioenergy, Structural Biology and Bioinformatics, Parasitology, Developmental Biology, Biophysics, Microbiology, Cancer Biology, Drug Delivery, Neurobiology, Biochemistry, Molecular biology, and Health Sciences.

The department has several Inter-institutional collaborative projects at the national and international levels. The national institutes that the department collaborates with are Apollo Hospitals, Bangalore; All India Institute of Medical Sciences, New Delhi; National Institute of Ayurveda, Jaipur; Ranbaxy Research Labs, New Delhi; SP College of Medicine, Bikaner, Rajasthan; Indian Institute of Science, Bangalore; LV Prasad Eye Institute, Hyderabad; Shankar Netralaya, Chennai; Mallareddy Institute of Medical Sciences, Hyderabad; Elite School of Optometry, Chennai; Biological E Limited, Hyderabad and Grasim Industries, Nagda. The International collaborations are with Baylor College of Medicine, USA; Humboldt University of Berlin, Germany; Osaka University, Japan; SickKids Hospital, Toronto, Canada; Huazhong Agricultural University, Wuhan, China; Avans University of Applied Sciences, Breda, The Netherlands; University of Mainz, Germany; China Agricultural University, Beijing, University of Pittsburgh, USA; University of Chicago at Illinois, USA; Mälardalens Högskola, Swedish Council of Higher Education, Sustainable Innovations Inc, Virginia, USA; Equate Health, Silicon Valley, California, USA; National Institute of Applied Sciences of Toulouse, France and National Research Institute for Agriculture, Food and the Environment, Occitanie-Montpellier center located, Narbonne, France.

The department coordinated Valorization 2024: International Conference on Science and Technology Integration for Circular Economy in January 2024. The department also hosted several international scientists through Synapsis talks, which triggered intense discussions that translated into active collaborations.

There are seventeen laboratories, of which three, i.e., Biology laboratory, Microbiology, and Genetic engineering, serve undergraduate and postgraduate teaching activities. In addition, Animal Cell Technology and Bioinformatics labs serve both teaching and research-related activities. The Department has developed research laboratories namely, Genomics, Stem Cell, Plant Biotechnology, Structural Biology, and Environmental Biotechnology. In addition, four more labs have been developed to support research in Immunology, Infectious Diseases, RNA Biology, Cancer Biology, and Neurology. A specialized laboratory (DST-FIST) has been set up with financial support from the Department of Science and Technology, housing equipment like a flow-cytometer and RT-PCR machine. A recent addition was the Environmental Science and Engineering Lab, supported by the

Department of Science and Technology's Promotion of University Research and Scientific Excellence (PURSE) project, which has high-end equipment such as the Total Organic Carbon analyzer, Automatic Methane Potential Test System and Anaerobic Chamber.

The sophisticated and high-end equipment that caters to both research and teaching purposes includes Biosafety Level 2a and 2b laminar flow hoods, refrigerated orbital shakers, CO_2 incubators, FPLC, plant growth chambers, plant growth room, Inverted microscope, fluorescent microscope, UV-vis spectrophotometers, multimode readers, advanced PCR machines, qRT-PCR machines, hybridization ovens, advanced table and floor top cooling centrifuges, ELISA reader, gel documentation system, Nanodrop spectrophotometer, Millipore Unit, -80 °C Freezers, workstation and servers for computational work. Also, the Electrophysiology unit sanctioned by the DBT-Builder project has been housed in the department. A greenhouse facility has also been constructed, pushing several exciting discoveries in Plant Biotechnology research.

The Central Analytical Laboratory (CAL) of BITS Pilani Hyderabad Campus (CAL-1 in B-Block and CAL-2 in D-Block), is equipped with modern state of the art instruments used in teaching and advanced research. These instruments cover a wide range of analysis including elemental analysis, various spectroscopic techniques, separation techniques, thermal studies, material characterization and imaging. The following list of equipment highlights some of the salient facilities that are functional: Powder XRD, single crystal XRD, FE-SEM, XPS, Laser scanning confocal microscope, Cell Sorter, 400 MHz NMR, SAXS, XRF, BET surface area analyser, GC, HPLC (detectors: diode array UV, RI, fluorescence), Ultracentrifuge, LC-MS-MS, DSC-60, TGA-DTA, simultaneous TG-DSC, contact angle measurement, FPLC, spectrofluorometer FP-6300, UV-Vis-NIR spectrophotometer, ATR-FT-IR spectrometer, CD, Polarimeter, Milli Q water, Impedance analyzer, Time-correlated single-photon counting spectrofluorometer, vapor sorption analyser, GC-MS, high-pressure reactor, Rheometer, CHNS analyzer, Electron Paramagnetic Resonance (EPR), vibrating sample magnetometer (VSM), RT-qPCR, Dynamic Light Scattering (DLS), and Inductively Coupled Plasma – Mass Spectrometry (ICP-MS). Besides, three more high-end equipment namely, are in the process of procurement. In addition to serving the internal teaching and research purposes, CAL also extends its service support to the external institutions, TBI incubates and industries.

The **Department of Chemistry** offers M.Sc. and Ph. D. (Chemistry) courses where the students are systematically trained in well-equipped laboratories as a part of their practical courses. Individual students are given the scope to run the experiments on their own with the guidance of faculty members. The laboratory facilities include organic, inorganic, physical, analytical, spectroscopy, material science and computational chemistry laboratories. The students enjoy the state of the art facilities like FTIR, AAS, Fluorescence, Raman spectroscopy, microwave synthesizer, high-end UV-Vis-NIR spectroscopy, flash chromatography, gas chromatography etc. Recently, the department has been awarded DST-FIST grant to further develop infrastructural facilities. Apart from the core facilities, department also extensively make use of the facilities in Central Analytical Laboratory. The faculty members for the department are involved in various projects such as organic synthesis, material science, and computational, physical, inorganic and analytical chemistry.

The **Department of Physics** offers M.Sc., Ph.D. and minor programs in Physics. In addition to the first-year courses, core courses for MSc are offered along with several electives. The department's faculty members conduct research in Gravity and High Energy Physics(AdS/CFT Correspondence, Quantum fields in curved spacetime, Dynamical horizons, Cosmology & gravitational waves, Mathematical Physics), Astrophysics (Neutron stars, Black Hole and Gravitational Waves emission from merger of compact objects, constraining modified gravity) Quantum optics(Quantum Optomechanics, Plasmonic Cavities, Quantum metrology and hybrid quantum systems), Computational Physics(Flow in porous media, Active matter), Materials Physics and

Experimental Physics (Condensed matter - Magnetic nano-materials, Multiferroics, Quantum dots, Plasmonics, Photo-voltaics, Microfluidics).

There are three research labs - Materials Science Lab, Magneto-Optics & Photovoltaics Lab and Microfluidics Lab. The current research facilities include an Atomic Force Microscope, a Fluorescence Microscope, a Dynamic Mechanical Analyzer (TA Q800), a Faraday rotation measurement unit, a Thin Film Deposition - DC Magnetron Sputtering unit, and a four-probe resistivity measurement unit; additionally, there are CO_2 laser engraving and cutting machine, an Impedance Analyzer (20 Hz - 1 MHz), a Programmable 2-channel Microfluidics Syringe Pump, a Programmable 6-channel Syringe Pump, a high-temperature box furnace, a hot air oven, a spin coater, a Zeiss Axiolab 5 optical microscope, three servers for computing, COMSOL simulation software with a microfluidics module, and the data analysis software - Igor Pro and Microcal Origin, a soft lithography fabrication unit, a PCO Edge camera (3 Megapixels at 200 fps) to study micro-flows.

The department runs undergraduate teaching labs-one First year and three Core Disciplinary Courses-Electromagnetic & Optics, Modern Physics and Advanced Physics. Recently an active learning classroom has been created and attached to the "Advanced Physics Lab". This course gives M.Sc. students exposure to some of the research tools. Modern Physics lab has new equipment to measure the Zeeman Effect, the Velocity of light, Frank-Hertz equipment, etc. Quantum Key Distribution experiment has been added to Advanced Physics lab recently. A computer-interfaced telescope gives students practical experience in the collection and processing of astronomical data. Sessions for Skywatch and workshops are often held.

The **Department of Pharmacy** offers B. Pharm, M. Pharm and Ph.D. courses where the students are trained in well-equipped laboratories for their practical exposure. The laboratory facilities include analytical instruments, equipment for pharmaceutical dosage form preparations, computer aided drug design lab, medicinal chemistry lab, pharmacology lab, molecular biology lab and BSL-3. The department has clean room facility for making formulations and Central Animal Facility for carrying out advanced in-vivo experiments on rodents. Recently, it added a Central Animal Breeding Facility to its existing infrastructure to support the in-vivo studies. The faculty of the department are involved in various projects including discovery & development of new lead molecules for cancer, TB, chronic inflammation, renal, cardiovascular and metabolic disorders; formulation development, nano-delivery systems, transdermal delivery systems, natural product chemistry and pharmacological systems specifically pathway/target exploration for neurological treatments.

