



PSG COLLEGE OF TECHNOLOGY



Commitment to
Technical Education



PSG & SONS' CHARITIES TRUST

*"Let there be charity, so that other people
may share my family's prosperity..."*

- P. S. Govindaswamy Naidu

*A man of vision, faith and integrity, whose initials
P S G have become a living legend at Coimbatore.*

At a time when education remained an unfulfilled dream for most Indians, one man's vision set out to make that dream a reality. In one visionary statement, Mr. P. S. Govindaswamy Naidu shaped the destinies of hundreds of thousands of aspiring learners. On 25th January 1926, a trust under the name and style of P. S. Govindaswamy Naidu & Sons' Charities was founded. This trust is dedicated entirely to the growth and development of education, training, industry and social upliftment.

At the present there are 25 institutions operating under this trust catering to the development of 25,000 individuals.

Under the able guidance of illustrious Managing Trustees, Late G.R. Govindarajulu, Late Dr. G.R. Damodaran, Late G. Varadharaj, Sri G.R. Karthikeyan, Sri V. Rajan and Sri G. Rangaswamy the college is standing as a landmark in the field of technical education in the country.

OUR COLLEGE MISSION

Our mission as an institution is to provide world-class engineering education, foster research and development, evolve innovative applications of technology, encourage entrepreneurship and ultimately mould young men and women capable of assuming leadership of the society for the betterment of the country.

PSG COLLEGE OF TECHNOLOGY, an institution of academic excellence, was founded in the year 1951 by PSG & Sons' Charities Trust. The emphasis of the Trust is on vocational education & production oriented industrial training. In order to achieve these objectives, the founders wisely decided to locate the college in the same campus as the PSG Industrial Institute, which is a pioneer today in the manufacture of several engineering products, like process and agricultural pumps, industrial motors and high quality speciality castings. 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 undergraduate engineering students are required to spend half a day every week in the PSG Industrial Institute which enables them to study the actual production processes and gives them an opportunity to observe the working of industry. This scheme has been hailed as a unique approach to inculcate industry culture among the students. In addition, a large number of projects, which the students undertake in collaboration with the PSG Industrial Institute and other industries meet the R&D requirements of industry.

The College has been in the vanguard of innovation in technical education, and over the years has taken giant strides and transformed itself into a prestigious centre

for advanced studies in several faculties of Engineering Technology, Applied Sciences, Management Studies and Computer Science and Applications.

Recognizing the excellent infrastructure, faculty, progressive outlook, high academic standards and record performance, the University of Madras reposed abundant confidence in the capabilities of the College, and PSG College of Technology was conferred Autonomous status in the year 1978, to update its own programmes and curriculum, to devise and conduct examinations, and to evaluate students' performance based on a system of continuous assessment. The academic programmes are designed and updated by a Board of Studies at the department level and Academic Council at the college level. These statutory bodies are constituted as per the guidelines of the All India Council for Technical Education. A separate examination section headed by a Controller of Examinations conducts the examinations.

PSG College of Technology an AICTE approved institution is affiliated to Anna University and ISO 9001 certified. Most of our programmes have been accredited by National Board of Accreditation (NBA). Sedulous progress has been the hallmark of PSG Tech. The growth and development of the college owed 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.

PSG College of Technology now has a student strength of nearly 7000 and has the following departments:

- Automobile Engineering
- Biomedical Engineering
- Bio-Technology
- Chemistry
- Civil Engineering
- Computer Science and Engineering
- Electrical and Electronics Engineering
- Electronics and Communication Engineering
- Energy Engineering
- English
- Fashion Technology
- Humanities
- Information Technology
- Instrumentation & Control Engineering
- Management Sciences
- Mathematics and Computer Applications
- Mechanical Engineering
- Metallurgical Engineering
- Physics
- Production Engineering
- Textile Technology

The college has a state of the art computing facility with wi-fi enabled 16 Mbps leased line internet connectivity.



PROGRAMMES OFFERED

UNDER GRADUATE PROGRAMMES

B.E./B.Tech.(4 years)

- Automobile Engineering
- Biomedical Engineering
- Biotechnology
- Civil Engineering
- Computer Science and Engineering
- Electrical and Electronics Engineering
- Electronics and Communication Engineering
- Fashion Technology
- Information Technology
- Instrumentation and Control Engineering
- Mechanical Engineering
- Metallurgical Engineering
- Production Engineering
- Textile Technology

B.E.(Sandwich) programmes (5 years)

- Electrical and Electronics Engineering
- Mechanical Engineering
- Production Engineering

B.Sc.(3 years)

- Apparel and Fashion Technology
- Applied Sciences
- Computer Technology
- Information Technology

POST GRADUATE PROGRAMMES

M.E./M.Tech.(2 years)

- Applied Electronics
- Automotive Engineering
- Biotechnology
- Communication Systems
- Computer Integrated Manufacturing
- Computer Science and Engineering
- Control Systems
- Embedded and Real Time Systems
- Energy Engineering
- Engineering Design
- Industrial Engineering
- Industrial Metallurgy
- Information Technology
- Infrastructure Engineering
- Lean Manufacturing
- Power Electronics and Drives
- Product Design and Commerce
- Production Engineering
- Software Engineering
- Structural Engineering
- Textile Technology
- VLSI Design

M.C.A.(3 years)

M.B.A.(2 years)

M.Sc.(2 years)

- Applied Chemistry
- Applied Mathematics
- Computer Technology
- Materials Science

M.Sc.Software Engineering (5 years)

M.Sc.Theoretical Computer Science (5 years)

RESEARCH PROGRAMME

M.Phil.

- Applied Chemistry
- Applied Mathematics
- Applied Physics
- Computer Science

M.S by Research in all the disciplines of Engineering / Technology

Ph.D in all the disciplines.



AUTOMOBILE ENGINEERING

The department was established with an undergraduate programme in Automobile engineering in 1999. The programme has been designed carefully and is frequently updated to cover all aspects of education in this field, thus catering to global demands. The faculty of the department have published about 30 technical papers in various National and International conferences and journals.

The department is well equipped with laboratories like Vehicle Design Lab, Engine Testing and Diagnosis Center, Karivaradan Centre of Excellence, Vehicle Servicing Laboratory, Simulation Lab and an Embedded Systems Lab.

The students are provided with a basic knowledge of mechanical engineering courses and specialization in the following courses thus making them highly trained to meet the needs of the automotive sector:

PROGRAMMES OFFERED

- BE Automobile Engineering (4 years)
- ME Automotive Engineering (2 years)

UG Curriculum

Core Automotive Courses

- Internal Combustion Engines
- Automotive Ergonomics and Vehicle Body Analysis
- Vehicle Dynamics
- Design of Engine and Auto Components
- Automotive Emissions and NVH
- Vehicle Component Design
- Automotive Transmissions and Motor Vehicle Engineering
- Automotive Electronics and Electrical Systems

The automotive manufacturing sector has been growing at a faster pace than the automotive sector because of the excellent competence of Indian engineers and keeping this in mind, the following courses in Production Engineering have been included.

Production Courses

- Production Technology
- Manufacture of Automobile Components

- Design for manufacture and assembly

The syllabus has been carefully framed to cater to the needs of the industry and future requirements, **some of the Advanced Topics and Electives are:**

- Unconventional Engines and Hybrid Vehicles
- Alternate Fuels
- Intelligent Vehicle Technology
- Automatic Transmissions
- Two and Three Wheelers
- Special Vehicles
- Aerodynamics of Road Vehicles
- Automotive Instrumentation
- Vehicle Maintenance and Testing
- Modelling and Simulation of Internal Combustion Engines
- Computational Fluid Dynamics

Laboratory Facilities

- Vehicle Design Centre
- Engine Testing and Trouble Shooting Laboratory
- Vehicle Servicing Laboratory
- Sensors and control laboratory
- Automotive System Simulation Lab
- Automotive Embedded System lab

Projects at a glance

- Design, Manufacture and Testing of an all terrain Baja Vehicle
- Design, Manufacture and Testing of all Electric Vehicle

- Remote Controlled 1:10 scale Cars propelled with IC engines with Methanol as the fuel
- Hybrid vehicle development (3 wheeler and 4 wheeler)
- Performance and emissions testing of Biodiesel produced from chicken fat
- Simulation of new developments in Fuel Cell using CFD
- Design, manufacture and testing of Composite usage for Bumper, Crankshaft, Propeller Shaft and Valves
- Aerodynamic Simulation of a road vehicle using CFD





BIO-MEDICAL ENGINEERING

The Undergraduate Programme in Biomedical Engineering started in the year 2006 with a mission to provide every student in-depth knowledge in the areas of Electronics and Biomedical Engineering as well as professional skills necessary to face the challenges of the future and enable them to find innovative applications of Technology for reaching the goal of "Health for all in our Country". The facilities available at PSG College of Technology, PSG Institute of Medical Sciences & Research are used for implementing the curriculum.

PROGRAMMES OFFERED

- BE Biomedical Engineering (4 years)

UG Curriculum

Core Courses

- Biomaterials
- Biosensors & Transducers
- Anatomy & Physiology
- Fluid Mechanics
- Pathology & Microbiology
- Analog & Digital Electronics
- Biomedical Signal Processing
- Clinical Engineering
- Medical Imaging & Image Processing
- Biomedical Equipment
- Radiology & its applications
- Embedded Systems

Science Courses

- Applied Physics
- Biochemistry
- Environmental Science & Engineering

Programming Courses

- C-Programming
- Object Oriented Programming

Management Courses

- Engineering Economics & Financial Management
- Industrial Management

Electives

- ICU & Operation Theatre equipment
- Ultrasonics & Laser applications
- Virtual Instrumentation
- Telemedicine
- Cell Biology & Tissue Engineering

Laboratory Facilities

Biomedical Engineering

Diagnostic and Therapeutic Instruments including Ultrasound scanner, Multiparameter monitor, Pagewriter-ECG, Bioamplifiers and LabVIEW for Biosignal acquisition, Datascope, Spida5

Instrumentation & Control

FPGA and DSP Development Board and Simulator, CRIO Real time input/output modules, DAQ cards for Instrument control & Signal Acquisition

Image Processing

X-CAP Software, NI LabVIEW Software, Aphelion Toolkit, HALCON IDE, NI Area Scan and Line Scan camera, Near IR camera

PSG-Cypress Advanced PSoc Facility

Students are trained to design and develop medical applications in the Cypress CY3210 and Cypress CY3210 express DK kits

TRAINING

- Students are trained in the advanced areas of Biomedical Engineering like "Application of DSP in Biomedical Engineering", "Rehabilitation Engineering", "Advanced topics in Radiology" etc., to expose them to the state-of-the art technologies by conducting one-credit courses with experts from industry and premier academic institutions.

- Faculty and students have presented technical papers in various symposia in areas like Nanotechnology in Medicine, Artificial Silicon Retina, Development of Medical Instruments using LabVIEW, Biometrics, Biosensors, etc.
- Students are exposed to the medical facilities available in PSG Hospital, Sri Ramakrishna Hospitals, KG Hospital, G.Kuppuswamy Naidu Memorial Hospital, Kovai Medical Center and Hospital in Coimbatore and other hospitals in cities like Mysore, Bangalore, Trivandrum, Mumbai and New Delhi.

PROJECTS

- Development of Wireless Soil Moisture Sensor systems based on GSM network for agricultural applications such as automatic irrigation systems, with funding from Department of Science and Technology, New Delhi.
- Development of Machine Vision System for Automatic Inspection of Rectangular Electronic Sensor components using the Halcon Integrated Development Environment with funding from Ministry of Information Technology, New Delhi.
- Development of Glucometer, Pacemaker, Sleep Study Gadgets, Smart Electrodes, Pulse Rate Monitor, Temperature Logger for Blood Bank, Audio Analyser, Body Fat Analyser, Color Blindness tester, from the Management Funds.





BIO-TECHNOLOGY

PSG College of technology has undertaken the responsibility of contributing professionals to the rapidly growing and important field of biotechnology through its B.Tech programme in Biotechnology. Relevant changes are regularly introduced in the courses offered to cater to the current global demands. The department is actively pursuing research at various levels. The laboratories with various facilities are at the disposal of the students for research under the able guidance of the faculty. The Biotechnology Association, a student forum, is involved in organizing a number of co-curricular activities and in assisting symposiums and workshops.

