PSG COLLEGE OF TECHNOLOGY
Coimbatore

M.Sc

5 YEAR INTEGRATED

DATA SCIENCE

SOFTWARE SYSTEMS

THEORETICAL COMPUTER SCIENCE

INFORMATION BROCHURE 2018-2023

Mission of the College

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.

Vision of the Department

Stay ahead and be relevant

Mission of the Department

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

Five Year Integrated

M.Sc Software Systems
M.Sc Theoretical Computer Science
M.Sc Data Science

Eligibility and Admission Procedure

A pass in Higher Secondary Examination with Mathematics and Physics as two of the four subjects of study.

Shortlisted candidates with an excellent academic record in Higher Secondary examination or equivalent with Mathematics and Physics as two of the subjects of study are assessed by an online test (English / Tamil) to be conducted on 11th FN June 2018 at PSG Tech campus. Candidates short listed in the online test and judged by their performance in an interview cum counseling on 11th AN and 12th June 2018, are admitted to the programmes.

The online test will be based on Higher Secondary Mathematics portions of Applications of Matrices and Determinants, Functions and Graphs, Differential Calculus, Integral Calculus, Differential Equations, Analytical Geometry, Vector Algebra and Probability.

A call for Test / Interview does not however confer any right of admission. Only candidates with very high academic record and have SPARK are selected for admission.

The College

PSG College of Technology, an institution par excellence today, was founded in 1951 by the PSG & Sons Charities. 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 & Applications.

Recognizing the excellent facilities, 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 the Autonomous Status in 1978, to update its own courses and curriculum, to devise and conduct examinations, and to evaluate students' performance based on a system of continuous assessment. Sedulous progress has been the hallmark of PSG College of Technology.

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

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. Dr. G. R. Damodaran, was followed by Dr. R. Subbayyan, Dr. K. Venkataraman, Dr. A. Shanmugasundaram, Dr. S. Subramanyan, Dr. P. Radhakrishnan, Dr. S. Vijayarangan as successive Principals. Presently Dr. R. Rudramoorthy is the Principal of the Institution.

PSG College of Technology today has a student strength of nearly 9,000 and has the following branches and / or discipline.

- Apparel and Fashion Design
- Applied Mathematics and Computational Sciences
- Applied Science
- Automobile Engineering
- Bio-Medical Engineering
- Bio-Technology
- Chemistry
- Civil Engineering
- Computer Applications
- Computer Science and Engineering
- Electrical and Electronics Engineering
- Electronics & Communication Engineering
- English
- Fashion Technology
- Humanities
- Information Technology
- Instrumentation and Control Engineering
- Management Sciences
- Mathematics
- Mechanical Egineering
- Metallurgical Engineering
- Physical Education
- Physics
- Production Engineering
- Robotics and Automation Engineering
- Textile Technology

The Department

The Department of Applied Mathematics and Computational Sciences comprises of dedicated faculty members who are undoubtedly the assets worthy of mention. The Department is known for its discipline and for the importance it gives to the overall development of students in grooming them towards becoming good software professionals, research scientists and data analysts. 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. To keep in touch with the ever - growing technology, the faculty members participate regularly in refresher courses and symposia conducted by top notch Universities, Research Institutions and Professional Bodies like Association for Computing Machinery. The department organizes technical symposia at national and international levels at regular intervals. Apart from stressing on consistent and good academic performance, the department encourages participation in co-curricular and extracurricular activities to bring out the latent talents in its students. The students are provided with ample opportunities to improve their organizational skills and group dynamics.

The Programmes

PSG College of Technology introduced the Five year integrated M.Sc. Software Engineering programme for the first time in the country during the year 1997 which has been well received by leading software industries across the globe. Under the autonomous scheme, the programme aims to develop the students with the knowledge and skill to apply computers for productive work in business, scientific applications in industry and research laboratories, and for higher learning. The course has been designed to meet the challenging needs of the industry, by giving ample opportunities for the students to undertake projects in the industries as part of the curriculum. A core of material to ensure good understanding of systems and software design and development has been included in the curriculum. **The programme has been renamed as Software Systems since 2014.**

Computer Science discipline faces many challenges because key research areas emerge quickly and technology has been growing exponentially. There has been a steadily increasing demand for graduates with research bent of mind. "Research is creating new Knowledge", said Neil Armstrong. With this in mind, five year **M.Sc. Theoretical Computer Science** programme was started in **2007** and the curriculum has been designed to augment human resources for innovations in the R&D division of software houses and to showcase their deep pool of young talents in the higher educational options in top notch universities across the globe.