The **Civil Engineering** department has established following state-of-art laboratories and facilities, which can provide opportunities at various levels to students, academicians, researchers and to outside agencies for consulting works:

Structural Engineering Laboratory: The major test equipment/facilities are loading frame with 200 tons' capacity static compression testing facility, Compression testing machine of 3000 kN capacity, Servo-hydraulic MTS actuator (250 kN) for Dynamic Testing, Advanced dynamic testing shake table of size 2m×3m with 12 tons payload capacity (maximum displacement ± 75 mm, velocity 1 m/s, acceleration 3g, frequency 0 to 50 Hz), Horizontal load testing strong support rig up to 250 kN capacity, Base isolator testing facility upto 150mm horizontal displacement with 100kN vertical load, A-Frame double girder crane of 10 ton capacity for lifting and shifting heavy loads, NI-9234 data acquisition system with LabView, Dytran Piezoelectric uniaxial accelerometers (5g-1000mV/g,10g-500mV/g, 500g-mV/g) Impact hammer with force sensor (500LbF-10 mV/LbF), Loadcell (500LbF range, 10 mV/LbF), Waycon laser displacement sensor (100-600mm), LAS linear potentiometer (0-500mm), HEICO Extensometer (0-4mm), APS 113 Long Stroke Shaker with DAQ system, APS0112 Reaction mass assembly with vertical and horizontal table kit , Oxygen Permeability Test apparatus, Carbonation Chamber

Concrete Technology Laboratory: The major equipment/facilities available in the lab are

Servo Hydraulic Compression Testing Machine (2000 KN), Universal Testing Machine-UTM (1000 KN), 20kN Tensile Test UTM, Vibrating table, Vibrating machine needle type, Sieve shaker, Cement/Mortar/Concrete Permeability Apparatus, Cement Autoclave, Torsion testing Machine, Air Permeability Apparatus, Flexural Testing, Machine, Compressometer / Extensometer, Rebound Hammer Test-NDT, Profometer (Rebar Locator)-NDT, Ultrasonic Pulse Velocity Tester, Dynamic Pull-Off Tester, Stereo Microscope and Strain Gauges of 120 ohms and 350 ohms capacity attached with Lab View Tester, Concrete mixer hand & motorized, Concrete cutter, Flow table, Hot air oven.

Advanced Characterisation and Analysis of Materials Laboratory: The lab has Olympus Stereomicroscope, Laminar Air Flow chamber, Vibratory wire strain gage setup, Length comparator, Digital height gauge, Dilatometer bench, Muffle furnace, Colorimeter, Rapid Chloride Permeability Test setup, Orbital shaking incubator (Heating), Mini fridge.

Highway Material Testing Laboratory: Highway Material Testing Laboratory is equipped with equipment namely universal penetrometer, ring and ball softening point apparatus, advanced ductility and elastic recovery apparatus with both heating and cooling arrangements, pycnometers for specific gravity, Rolling thin film oven test (RTFO), Pressurized Aging Vessel (PAV), Brookfield Rotational Viscometer, Cannon Manning Vacuum Viscometer for absolute viscosity of bitumen (indigenous), Silverson High shear laboratory mixer, Glas-Col 1 Gallon Heating Mantle with Digital Controller, Ika Magnetic stirrer and heating plate, Hobart N50 Mixer, Ika Low shear Mixer, Jaw Crusher, Abrasion Testing Machine, Aggregate Impact Test setup, Aggregate Crushing Value test setup, Electromagnetic Sieve Shaker, immersion basket methods of aggregate specific gravity test, Length gauge and thickness gauge for finding the shape of the aggregates, Modified Marshall apparatus with automatic compacting equipment and Indirect Tensile Strength test setup, Asphalt density Meter, Field CBR test setup, Modified Proctors density apparatus, Fifth Wheel Bump Integrator for measuring the roughness of pavement surface, Benkelman Beam for measuring the pavement rebound deflection, Merlene, Dynamic Cone Penetrometer, Soxhlet bitumen extractor, Hamburg Wheel Tracking Device (indigenous), UTM-15 (indigenous), Humidity Chamber, Weighing Balance (x3) – 20kg and 30 kg capacity, Memmert Auto-Programmable Oven,

Camber Board, Cold plate hot plate thermal conductivity test setup, Cement autoclave, TRL Pendulum type pavement friction tester, Permeability test apparatus (indigenous), Centrifuge, Ovens(x3), 5Kva Generator, Core cutting machine Hilti Make, FRASS equipment, Asphalt Mixer, & Rice apparatus

Geo technical Engineering Laboratory: The Geo technical Engineering Laboratory has all basic and a majority of advanced instrument-sand set-ups to test properties of soil and rock.These include Universal Permeability Test set-up, Hot air ovens, CBR Manual & Motorized,Electronic Direct Shear apparatus Manual &Motorized, Large Shear Box apparatus,Electronic Tri-axial set-up, Brazilian Test Apparatus Unconfined Compressive Strength test set-up, Electronic Consolidated, Linear and Volumetric Shrinkage measurement device, Swelling Pressure measurement apparatus, Model Plate Load Test set-up,Model Retaining Wall Test set-up, Model Stone-Column test set-up (Single and Group Columns), Model rainfall slopes, Soil Crusher, Refrigerator, Orbital Shaking Incubator. Automatic Liquid limit Apparatus, Cone Penetrometer, Core drilling Machine, Soil Trimmer – CBR, Automatic Soil Compaction Machine and Relative density Apparatus,Cutting & Polishing machine, Sieve shaker,vacuum pump, weighing balances. The lab also has finite element software Plaxis 2D for modelling soil.

Environmental Engineering Laboratory: The lab has facilities to test most of the water quality parameters. The facilities include, Spectrophotometer – Single & Double, Thermo reactor, water bath, Jar test Apparatus, Portable water & Microbial testing kits, Hot Air Oven, Rocky Max Shaker, Multi parameter Sonde, Digital PH meter, Fluoride meter, Water level meter, Double Distillation Unit, Portable DO meter, Magnetic stirrers, weighing balance , Portable turbidity, conductivity & TDS meter , Fume Hood, Rain Gauge Equipment, BOD

Incubator, BOD Analyzer , PM 2.5 and PM 10 dual dust sampler, Colony Counter , Fridge and Auto clave. Solid phase extraction unit.

Geomatics Laboratory: The Geomatics lab has a majority of advanced instruments available for executing modern surveying techniques. The major surveying instruments available are Drone, Total stations, DGPS R4s & R3, Handheld GPS, Auto levels, Electronic Digital Theodolites Planimeter, Rodo meters & Dumpy levels along with conventional surveying instruments. The lab also has ArcGIS software for mapping and spatial analysis.

Transportation Research Innovation Analysis Lab (TRIAL): TRIAL has many advanced instruments and software related to transportation planning and traffic systems. The major instruments available in this laboratory are Speed Radar Gun, VBOX data logger with video cameras, Noise-meter, Alcohol meter, Lux meter, Safety manuals, electric bikes, Night vision enabled video cameras, Traffic signboards and Virtual Reality (VR) headsets (Meta Quest 2 and Vive Focus 3). TRIAL houses a high computing workstation for modeling and simulation and has access to various academic software such as NGene, MPlus, Limdep NLogit, AMPL, PTV package (VISSIM, VISSUM, VISWALK and VISTRO), and Origin Pro.

Advanced Hydraulic Lab: This laboratory has a 2.5 m Flow channel and Wind Tunnel.

Structural Computational Laboratory: The Laboratory has been set for the computational requirements of graduate students and research scholars. The laboratory has seating space for 29 scholars and can be used as an instruction laboratory for computation and simulation based courses. The lab currently has 13 workstations with 32 GB RAM, Xeon octa core processor. More number of workstations are planned to be set up in this lab.The installed workstations have software such as MATLAB, Python, and FEniCS.

The Civil Engineering Department also has a Centre for Excellence in Water Resources Management (CEWRM), which has been initiated for innovation in sustainable research, education and training in water resources management and allied fields.

The Associate Research Center (ARC) of Volvo Research Education Foundation's Centre of Excellence for Sustainable Urban Freight Systems is dedicated to investigating new ways of infusing sustainability and efficiency into the way businesses send and receive goods. BITS Pilani – Hyderabad campus is the only private institute and one of the three Indian academic institutions with this research partnership. The mission of ARC of VREF's CoE-SUFS is to change the idea of urban freight systems from one driven by profit maximization to one that accounts for the externalities produced. The research team use technology, public policy, and proactive engagement of the private sector as building blocks to design and implement actionable strategies to transform and push forward the leading edge of urban freight systems.

The **Department of Chemical Engineering** has Six undergraduate labs namely Selected Chemical Engineering Operations, Transport Phenomena, Chemical Reaction Engineering, Process Control lab, Environmental Engineering lab, Petroleum Engineering lab and. The department also houses Multiphase Systems lab, Advanced Separation processes lab, Instrumentation lab, Research Lab I & Research Lab II, Material interfacial lab, Materials Science and Engineering lab and polymer engineering lab for the Master's program.

