CONTENT
  • PSG & Sons' Charities Trust
  • About PSG College Of Technology
  • Programmes Offered
  • Department Of Automobile Engineering
  • Department Of Bio Technology
  • Department Of Biomedical Engineering
  • Department Of Civil Engineering
  • Department Of Computer Science And Engineering
  • Department Of Electrical And Electronics Engineering
  • Department Of Electronics And Communication Engineering
  • Department Of Fashion Technology
  • Department Of Information Technology
  • Department Of Instrumentation And Control Systems Engineering
  • Department Of Mechanical Engineering
  • Department Of Metallurgical Engineering
  • Department Of Production Engineering
  • Department Of Robotics And Automation Engineering
  • Department Of Textile Technology
  • Department Of Applied Science
  • Department Of Computer Applications
  • Department Of Applied Mathematics And Computational Sciences
  • PSG Tech In News This Year
  • Collaborations
  • Research
  • International Exposure
  • Few Achievements Of Our Alumini During 2016-17
  • Extra Curricular Activities
  • Entrepreneurship Activities
  • Placement Procedure
  • Our Patrons
Shri P.S. Govindaswamy Naidu, the Founder Trustee, a Legendary Man of Vision, Faith and Integrity gave the initials “PSG” its immortal glory. The 82 year old legacy of the PSG Institutions founded by Shri P.S. Govindaswamy Naidu has been handed down through several generations. Each time the baton was handed down to the successor of the Trust, the golden words, “Let there be charity, so others can share my family's prosperity” are embedded firmly and hence the Founder’s vision has only grown richer and more profound. Education, one of the most treasured clauses in the Trust deed, attained sharper focus each growing year while each succeeding Trust head, carried the dreams of the Founders on their shoulders towards fulfillment of the Vision and the betterment of the future. At present there are 25 institutions under the Trust catering to the development of 25,000 individuals.

PSG & SONS’ CHARITIES TRUST

PSG College of Technology aspires to be recognised as one of the leaders in engineering education, research and application of knowledge to benefit society.

OUR COLLEGE VISION

PSG College of Technology aspires to be recognised as one of the leaders in engineering education, research and application of knowledge to benefit society.

OUR COLLEGE MISSION

Provide world-class Engineering Education, Foster Research and Development. Evolve innovative applications of Technology, Encourage Entrepreneurship. Ultimately mould young men and women capable of assuming leadership of the society for the betterment of the Country.
PSG College of Technology was established in the year 1951 by the PSG & Sons' Charities Trust (1926), one of the oldest charitable organizations in the country, dedicated entirely to the growth and development of education, training, industry and social upliftment. PSG College of Technology, fondly known as PSG Tech is an educational landmark of Coimbatore and has been ranked 33 among Engineering Colleges in the Country under the National Institutional Ranking Framework (NIRF), Govt. of India. PSG College of Technology an AICTE approved institution is affiliated to Anna University and ISO 9001 certified. Most of its programmes have been accredited by National Board of Accreditation (NBA). PSG Tech is an Autonomous institution since 1978 and has the authority to update its own programmes and curriculum, to devise and conduct examinations and to evaluate students' performance based on a system of continuous assessment.

One unique feature at PSG College of Technology is the close collaboration of educational institution and industry, resulting in the cross fertilization of theory with practice. The PSG Industrial Institute located in the same campus, is a pioneer in the manufacture of several engineering products, like process and agricultural pumps, industrial motors, high quality specialty castings; and enables students to study the actual production processes and gives them an opportunity to observe the working of industry. PSG Tech was ranked as the Institution with the best industry linkage by AICTE and CII consistently for the past three years.

PSG Tech has been continuously drawing the best of expertise in science, technology and management in order to train students effectively in various domains and to instill in them a spirit of entrepreneurship and innovation. The programmes of the college are recognized all over India and abroad. The student strength of PSG Tech is about 8518 with 15 engineering and technology departments besides the computer applications, management sciences, basic sciences and humanities departments. More than 505 research scholars are pursuing research programmes leading to Ph.D / M.S. / M.Tech degrees and the college is recognized QIP centre for Postgraduate and Ph.D programmes.

The college maintains close interaction with several R&D Institutions and institutions of higher learning in India and abroad, through institutional network programmes and collaborative research programmes. Several advanced centres are also set up with financial support from the Ministry of Human Resources Development, Ministry of Textiles, Ministry of Steel, Ministry of Heavy Industries, Ministry of Science and Technology and other agencies. PSG Tech is extremely proud of its alumni, a considerable number of them being entrepreneurs or senior executives in industries both within India and abroad; and a few of them having established their own educational institutions. The growth and development of the college owes much to the untiring efforts of Dr. G.R. Damodaran, Founder Principal of PSG College of Technology. Presently Dr. R. Rudramoorthy is the Principal of the Institution.

**PROGRAMMES OFFERED**

**Under Graduate Programmes**

**Bachelor of Engineering / Technology Programmes**
- Automobile Engineering
- Bio Technology
- Civil Engineering
- Computer Science and Engineering
- Electrical and Electronics Engineering
- Electronics & Communication Engineering
- Information Technology
- Mechanical Engineering
- Metallurgical Engineering
- Production Engineering
- Mechanical Engineering (Sandwich)
- Electrical and Electronics Engineering (Sandwich)
- Production Engineering (Sandwich)
- Robotics and Automation Engineering
- Textile Technology
- Textile Technology (Part Time)
- Bio Medical Engineering
- Fashion Technology
- Instrumentation and Control Engineering

**Bachelor of Science (Applied Science)**
- Applied Science
- Computer System and Design

**Post Graduate Programmes**

**Master of Engineering / Technology Programmes**
- Applied Electronics (Full Time)
- Applied Electronics (Part Time)
- Automotive Engineering
- Communication System
- Computer Science & Engineering
- Computer Integrated Manufacturing
- Control Systems
- Electrical Machines (Part Time)
- Engineering Design
- Embedded & Real Time System
- Energy Engineering
- Industrial Engineering (Full Time)

**Research Programmes**

**MPhil (Full Time & Part Time)**
- MCA
- M.Tech
- MCA
- M.Tech
- MCA
- M.Tech
- MCA
- M.Tech

**MSc & PhD (Full Time & Part Time)**
- OFFERED IN ALL DEPARTMENTS

**Post Graduate Programmes in Science and Applications**
- MCA (3 Years)
- MSc Applied Mathematics
- MSc Theoretical Computer Science [5 Years integrated]
- MSc Software Systems [5 Years integrated]
- MSc Data Science [5 Years integrated]
- MSc Fashion Design & Merchandising [5 Years integrated]

**Bachelor of Science (Applied Science)**
- MBA
- MBA (PART TIME)
- PGDM
The department was established in 1999 and offers NBA accredited undergraduate and post graduate programs in the field of automobile engineering apart from doctoral programs. These programs, designed and revised regularly with the inputs from leading industries, universities/ academic experts and other stake holders; and supported by very experienced faculty and internationally recognized faculties, lay the groundwork for innovative research, career opportunities in various avenues and entrepreneurship. The department is equipped with state of art laboratories and Centre of excellence which provide hands on education in testing and research of automobile systems. Practical exposure through participation in competitions such as SAE & PACE, student exchange programs with foreign universities and campus involvement like various association activities, provide a holistic educational environment for the students. Exposure to the state of art technologies, guest lectures from experts, participation in industry funded laboratories, consultancy projects and internships in industries are all part of the program and shape the students in to innovative and core engineering professional.

Programmes offered:
- B.E. - Automobile Engineering
- M.E. - Automotive Engineering

Facilities Available
Automobile System Simulation Lab
- Modeling Softwares - ProE Wildfire 5.0, Solidworks Premium 2009, SolidEdge, CATIA FEA Softwares - Ansys 12.1, AdaquaV6.9.1, Dynaform 5.7.1, VPG 3.4, Ls-Dyna971, Star CCM+/CD, Systems Modeling Software – AMESim V7.0, Matlab 7 and Data Acquisition Software – Lab-View 8.0

Vehicle Performance Lab
- Automatic gear box, Montana car chassis, Air brake and Hydraulic Brake systems, Front suspension system, Mobile automotive electrical system, Kinetic Honda (CVT), Leyland gear box, Maruti Transaxle gear box, Transfer case gear box (jeep), Steering gear box (TATA & Leyland), Vanjag hydraulic jib crane, Santro Hyundai car (Frame assembly), Maruti -800 car, Headlamp aligner, Welding machine (8kVA), Drilling machine size (3mm- 12mm) and Growler tester.

Engine Troubleshooting Lab
- Eddy current Dynamometer, Five gas analyzer & Smoke meter, Maruti Engine assembly, V- Type engine block, Hero Honda 100 cc Bike engine Cut section, Six cylinders TATA & Leyland engine assembly and Cielo engine assembly.

Hybrid and Electrical Vehicles Lab
- Prototype Vehicles Developed
  - Plug-in hybrid electric four-wheeler prototype
  - Plug-in hybrid electric three-wheeler auto rickshaw with series hybrid powertrain
  - Plug-in hybrid electric three-wheeler auto rickshaw with wheel hub motor in the rear
  - Plug-in hybrid electric two-wheeler with wheel hub motor fitted in the front wheel.

CAD and CAE Laboratory
- Autodesk Alias Automotive, Autodesk SketchBook Pro, Autodesk 3ds Max Design, Autodesk Showcase, Autodesk Maya, Autodesk Mudbox, Autodesk AutoCAD, Autodesk AutoCAD Inventor Professional and Autodesk Vault Professional

Laboratories for UG and PG programmes
- CAD & CAE Laboratory
- Automotive Research Laboratory
- Vehicle Servicing Laboratory
- PSG Motorsports Laboratory
- Electric Hybrid Vehicle Laboratory
- Engine Trouble Shooting Laboratory
- Vehicle Performance Laboratory
- 2 & 3 Wheeler Laboratory
- Automotive Steering System Laboratory
- Automotive Simulation Laboratory
- Automotive Electronics Laboratory
- Automotive Simulation & Manufacturing Laboratory
- Pace Laboratory

Ongoing Projects
- Centre of Excellence on Industrial & Home Textiles (Ministry of Textiles, Government of India)
- Proton Exchange Membrane Fuel Cell (PEMFC) with Porous Flow Channels (DST)
- Non-Platinum Based Catalysts for Acid and Alkaline Fuel Cells Indo-Mexican Scientific Technological Co-operation Programme
- Protein Patternning on Reactive Substrates Using Inkjet Printing for Diagnostic Application (UGC)
- Vehicle Powertrain Testing.
- Automotive Electronics.
- Automotive Embedded systems

PSG Motorsports Laboratory
The department of Biotechnology at PSG College of Technology was started in the year 2000 and it began its efforts by offering the B.Tech degree programme in Biotechnology. The activities of the department further expanded to offer M.Tech from 2006 and Ph.D programmes as well. An efficient team of highly qualified, trained and dedicated professionals is available to provide quality training and excellent research opportunities to the students enrolled. The research environment in the department is excellent due to its well equipped laboratories. The college has been able to produce well trained engineering graduates in biotechnology who are uniquely talented in analytical sciences.

**Laboratories for UG and PG programmes**

**Research Laboratories**
- Plant Tissue Culture Laboratory
- Animal Tissue Culture Laboratory
- Genetic Engineering Laboratory
- Analytical Instrumentation Facility

**Academic Laboratories**
- Microbiology Laboratory, Biochemistry Laboratory, Immunology Laboratory, Analytical Instrumentation Laboratory, Chemical Engineering laboratory, Bio process Engineering Laboratory, Downstream Processing Laboratory, Separation Technology Laboratory
- Bioinformatics Laboratory, Genetic Engineering Laboratory.
**Other Facilities**
Animal House (at PSG Medical College)
Zebrafish House (under development)
Shade House.

**Major Instruments**
Biosafety Cabinet, Bio reactors 14L/5 L, BOD incubator, Brook Field Viscometer DVI + Chemidocumentation System COD Analyser DO meter, ELISA reader, Fluorescent Microscopy, Gas Chromatography system, Gel Documentation System, Gradient PCR Growth Chamber, High Performance Liquid Chromatography (HPLC), High speed pump for external circulator, High speed refrigerated Chamber, High performance Liquid Microscopy, Gas Chromatography system, Gel Documentation System, Gradient PCR Growth Chamber, High Performance Liquid Chromatography (HPLC), High speed pump for external circulator, High speed refrigerated centrifuge, Liquid Chromatography System Lyophilizer, Multimode Detector (TRIAD) Multi parameter analyzer (Portable), Phase Contrast/Dark Field Microscopes.