PROGRAMMES OFFERED

- B.Tech Bio-Technology (4 years)
- M.Tech Bio-Technology (2 years)

UG Curriculum

Core Courses

- Introduction to Biomolecules and Biosystems
- Biochemistry
- Microbiology
- Cell biology
- General and prokaryotic genetics
- Analytical methods and instrumentation
- Molecular biology
- Population genetics
- Basics of industrial biotechnology
- Genetic engineering
- Bioprocess technology
- Immunology
- Bioinformatics
- Enzyme engineering and technology
- Bioethics, IPR and entrepreneurship
- Downstream processing
- Genomics and proteomics

Chemical Engineering Courses

- Introduction to chemical engineering
- Fluid dynamics and mechanical operations
- Chemical reaction engineering
- Chemical thermodynamics and biothermodynamics
- Heat transfer

Practical

- Biochemistry lab
- Microbiology and cell biology lab
- Instrumental methods of analysis
- Molecular biology lab
- Fluid flow lab
- Genetic engineering lab
- Heat transfer lab
- Bioprocess lab
- Immunology lab
- Bioinformatics lab
- Downstream processing lab

Mathematics and Programming Courses

- Probability and statistics
- Numerical methods
- C Programming
- Object Oriented Programming

Electives

- Biopharmaceutical technology
- Food science and technology
- Cancer biology
- Plant biotechnology
- Molecular pathogenesis



PG Curriculum

M.TECH - BIOTECHNOLOGY

Core Courses

- Genetic engineering and recombinant products
- Bioprocess engineering design
- Bioproduct separation and analysis
- Bioethics and IPR
- Chemical engineering principles for biotechnologists
- Bioinformatics and cheminformatics
- Immunotechnology
- Metabolic engineering

Practical

- Gene expression laboratory
- Bioprocess engineering laboratory
- Molecular modeling laboratory

Electives

- Industrial waste management
- Human physiology and pharmacology
- Natural products of medicinal interest
- Molecular pathogenesis
- Pharmacogenomics
- Food technology

Laboratory Facilities

Microbial technology laboratory

BOD incubators, orbital shakers, Phase Contrast, dark field microscopes, laminar air flow chambers

Bioprocess laboratory

Biochemical reactor, flash evaporator, vacuum oven, particle evaporators, refrigerated centrifuge, sonicator, homogenizer, freeze dryer

Genetic engineering laboratory

Thermal cyclers, documentation systems, pulse field electrophoresis

Analytical laboratory

UV - vis spectrophotometer, AKTA prime liquid chromatography system

Animal tissue culture laboratory

Biosafety cabinet, CO₂ incubator, inverted microscope

Bioinformatics laboratory

Pentium IV computers, DS gene software, high speed internet connectivity, MATLAB and Schrödinger facilities.

PROJECTS

- Biosensors for water and air quality measurement
- Development of lipid lowering phytoformulation
- Transgenic approaches to improve sesame oil quality with omega 3 fatty acid
- Glabridin derivatives for estrogen receptor Beta mediated growth control of prostate cancer cells
- Selenoproteins and antioxidants in pathogenesis of Alzheimer's disease





CIVIL ENGINEERING

Established in the year 1953, the Department of Civil Engineering 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, industrial training, seminars, internships, project and independent study. There is also a quantum value addition in the department through participation of the students and faculty in solving real life problems of the civil engineering field through project work and continuing education programmes. The department is equipped with a library with current books and a computer centre with latest analysis and design softwares. Keeping itself up-to-date with the latest developments in the field and with dedicated faculty and experienced team in various fields of civil engineering, the department consistently strives to provide world class facilities for education and research.

PROGRAMMES OFFERED

- BE Civil Engineering (4 years)
- ME Structural Engineering (2 years)
- ME Infrastructure Engineering (2 years)

UG Curriculum

Core Courses

- Mechanics of deformable bodies
- Construction practice
- Hydraulics and hydraulic machinery
- Surveying
- Engineering geology
- Transportation engineering
- Design of concrete structures
- Building science
- Structural analysis
- Soil mechanics
- Steel structures
- Concrete technology
- Irrigation engineering
- Foundation engineering
- Geographical information system
- Estimation and costing
- Construction project management

Practical

- Hydraulics and hydraulic machinery lab
- Concrete lab
- Soil mechanics lab
- Computer aided drafting lab
- Computer aided analysis and design lab

- Survey practice
- Strength of materials lab
- Environmental engineering lab
- Design and drawing (environmental and irrigation)
- Design and drawing (concrete and steel)

Electives

- Distress monitoring and rehabilitation of structures
- Prestressed concrete structures
- Advanced steel design
- Finite element method in civil engineering
- Remote sensing techniques and applications
- Pavement design
- Structural dynamics and earthquake resistant design
- Limit state design-Steel structures
- Industrial structures

Project Areas

- Computer aided planning, analysis and design
- Concrete technology
- Pavement design
- GIS applications
- Environmental engineering
- Earthquake engineering

PG Curriculum

ME- STRUCTURAL ENGINEERING

Core Courses

- Applied Mathematics
- Applied Elasticity & Plasticity
- Computer Analysis of Structures
- Reinforced Concrete Design

- Structural Steel Design
- Structural Dynamics
- Foundation Structures
- Finite Element Method
- Aseismic Design of Structures



Civil Engineering

Practical

- Symbolic and Numerical Computation Laboratory
- Concrete Technology and Structural Engineering Laboratory
- Computer Aided Structural Analysis and Design Laboratory
- Object Computing and Data Structures Laboratory

Electives

- Structural Stability
- Prestressed Concrete Structures
- Bridge Engineering
- Design of Shell Structures
- Maintenance and Rehabilitation Of Structures
- Space Structures
- Optimization Techniques
- Industrial Structures
- Experimental Techniques and Instrumentation
- Concrete Technology
- Mechanics of Composite Materials
- Prefabrication Engineering

ME-INFRASTRUCTURE ENGINEERING

Core Courses

- Applied Mathematics
- Infrastructure Management
- Pavement Design
- Reinforced Concrete Design
- Concrete Technology

- Construction Project Management
- Traffic Engineering and Transport Planning
- Advanced Environmental Engineering
- Geographic Information Systems

Practical

- Computer Aided Infrastructure Planning and Analysis Laboratory
- Geographic Information Systems Laboratory
- Concrete Technology and Structural Engineering Laboratory
- Object Computing and Data Structures Laboratory

Electives

- Modern Materials for Construction
- Prestressed Concrete Structures
- Bridge Engineering
- Modern Surveying and Remote Sensing
- Foundation Structures
- Structural Steel Design
- Maintenance and Rehabilitation of Structures
- Environmental Impact Assessment
- Optimisation Techniques
- Industrial Structures
- Experimental Techniques and Instrumentation
- City Planning and Urban Design
- Geotechnical Earthquake Engineering
- Organisation Behaviour
- Financial Management and Accounting
- Prefabrication Engineering

Laboratory Facilities

- Strength of Materials Laboratory
- Soil Mechanics Laboratory
- Survey Laboratory
- Concrete Laboratory
- Structures Laboratory
- Computer Laboratory
- Environmental Engineering Laboratory
- Geographic Information Systems Laboratory (GIS)

Major Research Work Undertaken

The Department has completed numerous research projects under its own doctoral and post graduate programmes as well as under sponsorship by the Council of Scientific and Industrial Research (CSIR), the University Grants Commission (UGC), Bhabha Atomic Research Centre (BARC) and Defence Research Establishment-Aeronautical Research and Development Board (DRE-ARDB), Ministry of Human Resource Development (MHRD), Department of Science and Technology (DST), All India Council for

Technical Education (AICTE), Indian Space Research Organisation (ISRO), National Programme on Earthquake Engineering Education (NPEEE), The Institution of Engineers (IE) etc.

The department is engaged in research in the field of

- Finite Element Methods
- Earthquake Engineering
- Steel Structures
- Concrete Structures
- Composite Materials
- Concrete Technology
- Soil Structure Interaction
- Pavement Design
- Support Vector Machine
- Fracture Mechanics
- Discrete Optimization Techniques
- Environmental Impact
- GIS Application in Civil Engineering





COMPUTER SCIENCE AND ENGINEERING

The programmes offered by the Department of Computer Science and Engineering are among those that the crème de la crème of students from all over the country aim for. The students undertaking the courses are not only benefited by the highly experienced and dedicated faculty but also by the vast array of extra and co curricular activities that are organized by students for students via a plethora of clubs. The courses have been meticulously designed to meet the current needs of the industry and also encourage research. The courses are periodically refreshed to reflect the ever-changing needs of the industry. The Department of Computer Science and Engineering has several avant-garde laboratories dedicated to specific core technologies like Open Source, Database management, Web Development, etc. The Department also continually updates its laboratory facilities to provide a platform for emerging fields like Cloud Computing, Software as a Service (SaaS), and Service Oriented Architecture (SOA). The education-conducive and competitive atmosphere of the college brings out the best in the students, be it in managerial mastery or engineering expertise.

PROGRAMMES OFFERED

- BE Computer Science and Engineering (4 years)
- ME Computer Science and Engineering (2 years)
- ME Software Engineering (2 years)
- B.Sc. Computer Technology (3 years)
- M.Sc. Computer Technology (2 years)

UG Curriculum

Core Courses

- Computer Organization
- Data Structures
- Software Engineering
- Operating Systems
- Theory of Computing
- System Software
- Database Technology
- Design and Analysis of algorithms
- Compiler Design
- Object Oriented Analysis and Design
- Java Programming
- Unix Internals
- Computer Communication Networks
- Advanced Computer Architecture
- Distributed Component Architecture
- Internet Protocols

Practical

- Object Oriented Programming lab
- Data Structures lab
- Microprocessors and Interfacing lab
- Operating Systems lab
- System Software lab
- Database Technology lab
- Compiler Design lab
- Java Programming lab

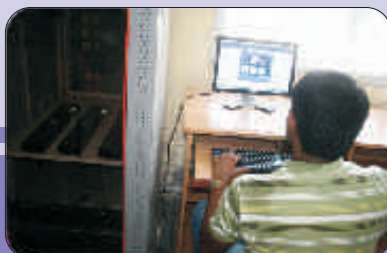
- Multimedia lab
- Computer Communication lab
- Distributed Component Architecture lab

Mathematics

- System engineering mathematics
- Discrete structures
- Probability and queuing theory
- Scientific computing

Electives

- Advanced Java Programming
- Open Source Systems
- Multi-Tier Computing
- Network Security
- Web Technology and E Business
- Artificial Intelligence and Expert Systems
- Mobile Computing
- Enterprise Computing
- Software Testing
- Genetic Algorithms and Applications
- Neural Networks and Fuzzy Systems
- Distributed Computing Systems
- Embedded Systems
- Data Mining
- Service Oriented Architecture
- Virtual Reality
- Fault Tolerant Computing Systems
- Digital Image Processing



Computer Science and Engineering

PG Curriculum

ME-COMPUTER SCIENCE AND ENGINEERING

Core Courses

- Mathematical structure of Computer Science
- Data structures and algorithms
- Computer architecture
- Software engineering methodologies
- Computer network engineering
- Operating systems
- System software
- Computer peripherals and interface
- Object oriented analysis and design

Practical

- Object Computing Laboratory
- Application Software Laboratory
- System Software Laboratory

Electives

- Microprocessor based system design
- Advanced java programming
- Theory of computation
- Database technology
- Distributed computing
- Agent based intelligent system
- Digital imaging
- Data warehousing and mining
- Creative thinking
- Mobile networking
- Digital signal processing
- Real time embedded systems
- Asic design
- Soft computing
- Cryptography and network security
- Software process management
- Human computer interaction

ME-SOFTWARE ENGINEERING

Core Courses

- Discrete Mathematical Structures
- Software Engineering Methodologies
- Object Oriented Systems
- Data Structures

- Computer Networks
- Database Systems
- Software Testing and Quality Assurance
- Distributed Component Architecture
- Operating Systems

Practical

- Object Computing Laboratory
- Advanced Java Programming Laboratory
- Software Testing Laboratory
- Computer Networks Laboratory

Electives

- Requirements Engineering
- Software Architecture
- User Interface Design
- Agile Software Development
- Software Project Management
- Service Oriented Architecture
- Software Metrics
- Distributed Systems
- Grid Computing
- Mobile Computing
- Pervasive Computing
- Web Engineering
- Open Source Systems
- Information Security
- Software Agents
- Semantic Web Technology

M.Sc- COMPUTER TECHNOLOGY

Core Courses

- Mathematical Structures of Computer Science
- Data Structures And Algorithms
- Computer Architecture
- Operating Systems
- Software Engineering
- Java Programming
- Enterprise Computing



- Computer Communication Networks
- Object Oriented Analysis and Design
- Principles of Compiler Design
- Database Management Systems
- Unix Internals
- Distributed Computing Systems
- Network Security
- Microprocessor Based System Design

Practical

Data Structures Laboratory

Operating System Laboratory

Networks Laboratory

Database Management Systems Laboratory

Microprocessor Laboratory

Network Security Laboratory

Electives

- Mobile Computing
- Web Technology
- Real Time Systems
- Digital Image Processing
- Embedded Systems
- Distributed Component Architecture
- Neural Networks and Fuzzy Systems
- Internet Protocols
- Software Testing
- Software Project Management And Quality Assurance

Laboratory Facilities

GRD Computing Laboratory

The GRD Computing Laboratory is the largest general-purpose laboratory in the department. It houses 70 Pentium D based workstations, networked via a HCL Windows-based server powered by an Intel Xeon processor.

PSG-Cordys SOA Laboratory

This laboratory is one of the many results of a high level of industry interaction that the college prides itself on. The laboratory houses a Dell Poweredge 2900 server with Dell machines powered by Xeon processors.

RDBMS Laboratory

The RDBMS laboratory is split into two sub-laboratories; these consist of 30 PC's each. The PC's are Pentium 4 HCL machines.

PSG-Yahoo! Grid Computing Laboratory

This brand new laboratory consists of Dell workstations with a Dell Poweredge 2950 server to stimulate development and research in grid computing technologies.

PSG-Cognizant Open-Source Software Laboratory

The Open-Source lab houses 30 machines, all running various GNU/Linux based operating systems like Fedora, Red Hat, Ubuntu, etc. They provide the unique opportunity for students to work with open-source platforms.