Selected Chemical Engineering Operations lab: This lab caters the requirements of UG students and M.E/PhD students. Second semesters students will come to this lab to perform Chemical Engineering Lab (CEL-2) experiments. This lab is equipped with Super mass collider which is an ultrafine grinding machine (MKCA6-2J) used to make nanofibers using wet grinding. Fluidized bed dryer used to dry the sand and other small sized grains, Granulator used for size enlargement using binder, Double Effect Evaporator, Water Cooling Tower, Rotary Drum Vacuum Filter used for continuous filtration (solid cake is removed continuously), Ball Mill, Jaw crusher for size reduction (cm to mm), Centrifugal pump, Fluid Mixing Apparatus, Reciprocating pump, Plate-and-frame filter press used for batch filtration, Lab-Valley beater used for refining the pulp (size reduction), Salt Spray

Test Chamber As per ASTM B117 and crystallization equipment's are installed in this Lab. Thermax Boiler used to generate steam (REVOMAX) of 200 Kg/hr, air Compressor of 15 HP, Sieve shaker set-up, Rotary Pulp Digester (160 OC, 10 Kg/cm2) and Compression moulding machine for making polymer sheets also installed in this Lab.

Transport Phenomena Lab: This lab houses the following apparatus required for understanding several phenomena related to Heat transfer, Mass transfer and Fluid mechanics, Bubble Cap Distillation Column, Absorption in wetted wall column, Sieve plate column, Liquid-Liquid extraction column, Vapour in air diffusion, Heat exchanger teaching set up, Natural and forced convection, Thermal conductivity solids and liquids, Fluid friction measurements and losses due to fitting, Venturi and orifice meters, Bernoulli's theorem apparatus, Heat Transfer Through Composite Wall Apparatus etc. All the equipment is from K C Engineers, and is used by UG students in their course work and research purpose.

Chemical Reaction Engineering Lab: This lab seeks to introduce undergraduate and graduate students to Kinetics and Reaction engineering processes and their study. The principal objective of this lab is to train the students on the operation of different types of reactors (namely Batch reactors, Continuous stirred tank reactors (CSTRs), and Plug flow reactors (PFRs)). This laboratory has the following equipment's- Five reactors of Mechtrix Engineers make and they are as follows: Batch Reactor, PFR, CSTR, CSTR followed by PFR in series and CSTR in series.

Process Control Lab: Process control is one of the most important concepts that is predominantly used in all chemical industries. We aim to impart the practical knowledge about various control concepts studied in the theory class via different control experiments. The lab is focused mainly for FD students where they have hands on experience related to level, temperature, pressure and pH control. Each of these experimental setups are connected to software, which further enable the students to understand the impact of each controller parameters on the desired control action. All of these experiments are based on the feedback control strategy. Details about the instruments in the lab is as follows: pH Process Control Rig, Level & Flow Process Control Rig, Temperature Process Control Rig, Pressure Process Control Rig, Make (Feedback Instruments Company).

Petroleum Engineering Lab: Petroleum Engineering Lab Provides Study and Analysis of Petroleum Products characteristics and its Properties. The facilities are mainly used by UG, HD and PhD students. The Laboratory is equipped with Red Wood Viscometer, Abels Flash Point Apparatus, Cloud & pour Point apparatus, Aniline Point Apparatus, Distillation apparatus from (Popular Science Apparatus). And Automatic Bomb Calorimeter Apparatus Reid Vapour Pressure Apparatus, Smoke Point Apparatus, and Carbon Residue Apparatus from (Koehler instrument Company), Copper Corrosion Apparatus from (Norma Lab), AVL Smoke Meter and Emission analyzer, Micro Gas chromatography from Agilent, Fluid Cracking Reactor Unit, Spark-ignition engine (SI engine) and Distillation Analyser (Haage Estanit for analysis of liquid mineral oil hydrocarbons As per ASTM D86, D1078,D850 standard)

Environmental Engineering Lab: The main function of the Environmental Engineering laboratory is to study systems that can be used for the control of air and water pollution. The various equipment and instruments hosted by this laboratory are as follows. Laminar Air Flow made by Bio-AIRCON which can be used to maintain sterile air flow.Dust Sampler (APM 460 NL) made by EnviroTech Particle size: PM10 (to collect and analyze dust present in the work environment), Microscope made by Thermo Fisher Scientific (to observe the size and shape of biological and particulate matter). Reverse Osmosis based water purification system Test Rig: To Develop and test technologies that can be used to improve functioning of Reverse Osmosis based water purification systems (from micro to macro scale). Measurement Techniques for Water Purification studies: pH meter made by Systronics, Colorimeter made by Systronics Wavelength, Conductivity meter made by Spectra Lab Range 0.2uS – 200 mS are present to determine the water quality. The facilities are mainly used by UG, HD and PhD students for their research projects

Analytical Lab I and II: The instrumentation lab contains state of art equipment to train all FD, HD and PhD students on characterization methods of gas chromatography (Liquid GC and additional columns), UV-vis Spectroscopy, Potentiostat & Galvanostat (Metro ohm, used to measure the Electrochemical energy conversion and storage), BET surface area analyzer, CO_2analyzer and Karl Fischer titrator (Moisture measurement in solids and liquids using chemical agents. In addition to these facilities, Instrumentation lab is also equipped with rotary evaporator, Orbital Shaking Incubator REMI-CIS-24PLUS (Temp range 5-60 deg C), Refrigerated Centrifuge), pH meter, Deep Freezer (400Litrs Up to -25 deg C), ultrasonic cleaner, probe sonicator, weighing balances, magnetic stirrers with hot plate, Digital Oil bath (6Litrs Up to 250 deg C) vacuum oven, cyclo mixer and refrigerated centrifuge for the synthesis of nanomaterials, fibers & polymers. Additional equipment such as Orbital Shaking Incubator, optical microscope, Moisture Analyzer (50 to 200 OC, Shimadzu MOC63U), Portable D.O Meter Advanced high-end equipment such as chemisorption analyzer, atomic force microscopy and microwave synthesizer are the recent additions to focus on nanomaterials characterization and synthesis. for HD students, PhD scholar and FD project students regularly use these equipment for their projects.

Polymer and Science Engineering Lab: Laboratory is equipped with the International Equipment's make (Model LT-160) Digital izod and charpy impact tester, V notch cutter. The Izod test is most commonly used to evaluate the relative toughness or impact toughness of materials.Noztek Extruder model Pro HT 600 (Temp.Range 600ºC), this can be used for mixing of polymers and making polymer blends and nano composites which can be processed further using techniques like 3D printing and injection molding. International Equipment's make (Model IE-111) Melt Flow Index Tester (Temp. upto 420ºC) is used to measure the melt flow rate of different polymers. Hand operated injection molding which can be used to make specimen for tensile and flexural testing as per ASTM standards. Compression molding machine is used to make an object according shape of mold die using polymer material. Muffle Furnace 7 L (Temp.Range1200 °C). All these equipment used for teaching of the undergraduate course higher degree course CHE F243 and CHE G522. In addition to these facilities the lab also has melting /boiling Point apparatus which can be used upto300 o C, fumehood, hot air oven 91 L(Temp.Range300°C), magnetic stirrer, shaking water bath.

Material & Interfacial Science Lab: This laboratory has some of the state of art facilities for measurement and modification of surface and interfacial properties of various materials. The facilities include UV / Ozone System (Nova Scan,PSDP- UV4), Contact angle and surface tension measuring system (Apex Instruments, ACM-NCS), Fume hood (L1500xD915xH2300mm), Stereo Micro Scope 0.8x to 10x Magnification, Hot air oven (100L Temp Range:300°C), DC to AC Converter etc.

Research Facilities. (Multi-phase Systems lab, Advanced Separation processes lab, & Research Lab I & Research Lab II): The Aim of these labs is to promote and develop basic and applied scientific research to support ongoing research Projects. These labs have the following facilities. Fixed bed reactor (Chemito, up to 1200 OC), High pressure Autoclave (PARR reactor, 350 OC, 140 Kg/cm2), Climatic Test Chamber (Humidity 30%-95% Temperature -20 to 85°C Range), Electro Chemical Work Station From Kanopy Techno Solution PG-LYTE1.0, Potentiostat, glove box, oscilloscope, Bio Safety Cabinet, Ultra-Pure grade Water System ,Brookfield Rheometer (coaxial cylinder 0.026 to 8830 Pas) Temperature controller bath (RHC1000S-S1) refrigerating/ heating, -20 to 200 OC), Rotary Microtome (Leica, sections of 500 nm using tungsten carbide and diamond knife, automated),Hot Air Oven(Up to 300OC), Humidity Chamber (40 to 80% RH, 10 OC - 60 OC), BOD Incubator, Table Top Centrifuge, Probe Snoicator, Gas Detectors(Co,H2), Micro Syringe Pump, High Speed Camera , CO2 Gas Analyzer, Back Pressure Regulator,Mass Flow Controllers, The department has recently added Paper and pulp technology equipment's from the Global Engineering. Corp. Make. Consistency Determination Apparatus, Beating & Freeness Tester - Canadian Type Pneumatic Model, Reflectometer, Densometer (Gurley

Type), In addition to these Facilities Electro spinning Machine (Super-ES-2, Nano scale fibers and core-shell fibers), Hot air oven (100L Temp Range: 300°C), Reverse Osmosis System (500LPH), Autoclave (Ambient to 140 degC),Tray Fermenter (Biomate India, BI-FERM-8D),Fixed bed Flow reactor Setup for CO2 adsorption study, TPD Analyzer Apparatus, Are Available for HD students, PhD scholar and FD project students.