**B.Tech - Biotechnology**

**Mathematics**
- Calculus and applications
- Complex Variables and Transforms
- Linear Algebra and Numerical analysis

**Science and Humanities**
- Bio Statistics
- Mathematical modeling in biotechnology

**Core courses**
Applied Physics, Analytical Chemistry, Environmental Sciences, Economics for Engineers.

**Elective courses**
- C programming
- C++ and data structures
- Bioinformatics
- Basics of Electrical and Electronics Engineering
- Biomolecules
- Biochemical Metabolism
- Cell and Tissue Biology
- General Microbiology
- Introductory Chemical Engineering

**Elective Courses**
- Immunotechnology
- Metabolic Engineering
- Cellular and Molecular Mechanism of Neurodegenerative Disorders
- Membrane Separation
- Microfluidics
- Bioreactor Designs
- Biomaterials in Tissue Engineering
- Biofuels
- Industrial Waste Management
- Stress Tolerance in Plants
- Pharmacogenomics
- Advanced Topics in Plant Molecular Biology
- Techniques in Epidemiological Data Analyses
- Introduction to Pharmaceutical Sciences
- Techniques in Molecular Subtyping of Pathogens
- Chemical Engineering Design
- Quality Assurance, Industrial and Biosafety
- Metagenomics and Epigenomics
- Molecular and Cellular Biomechanics
- System Biology - Theory and Applications

**Research Projects in Progress**
- An Integrated System for treatment of textile industry wastewater, Royal Academy of Engineering, UK (Newton Bhattacharya Fund)
- Rural Women Technology Park for Coimbatore District, Tamilnadu: sponsored by DST, GoI
- Ultrasound assisted biomass derived heterogeneous catalytic system for biodiesel production from non-edible oils; sponsored by SERB, GoI.
- Study on RAGE amyloid interactions with relevance to AD pathology and influence of G82S RAGE polymorphism on the above interaction; sponsored by DST, GoI
- Studies on Omega3 desaturase genes in Sesamum indicum Linn to improve oil quality; sponsored by DST, GoI
- Pilot scale demonstration of a novel water defluoridation unit for rural areas; sponsored by DST, GoI
- Vetiver based Treatment System for Textile Industry Wastewater sponsored by DBT, GoI
- Development of porous scaffold for bone implant; sponsored by DST, GoI
- B I O M E M S device for separation of bioparticles; sponsored by DBT, GoI
- Unit Operations
- Enzyme Engineering and Technology
- Genetic Engineering
- Heat Transfer
- Thermodynamics of Biochemical Systems
- Immunology
- Bioprocess Engineering
- Bioinformatics
- Chemical Reaction Engineering
- Bioethics, IPR and Biosafety
- Genomics and Proteomics
- Down Stream Engineering
- Entrepreneurship and Biobusiness

**M.Tech - Biotechnology**

**Curriculum**

**Core Courses**
- Biostatistics
- Process Engineering Principles
- Genetic Engineering and Recombinant Products
- Tools and Algorithms in Bioinformatics
- Protein Chemistry and Engineering
- Recombinant DNA Laboratory
- Instrumental Methods of Analysis
- Bioprocess Engineering
- Separation Technology
- Technologies and Strategies in OMICs Research
- Tissue Engineering
The mission of the department established in the year 2006 is to provide world class graduate engineering education in Biomedical Engineering, foster research and development in biology and medicine to improve the quality and effectiveness of health care, encourage Entrepreneurship, mould young men and women to innovate new technologies for diagnostic or therapeutic applications. The precise curriculum augmented with industrial training prepares students to handle the challenges in the healthcare industry pioneering biomedical research. The facilities available at PSG College of Technology, PSG Institute of Medical Sciences & Research and PSG Institute of Advanced Studies are used for implementing the curriculum.

Laboratory Facilities
Vision and Machine Learning Laboratory
- Soliton M P CMOS Area Scan Camera
- Line Scan Camera
- MOBIR Thermal Camera
- IP based Surveillance Camera
- NI LABVIEW

Biomedical Signal Processing & Assistive Technology Laboratory
- Emotiv BCI technology
- Epoch head set
- EM G Machine
- EEG Machine
- Pratt-Open source software

Computational Biomechanics Laboratory
- Three axis accelerometer
- W indows Kinect
- 3D printer
- SLA printer
- Cura software
- Solidworks software
- Sketchup software
- Kinovea software

Embedded Systems Laboratory
- CCS IDE
- Arduino
- Keil IDE
- ARM 7
- Rudra PIC Development Board
- Sensor Interface Card
- Raspberry PI
- Beagle Bone
- Zigbee Module
- ASLK PRO Analog system design kit
- MSP 430 Launch Pads

Electronics and Instrumentation Laboratory
- Strain Measurement Trainer
- Measurement Modules: Pressure, Level Control, Temperature, Displacement, Angular
- Compact Rio Module with Accessories
- Digital Phosphorous Oscilloscope
- Image Acquisition and Machine Vision System
- Voice Recognition Kit

Medical Informatics Laboratory
- Cc3200 IOT kits
- PSoC Microcontroller
- COM SOL Software
- Labview
- Code Composer Studio
- Solid Works

Research Projects in Progress
- Design and Development of low-cost Wireless Polysomnograph; sponsored by DST.
- Design and Development of low-cost Non-Contact Palm Biometric System for health care establishments; sponsored by AICTE.
- Design and development of low-cost Intelligent Wheelchair for severely disabled/old people; sponsored by DST.
- Development of Biomagnetic Iron oxide-Hydroxyapatite Nanoparticles for Hyperthermia and Biomedical applications, sponsored by DST.
- Design and Development of a novel multi-parameter pain monitoring system for children; sponsored by DST.
- Screening Tool for Sleep Related Breathing Disorder through assessment of Heart Rate Variability.
Programmes offered:
B.E. - Civil Engineering
M.E. - Infrastructure Engineering
M.E. - Structural Engineering

Laboratory Facilities for UG and PG programmes

Department of Civil Engineering

Elective Courses
- Hospital Systems Management
- Healthcare and Information Systems
- Ultrasonic and Laser Applications
- Telemedicine
- ICU and Operation Theatre Equipments
- Clinical Engineering
- AI and Expert Systems
- Computer Networks
- Virtual Instrumentation
- Control System
- Biofeedback
- Rehabilitation Engineering
- Artificial Organs
- Communication Systems
- Database Management System
- Cell Biology and Tissue Engineering
- Modeling of Physiological Systems
- Advanced Biochemistry
- Data Compression Techniques
- Research Methodology and Bioethics
- Sensors in Medical Applications

The Department of Civil Engineering is one of the oldest departments of PSG College Technology. Established in the year 1953, the mission of the department is to strive and produce wholesome Civil Engineers who can tackle the multiple responsibilities of analysis, design and construction of traditional and modern structures. The department offers undergraduate, postgraduate and doctoral level programmes. The infrastructure facilities of the department are the best which add on to the development of students.

The curriculum has been designed to provide a solid foundation in all fields of Civil Engineering. The highly qualified and experienced faculty in teaching as well as in consultancy and design has been instrumental in bringing the institute to the forefront of academic and consultancy activities. Besides Civil Engineering faculty, the management courses in the programme are taught by the faculty of Management studies of the college.
Concrete Laboratory

Soil Mechanics Laboratory

Survey Laboratory
- Advanced Total Stations, Garmin GPS, Standard Vernier Theodolites, Stanley Theodolites, Automatic Level, Dumpy Level, Digital Planimeter.

Civil Engineering Computer Lab
- STAAD PRO, SAP2000, ETABS, AUTO CAD, ANSYS, MATLAB, ABACUS.

Remote Sensing and GIS Laboratory
- Erdas Imagine, Arc View, Arc View Spatial Analyst, Arc View Network Analyst, Auto Desk Map 3D 2005, Micro station, Geographics, GRAM M ++, LPS, Geomedia Professional with GRID, ArcPAD, Data automation kit, R2V.

Science and Humanities
- Applied Physics, Applied Chemistry, Economics for Engineers

Core courses

Elective Courses

ME - Infrastructure Engineering Curriculum
Mathematics

Core Courses

Research Projects and Consultancy Work in Progress
- Determination of organic strength (BOD, COD etc.) of industrial and domestic waste water, Characteristic study on industrial waste water, Ground water quality study, Ground water recharge methods, ground water yield test on wells, Physical and chemical analysis of drinking water, Test on water for finding its suitability for construction purpose, Air pollution study using high volume sampler in an industrial environment and ambient air, Electrochemical treatment of textile dyeing wastewater, Pollution study on water resources water storage tanks in the, Coimbatore City, Palani town and Noyyal River, Evaluation and development of new or improved equipment and procedures for assessing the properties and performance of materials and composites, including materials selection, Mix Design, casting and testing of concrete test specimens, Investigation and evaluation of the properties and performance of, building materials based on Indian Standard Codes, Investigation by conducting specialized tests, field visits and quality control tests on building materials to assist State departments, private organizations and other departments and divisions within the State Administration, Rocks and Mineral Identification Ground Water Investigation Moh's scale of hardness testing Suitability test on rocks for commercial granite, Determination of bearing capacity of soil using Standard Penetration Test (SPT), Suitability of soil for making bricks and suitability of sand for filter medium.
The Department with its dedicated body of well qualified faculty, technical staff and students is committed to be an international, multi-disciplinary centre of excellence in Computer Science and Engineering through education and research. It has partnerships with leading academic institutions, Government and industrial sectors. It has acquired generous grants from global organizations like the World Bank, Swiss Development Co-operation for Manpower Development, Department of Electronics, VSSC, AICTE and Ministry of Information Technology. The department offers a UG programme and two PG programmes.

**Elective Courses**
- Environmental Impact Assessment
- Bridge Engineering
- Foundation Structures
- Advanced Concrete Technology
- Prestressed Concrete Structures
- Infrastructure Management
- Optimization Techniques
- Maintenance and Rehabilitation of Structures
- Modern Materials for Construction
- Experimental Techniques and Instrumentation
- Financial Management and Accounting
- Prefabri cated Structures
- City Planning and Urban Design
- Organization Behavior
- Modern Surveying
- Geosynthetics
- Corrosion Engineering
- Remote Sensing

**ME - Structural Engineering**

**Curriculum**


**Elective Courses**
- Bridge Engineering
- Finite Element Method
- Aseismic Design of Structures
- Behaviour and Design of Tall Buildings
- Structural Stability
- Optimization Techniques
- Maintenance and Rehabilitation of Structures
- Shell and Spatial Structures
- Experimental Techniques and Instrumentation
- Soil Structure Interaction
- Theory of Plates
- Industrial Structures
- Mechanics of Composite Materials
- Soft Computing in Structural Engineering
- Geotechnical Earthquake Engineering
- Reliability Analysis and Performance Based Design

**Laboratory Facilities available for UG and PG programmes**

**GRD Computing Lab**
- Intel Core 2 and i5 processors - 75 nos
- End Systems connected to IBM servers for File and Telnet Service
- Application Software includes Code Blocks
- .Net Professional, Java, Star UML and lab Software

**Programming Lab I**
- Intel Core i5 and i3 processors - 55 nos
- End Systems connected to IBM servers for file and Oracle-database Service
- Applications Software includes Code blocks
- Java, Oracle, .Net Professional
Software Programming Lab
- Intel Core i5 and Core 2 processors- 51 nos.
- End Systems connected to IBM Servers for files and Telnet service.
- IAR Embedded Workbench
- Windows, Ubuntu OS.
- Applications Software includes java, Wega
- Net Professional, NS2

Open Source Software Laboratory
- Server with Open V configuration
- Ozone Cloud Controller
- C1 hypervisor for cloud project
- Intel core i3 and Workstations - 20 nos.
- Open Source software

AICTE Sponsored Software Architecture Lab
Intel Core i5 / Core 2 duo Processors-32 nos.
End Systems connected to IBM Servers for file service, IBM Rational suite architect and conventional lab software.

TEQIP II Sponsored Hardware Lab
8085,8086 microprocessor/ 8051 trainer kits,
Traffic light controller, interface cards, embedded application development system, Intel core i5/core 2 duo processors- 12 nos and lab Software.

Programming Lab II
Intel Core, Dual and i3 Processors - 40 Nos.
End Computing systems connected to Dell servers, Rational Rose, lab software.

PSG- Nokia / PSG-Yahoo
Sponsored Research
Dell Power Edge 2970 Servers - 11 Nos, VMware Tower server with Vmware, Dell server with Tesla card for GPGPU, R210 Rack servers, Open Stack Cloud, Hadoop cluster.

PG Project Lab
- IBM Server
- Intel Core i5 processors and High end systems - 84 Nos.

BE- Computer Science and Engineering Curriculum
Mathematics
Calculus and applications, Linear Algebra, Complex Variables and Transforms, Probability and Queuing Theory.

Research Projects in Progress
- UGC sponsored project on Sustainable Agriculture through crop disease resistance using bioinformatics on hybrid CPU-GPU clusters
- AICTE sponsored project on Cloud Based Dynamic Service Discovery for Emergency and Management
- The Green Cloud Project: Innovative
- Product Lifecycle Management Solutions through Energy Efficient Cloud Computing for SM Es; sponsored by AICTE and Siemens.

Science and Humanities
- Material Science
- Applied Electrochemistry
- Environmental Sciences
- Economics for Engineers

Core courses

Elective Courses

ME - Software Engineering Curriculum
Core Courses

Elective Courses
The Department of Electrical and Electronics Engineering was one of the first two disciplines started since the inception of the college. The Department offers the following programmes: BE (E.E.E), Sandwich BE (E.E.E), M.E (Applied Electronics), M.E (Electrical Machines- PT), M.E (Power Electronics and Drives- FT), and M.E (Embedded & Real time Systems- FT). The Department is a recognized Quality Improvement Programme (QIP) Centre for Post-Graduate and Doctoral Programmes.

**Laboratory Facilities available for UG and PG programmes**

### Electrical Machines Laboratory
- DC Machines
- Transformers
- Induction Machines
- Synchronous Machines
- Special Machines
- Small Machines

### Instrumentation and Control Laboratory
- Bridge Circuits
- Trainer Kits for LVDT, Strain Gauge, Capacitive Transducer, Temperature
- AC Servo Motor with Loading Arrangement
- AC Servo Position Control System
- Synchro Setup
- Linear System Simulator
- Digital LUX Meter
- Earth Resistance Meter
- Pressure Measurement Trainer Kit

### Power Electronics Laboratory
- Inverter Fed v/f controlled Induction Motor Drive
- DSP Controlled IM Drive, Single & 3 Phase IGBT Based PWM Inverter, 3 Phase SCR Four Quadrant Chopper, Single & Three Phase Diode Bridge Rectifier, Single and Three Phase Thyristor Bridge Converter, Differential Module, Three Phase DC Voltage Controller
- DSO, Programmable Power Supply, PSpice 9.2, MATLAB, PSIM 6.0

### Analog Electronics Laboratory
- Single Trace Cardiac Monitor and ECG Simulator, LCR Meter, Decade Resistance Box, Decade Inductance Box, Decade Capacitance Box, Power Meter, Digital Multimeter, Analog IC Trainer, Linear IC Tester, DSO, CRO, DCPower Supply, Function Generator, Analog System Lab Kit

### Digital Electronics Laboratory
- Digital IC Tester
- Digital Trainer Kit
- Digital Multimeter

### Microprocessor & DSP Lab
- PCs, 8085 Microprocessor Kit, 8051, 89S52, 68HC11 Microcontroller Kits, Universal 8051Project Development Boards with Interfacing Accessories, Universal PIC Embedded Trainer Kit, Universal Programmer, TMS320C50 DSP Starter Kit & FunctionGenerator, TMS320C50 DSP Trainer Kit, TMS PCC DSP 25 Card, Xilinx Spartan-3 FPGA Kit, PC1-02 ADC/DHC/Timer Digital I/O Card, 3MHz Function Generator, 30M Hz CRO, DAC, ADC

### UG Computer Centre
- Intel Xenon Server, P4 PCs
- Switches

### Electrical CAD Centre
- MATLAB, PSCAD (V 4.2), PSpice 9, LABVIEW (V 8.6), EPLAN (1.8.5)

### Project Laboratory
- Keysight 1052 2 channel, 70 MHz DSO, GW Instek make 30 MHz CRO, 2 Channel Analog CRO, Function Generator, Dual Regulated Power Supply, UV Programmer- Smart Prog Elnec make. Analog IC Tester- Minimax Type

### Power Converters Laboratory
Embedded and Real-Time Systems Laboratory
8051 Microcontroller Development Kit with Keypad, RTC Display Board, Analog I/O Board, RS232 Transceiver, ARM 7 Microcontroller Development Kit, PIC Controller Development Kit, PC2378 Development Board ARM Kit, 8031 Microcontroller Kit

Special Electrical Machines Lab
BLDC Motor with controller, Switched Reluctance Motor with Drive, Permanent Magnet Synchronous Machine, Linear Induction Motor, MotorPro 5.2 software, MATLAB software, RM Expert software, ANSYS Maxwell software.