Myriad growth of technology generates a huge volume of data in many fields, from medicine, to marketing to scientific research. Data Science is the digital frontier to process these vast quantities of data. Data science encompasses the scalable techniques for Big data analysis and Interdisciplinary research areas. The Five year integrated **M.Sc. Data Science** is the first integrated data science programme in India, introduced by PSG College of Technology in the year **2015** to meet the challenges of Data driven era.

Dr. R. Nadarajan M.Sc., Ph.D
Data Mining, Stochastic Models

Dr. N. Geetha MCA, M.Phil., Ph.D
Computer Vision, Image and Video Processing, Soft Computing

Dr. G. Sai Sundara Krishnan M.Sc., M.Phil., Ph.D
Applied Mathematics, Fuzzy Softset, Topology

Dr. R.S. Lekshmi M.Sc., M.Phil., Ph.D
Graph Theory, Graph Algorithms

Dr. M. Senthil Kumar M.Sc., M.Phil, Ph.D
Stochastic Models, Epidemic models over Complex Networks

Dr. N. Mohanraj MCA, M.Phil., Ph.D
Distributed Pair Programming

Dr. Suresh Balusamy M.Sc., Ph.D
High Performance Computing, GPGPU Computing

Dr. R. Vijayalakshmi MCA, M.Phil, Ph.D
Data Mining, Graph Mining

Dr. RM. Periakaruppan M.Sc., MCA, Ph.D
Data Mining, XML Structural Mining

Dr. Shina Sheen MCA, Ph.D
Information Security, Data Mining, Network Security, TCP/IP Networks

Dr. B. Malar MCA, M.Phil., Ph.D
Machine Learning, Natural Language Processing, Metaheuristic Algorithms

Ms. S.D. Suganthi B.E, MCA, M.Phil
Wireless Sensor Networks, Network Security

Mr. A. Muthusamy M.Sc., M.Phil
Roughset Theory

Dr. V. Senthilkumaran M.Sc., M.Phil., M.Tech., Ph.D
Semantic Web Services

Dr. N. Rajamanickam MCA, Ph.D
Cryptography, Network Security

Dr. M. Dominic Savio MCA, M.Phil, Ph.D
Data Mining

Ms. G. Priyalakshmi MCA, MBA
Software Design, Software Patterns, VLSI Algoritms and Testing

Dr. R. Latha M.Sc., MCA, M.Phil, Ph.D
Machine Learning

Dr. K. Mohan, MCA., Ph.D
Cloud Computing, Component Based Software Engineering

Ms. P. Thanalakshmi M.Sc., M.Phil.
Cryptography

Dr. S. Poomagal M.Sc., Ph.D
Data mining, Information Retrieval

Ms. M. Thilaga M.Sc., M.Phil
Graph Mining

Ms. G. Poonthalir MCA
Vehicle Routing Alogorithm, Computational Intelligence, Metaheuristic Algorithms

Dr. M. Sasikumar MCA., M.Phil., Ph.D
Wireless Sensor Network

Dr. A. Kaja Mohideen MCA, M.Phil., Ph.D
Data Mining, Medical Image Processing, Optimization Techniques

Ms. N. Brindha MCA, ME (CSE)
Intelligent Information Retrieval, Image and Video Processing

Ms. M. Megala MCA, M.Phil
Web Security

Dr. V. Suresh Kumar M.Sc., M.Phil, Ph.D
Security Protocols and Formal Methods, Authentication Protocols for WSN and RFID

Ms. S. Anandhi MCA, M.Phil
Security Protocols, Natural Language Processing

Dr. N.K.Sreelaja MCA, Ph.D
Cryptography, Bio-Crypto Systems, Swarm Intelligence

Ms. M. Kasthuri Bai, MCA, M.Phil
DBMS, Operating Systems

Ms. S. Deepa MCA, M.Phil
Wireless Networks, VANET

Ms. P. Nirmala M.Sc.
Data Analytics, Data Mining, Swarm Intelligence

Ms. K. Parisa Begum MCA
Pervasive Computing, Database Mangement

Mr. M. Kumaresan M.Sc, M.Phil
Machine Learning

Ms. R. Priya M.Sc, M.Phil
Data Structures, Network Security

Dr. N. K. Sreeja MCA., M.Phil., Ph.D
Swarm Intelligence, Machine Learning, Pattern Recognition