Industry Institute Partnership Consultancy Projects

HP-USA, Kalycto

- Investigations on open HPI
- Driver Porting from 8139 to 8255
- Open Computer Vision Library
- Building a Custom Linux distribution for Internal Use
- Redundancy managing node
- Dissector for Wireshark

Yahoo! India

- Automated virtualization of hadoop clusters.
- Semantic search parallelizing
- Multiple sequence alignment
- PLP information retrieval system

Cordys BPM-SOA

- Procurement Solutions
- Insurance Document Registration
- Banking
- MeijurnKooi-Purchase and sales automation
- NorthWind Pick-N-Get groceries

Virtualization and Sequence alignment in bioinformatics (Yahoo)
Enterprise Integration using Open source Middleware (Hexaware)



Computer Science and Engineering

SUNCLUB

Department of CSE actively participates in PSG Tech Sun Club, which is a joint initiative of Department of Computer Science and Department of Information Technology. Student Campus Ambassadors are selected by Sun Microsystems after rigorous interviews. Under the leadership of this ambassador, Students also enthusiastically participate in the organization of Department level association meetings, National level Conferences, International level conferences and Events which helps in promoting organizational and leadership qualities

SOA CELL

15 students from Dept of CSE have been selected after rigorous tests and interviews as SOA ambassadors. These students were trained by the Cordys in the area of Service Oriented Architecture. Further 4 faculty and 2 technicians were also trained along with the students in the same area. This team involves in consultancy and R&D works offered by Cordys.

OPEN SOURCE INITIATIVE CELL

Motivations for opening open source initiative cell in PSG College of Technology have a concern, ranging from philosophical and ethical reasons to pure practical issues. The purpose of this cell to motivate the students to take up internship projects, support faculty research, undertake consultancy projects, and bring awareness of open source software development for faculty of other colleges and public through workshops, short term courses and conferences.

CLOUD COMPUTING CELL

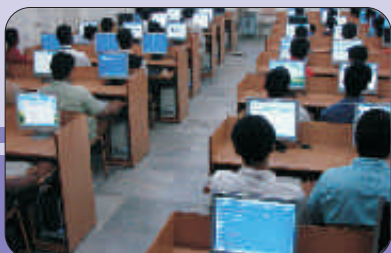
The Department of CSE, keeping abreast of the latest technologies, has started the Cloud Computing Cell in collaboration with Classle

Technologies, Chennai and Cordys Hyderabad. The students get the unique experience in the Cloud Computing Technologies through the newly introduced courses in these technologies and the state of the art laboratories.

RESEARCH AND DEVELOPMENT ACTIVITIES

Research work is being carried out in the areas of Network Security, Component Architecture and Distributed Computing, Model Driven Software Engineering, Embedded Systems, Service Oriented Architecture, Networking, Particle Swarm Optimization, Genetic Algorithm, Neural Networks, Data warehouse and Mining, and Web Mining. Some of the research projects completed and in progress include:

- Applying Model Driven Approach for Remote Control Appliances
- Reengineering a disaster management system
- Paralleling sequence alignment in bioinformatics
- Virtualization of hadoop clusters
- Enhanced P2P information retrieval system
- Enterprise Integration using open source middleware
- Mrithyunjai Robo
- Multimedia Class Room
- Applying MDA for realizing Service Oriented Architecture
- IDE/ITE for modeling Environment
- Embedded Security Modeling Languages
- Model Interpreters
- Code optimization in CORBA based distributed embedded systems.





ELECTRICAL AND ELECTRONICS ENGINEERING

The Department of Electrical and Electronics Engineering started in the year 1951 is a milestone in the field of Engineering. The department offers UG (Regular and Sandwich) programmes, PG programmes and Research programmes. The strength of the department lies in its dedicated faculties, students, well equipped laboratories and Centres Of Excellence. The Curriculum is frequently updated with latest technology enabling students to face the challenges of the future. The faculties render moral support and encourage students to involve in research activities. The students imbibe practical knowledge from Industrial Field Training at PSG Industrial Institute located within the college campus. The students acquire leadership qualities, interpersonal and communication skills from the EEE Association and promote their professional skills through societies like Indian Society for Technical Education (ISTE), and Institute of Electrical and Electronics Engineers (IEEE). The students from the department emerge as sound Professionals serving the society through technology.

Mission of the Department: Equip, Engineer and Enable the students to become responsible engineers and citizens of the country.

PROGRAMMES OFFERED

- BE Electrical and Electronics Engineering (4 years)
- BE (Sandwich) Electrical and Electronics Engineering (5 years)
- ME Applied Electronics (2 years)
- ME Embedded and Real-Time Systems (2 years)
- ME Power Electronics and Drives (2 years)

UG Curriculum

Electrical

- Electric circuits
- Electromagnetic fields
- Network theory
- Heat Engines and Fluid Machinery
- DC Machines and Transformers
- Induction and Synchronous machines
- Electrical Machine Design
- Generation, Transmission and Distribution
- Non-conventional Energy Resources
- Electric Drives and Controls
- Measurement and Instrumentation
- Power System Protection and Switch Gears
- Computer Aided Power System Analysis
- Computer Aided Design of Electrical Machines

- Power Electronics
- Control Systems
- Signals and Systems
- Digital Signal Processing

Computer Science

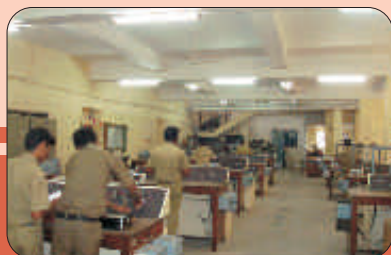
- C, C++ Programming languages
- Computer Architecture
- Operating Systems
- Personal Computer Systems
- Data Structures and Algorithms
- Database Management Systems
- Microprocessors and Applications
- Computer Networks
- Internet Tools and Java Programming
- Multimedia Computing

Electronics

- Electronic devices
- Electronic circuits
- Digital Electronics
- Linear ICs and Applications

Mathematics and Applications

- System Engineering Mathematics
- Probability and Statistics
- Scientific Computing



PG Curriculum

ME - APPLIED ELECTRONICS

Core Courses

- Applied Mathematics
- Digital Signal Processing
- Linear Systems
- Personal Computer Systems
- Digital System Design and Testing
- VLSI Design
- Analog VLSI
- Computer Architecture And Parallel Processing

Practical

- Object Computing Laboratory
- Data Structure Laboratory
- Applied Electronics Laboratory

Electives

- Neural Networks And Fuzzy Systems
- Microcontrollers And Applications
- Virtual Instrumentation / Advanced Microprocessor
- Algorithms For Vlsi Design Automation
- Advanced Topics In VLSI
- Digital Image Processing
- Operating Systems
- Scada And Dcs

ME - EMBEDDED AND REAL-TIME SYSTEMS

Core Courses

- Applied Mathematics for Systems Engineering
- Advanced Digital Signal Processing
- Real-Time Concepts for Embedded Systems
- Microcontrollers and Applications
- Digital System Design and Testing
- Fundamentals of Embedded Software
- Embedded Systems Design
- Real-Time Operating Systems
- Embedded Systems Networks

Practical

- Embedded Systems Lab-I
- Embedded Systems Lab-II

- Industrial Automation Lab
- Object Computing and Data Structures Lab

Electives

- Wireless Sensor Networks
- System on Chip
- Digital Image Processing
- Personal Computer Systems
- Industrial Networking and Standards
- Robotics and Factory Automation
- Micro Electro Mechanical Systems
- Graph Theory and Applications
- Soft Computing

ME - POWER ELECTRONICS AND DRIVES

Core Courses

- Applied Mathematics
- Digital Signal Processing
- Linear Systems
- Personal Computer Systems
- Generalised Theory Of Electrical Machines
- Neural Networks And Fuzzy Systems
- Power Semiconductor Devices
- Electric Drives And Control
- Power Converters
- Simulation Of Power Electronics Systems

Practical

- Object Computing Laboratory
- Power Electronics And Drives Laboratory
- Data Structures Laboratory

Electives

- Virtual Instrumentation Systems
- Microcontrollers And Applications
- Advanced Topics In Power Electronics
- Scada And Dcs
- Power Electronic Applications To Power Systems
- Power Electronics In Wind And Solar Power Conversion



Laboratory Facilities

Electrical Machines Lab

DC -shunt, series, compound motors and generators, Induction motor Series Generator, Induction motor High voltage DC generator, three phase and single phase Induction Motor, Induction motor Cascade set, DC shunt motor Induction generator, winding study Induction motor, DC motor Alternator, Reluctance motor rotary converter, Multi rotor machine, single and three phase transformer, Linear Induction motor, Machine Tutor set, PMDC/AC motors, Eddy Current Dynamometers.

Power Electronics and Drive Lab

Power semiconductor devices like SCR, TRIAC, Power Transistor, Power MOSFET, IGBT, Basic Power Electronics Trainer Kit, Three phase diode bridge converter, single phase half controlled, three phase half controlled and three phase fully controlled Thyristor bridge converters, Power MOSFET based DC Chopper, single and three phase IGBT based PWM Inverter, vector controlled and stator voltage controlled three phase Induction motor drive, Inverter fed Induction Motor drive, DSP controlled, Chopper controlled, and microprocessor controlled DC drives, Dual convertor fed DC drive system, Differential module.

Analog Electronics Lab

Digital Storage Oscilloscopes, Dual Trace Oscilloscope, Scientific CRO, Analog and Digital Multimeter, Function Generator, Frequency Meter, Single Trace Cardiac Monitor and ECG Simulator, FM Transmitter and Receiver kit, Modulation and Demodulation Trainer kit, Digital Soldering Station

Digital Electronics lab

SPARTAN III FPGA Main board, 8085, 8086 microprocessor kit, VMC 8031 kit, 80196, 8051 Microcontroller kit, Universal Embedded Trainer kit, Universal Microcontroller kit, Universal Cross Assembler, Universal Programmer kit, Digital Signal Processor kit, AD-3522 Single channel FFT Analyser and AD 3522-01 GPIB Interface, Flash Programmer.

Computer Lab

Java 1.5, C++, PSPICE 9.2, Matlab beta, Electrical CAD, Motor PRO, PSSIM, Xilinx, Model Sim, Simulink, Visual Studio, TASM, Auto CAD, PSCAD.

PSG-LAPP Centre for Excellence in Cable Technology

Worldwide the LAPP Group is one of the leading manufacturers of cables, wires, cable accessories, cable handling machines, communication technology and connectors. In collaboration with LAPP Group, this centre was established in 2005 and it is first of its kind in this field in India.

The centre resources are used in imparting training to the graduate and post graduate students of the college.

The centre is also used by Industries like machine tools, automotive, instrumentation, computer and other electrical installations for consultancy and testing purposes.

PSG-L&T Centre for Excellence in LV Switchgears

This centre, established in 2005 in collaboration with Larsen & Toubro Limited company (Electrical Division) displays their products for exhibition at the centre along with the trainer kits. Training courses for students and industrial engineers are conducted at the centre. The centre carries out testing and servicing of L&T switchgears for industries.

PROJECTS

The faculty members continually involve in research activities and publish many technical papers. The major areas of research are Power Electronics and Drives, Linear Control Systems, Reliability Engineering, Biomedical Engineering, Digital Signal Processing, Multidimensional Systems and Neural Network. The Faculty members have completed various projects sponsored by DRDO, DST, DRDE, MHRD, AICTE, UGC, and TNSCST. Some of completed projects are:

- Control of Axis run away in CNC machines during unprecedented power failures.
- Environment detection assessment and response system.

Some of the ongoing projects are:

- Design and development of flexible solar Tents for defense applications.
- Design, fabrication and testing of a 250kW, 3000V, three phase under water motor.

These projects are sponsored by DRDO and NIOT respectively.





ELECTRONICS AND COMMUNICATION ENGINEERING

The Department of Electronics and Communication Engineering established in the year 1968 with an undergraduate programme. Ever since its inception, it has been splendid in providing dynamic and quality engineers to the society till date. The PG Programmes include ME - Communication Systems and ME - VLSI Design offering high class technical experience to the students. Research

programmes have been nurtured in the department effectively and innovatively. The Electronics and Communication Engineering Department has always been interested not only in updating the curriculum, but also in enhancing the laboratory facilities to cope up with the new developments in the state-of art technologies. Through direct central assistance scheme and other projects, the Electronics and Communication laboratories are constantly upgraded with new equipments. The department boasts of top intelligentsia- with an intake of students who have attained the honorable status of members of the exclusive and coveted 'creme de la creme' throughout the state.

PROGRAMMES OFFERED

- BE Electronics and Communication Engineering (4 years)
- ME Communication System (2 years)
- ME VLSI Design (2 years)

UG Curriculum

Electronics

- Electron devices and circuits
- Analog electronics
- Digital electronics
- VLSI & ASIC design
- Linear integrated circuits
- Microprocessors & Microcontrollers.

Computer Technologies

- C/C++
- Data structures
- Operating systems
- Relational Database Management System
- Computer Networks.

Communication

- Communication engineering
- Transmission lines and waveguides

- Antenna and wave propagation
- Digital communication systems
- Wireless communication
- Telecommunication switching systems
- Microwave and RADAR engineering
- Statistical theory of communication.

Electives

- Network system design using network processors
- Soft computing
- Network security
- Digital Image processing
- Bluetooth technology
- Low power VLSI
- Embedded systems.