PG Computer Centre
Smart Grid Laboratory

Centres of Excellence in the Department
- L&T Centre for LV Switch Gears
- LAPP Cable Centre
- Audio Processing Centre
- PSG - DANFOSS Centre
- Centre for Renewable Energy
- Pro-Sun Centre of Excellence for Solar PV Systems

BE & BE(Sandwich) - Electrical and Electronics Engineering Curriculum
Mathematics Courses

Science and Humanities
Physics, Chemistry, Professional Skills, Communication Skills, Economics for Engineers, Environmental Sciences.

Core courses

Elective Courses

BE - Electrical and Electronics Engineering (Sandwich) Salient Features
The syllabi and the grading system of the Sandwich programme are identical to those of the 4-year BE programme. The students are provided industrial training for about 10 hours every week in PSG Industrial Institute. To accommodate intensive industrial training, the BE Sandwich programme is spread over 5 years. Further, the students must also undergo a three-month compulsory internship in an industry immediately after the third year of study. A total of 2000 hours industrial training is provided during the entire duration of the programme.

ME - Applied Electronics Curriculum
Core Courses
- Systems Engineering Mathematics
- Fundamentals of Linear Systems and Signal Processing
- Microcontrollers and Applications
- Digital System Design and Testing
- Circuits and Systems Simulation Laboratory
- Analog VLSI Design
- Object Computing and Data Structures
- Computer Architecture and Parallel Design
- Advanced Digital Signal Processing
- Embedded System Design

Elective Courses

Research Projects in Progress
- Development of Interactive Hydraulic Activated Device for Chronic Post Stroke Therapy; sponsored by DST
- Design & Development of Wireless Embedded Microcontroller Based Portable Nano Scale Toxic Gas Sensor System; sponsored by UGC
- Design and Development of Pneumatic Actuated Wearable Hand and Forearm Device for the Rehabilitation of Recovering Stroke Patients; sponsored by DST
- Solar Energy based Desiccant loop Air Conditioning; sponsored by DST.
- Design & Development of Smart Microgrid using Renewable Energy Sources; sponsored by AICTE.
- Design and Development of a Humanoid; sponsored by AVON Corporation.
ME - Power Electronics and Drives
Curriculum
Core Courses

Elective Courses
- Power Electronics in Wind and Solar Power Conversion
- Special Machines and Controllers
- Digital Controllers in Power Electronic Applications
- Advanced Control of Electric Drives
- Soft Computing Techniques for Renewable Energy System
- Flexible AC Transmission System
- Power Quality Management
- Power Electronics Applications to Power Systems
- Advanced Topics in Power Electronics
- HVDC Transmission
- Optimization Techniques
- Digital Signal Processing
- Advanced Virtual Instrumentation
- Wavelets and Applications
- Personal Computer Systems
- Smart Grid Technologies
- Distributed Generation and Micro grids
- Hybrid Electric Vehicles

ME - Embedded and Real-Time Systems
Curriculum
Core Courses
- Systems Engineering Mathematics
- Fundamentals of Embedded Software
- Microcontrollers and Applications
- Real-Time Concepts for Embedded Systems
- Digital System Design and Testing
- Microcontrollers Laboratory
- Real-Time Operating Systems
- Embedded System Networks
- Object Computing and Data Structures
- Linux Architecture and Device Drivers
- Computer Architecture & Parallel Processing
- Real-Time Systems Laboratory

Elective Courses
- Advanced Embedded Controllers
- Automotive Embedded Systems
- Robotics and Factory Automation
- Industrial Networking & Standards
- Advanced Digital Signal Processing
- Digital Image Processing
- Soft Computing
- Cryptography and Network Security
- Graph Theory and Applications
- Personal Computer Systems
- Advanced Virtual Instrumentation
- Wavelets and Applications
- System On Chip
- Wireless Sensor Networks
- Wireless and Mobile Communication
- Medical Instrumentation Systems
- Digital Controllers for Power Electronics Applications

The Department of Electronics and Communication Engineering came into existence in the year 1968. The department offers B.E Programme in Electronics and Communication Engineering and PG Programmes include M.E Communication Systems, M.E VLSI Design, M.E Wireless Communications and M.Tech Nanoscience and Technology offering high class technical and innovative experience to the students. The department offers doctoral and M.S by research Programmes in both part time and full time mode. The department has produced around 73 Ph.Ds. The AICTE-CII Award for the Best-Industry linked Institute for the Electronics & Communication Engineering subject stream for the year 2013 strengthened the department's industry-institute relations. BE ECE program of 2012 has been accredited for 5 years by the National Board of Accreditation (NBA). ME VLSI Design Course was Accredited for 5 years with effect from September 2016. ME Communication Systems course was Accredited for 5 years with effect from April 2017.
National MEMS Design Centre

- COMSOL Multiphysics
- IntelliSuite
- CoventorWare
- TannerEDA

Synthesis & Characterisation of Nanomaterials Laboratory

Magnetic stirrer with hot plate 1 MLH, Horizontal Single Distillation unit, UV-Vis Spectrophotometer, Omnicent® Nano snif-Piezoresistive cantilever sensor, Nitrogen gas cylinder, Electronic Weighing Balance, Hot Air oven, High temperature High pressure Autoclave, High temperature tubular furnace, Fume hood, Digital pH meter, Heating Mantle 500 mL capacity, Pulsed Digital Ultrasonic, Remi Micro centrifuge RM-12C.

Keysight Baseband Communication and Advanced Embedded Systems Laboratory

M50 with Deep Memory and GPIP, USB and LAN Interfaces, Digital multi meter with GPIP & R5232C Interfaces, DAQ Units, Function/Arbitrary Waveform Generator with GPIP, USB & LAN Interfaces, Triple output DC Power supply with GPIP & R5232C Interfaces, Agilent U3000A Electronic Instrumentation Training Kit, Agilent 20 Channel Armature Multiplexer, Agilent 20 Channel Actuator/GP Switch, Agilent Multi-function Module, Agilent Technologies B2357B USB/GPIB Interface USB2.0, Analog & Digital communication Kits, 16801A & 16802A Logic Analyzer, Keysight Advanced Design System Software, Keysight Vector Signal Analyzer Software, Agilent VEE Pro Automation Software, & MATLAB

Advanced Communication Centre

MATLAB, Exata Network emulator, QualNet & NetSim Network simulator, ANSYS Academic Teaching HF (Antenna/Microwave/RF design tool), Keysight Vector Signal Analyzer, Wiresharkopen source protocol analyzer, Intel Atom Processor, PS Boards, Mica Mote Development Kits.

Freescale Embedded Systems Laboratory

16 and 32 Bit Microcontroller Boards, Smart Car - 16 bit, 32 bit, ARM versions, 89S52 Project Trainer Boards, ARM Development Kits, 8051 Development Boards, USB - UART Boards

VLSI Design Centre Software

- Cadence Tools
- Synopsys Tools
- Xilinx Tools - Vivado, SDSoC
- Mentor Graphics Tools

Hardware Boards


BE - Electronics and Communication Engineering Curriculum

Mathematics
- Calculus and its Applications
- Complex Variables and Transformations
- Linear Algebra and Numerical Analysis
- Probability, Statistics and Random Processes

Science and Humanities
- Material Science
- Applied Chemistry
- Professional Skills
- Communication Skills
- Economics for Engineers
- Environmental Sciences

Elective Courses


ME - Communication Systems Curriculum

Core Courses

**Elective Courses**


**Core Courses**

- ME - VLSI Design

**Research Projects in Progress**

- Indigenous Design and Development of Digitally Secured Smart Padlock for the Rural and Economically Backward Community People of India, AICTE Sponsored Project under Unnat Bharat Abhiyan Scheme.
- Design and Development of Wireless Embedded Microcontroller based Portable Nanoscale Toxic GAS Sensor system; sponsored by UGC.
- Design and Development of Indigenous Phased Array RF Volume Coil for 1.5 Tesla Magnetic Resonance Imaging; sponsored by DST.
- Special Manpower Development Programme for Chip to System Design (SM DP - C2SD); sponsored by MeitY.
- Design and Development of GSM Emergency communication Network Base station based on universal software radio Peripheral; sponsored by UGC.
- Design and development of intelligent secret image recovery techniques using visual cryptography and heuristic optimization techniques for Healthcare application; sponsored by UGC.
- Design & Development of CAP Based Wireless System for Multichannel EEG Recording; sponsored by DST.
- Test Bed Architecture for authentication, Confidentially integrity of sensitive DICOM images; sponsored by AICTE.
- Visual Intuition and scene categorization for MAV Navigation; sponsored by DARO/DST.
- Fabrication of Nanoscale Biosensor for cholesterol detection; sponsored by UGC.
- Design and Development of Multi-parameter Pain Monitoring System for Children; sponsored by DST.

**ME - Wireless Communication**

**Core Courses**

- Applied Mathematics
- Baseband Digital Communications
- Wireless Networking
- Wireless Communication Systems

**Elective Courses**

- FPGA Based Wireless System Design
- Software Radio Architecture
- Wavelets and Sub-band Coding
- Wireless Security
- Cooperative Communication and Cognitive Radio
- Embedded Systems
- Advanced Processor Architecture
- Optical Networks
- Wireless Multimedia Communication
- Radar Communication
- Free Space Optics
- Radio Frequency Integrated Circuit Design
- RF MEMS
- M utiliser Detection
- Smart Antennas
- Adaptive Signal Processing
- 3G and 4G Wireless Communications
- Long Term Evolution Design
- Spread Spectrum Communication
- Wireless Ad Hoc Networks
- Computational Electromagnetics
- Wireless Technologies and Measuring Tools
- RF Circuits and Measurements
- Embedded System Design
- FPGA Based Implementation of Signal Processing Systems

**M.Tech - Nanoscience and Technology**

**Core Courses**

- Computational Mathematics
- Fundamentals of Nanoscience
- Quantum Mechanics
- Synthesis of Nanomaterials
- Materials Science
- Synthesis of Nanomaterials Laboratory
- Characterization of nanomaterials
- Nanolithography
- Micr o and Nano Electro Mec hanical Systems
- Nanoelectronics
- Nanosensors and Device
- Nanofabrication laboratory
- Nanodevice design laboratory

**Elective courses**

- Nanophotonic
- Biomaterials and Tissue Engineering
- Polymer Electronics
- Nanobiomaterials
- Nanotoxicology
- Nanotechnology in Textiles
- Nanotechnology for Energy systems
- Nanostructures in Medicine
- Nanocomputing
- Nanobiotechnology
- M odelling of Nano CMOS

**Elective courses**

- System on chip design
- Product Design, Management Techniques and Entrepreneurship
The Department of Fashion Technology offers B.Tech - Fashion Technology, a 4 years undergraduate programme accredited by National Board for Accreditation (NBA). The department has well qualified, experienced, competent and committed faculty members. They regularly involve in organizing conferences, workshops, publishing books, research papers and funded projects. This programme is structured with core and elective subjects to meet the technological and managerial needs of the fashion industry and to take care of the needs of placement, career growth and personal aspiration of the students. After a good foundation in communication skills, applied maths & science and textile technology, strong emphasis is given to apparel technology, management and computer application, keeping in pace with the revolution in information technology. While the industrial training imparted offers the students the much needed exposure to the industrial practice and current trends, the project work gives a capstone experience to improve their technical acumen, analytical skill, research oriented approach and problem solving capability.

**DEPARTMENT OF FASHION TECHNOLOGY**

Programmes offered: B.Tech. - Fashion Technology

**Fashion CAD Laboratory**
- Adobe Photoshop
- Corel Draw

**Apparel Resource Centre**
- Fabric Swatches
- Accessories
- Trimmings
- Garments

**Surface Ornamentation Laboratory**
Accessory attachments - sequence attaching, Beads attaching of multi head embroidery machine with fifteen needles per head, Computerized design punching

**Apparel Quality Evaluation Laboratory**
Fabric testing Abrasion, Pilling, Sublimation fastness, Drape, Perspiration fastness, Mechanical properties testing Tearing strength, Bursting strength Garment safety and accessories testing Snap pull, Zip endurance, Button impact testing.

**Centres Of Excellence**
**PSG - LECTRA APPAREL CAD CENTRE**
equipped with state of the art LECTRA CAD softwares like Modaris, Diamino for digital pattern design developments.
- It has the first of its kind 3D FIT analysis and rendering software Modaris 3D FIT. It also possesses fabric CAD softwares like kaledo Weave, kaledo Knit and kaledo Print. The centre helps the students to augment their skills in the area of Fashion Design Creation, Fabric Design Development & Simulation, Computerized Pattern Making Grading and Maker Planning.

**PSG - SIRUBA MEHALA Apparel Machinery And Equipments Centre**
Established in collaboration with M/s, Siruba, Taiwan and M/s. Mehala Machine works, Tirupur is equipped with different types of industrial Sewing M/s. The students are well exposed to these machines, their mechanisms and components.