Dr. S. Jeevadoss M.Sc., M.Phil., Ph.D
Graph Theory

Dr. T. Karthick M.Sc Ph.D
Stochastic Models

Ms. K .Sivakami M.Sc
Internet of Things, Mobile Computing

Ms. J. Kiruthika MCA
Data Communication Networks, Operating Systems

Dr. D. Nishanthi M.Sc., M.Phil.,Ph.D
Differential Equations

Visiting Professors

Dr. R. Anitha M.Sc., M.Phil., Ph.D
Graph Theory, Cryptography & Security in Computing

Mr. K. Murali Mohan B.E., FCA
Chartered Accountant, M/s. S. Krishnamoorthy and Co. Coimbatore

Dr. V. Sundaram
Retd. Professor, PSG College of Technology

Mr. Ramesh Balasubramaniam
Visual BI R&D and service hub, Chennai

M.Sc. (SOFTWARE SYSTEMS)
Programme Structure

SEMESTER 1

Theory
- Calculus & Its Applications
- English for Professional Skills
- Applied Physics
- Analog & Digital Electronics
- C Programming

Practical
- Engineering Graphics & Geometric Modelling
- C Programming Lab
- Applied Physics & Digital Electronics Lab
- Personality and Character Development

SEMESTER 2

Theory
- Applied Linear Algebra
- Probability & Statistics
- Data Structures
- Object Oriented Programming
- Computer Organization

Practical
- Object Computing Lab
- Data Structures Lab
- Web Designing Lab
- Personality and Character Development

SEMESTER 3

Theory
- Mathematical Foundations of Comp.
- DataBase Management System
- Transform Techniques
- Design and Analysis of Algorithms
- Microprocessor & Embedded Systems

Practical
- Design and Analysis of Algorithms Lab
- Embedded Systems Lab
- RDBMS Lab

SEMESTER 4

Theory
- Accounting & Financial Management
- Computer Networks and TCP/IP
- Operations Research
- Operating Systems
- Software Engineering Techniques

Practical
- Computer Networks and TCP/IP Lab
- Mathematical Computing Lab(with R)
- Python Programming Lab

SEMESTER 5

Theory
- Unix Architecture & Programming
- Java Programming
- Machine Learning
- Object Oriented Analysis & Design
- Professional Elective I

Practical
- Unix Shell & System Programming Lab
- Java Programming Lab
- Machine Learning Lab

SEMESTER 6

Theory
- Mobile Computing
- Artificial Intelligence
- Software Patterns
- Security in Computing
- Professional Elective II

Practical
- Mobile Computing Lab
- Artificial Intelligence Lab
- Distributed Enterprise Computing Lab

SEMESTER 7

- Project Work I
- Industry Project

SEMESTER 8

Theory
- Information Retrieval
- Computer Vision & Image Analysis
- Software Project Management
- Professional Elective III
- Open Elective I

Practical
- Information Retrieval Lab
- Computer Vision Lab
- Functional Programming Lab

SEMESTER 9

Theory
- Principles of Management & Behavioral Science
- Software Testing
- Principles of Compiler Design
- Professional Elective IV
- Open Elective II

Practical
- Principles of Compiler Design Lab
- Software Testing Lab
- Capstone Project Lab

SEMESTER 10

- Project Work II
- Industry Project

PROFESSIONAL ELECTIVES

- Modeling & Simulation
- Modern Databases
- Software Metrics
- Parallel & Distributed Computing
- Data Compression
- Computer Graphics & Visualization
- Principles of Programming Languages
- Agile Software Development
- Pervasive Computing
- Semantic Web
- Cloud Computing
- Human Computer Interaction
- Social Network Analysis
- Advanced Computer Graphics
- Deep Learning
- Big Data Analytics
- Data Mining
- Natural Language Processing
- Data Science
- Internet of Things
- Advanced Systems Programming
- Statistical Learning
- Virtual and Augumented Reality

OPEN ELECTIVES

- Entrepreneurship
- Computer Forensics
- Wireless Networks
- Randomized Algorithms
- Applied Graph Theory
- Network Forensics
- Applied Numerical Analysis
- Environmental Science and Green Computing
- Quantum Mechanics and Fundamentals of Quantum Computation
- Computational Foundations for Robotics
- Mathematical