The Department of Computer Science and Information Systems has six physical lab spaces with a total seating capacity of around 300 students. The Department also has a virtual lab infrastructure which is remotely accessible by all faculty members as well as the students of the department on request.

Academic Computing Lab 1

The academic computing lab houses 56 desktop class machines with Intel Core i7 2.8 GHz 6C processors, 16 GB memory, and Nvidia Quadro K420 2GB GPUs. This lab is used for executing some sponsored research projects and it will be used by concerned FD/HD students and JRFs for their projects. The lab is accessible 24x7 for the FD/HD students, the research scholars and the faculty, through biometric authentication modules. All the machines in the lab are interconnected through a high speed LAN and connected to the other network infrastructures of the dept. The lab is connected to the Internet through the campus network.

Academic Computing Lab 2

This academic computing Lab currently has 84 desktop class machines with Intel Core i7 2.8 GHz 6C processors, 16GB memory and Nvidia Quadro K420 2GB GPUs. This lab is used to run the core Computer Science courses in the systems domain like Computer Architecture, Operating Systems and Computer Networks and higher degree core systems courses like Advanced Computer Architecture, Advanced Operating Systems, Network Security and Advanced Computer Networks. This lab also supports popular electives like Cryptography, Parallel Computing, Network Programming, Human Computer Interaction (HCI), Pervasive Computing etc. All machines in the lab run the Ubuntu Operating System and have Free/Libre and Open Source Software, like Wireshark, compilers like GCC and JDK, interpreters like Tcl/Tk, Perl 5.0, and gawk, installed on them for academic and research purposes. All machines in the lab run on the Ubuntu Operating System and have Free/Libre and Open Source Software like tensorflow, Cuda, Nodejs, Matplotlib, ffmpeg, OpenGL, installed on them for academic and research use. This lab is accessible 24x7 for the FD/HD students, the research scholars and the faculty, through biometric authentication modules. All machines in the lab are interconnected through a high speed LAN and connected to the other network infrastructures of the dept. The lab is connected to the Internet through the Campus Network.

Research & Innovation Lab 1

This lab is dedicated for sponsored research projects. Currently, it hosts three research projects: (i) ML-Aided Secure SoC and Analytics (MASTIC) funded by Axiado, (ii) Multipath Networking Test-bed for Drone Communications (MUT-DROCO) funded by DST-SERB, Govt. of India, and (iii) Defend Internet of Things-based Espionage through analysis of encrypted or unencrypted network traffic using machine learning funded by DST-SERB, Govt. of India. The lab is accessible 24x7 for the PhD students. Several state-of-the-art equipment and prototypes are designed in this lab including Drone Prototypes (Quadcopter and Hexacopter), experimental setups for investigating USB-based cyber-attacks and corresponding software solutions, and experimental setups (with corresponding equipment) to investigate cyber espionage with several types of spy IoT devices.

Research & Innovation Lab 2

This lab is also dedicated for sponsored research projects. Currently, it hosts three research projects: (i) QoE Optimized Multimedia Content Delivery through Caching in D2D undelay networks, funded by DST-SERB, Govt. of India, (ii) Defending malicious attacks on Bio-CPS devices, funded by DST, Govt. of India and (iii) Data-driven Multimodal System for Academic Stress Management in Indian Universities. The lab is accessible 24x7 for the PhD students. Several state-of-the-art equipment including smart routers, servers and several IoT devices are used by the

researchers in this lab. The lab is connected to the Internet through the Campus Network.

Research Scholar Lab 1

This is a lab with dedicated workstations for the research scholars in the department. The lab has a total seating capacity of 25 and has cubicles equipped with HP Mini Towers with Intel Xeon E3-1225 V5 processors, 16 GB memory and Nvidia Quadro K420 2GB GPUs. Three cubicles have upgraded Nvidia Quadro K1200 4GB for GPUs for intensive computing and research requirements. All the workstations are equipped with Logitech 270 auto-focused web-cams and audio devices. Each research scholar is allocated a workstation and the scholars run Ubuntu Operating Systems with the scholars assigned privileges to install any Free/Libre Open Source Software to aid their research work. This lab is accessible 24x7 through biometric authentication modules.

Research Scholar Lab 2

This is the latest addition to the department lab physical infrastructure, with 20 dedicated workstations for the research scholars. Each workstation is powered by Dell OptiPlex 5080 Tower XCTO with Intel i7 (8-Core, 16MB Cache, 2.9GHz to 4.8GHz, 65W) processors, 16 GB memory, 256 GB NVMe class 35 SSD, 1 TB hard disk, and NVIDIA GeForce GT 730, 2GB GPUs. All the workstations are equipped with web cams and audio devices. One workstation each is allocated to each research scholar and they work on Ubuntu Operating Systems. The research scholars are free to install any Free/Libre Open Source Software to aid their research work. The lab is accessible 24x7 through biometric authentication modules.

Department Virtual Infrastructure

The department has setup a virtual infrastructure which is being extensively used during the online semesters to run the lab components of different courses. In addition, server support to run projects is also facilitated. The department has dedicated 2 HPE DL 380 Gen 10 Rack Servers with Intel Xeon Silver 4114 (Deca core) processor and 256 GB RAM for this purpose.

The servers run Ubuntu operating system and are equipped to run any software tool for the lab components in any course. The servers are accessible from anywhere using ssh through a dedicated port forwarding at the campus network gateway. All the students, the research scholars and the faculty in the department have accounts on the virtual infrastructure. In addition, the department has several rack servers on standby (1 HP rack server, 2 IBM rack servers, 1 IBM storage server) which can be commissioned into the virtual infrastructure as the demand rises. The virtual infra is housed in a dedicated server room with two server racks and two 8-port KVM switches.

In addition to meeting the lab requirements of the academics and research in the CSIS dept, the department receives requests for GPU access from other depts for their research purpose and such computing resources are also provided.

The Mechanical Engineering Department has thirteen laboratories, catering to the undergraduate and postgraduate teaching and research activities of the department: Mechatronics and Automation, AI and Robotics Lab, Material Testing Lab, Product Design & Realization (PDR) Lab, Dynamics and Vibration Lab, Tribology Lab, Refrigeration Air-conditioning and Energy (RACE) Lab, Heat Transfer Lab, Hydraulic Machines Lab, IC Engines Lab, Soft Matter and Microfluidics Lab, Applied Energy Lab and Central Workshop. In addition, it also caters to the research requirements of the DST-FIST project.

Mechatronics and Automation laboratory is presently equipped with facilities such as 5-axis industrial robot, NI-Myrio Kit, Multiple sets of Docile X mobile robot, Omni wheel robot loaded with sonars, LiDAR Steering Smart Car, ABB Articulated arm Robot with finger and vacuum gripper, Smart camera evaluation kit, Mechatronic workbenches, Industrial AC servo motor kit, PLC, Hydraulic and Pneumatic training kit, Flowlinc v2-IoT Edge Device, Gantry Table for Automated Manipulating System, etc. It is also supplemented by software like LABVIEW, SCADA and Wolfram Mathematica version 13.3 on Windows / Linux / Mac OS) with Premier Service.

The AI and Robotics Laboratory is equipped with fundamental and advanced state-of-the-art infrastructures. It includes different types of locomotion robots - Poppy Humanoid robot (27

DoF), Robonova Humanoid robot (18 DoF), DJI Mini2 drone, DJI Tello drone, BlueROV2 V4 Underwater Robot, LiDAR Steering Smart Car (Hanback), LiDAR Sensor, Turtlebot4 Tb4 Mobile Robot (Standard). It also includes Scorbot-ER-4U Manipulator (Intelitek), Geomagic Touch Haptic Device (3D Systems) to facilitate work on Kinematics and Dynamics of Robot manipulators. Apart from these, this lab has Nvidia Jetson, Raspberry Pi, Intel Realsense, and many other sensors and actuators to aid work on the development and computation work in the area of robotics.

Material Testing Laboratory Material Testing Laboratory has the following important facilities: Universal testing machine (Zwick / Roell) consist of tension, compression, bending test facility from cryogenic temperatures to elevated temperatures (-100º C to 1200º C) for metal, composite and polymers, Drop weight impact tester for measuring the toughness of polymers and composites, Pultrusion machine for composites processing, Rotating fatigue testing machine for metallic specimens, Creep and rupture testing machine under constant load condition, Torsion testing machine for circular metallic specimens, Ultrasonic flaw detector to detect hidden defects Other facilities include Polariscope, Polishing machine, Hot mounting machine, Digital density meter, Stereo and Inverted metallurgical microscopes (up to 500X magnification), Micro-Vickers, Rockwell, Barcol and Brinell hardness testing, Charpy and Izod impact testing, Muffle furnace (1200º C), Vacuum Oven, Magnetic stirrer, weighing balance, Euler buckling setup, Transverse Strain Extensometer, Mounting Press, and Computerized Simply Supported Beam.