**B.Tech - Fashion Technology Curriculum**

**Mathematics**
- Calculus and its Applications, Differential Equations, Complex Variables and Transforms, Probability and Statistics

**Science and Humanities**
- Properties of Materials and Measurements
- Applied Physics
- Applied Chemistry
- Professional Skills
- Communication Skills
- Economics for Engineers
- Environmental Sciences

**Research Projects in Progress**
- Development of new designs, prints and colours in promotional bags including beach, wine and shopping bags; sponsored by National Center for Jute Diversification, Kolkata.
- Development of instructional materials for vocational training in Textile sector; sponsored by National Instructional Media Institute (NIMI), Chennai.
- Design and development of skin - Fabric friction tester and measurements of in vivo and in vitro friction properties of human skin sponsored by University Grant Commission, New Delhi.
The Department of Information Technology (IT) was established in the year 1999. The mission is to develop quality engineers to meet the current trends in the emerging world of IT, to undertake research at the frontiers of computing technologies, and to serve the community and the profession. The well-structured curriculum enables the students to take up a broad spectrum of courses, while laying emphasis on the desired areas of specialization. The department offers excellent facilities for students to learn and acquire the necessary skills demanded by the industry. A wide range of research activities undertaken in the department allow the students to gain contemporary knowledge about real-life problems in the industry. The department offers an undergraduate programme in IT and post graduate programs in Information Technology & Biometric and Cyber Security.

### Core courses
- Problem Solving and C Programming
- Basics of Textile Engineering
- Yarn Technology
- Fabric Technology
- Fashion Evolution
- Visual Dress Design
- Pattern Engineering
- Fabric Structure and Design
- Textile Chemical Processing Technology
- Apparel Machinery and Equipments
- Garment Construction
- Textile Finishing and Garment care
- Textile and Apparel Quality Evaluation
- Knitwear Design and Technology
- Industrial Engineering
- Apparel Marketing Management
- Apparel Costing
- Clothing Science and Comfort
- Apparel Production Planning and Control
- Speciality Fabrics and Technology
- Fashion Trends and Visualization
- Green Textiles and Environment Protection
- Visual Merchandising
- Apparel Merchandising
- Fashion Retail Management
- Functional Apparels and Clothing
- Home Textiles
- Protective Clothing
- Recycling of Textile Products
- Apparel Size and Fit Analysis
- Lean Manufacturing of Apparels
- Apparel Work Measurement
- Leather Apparel Technology
- Operations Research for Apparel Industry
- Colour Science
- Fashion Photography
- Fashion Dynamics
- Garment Trims and Accessories
- Interior Designing
- Intimate Apparels
- Footwear Designing
- Apparel Logistics and Supply Chain Management
- Total Quality Management
- Brand Management and Advertising
- Strategic Management
- Global Trade Management
- Apparel Entrepreneurship

### Elective Courses
- High-End IBM and DELL Servers
- VMwarevSphere Hypervisor 5.5
- Sophos Firewall
- Microsoft SQL server 2015
- Oracle 11G, Microsoft Visual Studio
- Matlab, IBM rational suite, QualNet
- Microprocessor & Microcontroller trainer kits
- DSP & LAN Trainer kits

### Laboratory Facilities for UG and PG programmes

#### Computer Laboratory
- High-End IBM and DELL Servers
- VMwarevSphere Hypervisor 5.5
- Sophos Firewall
- Microsoft SQL server 2015
- Oracle 11G, Microsoft Visual Studio
- Matlab, IBM rational suite, QualNet

#### Hardware Laboratory
- Microprocessor & Microcontroller trainer kits
- DSP & LAN Trainer kits

### Programmes offered:
- B.Tech. - Information Technology
- M.Tech. - Information Technology
- ME. - Biometrics and Cyber Security
Mathematics
- Calculus and its Application, Linear Algebra and Numerical Analysis, Complex Variables and Transforms, Probability and Queuing Theory.

Science and Humanities
- Material Science & Applied Electrochemistry
- Professional & Communication Skills
- Economics & Environmental Sciences

Core courses

Elective Courses
- Artificial Intelligence
- System Software
- Embedded Systems
- Soft Computing
- Information Storage and Management
- Digital Image Processing
- Multi-core Computing
- Semantic Web Technologies
- Client Server Computing
- Enterprise Resource Planning
- Network and Internet Security
- Information Ethics
- Total Quality Assurance
- Wireless Adhoc Networks
- Cloud Computing
- Web Services and Service Oriented Architecture
- Compiler Design
- Graphics and Multimedia
- Information Retrieval
- TCP / IP and Socket Programming
- Big Data Analytics

Research Projects in Progress
- Deep learning for Health Informatics.
- Semantic integration of Biomedical Ontologies.
- Sentiment Analysis using Artificial Intelligent Techniques.
- Improving QoS in wireless LAN.

One credit courses with Industry Experts
- Virtualization
- Next Generation IP Networks
- Android Application Development
- Software Quality and Automated Testing
- Multicore Technology
- Ontology Engineering
- Machine to Machine Communication

ME - Biometrics and Cyber Security Core courses
- Number Theory and Quantitative Techniques
- Object Oriented Programming
- Data Structures and Algorithms
- Networking Technology
- Biometric Technologies
- Applied Cryptography
- Biometric Image Processing
- Cyber Security and Investigations
- Digital Forensics
- Pattern Recognition
- Biometric Image Processing Laboratory
- Security and Penetration Testing Laboratory

Elective Courses
- Android Application Development
- Next Generation IP Networks
- Virtualization
- Information Storage and Management
- Machine Learning
- Evolutionary Computation
- Big Data Analytics
- Social Network Analysis
- Agent Based Intelligent Systems
- Network Design
- Wireless Networks
- Semantic Web
- Internet of Things
- Distributed Systems

M.Tech - Information Technology Core courses
- Number Theory and Quantitative Techniques
- Object Oriented Programming
- Data Structures and Algorithms
- Networking Technology
- Database Technologies
- Data Structures Laboratory
- Operating Systems
- Data Warehousing and Data Mining
- Cloud Computing
- Software Engineering Methodologies
- Mobile Computing
- Software Development Laboratory
- Application Development Laboratory

Elective Courses
- XML and Web Services
- Service Oriented Architecture
- Cryptography and Network Security
- Information Storage Management
- Machine Learning
- Evolutionary Computation
- Big Data Analytics
- Social Network Analysis
- Agent Based Intelligent Systems
- Network Design
- Wireless Networks
- Semantic Web
- Internet of Things
- Distributed Systems
The department of Instrumentation and Control Systems Engineering was established in the year 2007. The department offers an undergraduate programme in Instrumentation and Control Engineering and a postgraduate programme in Control Systems. Instrumentation and Control Engineering play a vital role in any modern industry. The department aims to prepare students for productive careers in the discipline of Instrumentation and Control and to produce graduates who accept responsibilities for leadership roles in their profession, community, and global society. It is involved in providing quality education to students with a dynamic curriculum that caters to the ever-improving industrial and research needs.

Programmes offered:
B.E. - Instrumentation and Control Engineering
M.E. - Control Systems

Laboratory Facilities for UG and PG Programmes

**Instrumentation and Control Laboratory**
- Linear Variable Differential Transformer (LVDT)
- Strain Gauge
- Temperature Measurement System
- Sound Level Meter
- pH Measurement Setup
- Dead Weight Measurement System
- Smart Transmitter
- AC and DC Servomotor Setup

**Process Control Laboratory**
Interacting and Non-Interacting Systems, Pressure Control Station, Level Control Station, Flow Control Station, Temperature Control Station, Pneumatic Control Valve Setup, Multi-Process Trainer.

**Embedded Systems Laboratory**

**Distributed Control Systems Lab**

**Control and Drives Laboratory**
- Linear Inverted Pendulum, Magnetic Levitation System, Rotary Servo Plant, PMSM Drive Setup, PLC Based Induction Motor Drive, 2 DoF Helicopter System, Ball Balancer System,

**PSG-NI Virtual Instrumentation Centre**

**PSG Rockwell Centre for Industrial Automation**

**Signal Processing Laboratory**
- TM320C6416 - DSK, Code Composer Studio, Biopac, MP45 Two Channel Biomedical Acquisition System, Keysight Function Generator and CRO.

**BE - Instrumentation and Control Engineering Curriculum**

**Mathematics**
- Calculus and its Applications
- Complex Variables and Transforms
- Linear Algebra and Numerical Analysis
- Probability and Random Processes

**Research Projects in Progress**
- Design and Development of Embedded Vision Based Therapy System for Yoga Therapy; sponsored by DST SERB.
- Sensor Development for the Detection of Oil Debris in Gas Turbine Applications, (Collaborative Project with the Department of Instrumentation and Control Engineering, National Institute of Technology, Tiruchirappalli), Sponsored by Gas Turbine Research Establishment, DRDO, Bangalore.
Science and Humanities

Core courses

Elective Courses
- Logic and Distributed Control System
- VLSI System Design
- Adaptive Control System
- Robust Control
- Industrial Drives and Control
- Applied Soft Computing
- Robotic Systems
- Building Automation Systems
- Machine Vision
- State Estimation
- Optimization Techniques
- Embedded Systems
- Wavelets and Applications

ME - Control Systems Curriculum

Core Courses

Elective Courses
- Logic and Distributed Control System
- VLSI System Design
- Adaptive Control System
- Robust Control
- Industrial Drives and Control
- Applied Soft Computing
- Robotic Systems
- Building Automation Systems
- Machine Vision
- State Estimation
- Optimization Techniques
- Embedded Systems
- Wavelets and Applications

The Department of Mechanical Engineering was one of the first two disciplines started since the inception of the college and has evolved a comprehensive student-centric learning approach, designed to add significant value to the learner's understanding in an integrated manner through workshops, laboratory sessions, assignments, IT training, seminars, internships, projects, and independent study. The department also offers post graduate programmes in Computer Integrated Manufacturing, Engineering Design, Industrial Engineering, Energy Engineering and Lean Manufacturing.

Laboratory Facilities for UG and PG programmes

Dynamics Laboratory
- Universal Vibration Apparatus
- Whirling of Shafts Apparatus
- Journal Bearing Apparatus
- Shaft Alignment Test System
- Cam Analysis System
- Static and Dynamic Balancing of Rotating Mass
- Motorized Gyroscope

Engineering Design Centre
- PTC Creo
- Catia
- Solidworks
- Autodesk Inventor Professional
- AutoCAD Mechanical
- Ansys
- Abaqus
- Franc 3D
- Fe-safe
- Mathcad
Fluid Mechanics Laboratory
Centrifugal self priming pump, Reciprocating pump, Gear oil pump, Jet on vane apparatus, Axial flow fan, Centrifugal blower, Wind tunnel, Mouth piece & orifice, Cavitation apparatus, Pelton turbine, Submersible pump, Pitot tube apparatus, Reynold's apparatus.

Heat Power Laboratory
Pin Fin Apparatus, Natural Convection Apparatus, Forced Convection Apparatus, Stefan - Boltzmann Constant Apparatus, Emissivity measurement Apparatus, Heat Exchanger, Air Conditioning tutor, Refrigeration tutor, Boiling and Condensation Apparatus, Morse test on multi cylinder petrol engine, Constant speed 4 - stroke diesel engine, Multi - cylinder petrol engine, 4 - stroke diesel engine, Constant speed single cylinder petrol engine, High pressure two stage reciprocating air compressor, IC engine Test Rig

Machine Tool Research Centre

Material Testing Center
Rockwell Hardness Tester, Brinell hardness tester, Vickers hardness tester, Impact testing machine, Torsion testing machine, Fatigue testing machine, Spring testing machine, Universal testing machine

Metrology Laboratory
Tool Maker's Microscope, Optical Profile Projector, Surface Finish Measuring Instrument, Gear Roll Tester

PSG-FESTO Centre of Excellence in Pneumatic Automation Hardware
Basic and Advanced Pneumatic Set, Basic and Advanced Electro-Pneumatic Set, trainer kits for Pneumatics & Electro - Pneumatics, Rotary actuator with gripper, Proportional Flow and Pressure Control Valves, Anemometer for airflow measurement, Screw Compressor, 4 Cylinder Electro Pneumatic Demo Kit, Air Receiver, Rotary Actuator with parallel Gripper attachment, Festo and Siemens PLC, Festo Hydraulic Trainer Kit

PSG-RANE CoE in Manufacturing Systems
Desktop Trainer Kit for Conveyor Station, Handling Station, Stacking Station, Modular Production Systems for distribution, testing, processing and handling, Quanser HVAC Trainer Kit, Quanser DC Motor Control Kit, Closed loop pneumatic trainer kit

Sensors Laboratory

Workshop
Welding, Foundry, Sheet M etal, Plumbing, Carpentry and Fitting Section, Lathe and Special Machines Section

CNC Machines Laboratory
CNC Trainer Lathe, CNC Trainer M ill, Portable Surface roughness tester, KELLER Symploque Software

Noise and Vibration Laboratory (CoE sponsored by DST-FIST)
Sensors - Piezoelectric Charge Accelerometer, Miniature Tear-Drop IEPE Accelerometer, Charge to Deltatron Converter, Reaction Torque sensor, Load sensor, Data Acquisition Systems, Vibration Measurement - Electrodynamic Shaker, Classical Shock software, Impachammer, Free-fall shock machine, Acoustic Sensing - Handheld analyser with sound level meter and frequency analysis software, ½" free field microphone, Sound calibrator

Industrial Engineering Laboratory
eVSM, 3D SSP, Timer Pro, Reliasoft Weibull, Hyper Lingo, SAP, Arena, SYSTAT, iGraphics Flow Charter, Winit Software, MS Project, M initab, Flexsim

Lean Manufacturing Lab

PG CAE Laboratory (CoE for Simulation) Modeling Software
I-Deas, Unigraphics, W ifldife, Solidedge, Catia

Mechanism Analysis Software
Keller Turning and Milling Simulation, Visual M ill

Computational Fluid Dynamics Laboratory
Species Conservation, Finite Element Analysis Software, Ansys, Hyper W orks, Solidcast

Tribology Laboratory
Reciprocatory friction monitor, Fourball tester, Pin on disc wear test rig, Rubber wheel abrasive wear test rig, Ultrasonicator

Manufacturing Simulation Software
M SC.A DaM S, Finite Element Analysis Software, Ansys, Hyper W orks, Solidcast

Energy Engineering Laboratory
Wind Energy Training System, Boundary layer thickness measurement setup, Thermal mixer experimental setup, Bio digester

BE and BE (Sandwich) - Mechanical Engineering
Core courses
Elective Courses

BE - Mechanical Engineering (SW)
The BE Mechanical Sandwich Programe was started in the year 1983. The curriculum is the same as that of the four year mechanical engineering programme but spread over a span of five years to accommodate intensive industrial training. PSG Industrial Institute serves as an educational centre as well as an industrial production centre. The students undergo three hours of training everyday for a period of five days a week at three major divisions viz. Heavy Engineering Division, Rotating Machinery Division and Foundry Division.