M.Sc. (THEORETICAL COMPUTER SCIENCE)
Programme Structure

SEMESTER 1

Theory
- Calculus and its Applications
- Applied Physics
- Analog & Digital Electronics
- Problem Solving & C Programming
- English for Professional Skills

Practical
- Applied Physics and Digital Electronics Lab
- C Programming Lab
- Engineering Graphics & Geometric Modelling
- Personality and Character Development

SEMESTER 2

Theory
- Discrete Structures
- Complex Variables and Transforms
- Abstract Algebra
- Data Structures & Algorithms
- Object Oriented Programming

Practical
- Computational Mathematics with Python
- Data Structures Lab
- Object Oriented Programming Lab
- Personality and Character Development

SEMESTER 3

Theory
- Linear Algebra
- Graph Theory
- Probability and Statistics
- Advanced Data Structures
- Computer Organization & Assembly Language Programming

Practical
- Statistical Computing and R Programming Lab
- Advanced Data Structures Lab
- Assembly Language Programming Lab

SEMESTER 4

Theory
- Stochastic Processes
- Database Design
- Optimization Techniques
- Operating Systems
- Computer Networks & TCP/IP

Practical
- Operating Systems Lab (LINUX)
- Computer Networks & TCP/IP Lab
- RDMBS Lab

SEMESTER 5

Theory
- Theory of Computing
- Computational Number Theory & Cryptography
- Software Engineering
- Design & Analysis of Algorithms
- Professional Elective - I

Practical
- Scientific Computing Lab
- Design & Analysis of Algorithms Lab
- Java Programming Lab

SEMESTER 6

Theory
- Machine Learning
- Computer Graphics and Visualization
- Artificial Intelligence
- Security in Computing
- Professional Elective – II

Practical
- Computer Graphics and Visualization Lab
- Artificial Intelligence Lab
- Security in Computing Lab

SEMESTER 7

- Project Work I
- Industry / Research Project

SEMESTER 8

Theory
- Game Theory
- Parallel & Distributed Computing
- Data Mining
- Professional Elective – III
- Open Elective – I

Practical
- Parallel & Distributed Computing Lab
- Data Mining Lab
- Research Specialization Lab - I

SEMESTER 9

Theory
- Information Retrieval
- Software Patterns
- Mathematical Modelling
- Professional Elective - IV
- Open Elective - II

Practical
- Information Retrieval Lab
- Modelling and Simulation Lab
- Research Specialization Lab - II

SEMESTER 10

- Project Work II
- Industry / Research Project

PROFESSIONAL ELECTIVES

- Principles of Programming Languages
- Reinforcement Learning
- Natural Language Processing
- Deep Learning
- Approximation Algorithms
- Network Algorithmics
- Social Network Analysis
- Advanced Computer Graphics
- Computer Vision & Image Analysis
- Data Compression
- Randomized Algorithms
- Cloud Computing
- Pervasive Computing
- Big Data and Modern Database Systems
- Principles of Compiler Design
- Network Science
- Security Modelling and Analysis
- Internet of Things
- Epidemic Models
- Statistical Learning

OPEN ELECTIVES

- Computational Finance
- Computational Geometry
- Data Science
- Data Visualization
- Principles of Management and Behavioural Sciences
- Entrepreneurship
- Computational Complexity Theory
- Wireless Networks
- Advanced Operating Systems
- Mobile Computing
- Computational Foundations for Robotics
- Environmental Science and Green Computing

M.Sc. (DATA SCIENCE)
Programme Structure

SEMESTER 1

Theory
- Calculus and its Applications
- Basics of Computational Biology
- Digital Electronics
- Problem Solving & C Programming
- English for Professional Skills
- Engineering Graphics and Geometric Modelling

Practical
- C Programming Lab
- Digital Electronics Lab
- Personality & Character Development

SEMESTER 2

Theory
- Discrete Structures
- Abstract Algebra
- Data Structures
- Object Oriented Programming
- Theory of Probability

Practical
- Object Computing Lab
- Data Structures Lab
- Python Programming Lab
- Personality & Character Development

SEMESTER 3

Theory
- Applied Statistics
- Linear Algebra
- Graph Theory
- Advanced Data Structures
- Computer Organization and Assembly Language Programming

Practical
- Applied Statistics and R Programming Lab
- Advanced Data Structures Lab
- Assembly Language Programming Lab