PDR (Product Design & Realization) laboratory is equipped with Rank-Taylor-Hobson computerized profilometer, additive manufacturing machine (rapid prototyping), David SL2 & 3D scanner, milling dynamometer and etching machines along with the softwares like ABAQUS, DEFORM-3D, LS-DYNA, and Design-Expert.

Dynamics and Vibration laboratory has small and medium range shakers, uniaxial/triaxial accelerometers, universal vibration apparatus, whirling of shaft apparatus, gyroscopes, static and dynamic balancing machines, wireless strain remote monitoring WSDA link, stroboscope, gearbox with spur gear arrangement to perform condition monitoring studies, planetary gearbox for wind turbine fault diagnosis, NI DAQ system for data acquisition, sensors for monitoring lubricating oil, microphones for acquiring acoustic signals, Laser Doppler Vibrometer, for contactless vibration sensing.

Tribology laboratory is equipped with a number of sophisticated equipment to study the friction and wear characteristics of bulk materials, coatings and lubricants. The available facilities include pin-on-disc/ball-on-disc tribometer, four ball tester, scratch tester with humidity controller, journal bearing equipment, micro balance, electropolishing equipment, universal tribometer with linear and rotatory modules, vacuum tribometer, tool maker's stereo microscope, infrared camera. It also has Image Analysis software, ABAQUS and DEFORM 3D simulation software.

RACE (Refrigeration, Air-conditioning and Energy) laboratory is equipped with refrigeration and air conditioning test rigs, Solar drier test rig, Cooling Thermal Energy Storage test rig, Refrigerated/heating circulator, Water desalination cum cold storage equipment, wind emulator, wind energy training system, indoor air quality testing instrument, cooling tower, heat pump test rig, steam power plant test rig, PCM test setup, solar concentrator training system, superconductivity experiment kit, and data loggers as well as data acquisition system.

Heat Transfer laboratory is equipped with fundamental and advanced state-of-the-art infrastructures including heat exchanger modules, convection, conduction and radiation equipment setups, convection drier, thermal constant analyser, flame propagation unit, computerized fluidized bed, and a high speed camera (model no: Phantom VEO440L). Apart from these, a temperature test chamber (-5^{o}C to 70^{o}C), battery testing equipment, 3-stage hybrid evaporative cooling system, Bryair dehumidifier, ultrasonic humidifier, ejector-based hybrid vehicle thermal management system are also added in its feather as research infrastructure.

Hydraulic Machines laboratory caters to both classroom and research needs of fluid mechanics, prime movers and hydraulic

machines. The lab is equipped with Bernoullis's Theorem Apparatus, fundamental equipments to measure fluid flow rates, major losses, minor losses, fluid viscosity, centrifugal/reciprocating/submersible/gear/jet pump performance test rigs, reciprocating compressor test rig, centrifugal blower test rig, hydraulic turbines, nozzle performance test module, and air flow bench for boundary layer measurements. The lab houses some of the state-of-art equipment for research in fluid mechanics such as low speed wind tunnel facility, fan array tunnel facility, hot wire anemometer, thin coating fiber-film probe for boundary layer measurements, 3 axes load cell, laser flow visualization, smoke generator, pulsed and continuous laser for PIV applications.

IC Engines laboratory is equipped with computerized SI and CI engine, Single Cylinder Automotive Diesel (Dual Fuel, Hybrid) Engine, AVL Ditest MDS 650 system with features such as smoke meter and gas analyzer, pressure

sensor adapter & tooling device, computerized dual fuel VCR system, a test rig for evaluating alternate fuels, LPG & CNG sequential kits.

Soft Matter and Microfluidics laboratory is established in 2023 primarily as a research lab that focuses on multidisciplinary research involving fundamentals of micro-scale fluid flows, interactions of soft interfaces at micro-scale, active matter and their applications in the broad areas of biology, chemistry, and material sciences. The lab makes use of research tools including, but are not limited to, semi micro balance, pressure & flow control unit, microfabrication, optical microscopy, spectroscopy, wet lab tools, multi-physics simulation, mathematical modeling, and coding.

Applied Energy laboratory is equipped with Air pre conditioner, Adiabatic simulator for Advanced building materials, rotating machine and hot air convection oven, Solar driven ORC based trigeneration system

Central Workshop is equipped with numerous manual, semi-automatic and automatic machine tools and machines and providing services to all other departments and divisions

Mechanical Engineering Department is also supported by a Centralized CAD laboratory. Centralized CAD laboratory has a variety of computer aided design and engineering software like Pro/Engineer, ANSYS, COMSOL, MATLAB, etc. In addition, the Mechanical Engineering Department has collaboration with Hemair Systems Ltd. Hyderabad, for establishing an ISO-6 (Class-1000) Clean Room in the institute for micro-electro-mechanical systems (MEMS) fabrication, which is part of the Institute's Technology Business Incubation (TBI) programme funded by the Department of Science and Technology (DST), Government of India. DST-FIST project awarded to the department is supported by the Automated Physical Vapour Deposition (PVD) with SCADA software.

Since its inception, the **EEE department** at Hyderabad campus has established laboratories with Equipment and Software worth more than ₹ 24.85 Crores. Currently, the 18 lab rooms are spanned in more than 33,884.84 square feet area. These labs include, Analog Electronics Lab, Communication Systems Lab, RF & Microwave Engineering Lab, Microelectronic Circuits Lab, Digital Design Lab, Microprocessor and Interfacing Lab, Digital Signal Processing Lab, Electrical Machines Lab, Control System Lab, Power Electronics Lab, Power systems lab, Instrumentation and Transducers lab, MEMS, Microfluidics and Nanoelectronics (MMNE) Lab, Optical Communications Lab, Advanced Communication Lab, Embedded Systems lab, Data processing Lab, Machine Learning Lab, Advanced Digital Communication Lab, FPGA design Lab, Mobile and personal communication, Computer Architecture, VLSI CAD Lab, Advanced Computing Lab, High Voltage Lab, IoT Lab, Electronic Materials and Devices Lab (EMDL), VLSI Architecture Lab, Analog VLSI Design Lab, Software for Embedded System Lab, Lambda. These labs cater the teaching and learning requirements of the undergraduate programs in EEE, ECE & EEI and the higher degree programs in Communication Engineering, Embedded System Design and Microelectronics. Further, the students' projects, thesis, PhD research work and several sponsored projects are also implemented in these labs. A summary about a few labs are given here alphabetically:

Advanced Computing Facility is the best-in-class and one of the core labs catering to the computational needs of many laboratories in the Department. Advanced Computing Facility consists of 12 High-Performance Computing server nodes, Red Hat Enterprise Linux (RHEL) and Community Enterprise OS (CentOS), High-Performance Computing Software, and 150 High-Performance Workstations along with several general computing resources also.

Communication Systems Lab covers the basic understanding of functionalities of various block-sets involved in communication systems. It involves system design and simulation exercises using MATLAB and Simulink and experiments based on HW boards. In this Lab, the student's study in detail about the various types of modulators and demodulators, transceivers and spectrum analyzer and also different types of Pulse Code Modulation (PCM) formats both using hardware and software.

Electronic Materials and Devices Lab holds the cutting edge Nanoelectronic and opto-electronic devices fabrication, characterization, and simulation facilities such as thermal evaporator, Chemical Vapor Deposition, rapid thermal processor, spin-coater, Hot Air Oven, Electrospinning set up, Materials synthesis equipment, different furnaces (with ambiances), Automated Agilent B2912A SMU, Probe station, Keithley 2450 SMU, Four probe unit, Solar simulator, RF amplifier, optical exposure unit, Plasma Transistor Setup. Electrochemical WorkStation, Roll to Roll deposition setup customized, Mutech Microsystems micro laser etc.

Instrumentation Lab focused on designing and developing various instrument layout including sensing unit, data processing unit and signal processing unit. Various data acquisition hardware, sensors, mini-microprocessors, LCD interfacing and governing software are covered in this lab.

Internet of Things Lab provides the concepts of IoT, its ecosystem, widespread applications, and design challenges. The experiments include interaction options with real-world objects through cyber-infrastructure, systematic development of IoT based solutions, approach to handling data from IoT, introduction to Python programming and Raspberry Pi kit, introduction to Arduino programming and develop controllers, basic machine learning to process data from IoT on the fly, understanding the security implications while deploying IoT applications, and basics of developing mobile applications to command and control IoT. A wide variety of sensors, actuators, and controllers are available to design real-time projects. A number of simulation platforms facilitate the understanding of cloud computing and sensor networks.

High Voltage Lab has recently been set up and it consists of all state-of the art equipment such as 100 KV AC/DC Source and control panel, 3 stage 300 KV 3 KJ Impulse Generator, C and Tan-delta Test Kit (Schering Bridge), Vacuum and Pressure Vessel, Rod Gap Apparatus – Horizontal Sphere Gap Apparatus, Rain Making Equipment, Salt Fog Chamber, and Electrolytic Tank 2-channel Arbitrary function generator 60 MHz Bandwidth, Real time signal analyzer 6 KHz - 6.2 GHz, On the other side, some sophisticated instruments also added up which include Solar simulator, Laser engraver, contact angle measurement, UV laser writer, and dry film photoresist. On the other side, some sophisticated instruments also added up which include Solar simulator, Laser engraver, contact angle measurement, UV laser writer, and dry film photoresist.