ME - Engineering Design Core courses

Elective Courses


ME - Computer Integrated Manufacturing Core courses

Elective Courses

ME - Computer Integrated Manufacturing Core courses

Elective Courses
The Department of Metallurgical Engineering established in year 1968 has been in the forefront of metallurgical engineering education for nearly five decades. Besides offering quality education to the students, the department is also actively engaged in research and development. It also offers testing and consultancy services to industries. Faculty members of the department are highly qualified and most of them have long industrial experience. The department also offers a post-graduate programme in Industrial Metallurgy.

Department of Metallurgical Engineering

Programmes offered:
- B.E. - Metallurgical Engineering
- M.E. - Industrial Metallurgy

Major Laboratory Facilities for UG and PG programmes

**Mineral Dressing laboratory**
- Jaw crusher, Roll crusher
- Ball mill
- Ro-Tap Sieve Shaker
- Wilfley Table
- Hydraulic Jig

**Metallography Laboratory**
- Metallogrphical Microscopes with digital camera, Image processing and analyzing system
- Stereo microscopy, In-situ Metallography kit

**Foundry Laboratory**
- Foundry Sand Testing Equipment (Moisture content tester, sand strength tester, clay content tester, shatter index tester, mouldability tester, permeability tester)
- Induction Melting Furnace (Capacity of 25kg), Rheo casting setup
- Vacuum metal melting furnace Stir casting set up, Cast decant casting (CDC) set up

ME - Lean Manufacturing

Core courses
- Statistics, Quality Control and Reliability Engineering
- Manufacturing Engineering and Industrial Management
- Design of Lean Production System
- Lean Tools and Management Systems
- Information Technology in Manufacturing Applications
- Lean Manufacturing Laboratory
- Cost Management and Lean Accounting
- Lean Supply Chain and Logistics Management
- Lean Six Sigma in Manufacturing and Service
- Enterprise Resource Planning
- Global Integrated Manufacturing
- Manufacturing Simulation Laboratory
- Manufacturing Systems Design Laboratory

Elective Courses
- Quality Engineering and Ergonomics
- Modeling and Analysis of Advanced Manufacturing Systems
- Design for Manufacturing and Assembly
- Creativity and Innovation Management
- Industrial Scheduling
- Project Management
- Optimization Techniques
- Human Resource Management
- Leadership and Personality Development
- Flexible Manufacturing Systems
- Job and Workplace Design
- Inventory and Warehouse Management

ME - Energy Engineering

Core Courses
- Concepts of energy engineering,
- Thermodynamics and combustion systems,
- Thermal energy conservation and management
- Renewable energy systems
- Energy economics, forecasting and modeling
- Energy and thermal systems design
- Computational fluid dynamics
- Instrumentation for energy systems
- Electrical energy conservation and management

Elective Courses
- Cleaner production
- Building energy conservation and green buildings
- Solar energy technologies
- Design of solid and liquid waste conversion systems
- Advanced energy technologies and sustainable development
- Nano technologies and energy systems
- Design of bio-energy systems
- Energy storage systems
- Industrial processes and energy conservation

Major Research Area
- Department of Mechanical Engineering is presently carrying out research in the fields of Design and development of alternate materials for machine tool structures, Machining of composites, High speed machining, Renewable energy, Vibration analysis and smart materials, Micro manufacturing, Sheet metal manufacturing.
Welding Laboratory
GTAW, GMAW and SMAW Units, Implant Tester, Diffusible Hydrogen Determinator, Diffusion Bonding Setup, Varestraint tester.

Surface Engineering Laboratory
Salt Spray (Fog) Test Setup, Wear and Friction Monitors, High temperature wear tester, Electroplating unit, Air Jet Erosion Tester, Slurry jet Erosion Tester.

Metal Forming and Mechanical Testing Laboratory

Heat Treatment Laboratory
Controlled atmosphere furnaces, Induction furnace, Vacuum furnaces, Silicon carbide furnace.

Powder Metallurgy Laboratory
Hot Isostatic Press, Planetary Ball Mill, Attritors, Glove Box, Tumbler mill.

Non-destructive Testing Laboratory
X-Ray Radiography Unit (300 kV, 6 mA), Ultrasonic Flaw Detector, Eddy Current Tester, Magnetic Crack Detector, Boroscope, Ultrasonic C-scan system.

Materials Modeling Lab
40 PCs with windows and Linux OS., CALPHAD software: Thermo calc, Analyzing software: Ansys.

Advanced Characterization Lab
Scanning Electron Microscopy (SEM) with EDS attachment, Optical Metallography with polarized light attachment, phase contrast, dark field/bright field illumination. Microhardness Tester (Load range: 10 gm to 30 Kg), Microhardness Tester (Load range: 10 gm to 2 Kg with a TV projection system), Optical Emission spectrometer (OES), X-Ray Diffraction unit (XRD).

BE - Metallurgical Engineering Curricular
Mathematics
- Calculus and its Applications
- Differential Equations
- Complex Variables and Transforms
- Probability and Statistics

Scientific and Humanities
- Material Science
- Applied Chemistry
- Professional Skills
- Communication Skills
- Economics for Engineers
- Environmental Sciences

Core Courses

Elective Courses
- Advanced Metallurgy
- Materials Modelling
- Creep Fatigue and Fracture
- Welding Procedures and Qualifications
- Research Methodology
- Quality System Management
- Ceramics Processing Technology
- Advanced Coating Technologies
- High Performance Ceramics
- High Temperature Behavior of Alloys and Ceramics

Research Projects in Progress
- Synthesis and Characterisation of Zircon Sand/Ai-Zn-Mg alloy composites; sponsored by UGC.
- Establishment of Centre of Excellence in Welding engineering and technology sponsored by Department of Heavy Industry, Government of India. (Rupees 26.7 Crores)

ME - Industrial Metallurgy Core Courses
- Statistics, Quality Control and Reliability Engineering
- Engineering Physical Metallurgy
- Foundry Technology
- Welding Technology
- Mechanical Metallurgy
- Optical Metallography Laboratory
- Experimental Techniques in Metallurgy
The undergraduate programme in Production Engineering was started in the year 1975. Subsequently, the department grew in several dimensions of academic excellence with time and offers postgraduate programmes in Manufacturing Engineering, Product Design and Commerce and Virtual Prototyping and Digital Manufacturing. All laboratories of the department are approved for carrying out research, leading to Ph.D Degree. Currently, there are 43 research scholars pursuing their Ph.D work in the department. The department offers consultancy in manufacturing processes, design and testing products, including product styling. A team of dedicated faculty members nurture the programme and actively contribute towards the creation of a high quality learning environment that is persuasive.

**Production and Industrial Engineering Laboratory**

**Software**
- Arena V 7.0 Evaluation version, Crystal Ball 2000, Pro/Engineer Wildfire 5, Creo 3.0, Visual M III, Catia VSR 17, SOLID Cast, Simlab, Solid Works.

**Metrology and Machine Vision Laboratory**

- Machine vision system, Coordinate measuring machine (CMM), Gauge blocks and angle gauges, Michelson interferometer, Pneumatic, Electro-Pneumatic and electrical comparators, TESA bore gauge, UDT-2 dial gage tester 170, Auto collimator, Floating carriage micrometer, Electronic height gauge, Profile Projector, Surface Roughness tester, Tool Makers STM 500, Universal Bevel Protractors.

**Sensor and Automation Laboratory**

- Modular Manufacturing System, Pneumatic trainer kits, Electro pneumatic and PLC based controls, measurement system - temperature, speed, load, displacement, pressure and vibration., Do it yourself Kit - Sorting station, Automation Studio software.

**Ergonomics Laboratory**

- Anthropometric measuring kit, environment variable measurement system, goniometers, Electrocardiogram (ECG), 3D scanner and printer, Peg Board testers, Hand grip dynamometers, Surface electromyography ( SEMG), Force gauges.

**Reliability and Product Testing Laboratory**

- Electrodynamic shaker

**CAD/ CAM Learning Centres**

- Tool Presetter
- Pin on Disc Wear and Friction tester
- Subtractive Rapid Prototyping Machine
- TIG Welding Machine
- Brinell and Rockwell Hardness Testing machine
- Tensile Testing Machine
- Thermal Imager
- Cutting Tool Dynamometers

**Laboratory Facilities for UG and PG programmes**

**Production Engineering Laboratory**

- CNC Vertical Machining Center
- CNC Horizontal Turning Center
- Hydroforming Machine
- Lapping Machine
- Honing Machine
- CNC Fanuc Simulator
- Ultrasonic Metal Welding Machine
- Ultrasonic Plastic Welding Machine
- Laser Engraving Machine
- Injection Molding Machine
- Tool and Cutter Grinder

**Software**
- HCL Xenon Workstations
- Immersion Micorscipe
- Wacom Tablet

**Hardware**
- Dell, HP and HCL Workstations, LG 3D Smart TV, Sony 3D HMD, Barco Projector, Virtual Research HMD (DSGII 24”) Monitor, Micosoft X-Box 360, 3D Connexion Space Mouse, Wanda Mouse - 6 DOF, Wacom Tablet, Tracking Devices - Flock of Birds, X-box Kinect, W imote.
Elective Courses

ME - Product Design and Commerce
Core courses

Elective Courses

Research Projects in Progress
- Development of an Adaptive Control System for Precision Machining of Aircraft Aluminium Alloys at Near Minimum Material Zone With Targeted Mean; sponsored by ARDB, New Delhi.
- Experimental Investigations on Surface Topography in Micromilling of New Ti-Nb-Ta based Alloys for Biocompatibility in Medical Implants; sponsored by DST, New Delhi.
- Development of an Adaptive Control System for Precision Machining of Aircraft Aluminium Alloys at Near Minimum Material Zone With Targeted Mean; sponsored by ARDB, New Delhi.
- Experimental Investigations on Sound and Vibration Damping Characteristics of Green Sandwich Composites; sponsored by AICTE New Delhi.
- Development of an Adaptive Control System for Precision Machining of Aircraft Aluminium Alloys at Near Minimum Material Zone With Targeted Mean; sponsored by ARDB, New Delhi.
- Experimental Investigations on Surface Topography in Micromilling of New Ti-Nb-Ta based Alloys for Biocompatibility in Medical Implants; sponsored by DST, New Delhi.
The Department of Robotics and Automation Engineering was established in the academic year 2011 in order to meet the growing demand for trained manpower in the field of Robotics and Industrial Automation. It holds pride in equipping the young minds with a dedicated curriculum in Robotics and Automation at the undergraduate level itself. From robots that perform industry’s clear-cut needs to automotive solutions that crave for perfection and sophistication, the department makes an impact in the quality of life worldwide. The program in Robotics and Automation Engineering encompasses all areas of research, development, design, and operation which allow students to nurture in the major areas of Electrical, Electronics, Mechanical, Automation, Computer and Robotics Engineering. The department keeps close contact with the Indian and International industries as well as Institutions for student projects, internships and employment.

**Laboratory Facilities**

**PSG- Fanuc Centre for Advanced CNC and Robotics**
- High Precision Turning Centres
- High Speed Vertical Machining Centre
- Fanuc LR Mate 200iC Robot
- Fanuc M 710iC Robot
- ABB IRB 1400 M94A Robot

**PSG- Heidenhain CNC Centre**
- CNC Simulation Software
- Keller Cam
- SYM Plus
- TECHNIC Plus
- CAM Plus
- Training kits for CNC Turning and Milling Centres

**PSG- Adept Centre for Robotics**
- Adept Cobra s600, SCARA robot, Adept Quattro s650H parallel robot, Bumblebee, OCAM 360, LIDAR, Phantom Haptic device, Dual delta 3D printer

**PSG - Danfoss Centre for Climate and Energy**
- RC Components, Heating Solution and PCA Components, IGBT’s Dismantling Kit, Practical Working Drive, Test Beds, VLT Drive, 4”E-learning portal.

**PSG-Siemens Centre of Excellence in Automation**
- Siemens PLCs - S7 1200 and S7 1500, Siemens HMI Panels, Remote I/O Section, HMIs: KTP 600 COLOR PN, KTP 600 COLOR DP and KP 300 BASIC MONO PN, SINAMICS G120 and V60 training kit, SCADA and HMI: WINCC Advanced V12, WINCC RT Advanced V12 128 TAGS, WINCC Professional RT 512 TAGS, WIN CC Professional Enng 512 TAGS, Simatic Ti8 V12 Professional.

**PSG- FESTO Centre for Robotronics**
- FESTO M PS
- Robotino
- FluidSim software
- CIROS software

**PSG- Beckoff Centre for PC Based Automation Technology**

**e-Yantra Robotics Laboratory in association with IIT Bombay**
- TETRIX
- LEGO M indstorm NXT
- Aldebaran
- NAO, Firebird
- Hexapod

**Research Projects in Progress**
- Vision-based precision entry into buildings and landing on elevated flat surface, funded by Aeronautics Research and Development Board (ARDB), Ministry of Defense, Govt. of India.
- Design and Development of Robotic Endotrainer, funded by Global Innovation and Technology Alliance (GITA), DST.
- Design and Development of Solar panel Cleaning Robot, funded by DST - SERI.
- Development of High temperature servomotor, funded by Board of Research in Nuclear Sciences (BRNS) of the Department of Atomic Energy (DAE).
- Automated Welding station, funded by Department of Heavy Industry (DHI), Ministry of Heavy Industries, Govt. of India.
- Intelligent welding power source, funded by Department of Heavy Industry (DHI), Ministry of Heavy Industries, Govt. of India.
Established in 1965, the Department of Textile Technology is regarded as one among the few premier departments for Textile Engineering in India. The National Board of Accreditation (NBA) has granted the department with certification for 5 years in 2017, 2012, 2004 and 1997. The department is backed by well experienced, diverse team of faculties who regularly involve in funded projects, organizing conferences, workshops, and provide consultancy. The Department received the Mentor Award for Best Industry Linked Engineering Institute 2015 for Chemical & Allied Engineering Institute by AICTE and CII. Students present papers in academic forums all over India and have won several distinctions. They compulsorily undergo INternship programs in reputed industries and are exposed to practical aspects of Technology & Quality Assurance systems.