PG Curriculum

ME- COMMUNICATION SYSTEM

Core Courses

- Linear Algebra
- Information Theory Coding
- Digital Communication Technique
- Multirate Signal Processing
- Microwave Circuit Design
- Detection and Estimation
- Network System Design using Network Processor

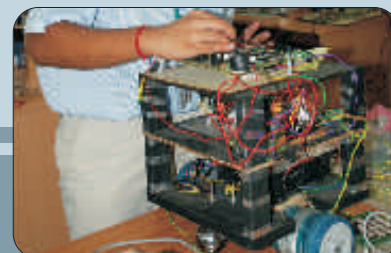
- Mobile Communication Engineering
- Software Radio Architecture

Practical

- Object Computing Laboratory
- Data Structures Laboratory
- Communication Engineering Laboratory

Electives

- Digital Image Processing
- Data Compression



Electronics and Communication Engineering

- Wavelet and Sub-band Coding
- Wireless Security
- Advanced Communication Networks
- RF Circuit Design

ME-VLSI DESIGN

Core Courses

- Linear Algebra and Optimisation Techniques
- Device Modeling
- VLSI Subsystem Design
- Computer Aided Design of VLSI System
- Hardware Description Language
- Low Power VLSI Design
- Analog VLSI Circuits

- Testing and Testability
- VLSI Signal Processing

Practical

- Object Computing Laboratory
- Data Structures Laboratory
- VLSI Design Laboratory

Electives

- Designing with CPLD's & FPGA's
- Semiconductor Memory Design and Testing
- Hardware Design Verification Technique
- Nano Electronics
- System On Chip
- VLSI for Wireless Communication
- RF Circuit Design
- Mixed Signal VLSI Design

Laboratory Facilities

VLSI design centre (Funded by DoE, Govt. of India) - VHDL & Verilog - Modelsim simulator, Xilinx ISE, FPGA Advantage 6i, CADENCE, MENTOR, SYNOPSIS, COWARE, MAGMA, TANNER tools Pro, Xilinx FPGA Board.

Network system design - Intel Multi-core lab, Architectural and Interfacing lab

Embedded systems - Infineon lab - XC167(keil), XC164(Infineon) 16-bit microcontroller board with keil IDE

Embedded systems - Freescale lab - Code Warrior 4.7(16-bit) & 7.1(32-bit), HCS12 (16-bit) & 52233 (32-bit, Cold Fire Architecture), 16-bit & 32-bit product/project prototyping board.

RF & Wireless communication lab - ADS (Advanced Design Suite 2008) - RF Design software, Vector Network Analyser, VSA (Vector Signal Analyser-89600 Series)

Digital Signal Processing - DSP kits based on TMS320C54XX, MATLAB with all tool boxes, PSPICE

MPLS Lab - Mixed Signal Oscilloscope-MSO6014A(LXI compatible), Intulink, VEEPRO, Arbitrary

Waveform Generator(33220A), Triple output power supply, Precision 6 ½ Digital True RMS DMM.

Sponsored Projects

Design and development of Network Hardware for the loss less

transfer of video streaming in wireless networks, sponsored by AICTE.

Special Manpower Development Program in VLSI Phase II sponsored by Ministry of Communications and Information Technology, Govt. of India.

Development of Blue tooth Telemedicine based Processor to transmit Biomedical Information via Mobile Networks sponsored by DRDO-LSRB.

Research areas

Testing of Analog and Mixed Signal of VLSI Circuits

Medical Imaging

MRI Brain- Image Segmentation

RF Phase Shifters for WLAN Applications

MIMO OFDM Systems

Image Segmentation and Image Authentication

VLSI Signal Processing for Biomedical Applications

RF IC Design

Digital Image Compression

Embedded Systems

Digital Image Processing

Robotics





FASHION TECHNOLOGY

The programmes offered by the Department of Fashion Technology have been developed distinctively to provide students with knowledge to strive and excel in understanding and integrating the areas of technology and management to respond to the diverse needs of the technologically advanced and creative fashion industries. The department develops complete professionals for the fashion and apparel industry with wide competence in the entire range of functions in the industry and in addition with specialisation in particular functions to meet their individual needs and aspirations. In this effort our curriculum is strengthened periodically with the significant contributions from eminent academicians, industrialists and fashion research organisations. Industrial training and our portfolio of course strike a balance between practical and theoretical concepts and self directed assignments allowing for exploration and experimentation within a specified area with such a background, department provides the right platform for the students to develop curricular, co-curricular, extra curricular and entrepreneurial skill sets to meet the diverse demands of fashion and textile industries.

PROGRAMMES OFFERED

- B.Tech Fashion Technology (4 years)
- B.Sc. Apparel and Fashion Technology (3 years)

UG Curriculum

Textile Technology

- Fibre science
- Yarn technology
- Fabric Technology
- Textile chemical processing
- Testing & quality assurance
- Fabric structure and design

Apparel Technology

- Pattern engineering
- Garment construction
- Knitwear technology
- Apparel costing
- Apparel machinery
- Clothing science and apparel product engineering
- Computer integrated manufacturing
- Leather garment technology

Fashion Technology

- Fashion designing
- Fashion forecasting
- Accessories and embellishment
- Fashion business
- Home textiles
- Visual merchandising
- Fashion Retailing

CAD / FIF Analysis Softwares

- Fabric CAD- Textronics, Kaledo-weave
- Apparel CAD- Lectra- Modaris, Diamino
- Fashion CAD- CorelDraw, Kaledo collections
- Virtual Garmenting- Assyst Bullmer

Management

- Apparel marketing & merchandising management
- Supply chain management
- Global marketing



Laboratory Facilities

Pattern engineering laboratory

Cork top tables, mannequins and dress forms of sizes Indian, American and European for drafting and draping techniques

Apparel construction laboratory

Wide range of all kind of sewing machines including computerized embroidery machine.

Fashion cad laboratory

Equipped with Adobe Photoshop and Corel Draw

Apparel Resource Centre

Good assortment of fabric swatches, accessories, trimmings and garments designed and constructed by the students.

PSG- Lectra apparel cad centre

This centre has the prized possession of the latest apparel and fashion CAD hard wares like Digitizer and Plotter and apparel and fashion CAD soft wares such as Modaris, Diamino and Kaledo collections. The centre helps the students to augment their skills in

apparel fashion and technical designing such as pattern making, grading marker planning, fabric and style collections.

PSG- Assyst Bullmer- Mehala Fashion Studio

This centre has the pride of possessing first of its kind 3D fashion CAD software "VIDYA" and the state-of-the-art 2D fashion CAD software, "ASSYST CAD". It provides a virtual sample fitting solution that eliminates the needs for multiple fit samples by developing 2D pattern for various styles with ASSYST CAD and simulation of style, fit and drape in "3DVIDYA".

PROJECTS

The Department is continuously engaged in research and development of new products in the field of apparels such as Microbe Resistant Apparels, Solo Spun Silk Garments, Fashion Sweaters from Wool/Silk Blends, Functional Wears using KAPOK Non-Wovens, Active Wears using New Generation Synthetic Fibres, Winter Jacket using Chicken Feather Nonwovens, 3D Knitted Spacer Fabrics, Footwear Textiles, Specialty Finishes for Apparels and Surgical Wears.





INFORMATION TECHNOLOGY

The Information Technology programme at PSG College of Technology is one of the sought after programmes in the institution. The Department of Information Technology offers an excellent atmosphere for students to learn and acquire the necessary skills demanded by the industry. The department has experienced faculty members who are fully committed to teaching and research and dedicated to imparting quality education to the students. The students have access to well equipped, state-of-the-art laboratories. 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 well thought out curriculum requires the students to take up a broad spectrum of courses, while simultaneously allowing emphasis on desired areas of specialization. Hence the Department of Information Technology endeavors to provide hands-on education to all of its students. The department has brought out outstanding engineers in the past and will continue in doing so in the years to come.

PROGRAMMES OFFERED

- B.Tech Information Technology (4 years)
- M.Tech Information Technology (2 years)
- B.Sc. Information Technology (3 years)

UG Curriculum

Core Courses

- Object Oriented Programming
- Database Management Systems
- Data Structures
- Design and Analysis of Algorithms
- Operating Systems
- Computer Architecture
- Software Engineering
- Theory of Computing
- Object Oriented Modeling and Design
- Computer Communication Networks
- Signals and Linear Systems
- Digital Signal Processing
- Analog and Digital Communication
- Microprocessors and Applications
- Distributed Component and Enterprise Systems
- Information Security
- Web Technology
- Data Mining

Practical

- Programming Languages(C,C++,Java)
- Data Structures Lab
- Relational Database Systems Lab

- Operating Systems Lab
- Networks Lab
- Distributed Component and Enterprise Systems Lab
- UNIX Lab
- Compiler Design Lab
- Web Technology Lab
- Data Mining Lab
- Digital Logic Design Lab
- Electronics Lab
- Microprocessors and Applications Lab

Mathematics

- Discrete Structures
- Probability and Queuing Theory
- System Engineering Mathematics

Electives

- UNIX Internals
- Parallel Programming and Algorithms
- Mobile Computing
- Soft Computing
- Software Project Management and Quality Assurance
- Compiler Design
- TCP/IP and Socket Programming



PG Curriculum

M.TECH - INFORMATION TECHNOLOGY

Core Courses

- Optimization Techniques
- Data Structures and Algorithms
- Computer Organization and Design
- Data Communications and Networks
- Operating System Design
- Software Engineering Methodologies
- Information Systems Design
- Advanced Database Technology
- Distributed Systems

Electives

- Software Testing and Quality Assurance
- Data Warehousing and Data Mining
- Mobile Computing
- Pervasive Computing
- Information Security
- Bioinformatics
- Soft Computing
- Embedded Systems
- Supply Chain Management
- Digital Imaging
- Component based Technology
- Network Management Systems

Laboratory Facilities

IT Laboratory

The IT laboratory has around 200 Core2 Duo based PC's all running WindowsXP while some are dual booted with RedHat Linux and OpenSolaris. It is also equipped with two IBM servers and two HCL servers running Linux and Windows Server 2003. All necessary softwares for the various laboratory courses are available.

Hardware Laboratory

The hardware laboratory is well equipped with 8085, 8086 microprocessor trainer kits and 8051 microcontroller trainer kits, cathode ray oscilloscopes, DSP trainer kits, function generators which are used in conducting laboratory experiments for the Microprocessor and applications and Electronics Lab courses.

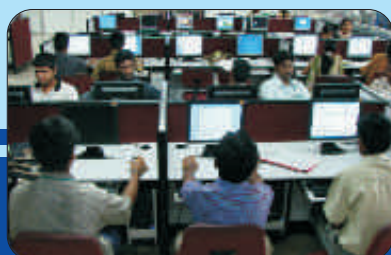
INDUSTRY INTERACTIONS

As a part of Industry Institute Interaction, Sun Club functions in collaboration with Sun Microsystems. The department has signed

MoU with IBM to develop and work on joint research and consultancy. It also jointly organizes a continuing education programme with EMC2 Corporation on Information Storage and Management.

PROJECTS

- Data Mining Research Projects: Pattern Mining
- Design of Energy Efficient Routing Protocols for Wireless sensor Networks.
- Multiprocessor scheduling using multi-objective evolutionary algorithms.
- Automated Data Replication between server and client using Periodic Synchronization
- Pattern Recognition using ANN





INSTRUMENTATION & CONTROL ENGINEERING

Instrumentation and Control Engineering play a vital role in any modern industry. The department is fascinating motley of multifarious disciplines of technology such as electronics, electrical, instrumentation, measurements, process control, and automation. The curriculum begins with foundation courses in mathematics, physics, chemistry, electronics and electrical. Emphasis is laid on the courses like sensors and transducers, micro-controllers, industrial instrumentation, control systems, PC interfacing and telemetry.

PROGRAMMES OFFERED

- BE Instrumentation and Control Engineering (4 years)
- ME Control Systems (2 years)

UG Curriculum

Electrical Engineering

- Electric Circuits
- Electrical Machines
- Electrical Measurements
- Power Electronics and Drives

Electronics Engineering

- Electronic Devices
- Electronic Circuits
- Digital Electronics
- Linear IC's and Applications
- Microprocessors and Microcontrollers

Signal Processing

- Digital Signal Processing
- Digital Image Processing

Control Engineering

- Control Systems
- Process Control
- Modern Control Systems
- Optimal and Adaptive Control Systems
- Intelligent Controllers

Instrumentation Engineering

- Sensors and Transducers
- Industrial Instrumentation

- Virtual Instrumentation
- Analytical Instrumentation
- Biomedical Instrumentation
- Fibre Optics and Laser Instruments
- Power Plant Instrumentation
- Instrumentation in Petro Chemical Industries

Computer Engineering

- C Programming
- Data Structures
- Operating Systems
- Computer Architecture
- Internet Tools and Java Programming

Automation

- Personal Computer Systems and Interfacing
- Logic and Distributed Control System
- SCADA and HMI
- Robotics and Automation

Ancillary Courses

- Communication Engineering
- VLSI Design
- Micro Electro Mechanical Systems
- Computer Networks
- Embedded System Design



PG Curriculum

ME - CONTROL SYSTEMS

Core Courses

- Applied Mathematics
- Digital Signal Processing
- Linear Systems
- Personal Computer Systems
- Nonlinear Systems
- Control Systems Design
- Digital Control Systems
- Optimal Control
- Advanced Instrumentation Systems

Practical

- Object Computing and Data Structures Laboratory
- Control Systems Laboratory

Electives

- Electric Drives And Control
- Microcontrollers And Applications
- Neural Networks And Fuzzy Systems
- Virtual Instrumentation Systems

Laboratory Facilities

- Virtual Instrumentation centre
- Process Control Laboratory
- Sensors and Transducers Laboratory
- Analog Electronics Laboratory
- Digital Electronics Laboratory
- Digital Signal processing Laboratory
- Industrial Instrumentation Laboratory

- Microprocessor and microcontroller Laboratory
- Industrial Automation Laboratory

SOFTWARE PACKAGES

- LabVIEW
- MATLAB
- MULTISIM
- PSPICE





MECHANICAL ENGINEERING

Among a myriad of engineering activities, the Mechanical Engineering Department has been a focal point of the PSG College of Technology.