MEMS, Microfluidics & Nanoelectronics (MMNE) lab is working towards realizing futuristic smart sensors and intelligent energy harvesters encompassing various Multidisciplinary domains. This include micro/ nanoelectronics; 3D printed sensors/ actuators; microfluidics; miniaturized Bio/Chemical Fuel Cells; Solar cells; Bio-Electro-Chemical sensors; printed /flexible /wearable/implantable devices; Bio-MEMS etc. MMNE lab has a multitude of fabrication and testing capabilities such as soft-lithography, inkjet printing, Profluidics 285D, 3D Printing, direct UV/ CO2/ Visible laser writing, paper-based devices, different types of microscopies, electrochemical/ optical detection setups, Solar simulators, high-speed vision etc. The global industry-academia-government collaboration of MMNE lab is directed at addressing scientific gaps and developing relevant technology while imparting state-of-the-art knowledge in the field.

Power Electronics Lab covers modelling, simulation and experimental verification of different power electronics devices/converter applications. Students are also provided with power electronic drives for performing minor projects as part of the power electronic course. Lab Consists hardware: 3-Ø Power Module, SCR – Diode Power Module, IGBT – Diode Power Module and Software: MATLAB - 2015a, P-Sim Software.

RF & Microwave Engineering Lab consists of various microwave equipment and components, to determine and plot the characteristics of Gunn Oscillator, Reflex klystron and other passive microwave components. It also included how to use various simulation software to design various microwave devices with desired characteristics, scattering parameters and field patterns. Using ANSYS HFSS to Design Waveguides, Microstrip Antenna, Microstrip Quadrature Hybrid & Design of Ring Hybrid. The Lab is also augmented with Rapid prototyping PCB Machine and Anechoic Chamber for Antenna Measurements recently. In addition to this high end workstations and software's like CST Studio, COMSOL, AWR Office, ADS & HFSS are available, anechoic Chamber 40GHZ etc

Software for Embedded Systems Design lab supports students in learning software development process as well as modeling complex embedded systems using Unified Modeling Language (UML). Students also learn to program embedded systems using Embedded C and RTOS as well as implement intelligent embedded system designs using Python programming language. The Lab has open-source tools such as Robot Operating System (ROS) and Simulators such as Gazebo, to create 3D scenarios on a computer with robots and obstacles, etc. to challenge the students to carry out interesting projects.

VLSI Lab has Industry-standard licensed tools for Computational VLSI & VLSI Design, such as Cadence EDA tools (Research Bundle), Synopsys TCAD tools (Advanced Research Bundle), Synopsys Front-End and Back-end tools, Synopsys Quantum-Wise Atomistic Modeling tools, Mentor Graphics HEP-I and HEP-II tools, Asia Pac Front end etc. A new FD elective lab has been started which gives exposure of Synopsys TCAD and Quantum - wise Atomistic tools to the students.

Apart from these, EEE Department is leveraging the facilities provided by a Central Workshop, Centralized CAD Lab Central Computing Facility, Central Analytical Lab, and a Clean Room.

Sandboxx

Sandboxx is a multi-disciplinary laboratory to develop technologies in the domains of the Internet of Things, Wearable Technologies, Robotics, and Consumer Electronics. The lab is envisioned as a platform that enables the student body or individual students the create technologies that solve real-world problems at the interface of engineering (Mech, EEE, CS, etc) sciences (biology, pharmacy, physics, etc), and design. This lab is for facilitating student ideas and implementation with easy access to equipment and tools such as 3D printers, laser cutters, CNC machines, sensors, microcontrollers, PCB machines, power tools, etc. The lab is managed by the IIC of the campus.

Tinkerers' Lab

The Tinkerers' Lab is a new addition and both Sandboxx and Tinkerer collectively function with I-Cell under IIC. A Tinkerer is someone who enjoys experimenting. At Tinkerers' Lab, we promote and motivate such tinkerers intending to grow the community of innovators. We provide them the platform to convert their creative and innovative ideas into actual engineering products. The Lab is one of its one-of-a-kind advanced technical facilities where innovators get an opportunity to apply the theoretical knowledge learned in classes. The lab is spread over a total floor area of more than 2500 sq. ft and the facility is currently being utilized by 80 student innovators.

In both labs, there is much helpful equipment like Drill Stands, 3D Printers, Thermocol Cutters, Lathes, CNCs, etc, and many power tools like Heat Gun, Drilling Machines, Soldering Rods, etc, along with the new addition of machines like PCB Design Machine, Laser Cutter, newer CNCs, which are student accessible and it satisfies their needs.

Some of the projects that are being innovated at the Tinkerers' Lab include but are not limited

to Hybrid Aerial Vehicles, Sub scaled Rockets, Autonomous Underwater Rover, Team Thriveforce, the combat robotics team of PHoEnix.

Technology Business Incubator (TBI)

The role of Technology Business Incubator (TBI) is to proliferate overall entrepreneurial process, and to encourage and nurture an innovative idea to become a successful venture. This can be supported through creation of conducive environment, facilities, activities and engagements. In the present context, TBI is a desirable link between manifesting the potential of technical innovations and new enterprise creation. Thus, TBI plays a significant role in the regional and national socio-economic development.

To encourage innovative entrepreneurship, and to facilitate translation of inhouse generated ideas and technologies into ventures, BITS Pilani Hyderabad has established a TBI with the support of National Science and Technology Entrepreneurship Development Board (NSTEDB), DST, Govt. of India called BITS Pilani Hyderabad Campus TBI Society (TBIS).

TBIS is aimed at fostering technology / knowledge based entrepreneurial start-ups by:

- Nurturing them at an early-stage and helping them overcome limitation trough low cost services
- Offer value added services *viz*. legal, financial, technical and IPR mentoring, networking and industry connect, and fundraising support.
- Providing business environment for operation with well-equipped infrastructure support
- Support in technology commercialization and nurturing business collaborations
- Strengthening business skills / knowledge of startups and making them more enterprising
- Student pre-incubation at TBI (Technology Business Incubator) provides budding entrepreneurs with essential resources, mentorship, and support to develop innovative ideas into viable business models, fostering early-stage startup growth and enhancing entrepreneurial skills.
- Skill development in the region in terms of Innovation & Entrepreneurship, and creating job opportunities.
- Creating a sustainable ecosystem with multiple stakeholders for enterprise creation.

Sectors of Intervention:

TBIS offers services and incubation support to technology / knowledge-based business ideas across the sectors. However, the major thrust areas of TBIS are as follows:

1. Information & Computer Technology (ICT) for Healthcare
2. Micro-Electro-Mechanical devices
3. Biotechnology & Pharmaceuticals
4. Other ICT, such as social media, edutainment, e-commerce, *etc.*

Current Infrastructural support and facility

Working Area:

TBIS provides working area spanning over 5,000 sq ft comprising of 12 individual offices and co-working space with 14 cubicles with total capacity of housing around 25 startups.

Bio-Tech/Pharma Lab

Dedicated bio / pharma lab of approximately 2000sq ft is available for R&D activities of incubatee startups. This includes common instrumentation facilities, cell culture lab, basic chemistry lab, five dedicated lab spaces, and access to Central Analytical Lab facilities of the host institute.

MEMS clean room (Micro-Electro-Mechanical Systems)

Clean room (Micro and Nano Fabrication Facility)

The BITS Pilani Hyderabad Campus cleanroom facility comprises one of the largest and cleanest university cleanrooms in Hyderabad. The micro and nanofabrication cleanroom consist of 581 sq. ft. of cleanroom, with 80% of the bays operating at ISO 6 (Class

1000) and 20% operating at ISO 5 (Class 100). The class 100 facility has also been converted into a yellow room which is required for photo-lithography process. A perforated raised floor ensures unidirectional airflow and bulkhead-mounted equipment separates operational functions from maintenance functions. A combination of careful control of the airflow path, multiple stages of filtration, careful choice of materials, and non-ionic-steam humidification ensure the control of both particulate and molecular contamination.

Any semiconductor device fabrication process involves multiple steps, like wafer cleaning, thermal silicon oxidation, Lithography, etching and Metallization. Once device fabrication is done, one can do I-V characteristic to know out parameters for the set of input parameters.

The cleanroom facility has PTFE wet station with good laminar flow for wet chemical process. One can execute RCA process, Piranha cleaning, UV Ozone cleaner, Lithography development and removal process. Highly sophisticated laser writer is available for the development of photo-mask and pattern writing. Spin coater to prepare a thin film on top a solid substrate from a liquid chemical. Very high vacuum – metallization and oxidation tools to deposit high quality thin metal and oxide films with good adhesion on the substrate. Fully automatic 6 KW electron beam evaporation tool for both metal and oxide depostion. UV exposure system for curing material. High temperature 2-inch tubular furnace with inert gas provision to enhance the metallization. In addition, BITS Hyderabad cleanroom facility also has characterization tools such as Profilometer, Probe station with Micro positioners and Oxide film thickness measurements.