Laboratory Facilities for UG and PG programmes
- Spinning Lab
- Weaving Lab
- Knitting Lab
- Textile chemical Processing Lab
- Textile Testing Lab
- Garment Manufacturing Lab

**DEPARTMENT OF TEXTILE TECHNOLOGY**

Programmes offered:
B.Tech. - Textile Technology
M.Tech. - Textile Technology

**Elective Courses**
- Special Machines and Controllers
- Artificial Intelligence for Robotics
- Advanced Control Systems
- VLSI Design
- Digital Signal Processors and its Applications
- Embedded Systems Design
- Advanced Microprocessors and Microcontrollers
- Computer Architecture and Parallel Processing
- Nano Computing
- Maintenance and Safety Engineering
- Wireless communication
- Micro Electromechanical Systems
- System Software
- Software Project Management and Quality Assurance
- Renewable Energy Sources
- Advanced Strength of Materials
- Automobile Engineering
- Lean Manufacturing
- Supply Chain Management
- Industrial Design and Applied Ergonomics
- Process Planning and Cost Estimation
- Industrial Networking
- Virtual Instrumentation Systems
- Computer Integrated Manufacturing
- Neural Networks and Fuzzy Systems
- Internet Tools and Java Programming
- Industrial Robotics and Material Handling Systems

Core courses
- Problem Solving and C Programming
- Introduction to Mechanical Systems
- Electrical Circuit Theory
- Digital Electronics
- Sensors & Instrumentation
- Electronic Devices and Circuits
- Electrical Machines & Power systems
- Automatic Control Systems
- CNC Technology
- C++ and Data Structures
- Linear Integrated Circuits
- Kinematics and Dynamics of Machinery
- Programmable Logic Controllers
- Basics of Robotics
- Microprocessors and Microcontrollers
- Mechanical Design
- Computer Architecture
- Power Electronics & Drives
- Embedded & Real-time Systems
- Vision Systems and Image processing
- Automation System Design
- Precision Equipment Design
- Field & Service Robotics
- Totally Integrated Automation
**Textile CAD Centre:**

**PSG TECHS COE IN DUTECH:**
- Is a project funded by Office of the Textile Commissioner, Ministry of Textiles, GoI, under Technology Mission on Technical Textiles (TM TTT) for promotion of Technical Textiles in 2011 with Rs.25 Crores grant. Major Facilities are -
  - Needle punching line
  - Hot melt coating and lamination
  - Chemical coating machine
  - Industrial Wet Wipes
  - FESEM
  - UV Accelerated Weathering Tester

**Powder Metallurgy Laboratory**
Hot Isostatic Press, Planetary Ball Mill, Attritors, Glove Box, Tumbler mill.

**B.Tech - Textile Technology Curriculum**

**Mathematics**

**Science and Humanities**

**Core Courses**

---

**Research Projects in Progress**
- Centre of Excellence in Industrial Textiles to the tune of 25 Crores; sponsored by Ministry of Textiles.
- Focus Incubation Centre; sponsored by Ministry of Textiles.
- Development of Jute/Jute Blended Fibrous Mat for Effluent Filtration Applications; sponsored by Ministry of Textiles.
- Vetiver Based Treatment System for Textile Industry Wastewater; sponsored by DBT.
- Development of Oil Sorption and Sound Absorption Pad using Natural Fibre Based Non Woven Textiles; sponsored by UGC.
- Development of Antimicrobial Silk Suture Materials; sponsored by AICTE.
- Empanelment of Assessment Agencies in Textile and Clothing Sector; sponsored by Ministry of Textiles.
- Skill Training Programme AICTE-PMKVY.

**Elective Courses**
- Advances in Manufactured Fibres
- Analytical Characterization of Textiles
- Structural Mechanics of Textile Materials
- Coated Textiles
- Functional Finishes
- Green Processing of Textiles
- Colour Science, Measurement & Applications
- Theory of Colouration
- Computer Application in Textiles
- Energy Management in Textile Industry
- Apparel Marketing and Merchandising
- Apparel Quality Evaluation and Standards
- Apparel Production Planning and Control
- Apparel Product Engineering
- Textile and Apparel Costing
- Industrial Engineering
- Operations Research

**M.Tech - Textile Technology Curriculum**

**Core Course**
- Quantitative Techniques in Textile Engg.
- Polymer and Fibre Physics
- Theory of Yarn and Fabric Manufacture
- Colouration and Finishing Technology
- Quality Analysis of Textiles & Clothing
- Statistics & Quality Control for Textile Industry
- Industrial Textiles
- Principles of Colour Measurement
- Clothing Comfort
- Functional Textiles

**Elective Courses**
- Characterization of Textile Polymers
- Nanotechnology in Textiles
- High Performance and Specialty Fibres
- Alternate Spinning Systems
- Process & Quality Control in Spinning & Weaving
- Theory of Yarn and Fabric Structures
- Specialty Textiles
- Nonwovens
- Surface Modification of Textiles
- Green Processing of Textiles
- Functional Finishes
- Chemical Processing of Synthetic Textiles
- Printing Technology
- Textile Effluent Treatments
- Textile Marketing and Merchandising
- Textile Composites
- Filters and Filtration Textiles
- Biomechanical Engg. of Functional Textiles
- Textile Marketing and Merchandising
- Textile Composites
- Electro-Active Textiles
- Recycling in Textiles
- Control System & Automation in Textile Engg.
Mathematics and Computational Sciences

- Calculus and its Applications
- Linear Algebra
- Complex variables and Transforms
- Probability and Statistics
- Mathematical Structures
- Operations Research
- Graph Theory
- C Programming (T+L)
- Object Oriented Programming and C++ (T+L)
- Data Structures (T+L)

- Apart from these subjects they have four Professional Electives, four Skill Based Electives and an Open Elective to widen their knowledge in their chosen area of specialization.

Programme Profile

The B.Sc. Applied Science Programme has a unique structure that gives the students a broad based science background. They may however specialize in one of the following streams of basic sciences namely Physics, Chemistry or Mathematics and Computer programming. This helps to prepare the students for any analytically oriented profession, while at the same time enabling them to take up post-graduate studies in physical, mathematical and computational sciences. Subsequently they could pursue research in the leading institutions and national R & D laboratories. Besides the regular theory and laboratory subjects, students are offered elective subjects in emerging areas of study. They are also exposed to engineering practices and research methodologies by means of open electives and a project work that has to be completed in the final semester. This would enable them to engage in life-long learning and thereby make them versatile practitioners or researchers in their chosen fields.

Curriculum

The students have subjects of study from mathematics and computer programming, physics and chemistry. A representative list of core courses (T) and associated laboratory (L) courses are given below:

Laboratory Facilities

Infrastructure facilities are available for carrying out experiments related to the respective theory courses. The students also have access to the research labs for carrying out their project work.

Student Projects

A project work has to be completed in the final semester. Students carry out project work in Physics, Chemistry or Mathematics and Computer Applications according to their field of interest.

Core Subjects of Study

Physics
- Properties of Matter (T+L)
- Electricity and Magnetism(T+L)
- Atomic and Nuclear Physics
- Acoustics and Optics(T+L)
- Mathematical Physics
- Mechanics, Waves and Oscillations
- Analog and Digital Electronics(T+L)
- Solid State Physics(T+L)
- Quantum Mechanics

Chemistry
- General Chemistry
- Physical Chemistry
- Organic Chemistry
- Inorganic Chemistry
- Applied chemistry
- (All the subjects have both theory and laboratory component)
The Department of Computer Applications is managed by a team of faculty members, six of whom hold Doctorates. The faculty has diverse specializations and research interests. The first AICTE approval for the programme 'Master of computer Applications' was obtained in 1995.

Laboratory Facilities
PARAM Shavak - Super Computer
HPC Applications, mpiBLAST, GROM ACS, WRF, MOM, Onama, Open-source Applications, Parallel and applications, Bio-informatics applications, Chemical engineering applications, Mechanical applications, CHReME.

Computer Centre

Soft Computing Research Lab
- HP Work station
- ACER Ferrari Notebook
- ACER Travelmate Notebook
- HCL Desktop personal computer
- Matlab Software
- Parallel Computing ToolBox
- Assortment of Tool boxes for the Client-Server based environment

Curriculum
Core courses

Elective Courses

Projects
Two miniprojects with 4 credits
One six month internship with 12 credits

Research Projects
In Progress
- Investigation of Routing Algorithms in Mobile Adhoc Networks;
- Classification using Pattern Matching and Rule Mining;
- Investigation on Link Prediction in Social Networks;
- Parallel and Distributed Computational Intelligence Algorithm for Portfolio Optimization in Financial Engineering;
- An Intelligent System for Automatic supply of fertilizers for Greenhouse Environment.
Mission of the Department

The fundamental objective of the department is to develop quality professionals by providing concept oriented subject knowledge through high quality teaching supplemented with practical training. Apart from specialized knowledge and skills, the programmes conducted by the Department aim to develop the personality of students by inculcating values of honesty, sincerity, team spirit and work culture.

DEPARTMENT OF
APPLIED MATHEMATICS AND
COMPUTATIONAL SCIENCES

PG Programmes offered by the department:

• M.Sc.(Applied Mathematics)
• M.Sc.(Software Systems)
• M.Sc.(Theoretical Computer Science)
• M.Sc.(Data Science)

UG programme offered by the Department:

• B.Sc (Computer Systems & Design)

Laboratory Facilities for UG and PG programmes

• SKAVA Mobile Computing Laboratory
• Computational Sciences Laboratory
• Data Science Laboratory
• Cyber Security Research Lab
• Computational Neuroscience Lab

Hardware:

IBM Server - 5 Nos, HP Blade server - 2 Nos, HP Server - 1

All necessary open source and proprietary software for the various laboratory courses are available.

B.Sc - Computer Systems and Design
Mathematics and Humanities Courses

• Calculus and its Applications
• Communication Skills
• Discrete Mathematics
• Environmental Science and Green Computing
• Linear Algebra
• Probability and Statistics

Core Professional Courses


Elective Courses


M.Sc - Software Systems
Curriculum

Mathematics and Science Courses

• Accounting and Financial Management,
• Applied Linear Algebra,
• Calculus and its Applications,
• Discrete Structures,
• Material Science,
• Probability and Statistics,
• Transforms
• Three Dimensional Geometry

Core Professional Courses


Elective Courses

• Advanced Computer Graphics
• Advanced Database Management Systems
• Agile Software Development
• Cloud Computing
• Data Compression
• Data Mining
• Human Computer Interaction
• Mobile Computing
• Modelling and Simulation
• Parallel and Distributed Computing
• Pervasive Computing
• Principles of Programming Languages
• Real Time and Embedded Systems
• Requirements Engineering
• Security in Computing
• Semantic Web
• Service Oriented Architecture
• Social Network Analysis
• Software Metrics
### M.Sc - Theoretical Computer Science Curriculum

**Mathematics and Science Courses**
- Abstract Algebra
- Complex Variables and Transforms
- Discrete Structures
- Graph Theory
- Linear Algebra and Numerical Analysis
- Mathematical Methods
- Mathematical Modeling
- Probability and Statistics
- Stochastic Processes

**Core Professional Courses**
- Advanced Computer Graphics
- Approximation Algorithms
- Cloud Computing
- Data Compression
- Multi Paradigm Programming Languages
- Natural Language Processing
- Network Algorithmic
- Pervasive Computing
- Principles of Programming Languages
- Randomized Algorithms
- Semantic Web
- Social Network Analysis
- Software Patterns
- Software Process Management
- Wireless Networks

### M.Sc - Data Science Curriculum

**Mathematics and Science Courses**
- Abstract Algebra
- Applied Physics
- Calculus and its applications
- Discrete Structures
- Graph Theory
- Linear Algebra
- Transforms and its applications

**Core Professional Courses**
- Advanced Analytics
- Advanced Data Structures
- Applied Numerical Analysis
- Applied Statistics and Python Programming
- Computer Networks
- Computer Organization and Assembly

**Elective Courses**
- Advanced Computer Graphics
- Approximation Algorithms
- Cloud Computing
- Data Compression
- Multi Paradigm Programming Languages
- Natural Language Processing
- Network Algorithmic
- Pervasive Computing
- Principles of Programming Languages
- Program Semantic Analysis
- Randomized Algorithms
- Semantic Web
- Social Network Analysis
- Software Patterns
- Software Process Management
- Wireless Networks

**M.Sc - Applied Mathematics Curriculum**

**Core Professional Courses**
- Real Analysis
- Discrete Mathematics

**Elective Courses**
- Advanced Data Structures and Algorithms
- Computer Graphics
- Computer Networks
- Number Theory and Cryptography
- Digital Image Processing
- Graph Theory and its Applications
- Intelligent Information Retrieval
- Machine Learning
- Mathematical Finance
- Numeric Solutions to Partial Differential Equations
- Stochastic Differential Equations
- Wavelet Transform
- Computational Topology
- Algebraic Topology
- Operating Systems
- Data Science
The Fashion Design & Merchandising is a five year integrated programme started in the year 2015. The curriculum is designed to prepare graduates with a solid understanding and expertise, required to enter professional practice in the challenging and competitive fashion industry. This course is first of its kind, designed at the university level with a unique blend of designing, production, merchandising and management, enabling them to be socially responsible entrepreneurs, to meet the diverse demands of the fashion industry through R&D.