The Department has been consistently ranked as one of the top mechanical engineering departments in the nation with active and productive teaching/research laboratories and an on-campus industry. The work undertaken by them ranges from the most basic, classical issues in engineering to the latest advancements in manufacturing sector. The PSG Industrial Institute provides a perfect working environment that makes students compare the classroom teaching with industrial applications.

A multi-disciplinary curriculum is framed to suit the needs of industries according to the recent trends and its periodic up-gradation retains the standard. It is designed to demonstrate not only areas of specific knowledge, but also to compare it with real world situations.

Keeping itself up-to-date with the latest developments in the field and with a dedicated faculty of highly qualified and experienced team in various streams of mechanical engineering, the department consistently strives to provide world-class facilities for education and research. PSG design data compiled by faculty of Mechanical Engineering is widely used by academic institutions and industries.

PROGRAMMES OFFERED

- BE Mechanical Engineering (4 years)
- BE (Sandwich) Mechanical Engineering (5 years)
- ME Computer Integrated Manufacturing (2 years)
- ME Engineering Design (2 years)
- ME Industrial Engineering (2 years)
- ME Lean Manufacturing (2 years)

UG Curriculum

DESIGN AND MANUFACTURING

- Design of Machine Elements
- Design for Manufacturing and Assembly
- Production Tooling
- Engineering Drawing
- Manufacturing Technology
- Automation, CNC and Robotics
- Lean Manufacturing
- Industrial engineering

STRUCTURAL

- Strength of Materials
- Engineering Mechanics
- Kinematics of Machines
- Dynamics of Machinery
- Material Science
- Design of Automotive Systems

FLUID POWER

- Fluid Mechanics
- Fluid Machinery and Gas Dynamics

THERMAL

- Thermodynamics
- Heat and Mass Transfer
- Thermal Engineering
- Computational Fluid Dynamics
- Automobile Engineering

SOFTWARE PACKAGES

Analysis

- ANSYS 11.0
- NISA
- VPG 1.0
- DYNAFORM 2.1
- HYPER WORKS 7.0
- SOLIDCAST
- MSC ADAMS 2006
- FLOTHERM

Automation

- DIRECTSOFT
- Automation Studio
- CBT
- KV LADDER
- LabVIEW 8.2

Modeling

- I-DEAS 11 NX
- UNIGRAPHICS NX 3.0
- WILDFIRE 3.0
- SOLIDEDGE V19
- CATIA V17
- SOLIDWORKS



PG Curriculum

ME - COMPUTER INTEGRATED MANUFACTURING

Core Courses

- Components and Architecture of Cim
- Modeling and Analysis of Manufacturing Systems
- CNC Machines and Robotics
- Design for Manufacture and Assembly
- CAD in Manufacturing
- Engineering Economic Analysis
- Mechatronic System Design
- Precision Engineering
- Manufacturing System and Quality Engineering

Practical

- Object Computing Laboratory
- Computer Integrated Manufacturing Laboratory
- Computer Aided Manufacturing Laboratory

Electives

- Finite Element and Boundary Element Methods
- Design of Automotive Systems
- Supply Chain Management
- Flexible Manufacturing Systems
- Six Sigma in Lean Manufacturing and Service
- Lean Tools and Management Systems
- Product Analysis and Cost Reduction
- World Class Manufacturing
- Value Engineering
- Artificial Intelligence in Manufacturing

ME - ENGINEERING DESIGN

Core Courses

- Computational Methods in Design
- Applied Elasticity and Plasticity
- Design for Manufacturing and Assembly
- Design and Failure Analysis
- Designing with Composite and Smart Materials
- Industrial Design and Applied Ergonomics
- Mechanisms and Robot Kinematics
- Finite Element and Boundary Element Methods
- Machinery Vibration and Diagnostics

Practical

- Object Computing Laboratory
- Design Engineering Software Laboratory
- Mechanical Systems Analysis Laboratory

Electives

- Design of Mechanical Drives
- Geometric Modelling
- Plant Equipment Design
- Design and Analysis of thermal systems
- Experimental Stress Analysis
- Tribological Components
- Design of Automotive Systems
- Micro Electro Mechanical Systems
- Production Tool Design
- Engineering Economic Analysis

ME - INDUSTRIAL ENGINEERING

Core Courses

- Reliability Engineering
- Operations Management
- Modeling and Analysis of Manufacturing Systems
- Manufacturing Systems and Productivity Management
- Engineering Economic Analysis
- Engineering Optimization - Theory and Applications

Practical

- Object Computing Laboratory
- Industrial Engineering Laboratory
- Manufacturing Laboratory

Electives

- Total Productive Maintenance
- Six Sigma in Lean Manufacturing and Service
- Human Resource Management
- Industrial Design and Applied Ergonomics
- Artificial Intelligence in Manufacturing
- Industrial Scheduling
- Value Engineering
- Environment Management System



Mechanical Engineering

ME-LEAN MANUFACTURING

Core Courses

- Reliability Engineering
- Lean Tools and Management Systems
- Cost Management and Lean Accounting
- Six Sigma in Lean Manufacturing and Service
- Supply Chain Management
- Design for Manufacture and Assembly
- Design Of Lean Production System
- Discrete Event System Simulation
- Computer Integrated Manufacturing

Practical

- Object Computing Laboratory
- Lean Manufacturing Laboratory
- Manufacturing Laboratory

Electives

- Creativity and Innovation Management
- Human Resource Management
- Total Quality Management
- Product Analysis and Cost Reduction
- Quality Engineering and Management Systems
- Concurrent Engineering

Laboratory Facilities

- Rapid Prototyping Centre
- Heavy Vehicles Laboratory
- Manufacturing Systems Laboratory
- Engineering Design Laboratory
- Dynamics Laboratory
- Noise and Vibration Laboratory
- Pneumatic Automation Laboratory
- Power Hydraulics Laboratory
- Lean Manufacturing Laboratory
- Supply Chain Management Laboratory
- Sensorics Laboratory
- Thermal Engineering Laboratory
- Fluid Machinery Laboratory
- Heat and Mass Transfer Laboratory
- Flomerics Laboratory
- Near Net Shape Laboratory
- Metrology Laboratory
- Industrial Engineering Laboratory

MAJOR RESEARCH WORK UNDERTAKEN

The faculty of the Department are doing work in the areas of Design and Analysis, Pneumatics, Finite Element Analysis, Manufacturing and Medical fields. Many testing work, consultancy work and sponsored research work have been completed and several of them are in-progress.

- Investigations on High Speed Machining of Light Alloy Structures for Aerospace applications
- Investigations on High Speed Machining of Metals
- Tool Condition Monitoring in High Speed Machining using Acoustic Emission Technique
- Computational Fluid Dynamics analysis of Dense Media Cyclone
- Low cost automation for handling asymmetric components
- Design and development of Infant ventilator
- Virtual cellular manufacturing
- Cost optimization of Supply Chain Network using non-Traditional Optimization
- Sheet and Tube hydroforming of superalloys





METALLURGICAL ENGINEERING

The department of Metallurgical Engineering provides world class education and research in metallurgy to foster and sustain healthy professional attitudes and develop team spirit, leadership, motivational skills and awareness of social responsibilities among students for the development of the individual and the country. The department has a competent and committed faculty team. Besides full time faculty, experts from R&D institutions and industry are drawn as visiting professors from time to time to enhance the delivery of academic programmes in the department. The department undertakes several projects sponsored by DST, ISRO, DRDO, IGCAR and other leading private concerns.

PROGRAMMES OFFERED

- BE Metallurgical Engineering (4 years)
- ME Industrial Metallurgy (2 years)

UG Curriculum

Core Courses

- Physical Metallurgy
- Metallurgical Thermodynamics
- Mechanical Behaviour of Materials
- Non Ferrous Extraction Metallurgy
- Production of Iron and Steel
- Foundry Processes and Metallurgy
- Welding Processes and Metallurgy
- Metal Forming
- Corrosion Engineering
- Heat Treatment and Surface Engineering
- Material Characterisation Techniques
- Destructive and Non Destructive Testing
- Selection of Materials
- Metallurgical Failure Analysis
- Special Steels and Non Ferrous Alloys

Practical

- Metallography
- Non Destructive Testing

- Welding Metallurgy
- Corrosion and Surface Engg
- Heat Treatment
- Material Characterisation
- Foundry Sand Testing
- Mechanical Testing
- Powder Metallurgy
- Metal Forming
- Mineral Dressing

Programming Skills

- Programming with C and C++

Electives

- Powder Metallurgy
- Special Casting Techniques
- Nuclear Materials
- Nanomaterials
- Advanced Surface Engineering
- Materials for Modelling
- Materials for Mega Energy Systems

PG Curriculum

ME- INDUSTRIAL METALLURGY

Core Courses

- Physical Metallurgy
- Metallurgy of Metallic Materials
- Metal Casting Engineering
- Welding Technology
- Heat Treatment and Surface Engineering

- Mechanical Metallurgy
- Forming Process
- Non Destructive Testing

Practical

- Metallography Laboratory
- Materials Testing Laboratory
- Casting and Joining Laboratory



Electives

- Foundry Metallurgy
- Powder Metallurgy
- Materials Characterisation

- Welding Metallurgy
- Metallic Corrosion and its Control
- Iron and Steel Technology

Laboratory Facilities

METALLOGRAPHY LAB

Metallography lab is facilitated with SEM with EDAX, X-Ray diffraction unit, Image analysis system for advanced Research studies.

NDT

This laboratory is equipped with X-ray radiography unit, Ultrasonic tester, Eddy current tester, Industrial Endoscopy unit, Magnetic crack detector for material inspection and failure analysis.

SURFACE AND HEAT TREATMENT LAB

This lab is furnished with abrasion tester, pin-on-disc tester, stress corrosion tester, salt spray chamber, controlled atmosphere furnace, induction hardening unit.

RESEARCH EQUIPMENT

Hot isostatic press, Diffusion bonding set-up, attritor and plasma spray deposition unit.

PROJECTS

- Manufacture of hollow cylinder in YBCO by hot pressing
- Diffusion bonding of alnico magnets with mild steel
- Bonding of Invar with magnetic materials
- Weldability study of HSLA steel using GMAW
- Development of bainitic and high nitrogen steels
- Development of porous aluminium castings
- Equal channel angular pressing of Titanium alloys

- Development of Oxide Dispersion strengthened
- Ferritic Stainless Steel by mechanical alloying

Advanced Metallography Lab

Carl Zeiss Optical Microscopes, Scanning Electron Microscope with EDS, X-Ray diffractometer, Image analyser

Mechanical Testing and Metal Forming Lab

UTM, Impact testing (room temperature and Sub zero temperatures), diffusion bonding equipment

Powder Metallurgy Lab

Hot isostatic pressing unit, Planetary ball mill,

Non Destructive Testing Lab

X-ray radiography, Ultrasonic Testing, Magnetic particle testing, Eddy current testing, endoscopy, Ultrasonic Testing - C scan, etc.

Corrosion and Surface Engineering Lab

Potentiostat-galvanostat, salt spray testing, stress corrosion testing, Wear testing machines (dry sliding, slurry abrasion tester).

Heat Treatment Lab

Heat treatment furnaces including vacuum and controlled atmosphere furnaces, Jominy end quench testing unit.

Industry Institute Interaction

The department is interacting with industries for their testing and consultancy related activities. It also has close interaction with R&D Labs like IGCAR, DMRL, WRI-BHEL, etc. Our students take up projects with them during their final semester, which help them to improve their experimental and analytical skills.





PRODUCTION ENGINEERING

Department of Production Engineering offers programmes to develop engineers with strong foundation on basic sciences, materials, manufacturing processes, tooling and manufacturing systems to provide cost effective solutions for the problems faced by industries leveraging the power of information technology, internet technology, CAD/CAE and CAM. In this effort the curriculum is strengthened periodically in close interaction with eminent academicians, industrialists and R&D organizations. Industry training and identifying industry relevant problems for research is a special characteristic of the programmes offered by the department. With such a background, department provides the right environment for the students to develop curricular, co-curricular, extra curricular and entrepreneurial skill sets for solving the challenging problems faced by the industry.