SEMESTER 4

Theory
- Optimization Techniques
- DataBase Design
- Predictive Analytics
- Operating Systems
- Transforms and its Applications

Practical
- Data Visualization Lab
- RDBMS Lab
- Java Programming Lab

SEMESTER 5

Theory
- Design and Analysis of Algorithms
- Stochastic Models
- Computer Networks
- Supervised and Unsupervised Learning
- Professional Elective - I

Practical
- Design and Analysis of Algorithms Lab
- Computer Networks Lab
- Supervised and Unsupervised Learning Lab

SEMESTER 6

Theory
- Parallel And Distributed Computing
- Data Mining
- Big Data & Modern Database Systems
- Artificial Intelligence
- Professional Elective - II

Practical
- Parallel and Distributed Computing Lab
- Big Data & Modern Database Systems Lab
- Scientific Computing Lab

SEMESTER 7

- Project Work I
- Industry / Research Project

SEMESTER 8

Theory
- Reinforcement Learning
- Natural Language Processing
- Cloud Computing
- Professional Elective – III
- Open Elective - I

Practical
- Reinforcement Learning Lab
- Natural Language Processing Lab
- Cloud Computing Lab

SEMESTER 9

Theory
- Data Privacy and Security
- Network Science
- Information Retrieval
- Professional Elective - IV
- Open Elective – II

Practical
- Information Retrieval Lab
- Data Privacy and Security Lab
- Network Science Lab

SEMESTER 10

- Project Work II
- Industry / Research Project

PROFESSIONAL ELECTIVES

- Data Compression
- Mobile Computing
- Digital Image Processing
- Multimedia Analytics
- Computational Neuro Science
- Pervasive Computing
- Marketing Analytics
- Web Analytics
- Soft Computing
- Computer Graphics
- Algorithms for Bioinformatics
- Mathematical Modeling
- Software Engineering
- Software Patterns
- Applied Graph Algorithms
- Game Theory
- Social Network Data Analytics
- Survival Analytics
- Deep Learning
- Health Analytics
- Cyber Security Analytics
- Internet of Things

OPEN ELECTIVES

- Computational Finance
- Computational Geometry
- Randomized Algorithms
- Principles of Management and Behavioural Sciences
- Entrepreneurship
- Information Theory and Error Control Coding
- Accounting and Financial Management
- Wireless Networks
- Environmental Science and Green Computing

Infrastructure

The College has a well equipped state-of-the-art computer centre with latest software and hardware. The Department has an Object Computing Lab, Computational Sciences Lab, Theoretical Computer Science Lab, Computer Systems and Design Lab, Information Systems Lab, Computational Neuroscience Lab, Smart and Secure Environment Lab and Data Science Lab. In addition to the Computer Centre, the college also has a well-equipped TIFAC-CORE Centre, CAD/CAM Centre, Virtual Reality Centre, Virtual Instrumentation Centre, Project IMPACT Centre, DSP Lab in Collaboration with Texas Instruments, PSG - Siemens Centre of Excellence in Automation and PSG Cognizant Open Source Lab with state-of-the-art facilities.

Library

The College has a well stocked library with nearly 2.5 lakhs books, back volumes, more than 400 international & national journals and magazines. The library has a good collection of CD-ROMs, to which students have free access. Apart from catering to the needs of the faculty and students, the library allows access to industrial associates of PSG College of Technology. In addition to this, each Department maintains its own well-equipped library catering to the needs of its students.

An in-house academic journal, National Journal of Technology, is published by the college on a quarterly basis comprising of quality articles by researchers all over the country.

Internship

As part of the curriculum, the students are required to undertake two projects each of duration six months, which provide them hands on training, thereby exposing them to the requirements and the pre-requisites of the Industry. The Seventh Semester (May – November) and Tenth semester (December- May) are devoted entirely to project work, which is usually taken up by the students at software industries and research institutions, thereby enabling them to have industrial and R&D exposure. This not only gives the students an opportunity to work in a challenging environment with the state-of-the-art technology, but also, supplements their work culture through which they gain a mélange of managerial and technical skills.