**Laboratory facilities:**
- Pattern Making Laboratory:
  - Dress Forms
  - Cork Topped Tables
- Computer - Aided Fashion Design Laboratory
  - Corel Draw
  - Adobe Illustrator
  - Adobe Photoshop
  - Colour M atters
  - WGSN
- Fashion Styling and Product Development Laboratory
  - Embroidery M achine
- Garment Construction Laboratory
  - Single Needle Lock Stitch M achine
  - Over Lock M achine
  - Flat Lock M achine

**Research Projects In Progress**
- Design and development of functional wear for the elderly, sponsored by University Grants Commission - South Eastern Regional Office, Hyderabad.

**Programmes offered:**
- M.Sc. - Fashion Design and Merchandising

**Curriculum**

**Mathematics**
- Applied Geometry
- Research Methods

**Science and Humanities**
- English for Professional Skills
- Applied Science

**Professional Core courses**
- Textile Science
- Elements and Principles of Design
- Textile Manufacturing
- Fabric Structure
- Indian Art and Craft
- Pattern Making
- Fashion Communication
- Dyeing and Printing of Textile M aterials
- Process Flow in Apparel M anufacturing
- History of Costumes
- Trend and Fashion Forecasting
- Costume Design
- Textile & Apparel Quality Evaluation
- Knitwear Design and M anufacture
- Fashion Branding
- Finishing and Clothing Care
- Clothing Science
- Apparel Production Planning and Control
- Apparel M arketing
- Principles of M anagement
- Apparel Costing
- Apparel M erchandising
- Fashion Retail M anagement
- Ergonomics in Clothing Design
- Visual M erchandising
- Financial M anagement
- Apparel M anufacturing
- Logistics and Supply Chain M anagement
- Entrepreneurship
- Fashion Illustration
- Garment Construction
- Fashion Draping
- Computer Aided Design

**Employment Enhancement Courses**
- Industrial Visit and Lecture
- Cluster Visit and Craft Documentation
- Internship/ Project work (I,II)

**Electives**
- Theatre Costume and Design
- Footwear Designing
- World Art and Craft
- Garment Trims and Accessories
- Ergonomics in Apparel Industry
- Intimate apparels

**Electives**

- Sportswear
- Fashion Denim Wear
- Garment Size and Fit Analysis
- Human Resource M anagement
- Operations M anagement
- Global M arketing
- Strategic Business M anagement
- Total Quality M anagement
- Business Ethics and Social Responsibility
- Intellectual Property Rights
- Fashion J ournalism
- Fashion Advertising and Promotion
- O rganizational Behavior
PSG Tech was selected into the elite club of 65 PACE (Partners for the Advancement of Collaborative engineering Education - partnership between General Motors, Siemens PLM Software, Autodesk, Hewlett Packard and Oracle) institution across the globe and has received in-kind support of software and hardware worth INR 1500 Crores.

**COLLABORATIONS**

Industrial Collaboration, Research & Development and participation in Curriculum design. MoUs were signed by departments with industries for exchange of resources and knowledge, Industrial visit, identification of research projects of mutual interest, sharing Infrastructure, Market Survey, Student training & internship. MoUs were signed between:

- Dept. of Applied Mathematics and Computational Sciences and Nalco Company LLC, Naperville, USA, Probyto Data Science & Consulting Pvt. Ltd., Ghaziabad, India.
- Dept. of Mechanical engineering and the American Society for Quality India Pvt. Ltd., New Delhi.
- Departments of Electronics and Communication Engineering and Instrumentation and Control Engineering with YantraVision Software Private Limited, Bangalore.
- Metallurgy Department with JSW Steel Limited, Salem.
- Department of Biomedical Engineering with M/s ROOTS Group of companies, Coimbatore.
- Dr. G. Thilagavathi, Professor & Head, Department of Textile Technology, participated in the International Teaching Week at HoF University, Germany.
- The Industrial Research and Development Cell of PSG Tech with Kovai Air Products, USA; Saint Gobain Ltd., Chennai; Tamil Nadu Transmission Corporation, Mercedes-Benz R&D India Pvt. Ltd., Indus Electronics India (P) Ltd., Coimbatore; INDFURR SuperHeat Furnaces, Chennai.

Our faculty members and Ph. D scholars have contributed immensely to improving the academic and research ambiance of the institution in the way of publications, patents and research grants from Government agencies and industry. To mention a few of the research projects sanctioned:

- Automated Welding Systems for specific Industrial Applications.
- Design and development of PCM based pilot solar hybrid thermal storage system for low temperature application.
- An Integrated System for Treatment of Textile Industry wastewater.
- Wind- Solar cold storage plant for the needy.
- Experimental Investigations on Surface Topography in Micro-milling of New Ti-Nb-Ta Based Alloys for Biocompatibility in Medical Implants.
- Design and Development of Controller for Smart MicroGrid under Unbalanced Conditions.
- Development of Jute/Jute Blended Fibrous Mat for Effluent.

Our BE ECE 1994 alumnus Vanitha Kumar, Vice President - Software Engineering at Qualcomm in USA, is selected as one of the top ten powerful women in the world of technology.

Dr. Myswamy Annadurai, an alumnus of EEE department, PSG Tech was awarded Padma Shri award by the Government of India for year 2016.

Mr. Cottalango Leon (1992 BE-CSE), received the Oscar Technical Achievement Award from OSCAR Academy for his contribution to the process of movie making.

Products developed by the ECE and BME departments under the support of Department of Science and Technology, Govt. of India, were successfully transferred to Industry for commercialization.
The college is associated with several research organizations and industries in order to promote closer interaction with other institutions in the areas of technology development, training of students, curriculum updating and development of state-of-art centres. Several advanced centres are set up in collaboration with industries as well as with financial support from the Ministry of Human Resources Development, Department of Science and Technology and other agencies. These include:

- PSG - Rockwell Centre for Excellence in Industrial Automation
- PSG - L&T Centre for Excellence in Low Voltage Switchgears
- PSG - Premier Textile Technology Centre
- PSG - ASSYST BULLMER - M EHALA Fashion Studio
- PSG - Kawabata Centre for Fabrics
- PSG - Infineon Embedded Systems Centre
- PSG - Keysight Centre of Excellence in Advanced Wireless Technology
- PSG - TCS Centre of Excellence in Software Engineering
- VLSI Design Centre
- PSG - Keysight Baseband Communication & Advanced Embedded Systems Lab
- PSG - Fanuc Centre for Advanced CNC and Robotics
- PSG - Eplan Centre for Advanced CNC and Robotics
- PSG - LAPP Centre of Excellence in Cable Technology
- PSG - Siemens Centre of Excellence in Automation
- PSG - Heidenhain CNC Centre
- PSG - Lectra Apprael CAD Centre
- PSG - SIRUBA-M EHALA Apparel Machinery & Equipments Centre
- PSG - ELM AQ ERP Training Centre
- PSG - Cognizant Open source Software Centre
- PSG - J uniper Centre of Excellence in Networking
- PSG - Freescale Embedded Systems Lab
- Karivardhan centre of Excellence in Automobile engineering
- PSG - Adept Centre for Robotics
- PSG - Ranal Centre for Software Testing
- PSG - Ashok Leyland Automotive Research Centre
- PSG - Techtronics Centre for Excellence in Robotics
- PSG - IBM Centre for Excellence in Operating Systems
- PSG - Cypress - PSoC Design Centre
- PSG - Siemens PLM Training Centre
- PSG - Exilant Textile ERP Centre
- TIFAC - CORE in Rapid Prototyping and Manufacturing
- PSG - Yuken Hydraulic Automation centre
- PSG - Rane Automotive Test Centre
- PSG - TI Centre of Excellence for Medical Electronics jointly established by Texas Instruments, USA and PSG Tech in the Department of Biomedical Engineering.

The GRD Memorial Library of PSG Tech is one of the best equipped in terms of number of books, back volumes and current journals. Spread over an area of 51,240 sq. feet, the library caters to the needs of faculty and students as well as the industrial associates of PSG College of Technology. The library is fully automated and includes a digital library facility to enable universal access.

As on date the library houses around 2,50,000 books and 280 journals. Online journals like Science Direct, IEEE-ASPP, SME, ASCE, SPRINGER, NATURE, ASTM, McGraw Hill, J-Gate and Scopus databases at a cost Rs.36,67,474 are being subscribed.

The library organizes LIBFEST every year in association with the Book Readers Club of PSG Tech and the Rolling trophy is awarded to the Overall Championship.

**Few recent research initiatives by the college include the following** -

- Machine Tool Development Centre, sponsored by the Office of the Principal Scientific Advisor to Govt. of India with a funding of 5.13 crores.
- Welding Research Project jointly established by Dept. of Heavy Industries (DHI), Govt. of India and PSGCT to the tune of 21.1 crores. The Centre was inaugurated by Shri Girish Shankar, Secretary, DHI.
- Centre of Excellence in Industrial Textiles jointly established by Ministry of Textiles and PSG Tech at a cost of 24.5 crores.
- Nanotechnology Research, Innovation and Incubation Centre jointly established by Department of Science and Technology, Govt. and PSG Tech at a budget of 25 crores.
- Centre for Earthquake Technology established by FIST, Govt and PSG Tech with funding of 1.5 crores.
Students take up various types of Internships, including the 3-month curricular Internship of the Sandwich branches - Electrical and Electronics, Mechanical and Production Engineering; coordinated by the Industrial Training Department attached to the PSG Industrial Institute, an on-campus Industry that is a unique feature of the PSG group of Institutions. For the year 2016-17, five Sandwich students carried out their Summer Internship at Lapp Kabel Germany, Siemens Abu Dhabi and at the University of Leeds, UK.

INTERNATIONAL EXPOSURE

Several of our students across various years and branches opt to attend a Summer School at overseas Universities that offer such programmes. Students also take up a One semester Study abroad programme as part of their curriculum. Universities that have a long-term relationship with PSGCT include the University of South Australia, University of New South Wales, University of Towers Engineering and University of Flinders-Australia, University of HoF Applied Sciences and University Hochschule Esslingen of Applied Sciences - Germany, University of Colorado State, USA, Glasgow Caledonian University (GCU) and the University of Leeds, in the United Kingdom.

The Summer schools and One-Semester Study Abroad offer our students a glimpse into the teaching-learning processes at reputed global Universities, and also provide them additional Research and further study options.

FEW ACHIEVEMENTS OF OUR ALUMNI DURING 2016-17

Our M.E. Computer Integrated Manufacturing 1991 alumnus Prabhu Patil, CEO, PROLIM Corporation is honored by US Govt. Small Business Administration as the Entrepreneurial Success of the Year 2017 as he is the man behind the concept, design and implementation of complex global delivery model across continents and countries.

"M/s.Maxbyte Technologies Pvt. Ltd., a Startup by M.r.C.S.Ramshankar, alumnus of M.E. Product Design and Commerce of Department of Production Engineering has been recognized as a Best Start-up by the CII in M manufacuring Sector at CII STARTUPRENEURS 2017, Chennai on Apr 17th 2017.

Our Alumnus Mr.Safirulla IAS, B.E (EEE-SW) received an Award from the President of India in Appreciation of his Exemplary Services as Director-IT, Govt. of Kerala, during Elections 2016.

Our Alumnus Dr Sharath Sriram was awarded "3M Eureka 2016 Prize for Emerging Leader in Science". He has mimicked the way the human brain processes information with the development of an electronic long-term, multi-state memory cell. He is Associate Professor in Royal Melbourne Institute of Technology, Australia.

Our BE ECE 2004 alumnus Dr Raj Rajkumar, Professor of Electrical & Computer Engg at Carnegie Mellon Univ in U.S. His General Motors - Carnegie Mellon Autonomous Driving Collaborative Research Lab is about to release Autonomous Car

Our Alumnus (M.Sc - Applied Mathematics) Prof. Dinesh Kumar, Professor in Quantitative Methods & Information Systems, Indian Institute of Management Bangalore (IIMB), has been recognized as one of the Top 10 Most Prominent Analytic Academicians in India for his extensive research in Big Data Analyses by Analytics India Magazine. He is also the President of the Analytics Society of India (ASI).
The Department of Physical Education covers an area of five acres located near the hostel premises. The department has infrastructure for all the indoor and outdoor games. The department is headed by a Physical Director and assisted by two Assistant Physical Directors, one Physical Training Instructor along with three markers as supporting staff. The activities are held throughout the year, every day, from 6.30 am to 7.00 pm.

EXTRA CURRICULAR ACTIVITIES

Our college teams have participated in various tournaments and won many laurels to our college. The following are the achievements of men and women teams. By winning first place in 9 games and second place in 5 games we won the Anna University zonal Overall Championship this year.

Our Players representing PSG sports Club currently playing in the 'A' division Coimbatore Football league.

Our cricket team is actively competing in Coimbatore District Cricket Association (CDCA) III Division League tournaments.

The National Cadet Corps (NCC) of PSG has five wings and there are about 278 cadets who are actively involved in NCC activities.

The Bridge is the student-run official online magazine of PSG Tech, which connects current students to the larger alumni community. It publishes the events and happenings in and around PSG Tech, the success stories and interesting interviews of the alumni and other contributions of Techians.

http://thebridge.PSGtech.ac.in

GLOBAL LEADERS' FORUM (GLF) is a platform for students who aspire to become leaders and create a better tomorrow. The club conducts various interactive activities and events to instill leadership qualities and public speaking skills in students.

To develop social responsibility and to cultivate the service mind in young people NSS, YRC and ROTARACT organised several orphanage, donation camps and rural development camps.

The FINE ARTS CLUB encourages young talents in diverse wings like drawing, painting, philately and photography.

RADIO HUB of PSG TECH conducted RJ Hunt to bring out the Radio Jockeying talents of students and Ham Radio Awareness programme to create awareness about amateur radio, its use and procedure for obtaining license. PSG Super Singer 2017 encourages young talents every year.

To encourage innovative and practical skills among students STUDENTS’ RESEARCH COUNCIL organised Technovator Award presentation. Selected teams were judged by Industrial Experts and were given funding to implement their ideas.
The PSG STEP (Science & Technology Entrepreneurial Park) is in the seventeenth year of operation at PSG Tech and is spread over an area of 28,000 sq. feet with 41 incubates in the areas of IT, Mechanical, Electronics and Biotech. PSG STEP adjudged as the "Best STEP" in the country by Ministry of Science and Technology, Govt. of India, provides technical services to entrepreneurs by providing hardware, software and humanware support available at PSG Tech.