PROGRAMMES OFFERED

- BE Production Engineering (4 years)
- BE (Sandwich) Production Engineering (5 years)
- ME Production Engineering (2 years)
- ME Product Design and Commerce (2 years)

UG Curriculum

MANUFACTURING

- Introduction to Manufacturing Systems
- Foundry Technology
- Welding Technology
- Machining Technology
- Metal Forming Processes
- Design of Production Tooling
- Theory of Metal Cutting
- Metrology and Quality Control
- Injection Moulding

ADVANCED MANUFACTURING

- CNC Machines
- Non-Traditional Machining Process
- Automation and CIM
- Design for Manufacturing and Assembly
- Industrial Hydraulics and Pneumatics
- Process Planning and Cost Estimation
- Robotics

INDUSTRIAL ENGINEERING

- Industrial Engineering and Operations Research
- Production and Operations Management
- Lean Manufacturing
- Agile Manufacturing
- Total Quality Management
- Supply Chain Management

- Six Sigma
- Optimization Techniques

MECHANICS AND MATERIALS

- Engineering Mechanics
- Strength of Materials
- Kinematics of Machinery
- Dynamics of Machinery
- Materials Science
- Engineering Metallurgy
- Engineering Design
- Fluid Mechanics and Machinery
- Thermal Systems and Heat Transfer
- Mechanics of Composite Materials
- Computational Fluid Dynamics

PRODUCT DEVELOPMENT

- Product Development Strategies
- Product Life Cycle Management

SOFTWARE PACKAGES

Analysis

- ANSYS 11.0
- CFD ACE+
- HYPERMESH



Production Engineering

Process Simulation

- SOLIDCAST
- MOLDFLOW
- VISUALMILL
- KELLERCAM
- DESKPROTO
- PROECAM

System Simulation

- ARENA V7.0
- CRYSTAL BALL 2000
- SYSTAT

Solid Modeling & Visualization

- UNIGRAPHICS NX3.0
- PRO-E WILDFIRE 3.0
- CATIA V5 R17
- SOLIDWORKS
- ALIAS
- RHINOCEROS
- AUTOVUE

Data Modeling

- RATIONAL ROSE
- ORACLE 9i

PG Curriculum

ME-PRODUCTION ENGINEERING

Core Courses

- Statistics and Quality Control
- Tool Design
- Advanced Metrology and Quality Engineering
- Advanced Materials Engineering
- Design for Manufacture
- Production and Operations Management
- Advanced Metal Forming
- Advanced Welding and Casting
- Advanced Manufacturing Systems

Practical

- Advanced Manufacturing Laboratory
- Automation, Metrology and Simulation Laboratory
- Industrial Visit & Technical Seminar
- Object Computing and Data Structures Laboratory

Electives

- Engineering Economics
- Design by Finite Element Method
- Rapid Prototyping
- IT in Manufacturing
- Applied Hydraulics and Pneumatics
- Optimization Techniques
- Non-Traditional Machining Processes

- Product Development Strategies
- Image Processing and Machine Vision
- Reliability Engineering
- Human Factors Engineering
- Logistics and Supply Chain Management
- Total Quality Management
- Work Systems Engineering
- Six-Sigma Concept
- Geometric Modeling
- Industrial Automation Systems
- Micro Electro Mechanical Systems
- Lean Manufacturing
- Agile Manufacturing
- Solidification Processing and Foundry Metallurgy

ME-PRODUCT DESIGN AND COMMERCE

Core Courses

- Applied Numerical Analysis
- Human Factors Engineering
- Geometric Modeling
- Product Lifecycle Management
- Design for Manufacture
- Design by Finite Element Method



- Advanced Materials Engineering
- Product Reliability
- Engineering Economics

Practical

- Product Design and Development Laboratory
- Engineering Design Laboratory
- Industrial Visit & Technical Seminar
- Object Computing and Data Structures Laboratory

Electives

- Database Management Systems
- Product Development Strategies

- Micro Electro Mechanical Systems
- Computational Fluid Dynamics and Heat Transfer
- Mechanics of Composite Materials
- Optimisation Techniques
- Failure Analysis and Design
- Production and Operations Management
- Total Quality Management
- Enterprise Computing
- Rapid Prototyping
- Object Oriented Analysis and Design

Laboratory Facilities

- Production Engineering Laboratory
- CAD/CAM Centre
- CAD/CAM Learning Centre
- Direct Ceramic Ink Jet Printing (DCIJP) Laboratory
- Ultrasonic Welding (Metal & Plastic)
- Computer Vision and Advanced Metrology Laboratory
- Manufacturing Process Simulation Laboratory
- Subtractive Rapid Prototyping Laboratory
- PDM and Integrated Product Development Laboratory
- PSG- DSIR Consultancy Clinic on Product Styling & Design product Styling & Design
- Virtual Reality Centre
- Computer Aided Engineering Laboratory

Major research projects

- Investigations on the Preparation of Ceramic Inks for Direct Ceramic Ink Jet Printing for the Manufacture of Ceramic Components
- Micro Engg. of Ceramics using Direct Ceramic Ink Jet Printing
- Investigations of the Effect of Joint Design in the Effective Utilization of Ultrasonic Energy for Ultrasonic Welding

- Investigations on Direct Ceramic Inkjet Printing of Multilayered Ceramic Components using a Dispensing Platform
- Investigations on Metal Ceramic and Metal-Metal Joining by Ultrasonic Welding for Different Joint Designs
- Modelling of PLM solutions
- Development of process templates for new product introduction for aerospace and defence industry with PLM/PDM solution
- Proposing a methodology for migration of data between two disparate databases in product development scenario and its implementation
- ESI Frame work for integrating PDM and ERP systems for product development
- A framework for integrating CAD and PDM systems for product visualization in collaborative product development (PhD work)
- A Methodology for Exporting Product Data from a PDM System to other Enterprise Databases
- Product Data Modelling for Collaborative Development of Automotive Headlamps (PhD work)
- Design Automation of Automotive Headlamps using CATIAV5 Knowledgeware
- Investigations on performance of hand held electronic components subjected to drop impact and random vibration loads





ENERGY ENGINEERING

School of Energy (SOE) is committed to excellence in education and research. A post-graduate programme in Energy Engineering is being offered for the graduate students in order to make them competent to undertake energy related activities including renewable energy systems. The major areas in which the department concentrates are Energy Audit, Environmental Engineering, Renewable Energy Sources, Energy Management Information Systems, Industrial Energy Conservation and Management and CFD Analysis for energy efficient system design.

PROGRAMMES OFFERED

- ME Energy Engineering (2 years)

PG Curriculum

ME - ENERGY ENGINEERING

Core Courses

- Applied Mathematics
- Energy Conversion Technologies
- Thermodynamics and Combustion Systems
- Thermal Energy Conservation and Energy Audit
- Electrical Energy Conservation and Management
- Energy Economics, Forecasting and Modelling
- Environmental Engineering and Audit
- Renewable Energy Sources and Technology
- Measurement and Control Systems

Practical

- Energy Engineering Laboratory
- Computational Fluid Dynamics Laboratory
- Power Electronics and Drives Laboratory
- Object Oriented and Data Structures Laboratory

Electives

- Cleaner Production and CDM

- Computational Fluid Dynamics
- Design and Optimization of Energy Systems
- Heat Exchanger Design
- Energy Conservation in Industrial Processes and Equipments
- Cryogenic Engineering
- Energy Conservation in Refrigeration and Air-Conditioning Systems
- Energy Conservation in Buildings
- Power Electronics in Wind and Solar Power Conversion
- Design of Energy Efficient Electrical Machines
- Control Systems Design
- Advanced Instrumentation Systems
- Embedded Systems Design
- Electrical Power System Analysis
- Power System Planning and Operation
- Soft Computing Technologies for Energy Systems
- Fuel Cells and Hydrogen Technologies

Laboratory Facilities

Facilities available include standard laboratory apparatus for the study of renewable energy systems, heat transfer, fluid mechanics and machinery, refrigeration and air-conditioning systems and Internal Combustion engines. School of Energy has been approved as one of the energy auditors for conducting energy audit in different industrial organizations under Tamilnadu Electricity Board mandatory Energy Audit Scheme. The School of Energy has a departmental library to cater the immediate needs of students for their project related activities.

A well equipped laboratory with outdoor testing area for teaching and research is available in the Energy Park which was established with financial assistance from Ministry of New and Renewable Energy [MNRE], Government of India (GOI), New Delhi.

Energy Park: Solar Systems, 100 kW Biomass Gasifier, 2 x 500 kW Wind Mills

Energy Equipment Test: Pumps, Fans, Compressors

Energy use optimization Tools.

Computational Fluid Dynamics Lab

CFX, CFD, NISA, ANSYS, FLUENT, Star-CD and other modelling softwares

PROJECTS

School of Energy is carrying out many collaborative projects with Asian Institute of Technology, Bangkok, W2E, USA, Indira Gandhi Centre for Atomic Research, Ministry of New and Renewable Energy (GOI), Department of Science & Technology (GOI), Textiles Committee (GOI) and Tamilnadu Energy Development Agency.





TEXTILE TECHNOLOGY

Inculcating technical endeavors among young minds, Department of Textile Technology has been a pillar of strength for the PSG College of Technology right from 1965, serving its purpose for the Textile engineering community by structuring and equipping professionals with the expectations of the same. The department, supported by state-of-the-art laboratory facilities and infrastructure, helps the students to build both theoretical and practical abilities themselves.

The qualified and dedicated faculties impart excellent training to students not only in core but also in allied areas such as Industrial engineering, Professional communication, Engineering economics etc., The curriculum for the programmes is framed magnificently in proportion by faculty members with significant contributions from well known industrialists. The syllabi are continuously improved and upgraded with respect to the innovations and trend happening in the textile vicinity. Students are encouraged to take part in projects, researches etc., to improve their learning skills. Apart from main curriculum, is constantly organizing technical symposia and other conferences, workshops every semester.

PROGRAMMES OFFERED

- B.Tech Textile Technology (4 years)
- M.Tech Textile Technology (2 years)

UG Curriculum

Textile Technology

- Mechanism of Spinning Machines I, II
- Theory of Spinning
- Weaving Technology I, II
- Textile Chemical Processing I, II
- Textile Physics
- Technology of Man-Made Fibres
- Textile Testing
- Garment Manufacturing Technology
- Knitting Technology
- Textile Mechanics
- Non-Wovens and Speciality Textiles
- Fabric Structure
- Polymer Chemistry
- Shuttleless Weaving

Electives

- Technical Textiles
- Textile & Apparel Marketing and Merchandising
- Design Concepts of textile machinery
- Process & Quality control in chemical processing

- Modern spinning systems
- Eco Friendly textile processing
- Apparel finishing & clothing care
- Structural mechanics of yarns & fabrics
- Advanced fabric structure
- Quality assurance in garment industry
- Apparel production planning & control
- Computer applications in textiles

Management & Allied Engineering Courses

- Engineering Economics & Financial Management
- Electrical & Electronics Engineering
- Electrical & Electronics Engineering Laboratory
- Microprocessor & PLC Technology
- Instrumentation & Control
- Instrumentation & Microprocessor Laboratory
- Applied Mechanics
- Theory of machines
- C-Programming
- Object Oriented Programming

PG Curriculum

M.Tech - TEXTILE TECHNOLOGY

Core Courses

- Control Systems and Automation in Textile Engineering
- Fiber Physics
- Yarn Mechanics and Theory of Yarn Manufacturing

- Fabric Mechanics and Theory of Fabric Manufacturing
- Theory of Colouration
- Textile Quality Analysis And Analytical Methods
- Clothing Science and Textile Product Engineering
- Apparel Technology
- High Speed Fibre Spinning Technology



Textile Technology

Practical

- Object Computing Laboratory
- Textile Technology Laboratory
- Textile CAD Laboratory

Electives

- High Performance Fibers
- Textile Composites
- Functional Textiles

- Technical Textiles
- Advanced Computer Concepts in Textile Process Engineering
- Bio Tech and Nanotech Textiles
- Technology of Non Wovens
- Surface Modification of Textiles
- Advances in Textile Chemical Processing
- Mathematical Modeling and Finite Element Analysis

Laboratory Facilities

Spinning Laboratory

Double roller Macarthy Ginning machine, MMC-Semi high production Carding machine, Rieter silk carding machine, Textool Mechanical winder, Jayanth Cheese winding machine, Lakshmi LK 54 Comber machine, Lakshmi LF 1400 Roving Frame, NMM Ring Frame.

Weaving Laboratory

Sulzer Ruti F2001 Rapier Loom, Nuovo pignone Rapier Loom, Small width Terry Loom, Hardaker Piano Card Cutting machine, Lakshmi Ruti-C 1000, Lakshmi L5000 Airjet Loom, Reshmi Precision Winding machine, Sara-Bonas Narrow width weaving machine.

Knitting Laboratory

Elex Hosiery Flat Knitting machine, Knitmac Hand Knitting machine, Knitmac Single Jersey Knitting machine, Knitmac Double Jersey Knitting machine, Veetex socks knitting machine, Mesdan SPA Test knitting machine.

Textile Testing Laboratory

Kawabatta Evaluation System - All modules, Premier HVT 9000, Premier UT3 Evenness Tester, Premier Tensomaxx 7000, Classimat - Yarn fault analyser, Automatic Single Yarn Strength Tester, Sheffield & Statex Micronaire Tester, Shirley & Statex Trash Analyzer, Lea strength tester, Yarn twist tester, Drape meter, Fabric Tensile strength tester, Fabric Abrasion resistance tester, Fabric Pilling Tester, Shirley Crease recovery tester, Shirley Stiffness Tester.

Textile Chemical Processing Laboratory

Spectrophotometer with Colour matching software, Jaypak Colour matching system, Spectra manual colour matching cabinet, Wash fastness tester, Rubbing fastness tester, Light fastness tester, Limiting Oxygen Index (LOI) tester, Infracolour sample dyeing machine, HTHP sample dyeing machine, Ultrasonicator, Cheese dyeing machine, Lab jigger, winch, padding mangle, environment test chamber, Hot air oven, IFB washing machine.

PROJECTS

The faculty members of our department have done extensive project/research work in the fields of Application of Nano science in textile, Smart Textiles, Defense Textiles, Medical Textiles etc., Number of projects have done by the faculties and they are funded by the SDC-Swiss; DRML-Hyderabad; DRDO-New Delhi; Life-Science Research board, Ministry of Defense; and Ministry of Textiles. Some of the ongoing projects are also funded by the same.

- Weaving of SiC filament using wrapping technique
- Design, Development and Fabrication of Tele intimation garments for defense personal
- Concepts development wearable electronic for device
- Development of durable and high performance anti-microbial textiles using microencapsulated Herbs
- Development of Nano particles and their application in multi functional finishing of textiles





MATHEMATICS & COMPUTER APPLICATIONS

Formed in 1951, the Department of Mathematics and Computer Applications, a center for research and education provides flexible, attractive and relevant education at the under graduate and graduate levels to generate the workforce capable of meeting the varied challenges in the field of engineering, mathematics and computer science. Through excellence in research, teaching and service our dedicated faculty has distinguished themselves in the core areas of mathematics and computer science. The programmes offered in the department combine fundamentals with practical experience in problem solving, programming, communication, and collaboration, allowing each student to realize his or her individual potential. The department has its own library with latest books, national and international journals and magazines. The computer centre is well equipped with the most recent hardware and software. The students are provided with ample opportunities to improve their organizational skills and group dynamics. The department with support from faculty, staff, students, administrators and generous alumni and corporate partners has established a brand, which creates an ambience that promotes innovative thinking, values mutual respect and diversity, supports research, instills ethical behavior and cultivates lifelong learning.