Department of Humanities and Social Sciences

Psychoacoustics Laboratory: This Psychoacoustics Laboratory is a chamber with walls covered in anechoic material, providing a quieter environment. The lab is used for running the hearing experiments and recording experimental stimuli with minimal noise intervention. Basic recording equipment is available.

HSS Language Lab: It is a laboratory with computers and work-stations. It is used for allowing access to various software based suites, e.g. ATLAS.ti, R, which is a statistics software, and accessing online transcription-based services. FD students access it for practicals and PhD students use it for their research.

Media and Policy Hotspot: The Media and Policy Hotspot hosts physical copies of news dailies, magazines and books to create conversations within the department and with the larger campus community on issues of public interest.

High Performance Computing Cluster – Sharanga

Sharanga is the high-performance computing cluster at the BITS Pilani - Hyderabad Campus. This facility is meant for research and is used in computational sciences related to biology, chemistry, pharmaceutics, data analytics, machine learning, micromagnetics, and fluid and structural dynamics. The sister campuses at Pilani and Dubai also use this facility.

It is a heterogeneous system consisting of 31 compute nodes and 4 accelerator nodes, supporting CPU and GPU parallel computations. It has two primary (login or controller) nodes to access the cluster, compile software, and submit jobs. Furthermore, it has two parallel file system (PFS) nodes for managing the read and write operations of a parallel file system. Regarding storage, it has 264 TiB of Lustre space, excluding the redundancy. Overall, the HPC cluster has 3392 cores for CPU parallel computations. The total computing power Rpeak (a metric used to measure the theoretical computational performance) is around 264 Teraflops.

More details on the cluster can be found at https://sharanga.hpc.bits-hyderabad.ac.in.

Central Animal Facility

The Central Animal Facility (CAF) at BITS PILANI HYDERABAD CAMPUS was established to perform experiments in the discipline of Biomedical and Preclinical research, utilizing rodents and lagomorphs as experimental animals. At the core, every major advancement in the creation of new pharmaceutical drugs or vaccines has been a

product of animal experimentation. CAF at BITSPILANI HYDERBAD CAMPUS is established in the year 2016 and is registered with the Committee for Control and Supervision of Experiments on Animals (CCSEA), Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, New Delhi holding a Registration No: - 1912/PO/ReBi/S/16/CPCSEA. An addition of approximately 1550 sq. ft. was recently made to this establishment for the purpose of in-house breeding and has received the approval.

OBJECTIVES AND VISION OF CAF:

The major objective for animal research facility is to support research programs that promote the health and wellbeing of people and animals by facilitating high-quality, scientifically sound research on animals and educate students/ researchers through certificate courses, internships and other programs. The experiments conducted on animals at this facility are through the approval of Institutional Animal Ethics committee (IAEC). Russell and Burch's concept of application of 3R Reduction, Refinement and Replacement in all experiments on animals are monitored carefully. The CAF engages in the following pursuits: conducting in-vivo research at the PhD level and overseeing collaborative scientific projects, ensuring the approval and implementation of ethical animal welfare practices, and providing instruction to faculty and students in the field of applied animal studies. The CAF is utilized for the performance of advanced research in the areas of pharmacokinetics, drug bioavailability trials, and pharmacological assessments of various chemical compounds like analgesic, anti-inflammatory drugs, anti-pyretic and anti-arthritic drugs, anti-cancer drugs, hepato-protective agents, anti-diabetic drugs, anti-ulcer drugs, xenograft nude mice model, Ocular delivery agents, neuro-protective agents.

DESIGN AND ROOMS AT CAF:

CAF has an animal holding capacity of 1000 mice, 400 rats and 50 rabbits. The design of the building incorporates a "Two-Way Corridor System (Distinctive for Clean and Dirty corridor)" to minimize the risk of cross-contamination. The conduct of all laboratory animal research activities at CAF adheres to the guidelines set forth by CCSEA, New Delhi. Provision of separate rooms for housing of each species with controlled environment conditions such as temperature (23+2°C), relative humidity (30-70%), dark and light cycles (12:12 h) are properly maintained. Entire facility is supported with auto controlled Heating, Ventilation, and Air Conditioning (HVAC) system including dedicated chilling plant, air handling unit and control panel. The working of HVAC system can be monitored through BMS software.

The state-of-the-art CAF has all the important requisites for a modern laboratory animal facility including animal holding rooms for different species/strains, quarantine rooms, experimentation rooms, procedure room, surgery room, autoclave room, storage room, washing area, waste collection room, etc. The facility also has exclusive nude mice rooms provided with Individually Ventilated Caging (IVC) systems and Bio-Containment Unit for housing immune-deficient mice. An isolated experimental room, maintained under negative pressure, is dedicated solely to investigations involving non-pathogenic microbial strains in animals. An In-Vivo Imaging System(IVIS) is housed in a specially assigned room to facilitate preclinical research. Dedicated neuro behavioral rooms with sophisticated Harvard apparatus includes ACTi meter, Morris water Maze, Elevated Plus Maze, Rota Rod, Stereotaxic, Active and Passive avoidance, Startle Freeze, Place Preference, Open Field Apparatus.

A high-capacity steam sterilizer (autoclave) has been made available for the sterilization process of all materials prior to their introduction into the animal rooms. For the purpose of maintaining a secure biosafety environment, air showers, UV sterilizers, and air curtains have been installed to hinder the entry of pathogens into the facility. Equipped with fire safety apparatuses such as smoke detectors, fire alarms, and emergency exits.

Only authorized individuals may gain entry to the facility through the use of access cards, thereby reducing the potential for infection among the animal colonies. The facility is under electronic surveillance (CCTV system). The CAF staff receive timely training to optimize the process of cleaning, washing, sterilization of

cages, feed, and bedding items. Newly joined PhD candidates undergo a week-long training program to acquire experience in managing animal research methods.

Campus Placements

The Placement Unit at the Hyderabad campus of BITS Pilani has consistently played a significant role in contributing to the institute's growth by assisting students in meeting their career aspirations and honing necessary skill sets. In addition to noteworthy placement statistics demonstrating growth on key metrics, the Placement Unit has effectively guided students towards their areas of interest and career paths. The specific focus of the Placement Unit encompasses building connections with recruiters, expanding outreach, analysing the students' skill-gap analysis, and implementing a career awareness through meticulously designed training programs aligned with industry expectations. The unit has also redesigned the overall industry engagement model by positioning the summer internship programme along with full time placements & existing Practice school model. This approach ensures a seamless integration of industry requirements in line with students' interest. During the previous academic year (2022-23), approximately 320 flagship and medium-sized companies visited the Hyderabad campus, resulting in an overall placement percentage of 87.39% and a median salary of 18 lakhs.

LIST OF RECRUITERS:

S.No	Company (AY 2022-23)
1	Acceldata Technology
2	Accelerize 360
3	Achala IT Solutions
4	Aditya Birla Capital
5	Aditya Birla Science & Technology (ABST)
6	Adobe
7	Advarisk
8	Aerchain
9	AG&E Structural
10	Airamatrix
11	Aizant
12	Akasa Air
13	Akash Byju's
14	AlphaGrep
15	Amagi Media Labs
16	Amara Raja Group
17	Amazon
18	AMD
19	Amdocs
20	American Express
21	Amphenol Sensors
22	Anand Group
23	Andromeda Security
24	Apollo Tyres
25	Apple
26	Applied Materials
27	Aragen Life Science
28	Arcadis
29	Arcesium
30	Arha Media
31	Arista Networks
32	Arup
33	Ascendo.ai
34	Aspect Ratio
35	Ather Energy
36	Atlassian
37	Avaamo
38	Axtria
39	Axxela
40	Barclays
41	Biocon Biologics
42	Biz2credit
43	Blend360
44	Bloomreach Technologies
45	BlueYonder
46	BNY Mellon
47	Bosch Global Software Division
48	Capco
49	Cargill
50	Cashe (Bhanix Finance & Investment)
51	Cashfree
52	Caspex
53	C-DOT
54	Ceremorphic
55	Checkpoint
56	Chubb Business Services India LLP
57	Cisco
58	CityMall
59	Clevertap
60	CME Group

61	Cohorrent (Finisar Group)
62	Coinswitch Kuber
63	Comcast
64	Commerce IQ
65	CondeNast
66	Confluent
67	Coupa Software
68	Couture.ai
69	Credit Suisse
70	CRISIL
71	Cropin
72	Cvent
73	Cybertech Systems & Software
74	Cyient
75	Darwinbox
76	Datalink Software
77	Datazymes
78	DE Shaw India
79	Deel Eor Pvt Limited
80	Deepak Fertilizers & Petrochemicals Corp
81	Dell Technologies
82	Deloitte USI
83	Deutsche Bank (DBOI)
84	Development Consultants Pvt Limited (DCPL)
85	DevRev
86	Disney+Hotstar
87	Dolat Capital
88	Dolcera
89	Dover Group
90	Dunzo
91	Electronics Arts
92	Elucidata
93	Endowus
94	Epimoney Private Limited
95	Epsilon
96	EquBot AI
97	Ernst &Young (EY)
98	Es Magico
99	Ethiquant Analytics
100	Exeevo
101	EXL Service
102	Exo-Field
103	Exxon Mobil
104	F5 Networks
105	Ferring Pharmaceuticals
106	FIITJEE