ENTREPRENEURSHIP ACTIVITIES

A Boot Camp for Startup Co-Founders was organized by PSG STEP this year. The PSG STEP incubate "Coitor IT Technology P Ltd" won the CII-Startupreneurs Award" from CII, Chennai. The product of PSG - TSEP incubate TiNO Techmations Pvt. Ltd - SmartAgri was selected as one of the top 150 innovations around the world by the United Nations.

The PSG STEP Entrepreneurs Club started in 2006 in collaboration with the National Entrepreneurship Network (A part of the Wadhani Foundation) with several campus companies including the Thirst-e, Tech Travels, Trend E, bookmark, organized several events this year including an "Evening with Entrepreneur" - an experience sharing session of entrepreneurs with students and the E-Next, a 2 day Entrepreneurship Summit for students of PSG College of Technology and other institutions from the region. The event had experience sharing by successful entrepreneurs, investors, talk panel discussion, workshops and idea pitches.

Three incubates of PSG STEP were invited by CII to showcase their products in the event "Start-up India" organized by CII, SIEMA and CODISSIA.

PSG STEP is authorized for NIDHI-PRAYAS (PRomoting and Accelerating Young and Aspiring Technology entrepreneurs) - a scheme launched by NSTEDB, DST, Govt. of India, as a pre-incubation initiative that supports young innovators to turn their ideas into proof of concept.

The NIDHI - Entrepreneurs - in - Residence (EIR) programme provides opportunity for guidance from experienced, innovative and highly successful entrepreneurs on business concepts, strategies, etc and co-working spaces for developing idea into a marketable product.

PSG College of Technology has an independent Placement Office devoted to cater to the needs of organizations in conducting campus interviews for placements. It is headed by Dean, Placement & Training and supported by a Placement Officer and Placement Co-coordinator. The office is also assisted by student Placement Co-coordinators who lead a team of placement representatives from various courses of study. The Placement Office ensures and provides the best arrangements and hospitality for visiting companies' officials.

Placement Office functions in a separate air conditioned block with all audio visual facilities for PPT, written test, group discussion and interviews and has rapidly progressed over the years in enhancing the placement potential effectively. It plays a very important and key role in counseling and guiding students of the college for their successful career placement, which is a crucial interface for the students between the stages of completion of academic programme of studies and entry into a suitable employment.

This office also coordinates various activities related to the career of the students along with the industrial training. More than 150 reputed national and multinational companies visit the college for campus recruitment annually. Over 90% of the students secure job offers before they complete their programmes of study.

The Placement Section also offers Pre-placement Grooming to students in association with FACE (Focus Academy for Career Enhancement), Coimbatore. FACE, an IIM Graduates’ Enterprise, was recently featured in the Starship Enterprise Section of Economic Times.
OUR PATRONS

- ABB Ltd., Bangalore
- ACC Limited, Mumbai
- Accenture, Bangalore
- Adobe Systems, Bangalore
- ADPPvt. Ltd., Hyderabad
- Advanced Academy for Development of Textile Technologist, Mumbai
- Akoz Nobel Coatings India Pvt. Ltd., Bangalore
- Alcatel Lucent India Ltd., Chennai
- Altair Engineering Pvt. Ltd., Chennai
- Amazon Software Development (I) Pvt. Ltd., Bangalore
- Ameex Technologies Pvt. Ltd., Chennai
- Analog Devices India Pvt. Ltd., Bangalore
- Anand Automotives Ltd., Mumbai
- Areva T & D India Ltd., Noida
- Aricent, Bangalore
- Ashok Leyland Limited, Chennai
- Asian MotorWorks Pvt. Ltd., Gujarat
- ATCTyres Pvt. Ltd., Tirunelveli
- Athenahhealth Technology Pvt. Ltd., Chennai
- AVTEC Ltd., New Delhi
- BajajAuto Ltd., Pune
- Beroe Inc, Chennai
- BGR Energy Systems Ltd., Chennai
- Bharat Earth Movers Ltd., Bangalore
- Bharat Forge Limited, Pune
- Blue Star Limited, Chennai
- Brahm os Aerospace Pvt. Ltd., New Delhi
- Brakes India Limited, Sholinghur
- CA Technologies Pvt. Ltd., Hyderabad
- Capgemini India, Hyderabad
- Caterpillar India Pvt. Ltd., Chennai
- Cethar Limited, Trichy
- Chrysler India Automotive Pvt. Ltd., Chennai
- Cisco Systems (India) Private Limited, Bangalore
- Cognizant Technology Solutions, Chennai
- CommVaultSystems India Pvt. Ltd., Hyderabad
- Computer Associates, Hyderabad
- Computer Sciences Corporation (I) Pvt. Ltd., Chennai
- Consolidated Construction Consortium Ltd., Chennai
- Consul Consolidated Pvt. Ltd., Chennai
- Cordys Software India Pvt. Ltd., Hyderabad
- Cosmic Circuits Pvt. Ltd., Bangalore
- Crescent Foundry Co. Ltd., Kolkata
- Cypress Semiconductors Ltd., Chennai
- D.E.Shaw India Software Pvt. Ltd., Hyderabad
- Daimler India Commercial Vehiciles Pvt. Ltd., Sriperumbudur
- Dalma Cements (Bharat) Ltd., Trichy
- Danfoss Industries Ltd., Chennai
- Defiance Technologies, Chennai
- Deloitte Consulting (I) Pvt. Ltd., Hyderabad
- Delphi Automotive Systems Pvt. Ltd., Bangalore
- Delphi-TVS Diesel Systems Ltd., Chennai
- Donear Industries Ltd., Surat
- eBay IDC, Chennai
- Efficient Frontier India, Chennai
- Elgi Equipments Ltd., Coimbatore
- EmbedUSystems India Pvt. Ltd., Chennai
- EMC Corporation, Bangalore
- Ericsson (I) Pvt. Ltd., Chennai
- Ernst & Young, Bangalore
- ESAB India Ltd., Chennai
- EssarGroup, Surat
- ETAEngineering Ltd., Chennai
- ExterGroup, Bangalore
- Exterro (I) Pvt. Ltd., Coimbatore
- Fiorano Software Technologies Pvt. Ltd., Bangalore
- Ford India Ltd., Chennai
- Frontline Consulting Services, Hyderabad
- Future Group, Mumbai
- GE India Healthcare, Bangalore (I FWTC)
- General Motors Technical Centre, Bangalore
- Geometric Limited, Pune
- Givaudan India, Mumbai
- Global Analytics (I) Pvt. Ltd., Chennai
- Global Scholar, Chennai
- Godrej & Boyce M manufacture Company Ltd., Mumbai
- Goldman Sachs Services Pvt. Ltd., Bangalore
- Goodrich Aerospace Services Pvt. Ltd., Bangalore
- Google India Pvt. Ltd., Bangalore
- Groz-Beckert, Tirupur
- HCL Infosystems Ltd., Chennai
- Hewlett Packard India Ltd., Bangalore
- honda M otocycle and Scooter(I) Pvt. Ltd., Gurgaon
- HP India Pvt. Ltd., Bangalore
- Hyundai Motors India Pvt. Ltd., Chennai
- I2 Technologies India Pvt. Ltd., Bangalore
- IBM India Pvt. Ltd., Bangalore
- IBM India Software Lab, Bangalore
- IGATE Patni, Bangalore
- Indian Oil Corporation Ltd., New Delhi
- Innovation Labs, 24/7 Inc, Bangalore
- Intel India Technologies Pvt. Ltd., Chennai
- Intimate Fashions (I) Pvt. Ltd., Chennai
- ITC Infotech India Ltd., Bangalore
- ITC Limited, Kolkata
- Ittiam Systems Pvt. Ltd., Bangalore
- IVY Comptech Pvt. Ltd., Hyderabad
- J Jay Mills (I) Pvt. Ltd., Tirupur
- J D A Software India Pvt. Ltd., Bangalore
- J John Deere India Pvt. Ltd., Pune
- JSW Steel Limited, Bellary
- KG Denim Limited, Coimbatore
- KEF Holdings Limited, Sharjah U.A.E
- KirloskarOil Engines Ltd., Pune
- KLA Tencor Software India Pvt. Ltd., Chennai
- KPM G, Mumbai
- L&T Valdel Engineering Ltd., Bangalore
- Lakshmi Machine Works Ltd., Coimbatore
- Larsen & Toubro Limited, (ECC Division) Chennai
- Larsen & Toubro Limited, (Infotech) Mumbai
- Larsen & Toubro Ltd., (Ramboll) Chennai
- Larsen & Toubro Ltd., Mumbai
- Laser Works Pvt. Ltd., Chennai
- Lister Technologies Pvt. Ltd., Chennai
- Loyal Textile Mills Ltd., Kovilpatti
- Lucas- TVS, Chennai
- M.N. Dastur & Company (P) Ltd., Chennai
- Madora Garments, Bangalore
- Mahindra & Mahindra Automotive Ltd., Mumbai
- Mangalore Refinery & Petrochemicals Ltd., Mangalore
- Mahattan Associates, Bangalore
- M aig Constructions Limited, Chennai
- Maruti Suzuki India Ltd., Gurgaon
- Mckinsey & Company, Chennai
- M ichelin India, Chennai
- Microchip Technologies India Pvt. Ltd., Bangalore
- Microsof t India R & D, Bangalore
- M indtree Consulting Ltd., Bangalore
- Morgan Stanley Advantage Services, Mumbai
- Motor ola India Electronics Pvt. Ltd., Bangalore
- M u Sigma Business Solutions Pvt. Ltd., Bangalore
- M urugappa Group, Chennai
- Must Garment Corp. Ltd., Hongkong
- Mytrah Energy India Ltd., Hyderabad
- National Instruments, Bangalore
- NetApp Systems India Pvt. Ltd., Bangalore
- Nokia India Pvt. Ltd., Chennai
- Nokia Siemens Networks India Pvt. Ltd., Bangalore
- Nomura Services India Pvt. Ltd., Bangalore
- Nomura Services India Pvt. Ltd., Mumbai
- Novell Software Development (I) Pvt. Ltd., Bangalore
- NettApp Systems India Pvt. Ltd., Bangalore
- NTT Data FA Insurance Systems (I) Pvt. Ltd., Bangalore
- Nvidia Graphics Pvt. Ltd., Bangalore
- OAT Systems Software (I) Pvt. Ltd., Bangalore
- Oracle India Pvt. Ltd., Bangalore
- Oxylane, Bangalore
- Patni Computer Systems (P) Ltd., Mumbai
- Payoda Technologies Pvt. Ltd., Coimbatore
- Paypal (I) Pvt. Ltd., Chennai (eBay India)
- Philips Electronics India Limited, Bangalore
- Philips Software Centre Pvt. Ltd., Bangalore
- Precot Meridian Ltd., Coimbatore
- Qualcomm India Pvt. Ltd., Bangalore
- Quest Global, Bangalore
- Rane Group, Chennai
- Raymonds Limited, Yavatmal
- Reckitt Benckiser (India) Ltd., Gurgaon
- Renault Nissan Technology and Business Centre India Pvt. Ltd., Chennai
- Robert Bosch Engineering & Business Solutions Ltd., Coimbatore
- Rotork Controls India Pvt. Ltd., Chennai
- Royal Enfield, Chennai
- S.P. Apparels Ltd., Coimbatore
- Saipem(I) Projects Ltd., Chennai
- Same Deutz- Fahr India Pvt. Ltd., Chennai
- Samsung India Software Operations, Bangalore
- Sankalp Semiconductor Pvt. Ltd., Bangalore
- Sanmar Group, Chennai
- SAP Labs India Pvt. Ltd., Bangalore
- Satyam Venture Engineering Services, Bangalore
- Schneider Electric India Pvt. Ltd., Bangalore
- Shahi Exports Pvt. Ltd., Bangalore
- Shanthi Gears Ltd., Coimbatore
- Shapoorji Pallonji Co. Ltd., Mumbai
- SHV LPG India Pvt. Ltd., Chennai
- Siemens Information Processing Services, Bangalore
- Skava Systems Pvt. Ltd., Coimbatore
- Sobha Developers Ltd., Bangalore
- Soma Enterprise Ltd., Hyderabad
- Sony India Software Centre, Bangalore
- Sourcebits Technologies, Bangalore
- SRF Limited, Gurgaon
- Subex Limited, Bangalore
- Success Factors, Bangalore
- Sun Tec Business Solutions, Chennai
- Sundaram Fasteners Limited, Chennai
- Synopsys India Pvt. Ltd., Hyderabad
- Tata Consultancy Services Ltd., Chennai
- Tata Motors Ltd., Pune
- Tata Power Company Ltd., Mumbai
- Tata Steel Limited, Jamshedpur
- Tata Technologies Ltd., Pune
- TECO Consulting Engineers Ltd., Bangalore
- TESCO Hindustan Service Centre Ltd., Bangalore
- The Southern India Mills Association, Coimbatore
- Thermax India Ltd., Pune
- Thorogood Associates India Pvt. Ltd., Hyderabad
- ThoughtWorks Technologies India Pvt. Ltd., Bangalore
- Titan Industries Ltd., Hosur
- Tony Harris Business Solutions, Bangalore
- Tractors and Farm Equipments Ltd., Chennai
- Triad Software Pvt. Ltd., Chennai
- TVS Motor Company Ltd., Hosur
- Unisys Global Service Pvt. Ltd., Bangalore
- URC Construction Pvt. Ltd., erode
- VATECH Wabag Ltd., Chennai
- VALEO Engineering Center (I) Pvt. Ltd., Chennai
- Vardhman Textiles Limited, Himachal Pradesh
- VE Commercial Vehicles Ltd., Bangalore
- Vedanta Resources, Tutoorin
- Volvo India Pvt. Ltd., Bangalore
- Wells Foigo India Solutions Pvt. Ltd., Hyderabad
- Windcare India Ltd., Udumalpet
- Wipro Technologies, Bangalore
- Yahoo! Software Development India Pvt. Ltd., Bangalore.