PROGRAMMES OFFERED

- Master of Computer Applications (3 years)
- M.Sc (Software Engineering) (5 years)
- M.Sc (Theoretical Computer Science) (5 years)
- M.Sc (Applied Mathematics) (2 years)

PG Curriculum

MASTER OF COMPUTER APPLICATIONS

Core Courses

- Accounting and Financial Management
- Principles of Programming Languages
- Discrete Structures
- Data Structures
- Computer System Architecture
- Microprocessor and its Applications
- Object Oriented Programming
- Advanced Data Structures and Algorithms
- Database Management System
- Probability and Statistics
- Optimization Techniques
- Operating Systems
- Software Engineering
- Data Communication Networks
- System Software
- Enterprise Computing
- TCP / IP Network and Applications
- UNIX Architecture and Programming
- Data Mining
- Software Project Management and Quality Assurance

- Service Oriented Architecture
- Security in Computing

Electives

- Parallel Programming
- Simulation and Modeling
- Advanced Database Management System
- Artificial Intelligence
- Neural Networks and Fuzzy Systems
- Bio Informatics
- Human Computer Interaction
- Extreme Programming
- Computer Graphics
- Real Time and Embedded Systems
- Mobile Computing
- Cryptography
- Software Testing
- Open Source Systems
- XML and its Applications
- Software Patterns
- Multimedia Communication Systems



Mathematics & Computer Applications

- Information Storage and Management
- Knowledge Management
- Distributed Component Architecture
- Information Life Cycle Management
- Semantic Web
- Applied Graph Theory
- Text Mining
- Grid Computing

M.Sc- SOFTWARE ENGINEERING

Core Courses

- C Programming
- Discrete Structures
- Data Structures and Algorithms I
- Object Oriented Programming
- Computer Organization
- Probability and Statistics
- Software Engineering Techniques
- Data Structures and Algorithms II
- Microprocessor System and Programming
- Accounting and Financial Management
- Data Communication Networks
- Data Base Management System
- Operating Systems
- Optimization Techniques
- UNIX Architecture and Programming
- Computer Graphics and Animation
- Multi-tier Computing
- TCP /IP Networks and Applications
- Object Oriented Analysis and Design
- Principles of Compiler Design
- Security in Computing
- Enterprise Computing
- Software Testing
- Digital Manufacturing
- Soft Computing
- Software Project Management and Quality Assurance
- Graph Theory and Combinatorics

- Principles of Management and Behavioral Science
- Software Process Management
- Intelligent Information Retrieval

Electives

- Modeling and Simulation
- Advanced Database Management Systems
- Software Metrics
- Parallel and Distributed Computing
- Data Compression
- Web Services
- XML and its Applications
- Advanced Computer Graphics
- Real Time and Embedded Systems
- Mobile Computing
- Storage Networks
- Digital Image Processing
- Multimedia Communication Systems
- Requirements Engineering
- Service Oriented Architecture
- Principles of Programming Languages
- Data Mining
- Agile Software Development
- Machine Learning
- Network Management
- Pervasive Computing
- Semantic Web
- Grid Computing
- Cloud Computing

M.Sc - THEORETICAL COMPUTER SCIENCE

Core Courses

- Problem Solving and C Programming
- Discrete Structures
- Object Oriented Programming
- Data Structures and Algorithms
- Graph Theory
- Probability and Statistics



Mathematics & Computer Applications

- Advanced Data Structures
- Computer Organization and Assembly Language
- Design and Analysis of Algorithms
- Operating Systems
- Computer Networks and TCP/IP
- Database Design
- Stochastic Processes
- Computational Number Theory and Cryptography
- Computer Graphics and Animation
- Optimization Techniques
- Software Engineering
- Security in Computing
- Principles of Compiler Design
- Principles of Programming Languages
- Soft Computing
- Parallel and Distributed Computing
- Mathematical Modeling
- Data Mining
- Machine Learning
- Intelligent Information Retrieval
- Game Theory

Electives

- Digital Image Processing
- Data Compression
- Computational Geometry
- Quantum Computing
- Wavelet Transforms and Applications
- Algorithmic Bioinformatics
- Randomized Algorithms
- Advanced Computer Graphics
- Multi Paradigm Programming Languages
- Wireless Networks
- Program Semantic Analysis
- Network Management

- Semantic Web
- Pervasive Computing
- Network Algorithmics
- Software Patterns
- Grid Computing
- Cloud Computing

M.Sc - APPLIED MATHEMATICS

Core Courses

- Mathematical Analysis
- Discrete Structures
- Stochastic Processes
- Digital Electronics & Computer Organisation
- Communication Skills
- Data Structures
- Quantitative Techniques
- Statistics and Quality Control
- Object Oriented Programming
- Database Management System
- Operating Systems
- Methods of Applied Mathematics
- Number theory for computing
- Software Engineering

Electives

- Data Mining
- Java Technology
- Computer Networks
- Simulation and Modeling
- Advanced Data structures and Algorithms
- Soft Computing
- Computer Graphics
- Digital Image Processing
- Cryptography
- Graphs and Networks
- Reliability and Queuing theory
- Stochastic Finance
- Stochastic Differential Equations
- Algebraic Number Theory
- Advanced Optimization Techniques



Laboratory Facilities

- Object Computing Lab
- Soft Computing Laboratory
- Multilingual Laboratory
- Mathematical Computing Laboratory
- TCS Centre of Excellence in Software Engineering
- Smart and Secure Environment Lab

MAJOR RESEARCH WORK UNDERTAKEN

The department is actively engaged in research in the fields of

- Computational Finance
- Cryptography
- Data Mining
- Distributed Computing
- Fuzzy Systems
- General Topology
- Graph Theory
- Image Processing
- Information Retrieval
- Multilingual Computing
- Network Security
- Object Oriented Framework
- Queuing Theory
- Semantic Web
- Soft Computing
- Software Engineering

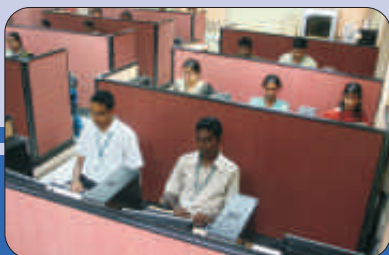
- Stochastic Differential Equations
- Stochastic Models

Many Projects which were sponsored by funding agencies like AICTE, MHRD, DAE have been completed and the following sponsored projects are in progress.

- Directed Basic Research in Smart and Secure Environment sponsored by NTRO, New Delhi
- Investigation of Intelligent Security and Privacy Protocols for Smart Card Applications sponsored by AICTE, New Delhi
- Advanced Engineering Mathematics Laboratory sponsored by AICTE, New Delhi.

Some of the best projects done by our students:

- "Smart T.V Media Services" for Intel, Bangalore
- "Yahoo ! Search Marketing Enterprise web services" for Yahoo!, Bangalore.
- "Database Reporting Metrics" for Intel, Bangalore
- "Text Analyzer" for the directed Basic Research project in Smart and Secure Environment, sponsored by NTRO, New Delhi.
- "Customizing IP04" for Kalycito Infotech, Coimbatore.
- "A Novel approach to Watermark Text Documents based on Eigen values" for directed Basic Research project in Smart and Secure Environment, sponsored by NTRO, New Delhi.
- Trackut Mobile Application for Symbian Phones for Interchain Solution, Bangalore.





PHYSICS

The Department of Physics was established in 1951. The Department has been working towards fulfilling its mission through a synergetic combination of teaching and research. Apart from the undergraduate, post-graduate and research programmes the department has also been conducting many workshops, conferences and short-term continuing education programme for the educational institutions and industries. Through excellence in teaching and research, the faculty members have distinguished themselves in the core areas of Physics, Materials Science, Medical Physics and Applied Sciences. The programmes offered in the department impart sound knowledge in science and technology of materials. The department is equipped with the state-of-the-art facilities in materials synthesis and characterisation. The Thin Film Centre, the centre of excellence, in the department has more than three decades of service caters to needs of the industry and various departments of science and technology. The department library is equipped with latest books, national and international journals and scientific magazines. The computer center in the department has latest softwares relevant to computational materials science. The excellent academic environment that prevails in the department encourages innovative thinking among the students and enables them to develop their organizational skills, ethical values and team work.

PROGRAMMES OFFERED

- M.Sc. Materials Science (2 years)
- B.Sc. Applied Sciences (3 years)

PG Curriculum

M.Sc - MATERIALS SCIENCE

Core Courses

- Mathematical Physics
- Advanced Materials Science
- Linear Integrated Circuits
- Electrical and Electronic Instruments
- Engineering Physical Metallurgy
- Computational Materials Science
- Applied Thermodynamics
- Nano Materials and Nano Technology
- Advanced Quantum Mechanics
- Experimental Techniques in Materials Science
- Thin Film Technology
- Crystal Growth and Characterization
- Ceramic Materials
- Micro Electro Mechanical Systems
- C Programming and Data Structures
- Object Oriented Programming
- Communication Skill

Practical

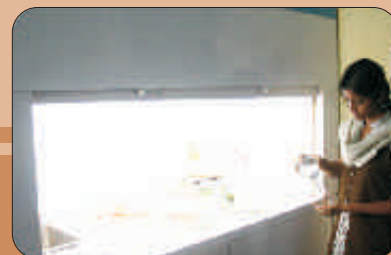
- Materials Science Laboratory I, II & III in the First, Second and Third Semesters.

Electives

- High Vacuum Technology
- Integrated Circuit Technology
- Laser Technology
- Cryogenics and Super Conductivity
- Composite materials
- Laser Applications
- Semiconducting Materials and Devices
- Electro optic materials and Devices
- Corrosion Science and Engineering
- Polymeric Materials
- Plasma Technology
- Ferroelectric Materials and Applications
- Mechanics of Solids
- Professional Ethics and Human Values
- Personality Development

Equipments Available

- DC Magnetron Sputtering Unit
- RF Magnetron Sputtering Unit
- Electron Gun Thin Film Coating Unit
- Thermal Evaporation Thin Film Coating Unit
- Closed Spaced Vapour Transport Deposition Unit



Physics

- DC Plasma chamber
- Piezometer (for testing piezoelectric materials)
- Ball - Mill for Powdering Ceramics
- Scanning Electron Microscope
- EDAX
- X-ray diffractometer
- Differential Scanning Calorimeter
- UV - VIS Absorption Spectrophotometer
- Fourier Transform Infrared Spectrometer
- Atomic absorption Spectrometer
- Digital Thickness Monitor
- Micro Hardness Testing Instrument
- Four Probe Apparatus
- Laser Interferometer
- Image Analyzer
- Nd-YAG, He-Ne, Ar-Ion Laser
- Rotating Furnace (10000 C)
- Surface Profilometer
- Glove Box

Equipment for testing mechanical properties such as Shear Strength, Compression Strength, Vicker's hardness, Brinell hardness, Torsion test, Izod impact test, etc.

Collaboration

With DMRL-Hyderabad, ARCI-Hyderabad and IGCAR-Kalpakkam (MOU) for carrying out projects.

Industrial Interactions

The students of M.Sc. Material Science have an industry internship programme through

• **Mini Project:** During the vacation at the end of the Second Semester.

• **Major Project:** In the Fourth Semester of six month duration During the internship they are attached to some of the premier research organizations and industrial establishments such as IGCAR, NAL, DMRL, ARCI, RRL, C-MET and Universal Carborandum, HindHivac etc., This provides an opportunity for the students to have hands-on training in AFM, DSC, XRD, SEM, TEM, XPS, SPM, EDAX, High Power Lasers, Thin Film processing systems, etc.,.

Professional Societies

Students are provided opportunities to join as members of professional societies listed below and network with experts world-wide.

- Association of Indian Institute of Metals (IIM)
- American Society of Metals (ASM)

Students also actively participate in the organization of Department level association meetings, National and international conferences which help in developing their soft skills and leadership qualities.





CHEMISTRY

The Department of Chemistry, offers a program in M.Sc Applied Chemistry. The curriculum for this programme is carefully designed to cover a wide range of topics in chemical sciences. The diversified topics in basic and applied chemistry, is aimed to equip the students to face the challenges and demands of industrial organizations.

A good team of faculty with various specialization in chemistry provides education to the students and individual care. Such background and training enable our students to get project placements in different popular industrial and government R&D centers

PROGRAMMES OFFERED

- M.Sc. Applied Chemistry (2 years)

PG Curriculum

M.Sc-APPLIED CHEMISTRY

- Equilibrium and statistical thermodynamics
- Inorganic chemistry
- Stereochemistry, Reaction mechanisms and reactions and aromaticity
- Analytical chemistry
- Group theory and molecular spectroscopy
- Organic reactions and natural products
- Organic spectroscopy and synthetic methods
- Quantum and computational chemistry
- Chemical kinetics and electrochemistry
- Organic reagents, photochemistry and natural products
- Nuclear and solid state chemistry
- Coordination chemistry

Papers for value addition

- Chemical Engineering
- Applied mathematics for chemists
- C programming and data structures
- Object oriented programming

Practicals

- Organic chemistry
- Inorganic chemistry
- Physical Chemistry
- Applied Chemistry

Electives

- Industrial Electrochemistry
- Electro analytical Methods
- Corrosion and Corrosion control
- Medicinal Chemistry-I
- Medicinal Chemistry-II
- Polymer Technology
- Polymer Chemistry
- Textile Chemistry
- Chemistry of Advanced materials
- Chemistry of Nanomaterials

Laboratory Facilities

- Instrumentation centre
- Drug membrane and corrosion testing Laboratory
- Polymer Research Centre
- Organ metallic Research Laboratory
- Nanomaterial Research Laboratory

MAJOR RESEARCH WORK UNDERTAKEN

Department faculty members have done extensive research work in various fields. Many testing work, consultancy work and sponsored research work have been completed and several of them are in progress. The following are the completed/ongoing research and consultancy projects.