107	Fiorano
108	First Meridian
109	Fischer Jordan
110	Flipkart
111	Force Structural Engineers
112	Fortanix
113	Forvia (Faurecia)
114	Freyr Solutions
115	Futures First Info Services (PVT) Limited
116	GALE
117	GE Healthcare
118	GE India Technology Centre
119	GeoIQ (Quantduo Technologies)
120	Goldman Sachs
121	Goodera
122	Google
123	Greenko Group
124	Groupon
125	Growth Jockey
126	Groww
127	Happay
128	Haptik
129	Hashstack
130	HCL
131	Head Digital Works (Off-Campus)
132	HealthEdge
133	Here Technologies
134	Hevo Data
135	Hewlett Packard Enterprise
136	Hourglass Research
137	HSBC
138	IBM
139	ICICI Bank
140	ICICI Lombard
141	ICICI Securities
142	IIFL Home Loan
143	Impact Analytics
144	Incedo
145	Indus Insights
146	Infineon
147	Infoedge
148	Infor
149	Informatica
150	Infra Market
151	Intuit
152	Itron

153	Jacobs
154	Jio Platforms
155	JK Fenner
156	Jocata Financial
157	Jodas Expoim
158	Jodo
159	JP Morgan Chase & Co
160	Just Dail
161	Kanerika Software
162	Kantar
163	Kinara.AI
164	KMK Consulting
165	Kore.ai
166	KPIT
167	Kuvera
168	Kworks (Gameskraft)
169	L&T (Larsen & Toubro)
170	Landmark Group
171	Lemnisk
172	Lime (Lectrix)
173	LookOut
174	Loyalty Juggernaut
175	LTI Mindtree
176	Lumenci
177	Mad Machines
178	Marudhar Rocks International Pvt.Ltd
179	Marvell
180	Mashreq Bank
181	Mathworks
182	Max Life Insurance
183	Maxlinear
184	MBRDI
185	McKinsey & Co- CCN
186	Media.net
187	Mediatek
188	Medibuddy
189	Merilytics
190	Merkle Science
191	Mewt
192	Microchip
193	Micron
194	Microsoft
195	Mihup
196	Miko.ai
197	Minfy
198	Morgan Stanley (MSCI)

199	Morning Star
200	Nation with Namo
201	Navi
202	NCR
203	Newton School
204	Newzera
205	Nomura
206	Nutanix
207	Nuvama
208	Nvidia Corporation
209	NXP Semiconductors
210	Nykaa
211	O9 Solutions
212	ODE Holdings
213	Omnicloud Software
214	Online Sales.ai
215	Orbicular Pharma
216	Panel IQ
217	Park Plus
218	PayPal
219	PayU
220	Pfizer
221	Pienza (Inflection.io)
222	Piramal
223	Pixelapps
224	Playment Inc
225	Porter
226	Powerplay
227	Pragmatic Play
228	ProteanTecs
229	Providence
230	Prudential
231	Publicis Sapient
232	PwC
233	Qualcomm
234	Quality Council of India
235	QUANTRA (POKARNA)
236	Quantrium
237	Quantum Phinance Consulting
238	Qure.ai
239	Ramboll
240	Razorpay
241	Reliance Industries Limited
242	Renesas Electronics
243	Retain IQ
244	Rippling

245	Rivos
246	Rocket Learning
247	RSM US LLP
248	Rupifi
249	Salesforce
250	Samsung R&D
251	Samsung(SSIR)
252	Saras Analytics
253	Schrodinger
254	Secureworks
255	Sedemac
256	SenseHQ Talent Labs
257	Serum Institute of India (SII)
258	Servicenow
259	Seygnux Solutions (Sheru Tezz)
260	Sharedeum
261	Shield
262	Showtime Consulting
263	Signzy
264	Silicon labs
265	Sodio Technologies
266	Soma Srinivas Reddy Engineers & Contractors
267	Sona Comstar
268	Spiralyze LLC
269	SS Supply chain Solutions
270	Standard Chartered Bank
271	Strand life science
272	Strategic Research Insights
273	Sugarbox
274	Suki.ai
275	Sundial Systems
276	Swimlane
277	Synchrony
278	Synopsys
279	Tally Solutions
280	Tata Consulting Engineers (TCE)
281	TATA Technologies
282	Taxilla (Adaequare)
283	Telus International
284	Tensorrent
285	Teradata
286	Tesco
287	Texas Instruments
288	The Modern Data Company
289	Thorogood Associates
290	Thronton Tomasetti
291	Timetooth Technologies
292	Titan Industries
293	Trueminds
294	Twilio
295	Uber
296	UBS
297	Udaan
298	Unitedlex
299	UrbanPiper Technologies
300	vConstruct
301	Viacom 18
302	Visa
303	W3Global
304	Wabtec
305	Walmart Global Tech
306	Wavelabs
307	WCB Robotics
308	Western Digital
309	Whatfix
310	William O Neil
311	Yatra.Com
312	Youth 4 Jobs
313	Yugabyte
314	Zee Entertainment Enterprises
315	Zetwerk
316	ZF Commercial Vehicle Control Systems India Limited
317	Zlti
318	Zomato
319	ZS Associates
320	Zydus life

Library facility

The BITS Pilani: Hyderabad Campus Library is a gateway to knowledge resources. The Library is one of the central support services of the BITS Pilani - Hyderabad Campus. It provides information services and access to textual and bibliographic digital and print resources to the BITS Community—Institute's state-of-the-art Library with two floors spread over 45000sq.ft. The Library is fully air-conditioned with a WI-FI facility as well. Open seven days a week till 11 pm and during the tests and examinations till 1 am (mid-night). It has over 48923+ books and 200+ DVD/CD-ROMs, subscribes to over 33 print magazines.

The library also subscribes to 14800+ e-journals from American Chemical Society, American Society for Civil Engineers, American Society of Mechanical Engineers, Association of Computing Machinery, Taylor & Francis, Cambridge University Press, JSTOR, SciFinder, SCOPUS, Royal Society of Chemistry, IOP, APS, Nature, IEEE, Science Direct, Springer Nature, Wiley online, JOVE, etc. The Library has over 7105+ e-books on engineering, computer science, life sciences and Bio-Medical Engineering. In the Digital Library, the previous year's question papers are available.

The library operations are fully computerized, and students can access the Online Public Access Catalogue (OPAC) from anywhere. The introduction of RFID technology in 2016 has enabled faculty and students to borrow and return materials whenever the library is open. This self-check-in & check out facility has made the circulation process very simple. No time restrictions for book issues and returns. Self-service facilities also allow for a much faster and more efficient borrowing and returning of books. Discussion room is available in the Library for the faculty and students to meet and discuss their projects and other academic-related work. The Library is equipped with the most modern furniture. The Library has been designed considering the future growth of the library collection and users' needs in the coming years.

Students Activity Centre (SAC)

Physical Education and Sports play a pivotal role in shaping students personality and maintaining good health. In this Kinesthetic learning model, students perform hands-on physical activities which values movement and creativity over technological skills, is most commonly used to augment traditional type of instruction. BITS, Pilani, Hyderabad campus have specially developed a sports and games environment that matches international standards and give a truly global experience to all our students.

There are multiple sport facilities to keep our students engaged and physically fit.

BITS, Pilani Hyderabad campus offers facilities for various Indoor Games & Sports like Chess, Carom, Table Tennis, Cue Sports, Badminton and Squash. In addition to indoor facilities, modern facilities for outdoor sports like Tennis, Basketball, Volleyball and Throw ball are available in the premises. Two indoor Badminton wooden flooring courts with Yonex mat, two Tennis and Basketball courts with synthetic surface have been provided with flood lights. The cricket ground having two pitches with grass playfields along with a spectator gallery is located inside the institute premises. Football and hockey ground along with kabaddi courts are located centrally inside the institute. A standard 400 meters' clay track along with football field and swimming pool (short course) available in the Camus. In addition to the common sports facilities, separate play areas for Volley ball, Table tennis, Chess and Carom are provided in each hostel.

Gym: In order to ensure a sound mind in sound body, students are given special attention on health and fitness. A modern gym, with all the latest equipment has been set up in the Student Activity Center.

Inter College Tournaments: BITS, Hyderabad campus contingent participated in IIT Kanpur Sports fest UDGOSH 2022 at Kanpur. Hyderabad campus organized Inter College Tournament ARENA 2023 at our campus and universities and colleges from various cities from India.

Student Clubs

A separate hall with wooden flooring is being provided for Dance practice. The Students Union and various clubs like Music (Indian and Western), VFX, Photography, Dramatics, Shades (Fine Arts) and English Language Activities Society (ELAS) are provided with rooms inside SAC to pursue their activities. Many more clubs share space in SAC for their activities.

A variety of musical instruments like synthesizers, drums, guitars, etc., have been made available for students of the Music Club to encourage them to practice and perform.