- Development of Photocrosslinkable polymers for photoresist applications
- Modernization and removal of obsolescence in Corrosion Engineering Laboratory
- Development of Photo-crosslinkable Thermotropic Liquid Crystalline polymers
- Testing of Oils and lubricants
- Measurements of corrosion rate and inhibition studies
- Water analysis
- Quantitative elemental analysis
- Spectroscopic studies – FTIR, UV-Vis





PLACEMENT

PSG College of Technology has an independent Placement Office devoted to cater to the needs of organisations in conducting campus interviews for placements. It is headed by Dean, Placement & Training and supported by a Placement Officer and Placement Co-ordinator. The office is also assisted by student Placement Co-ordinators 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.

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| 1 | 24/7 Customer, Bangalore | 35 | Dalmia Cements (Bharat) Ltd., Trichy |
| 2 | ABB Ltd., Bangalore | 36 | Dell International Services India Pvt. Ltd., Bangalore |
| 3 | Accenture, Bangalore | 37 | Deloitte Consulting (I) Pvt. Ltd., Hyderabad |
| 4 | AIG System Solutions Pvt. Ltd., Chennai | 38 | Delphi Technical Center India, Bangalore |
| 5 | Akzo Nobel Coatings India Pvt. Ltd., Bangalore | 39 | Dieffenbacher India Pvt. Ltd., Bangalore |
| 6 | Amazon Software Development (I) Pvt. Ltd., Bangalore | 40 | DLF Limited, Gurgaon |
| 7 | ANZ IT, Bangalore | 41 | eBay IDC, Chennai |
| 8 | Aparna Labels Pvt. Ltd., Tirupur | 42 | Efficient Frontier India, Chennai |
| 9 | Areva T & D India Ltd., Noida | 43 | Elgi Equipments Limited, Coimbatore |
| 10 | Aricent, Bangalore | 44 | EMC Data Storage Systems (I) Pvt. Ltd., Bangalore |
| 11 | Aris Global Software Pvt. Ltd., Bangalore | 45 | Ennore Foundries, Chennai |
| 12 | Ashok Leyland Limited, Chennai | 46 | Epigon Media Technologies, Bangalore |
| 13 | Asian Motor Works Pvt. Ltd., Gujarat | 47 | Essar Group, Hazira |
| 14 | AthenaNet India Pvt. Ltd., Chennai | 48 | Exeter Group, Bangalore |
| 15 | Atheros India LLC, Chennai | 49 | Fichtner Consulting Engineers India Pvt. Ltd., Chennai |
| 16 | Beroe Inc, Chennai | 50 | Flextronics Software Systems, Bangalore |
| 17 | BGR Energy Systems Ltd., Chennai | 51 | Ford India Ltd., Chennai |
| 18 | Bharat Earth Movers Ltd., Bangalore | 52 | GE India Technology Centre Ltd., Bangalore (JFWTC) |
| 19 | Bharat Electronics Ltd., Bangalore (Central Research Laboratory) | 53 | Godrej & Boyce Manufacture Company Ltd., Mumbai |
| 20 | Bin Dasmal Group of Companies, Dubai, UAE | 54 | Goldman Sachs Services Pvt. Ltd., Bangalore |
| 21 | Birlasoft Limited, Chennai | 55 | Google India Pvt. Ltd., Bangalore |
| 22 | Carevoyant Technologies India Pvt. Ltd., Chennai | 56 | Greaves Cotton Limited, Pune |
| 23 | Caterpillar India Pvt. Ltd., Chennai | 57 | Groz-Beckert, Tirupur |
| 24 | Chronus Corporation, Chennai | 58 | HCL Infosystems Ltd., Noida |
| 25 | Cisco Systems (India) Private Limited, Bangalore | 59 | HCL Technologies Ltd., Chennai |
| 26 | Cognizant Technology Solutions, Chennai | 60 | Hewlett Packard India Ltd., Bangalore |
| 27 | CommVault Systems India Pvt. Ltd., Hyderabad | 61 | Hindustan Construction Company Ltd., Pune |
| 28 | Computer Associates, Hyderabad | 62 | Honeywell Technology Solutions Ltd., Madurai |
| 29 | Computer Sciences Corporation (I) Pvt. Ltd., Chennai | 63 | Hyundai Motor India Ltd., Chennai |
| 30 | Consolidated Construction Consortium Ltd., Chennai | 64 | i2 Technologies India Pvt. Ltd., Bangalore |
| 31 | Convergys (IMG), Hyderabad | 65 | IBM India Pvt. Ltd., Bangalore |
| 32 | Cordys Software India Pvt. Ltd., Hyderabad | 66 | IDEA Ltd., Chennai |
| 33 | Crescent Foundry Co. Ltd., Kolkata | 67 | iflex Solutions, Bangalore |
| 34 | D.E. Shaw India Software Pvt. Ltd., Hyderabad | 68 | iNautix Technologies (I) Pvt. Ltd., Chennai |

69	India Pistons Ltd., Chennai	115	Polaris Software Lab Ltd., Chennai
70	Indian Oil Corporation Ltd., New Delhi	116	Pricol Technologies Ltd., Coimbatore
71	INDO US -MIM Tec Pvt.Ltd., Bangalore	117	Raymonds Limited, Yavatmal
72	Infosys Technologies Ltd., Bangalore	118	Reckitt Benckiser (India) Ltd., Gurgaon
73	Intel Technology (I) Pvt.Ltd., Bangalore	119	Renault Nissan Technology and Business Centre India Pvt. Ltd., Chennai
74	Intelizign Engineering Services Ltd., Bangalore	120	Sapient Corporation, Gurgaon
75	Interchain Solutions Pvt.Ltd., Bangalore	121	Savvion India Pvt.Ltd., Mumbai
76	ITC Infotech India Ltd., Bangalore	122	Schlumberger RDM, Pune
77	ITC Limited, Kolkata	123	Schneider Electric India Pvt.Ltd., Bangalore
78	IVY Comptech Pvt.Ltd., Hyderabad	124	Scooters India Ltd., Chennai
79	Jain Housing & Constructions Ltd., Chennai	125	Scope International Pvt.Ltd., Chennai
80	Jataayu Software, Bangalore	126	Shahi Exports Pvt.Ltd., Bangalore
81	John Deere Equipment Pvt.Ltd., Pune	127	Shri Ram Fibres, Chennai
82	JSW Steel Limited, Bellary	128	Silver Software Pvt.Ltd., Bangalore
83	Juniper Networks India Pvt.Ltd., Bangalore	129	Simulation Technology Services Pvt.Ltd., Chennai
84	Juno Online, Hyderabad	130	Soliton Technologies, Bangalore
85	K G Denim Limited, Coimbatore	131	Sundaram Fasteners Limited, Chennai
86	Keane International India Pvt.Ltd., Chennai	132	SunGard, Bangalore
87	Kennametal India Pvt.Ltd, Bangalore	133	Super Spinning Mills Ltd., Coimbatore
88	KOB Medical Textiles Pvt.Ltd., Coimbatore	134	Synopsys India Pvt.Ltd., Bangalore
89	L&T Valdel Engineering Ltd., Bangalore	135	Syntel (I) Ltd., Chennai
90	Lakshmi Machine Works Ltd., Coimbatore	136	Tata Chemicals Limited, Mumbai
91	Larsen & Toubro Limited, (ECC Division) Chennai	137	Tata Consultancy Services Ltd., Chennai
92	Larsen & Toubro Limited, Mumbai	138	Tata Elxsi, Bangalore
93	Larsen & Toubro Ramboll Ltd., Chennai	139	TCE Consulting Engineers Ltd., Bangalore
94	Lister Technologies Pvt.Ltd., Chennai	140	Tecpro Systems Ltd., Chennai
95	Mahindra & Mahindra Automotives Ltd., Mumbai	141	TESCO Hindustan Service Centre Ltd., Bangalore
96	Mangalore Refinery & Petrochemicals Ltd., Mangalore	142	TEXMO Industries Ltd., Coimbatore
97	Manhattan Associates, Bangalore	143	Think 3 Designs India Pvt.Ltd., Bangalore
98	Marg Constructions Limited, Chennai	144	Thorogood Associates, Bangalore
99	Maruti Suzuki India Ltd., Gurgaon	145	ThoughtWorks Technologies India Pvt.Ltd., Bangalore
100	Microsoft India, Bangalore	146	Toshiba Embedded Software India Pvt.Ltd., Bangalore
101	MindTree Consulting Pvt.Ltd., Bangalore	147	Tractors and Farm Equipments Ltd., Chennai
102	Minvesta Infotech Pvt.Ltd., Chennai	148	Triad Software Pvt.Ltd., Chennai
103	Motorola India Electronics Pvt.Ltd., Bangalore	149	Triveni Engineering & Industries Ltd., Mysore
104	Mu Sigma Business Solutions Pvt.Ltd., Bangalore	150	TVS Motor Company Ltd., Hosur
105	Murugappa Group, Chennai	151	U.S Technologies, Trivandrum
106	National Instruments Systems India Pvt.Ltd., Bangalore	152	Ucal Fuel Systems Ltd, Chennai
107	NetApp Systems India Pvt.Ltd., Bangalore	153	VALEO Engineering Center (I) Pvt.Ltd., Chennai
108	Nokia Siemens Networks India Pvt.Ltd., Bangalore	154	Vedanta Resources, Tuticorin
109	Nortel Technology Excellence Centre Pvt.Ltd., Bangalore	155	Verizon Data Services India Pvt.Ltd., Chennai
110	Novell Software Development (I) Pvt.Ltd., Bangalore	156	Verse Solutions, Bangalore
111	OATSystems Software (I) Pvt.Ltd., Bangalore	157	Voltas Limited, Coimbatore
112	Oracle India Pvt.Ltd., Bangalore	158	Volvo India Pvt.Ltd., Bangalore
113	Patni Computer Systems (P) Ltd., Mumbai	159	Wipro Technologies, Bangalore
114	Philips Software Centre Pvt.Ltd., Bangalore	160	Yahoo! Software Development India Pvt.Ltd., Bangalore

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LIBRARY

PSG Tech library is one of the best equipped in terms of the number of books, back volumes and current journals subscribed. Apart from catering to the needs of the faculty and students, the library allows success to industrial associates of PSG College of Technology.

As on date, the vital statistics are:

No. of Books : 1,83,312

No. of Journals : 567

The library has a good collection of CD-ROMs and Digital Library, to which students have free access. The services of the library are fully automated. To have universal access a digital library facility is setup and the students are having free access of E-Journal and E-Books. In addition to this, each department maintains its own well-equipped library catering to the needs of its students.

HOSTELS AND OTHER FACILITIES

PSG College of Technology offers residential accommodation to nearly 4000 students. There are 7 hostels for men and 2 hostels for ladies. A guesthouse caters to the requirements of the guests and visiting faculty of the college. Facilities are provided for the recreation and extra-curricular activities of the students. These include a student's union centre, indoor recreation facilities and courts for various games. There is also an open-air stadium for sports activities.

PSG TECH ALUMNI

The training given in the college focuses on entrepreneurship, communication skills, leadership and interpersonal qualities apart from exposure to the state-of-the-art technology. PSG Tech has produced several thousands of entrepreneurs who have setup small, medium and large scale industries. Many Alumni of PSG Tech occupy top positions in prestigious organisations in India and abroad.





PSG INSTITUTIONS

• PSG Sarva Jana Higher Secondary School	1924
• PSG Industrial Institute	1926
• PSG Polytechnic College	1939
• PSG Primary School, Vedapatti / Peelamedu	1941 / 1943
• PSG College of Arts & Science	1947
• PSG College of Technology	1951
• PSG Rural Health Centre, Vedapatti	1961
Neelambur	1985
Vellalore	1998
Karadivavi	2004
• PSG & Sons' Charities Metallurgy and Foundry Division	1974
• PSG Institute of Medical Sciences & Research	1985
• PSG Industrial Training Centre	1986
• PSG Hospitals	1989
• PSG Centre for Sponsored Research and Consultancy	1989
• PSG Centre for Non-formal & Continuing Education	1989
• PSG Urban Health Centre	1993
• PSG Institute of Management	1994
• PSG College of Nursing	1994
• PSG Science and Technology Entrepreneurial Park (STEP)	1998
• PSG College of Physiotherapy	1999
• PSG College of Pharmacy	2001
• PSG Cules	2001
• PSG Centre for Advertising & Communication	2001
• PSG Children's School	2002
• PSG Offshore Healthcare Management Services	2003
• PSG High School, Vedapatti	2005
• PSG Institute of Advanced Studies	2006
• PSG Public School	2008

PSG Institutions host 25,000 students to achieve academic excellence in various disciplines.



PSG COLLEGE OF TECHNOLOGY

(Govt. Aided Autonomous Institution & ISO 9001:2008 Certified)

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