Companies which recruit our students are ABCO India Pvt. Ltd., Adobe systems, Amazon, J.P. Morgan, Bridgei2i, Cerner, Cisco, Citrix, Cognizant, Commvalut, D.E. Shaw, Dell, Deloitte, eBay, Freshdesk, Goldman Sachs, Google, HP, IBM, Infibeam.com, Infosys, Intel, Juniper Networks, KLA Tencor, LatentView, Microsoft, Micro Focus, Motorola, MU Sigma, Nokia, OAT Systems, Siemens, Oracle, Paypal, Philips, SAP Labs, Societe Generale, TCS, Thorogood, ThoughtWorks, Verisign, Verizon, Wipro and Yahoo and are paid attractive stipend during the period.

To address the needs and challenges of the global market and to quench the thirst of our students as creators of knowledge, the department encourages students to do research in top-notch research institutes like IISc, IITs, ISI, IIM, TIFR, IISER, DRDO, IIIT, GIST South Korea, NUS Singapore.

Extra Curricular Activities

In addition to the academic and curricular activities, the students actively participate in co-curricular and extra curricular activities. The Computational Sciences Association, which is exclusively for the students of M.Sc. (Software Systems), M.Sc. (Theoretical Computer Science) and M.Sc. (Data Science) conducts various activities for the benefit of the students. Special lecture meetings, invited talks and seminars are held regularly, for which experts in various fields from the industry and other institutions are invited to present their views regarding the latest trends and developments in the field of Information Technology. From a very humble beginning, the Association has, under the able guidance of the faculty advisors and the staff members of the Department, grown into being one of the most active associations in the college today. On the eve of, celebration of two decades of Software Engineering and one decade of Theoretical Computer Science, a series of guest lectures by the Alumni and Academicians from top notch institutions/industries have been organised since Jan 2017.

The Association also brings out a quarterly newsletter "COMAPP COMMUNICATIONS", which publishes papers and articles from its members, alumni of the Department and students of the department. The Editorial Board of COMAPP Communications consists of students guided by a faculty member acting as the Chief Editor. COMAPP COMMUNICATIONS is released by the students themselves and each issue highlights a recent trend in the IT field, thus enabling the students to keep abreast of the ever-changing technology.

Under the auspices of the Association, the students organize a National Level Technical Symposium, titled "LOGIN" every year. LOGIN, which was first hosted in 1990, has now grown into an International level Inter-collegiate Computer Festival, and has always attracted active participation from the students of various Universities and Institutions.

THIRAN, an intra collegiate technical symposium is also organized by the students and has active participation from the various departments within the college. MINDS is an annual intra-department event conducted by the Association with the sole aim to bring out the best out of the freshers.

The Association also encourages the students to participate in similar meets conducted by other institutions. As a result of such constant support, the students have, over the years, been winning laurels outside the campus. Periodical industrial visits and active industry-institute interaction are a boon to the students in enhancing their skills.

Campus Placements

Students from PSG Tech have been absorbed by leading software houses of India and abroad through campus recruitment. Partial list of IT organizations which visit PSG Tech for campus recruitment:

- **ABCO Pvt. Ltd**
  Chennai
- **Adobe**
  Chennai
- **Amazon Software Development (I) Pvt. Ltd.**
  Bangalore
- **Bridgi2i Analytics Solutions Pvt. Ltd.**
  Bangalore
- **Cerner Corporation**
  Bangalore
- **Cisco Systems (India) Private Ltd.**
  Bangalore
- **Citrix**
  Bangalore
- **Cognizant**
  Chennai
- **Commvault Systems**
  Hyderabad
- **D E Shaw**
  Hyderabad
- **Dell International Services India Pvt. Ltd.**
  Bangalore
- **Deloitte Consultancy (I) Services Ltd.**
  Hyderabad
- **Ernst & Young**
  Chennai
- **FourKites**
  Chennai
- **Goldman Sachs Services Pvt. Ltd.**
  Bangalore
- **Google India**
  Hyderabad
- **Hewlett Packard Labs R & D Division**
  Bangalore
- **Honeywell Technology Solutions Pvt. Ltd.**
  Madurai & Bangalore
- **IBM India Pvt.Ltd.**
  Bangalore
- **Infibeam.com**
  Bangalore
- **Infosys Technologies Ltd.**
  Bangalore
- **Intel India Pvt. Ltd.**
  Bangalore
- **J.P.Morgan**
  Mumbai
- **Juniper Networks**
  Bangalore
- **KLA Tencor Software India Pvt Ltd.**
  Chennai
- **LatentView Analytics**
  Chennai
- **Micro Focus**
  Bangalore
- **Microsoft India R&D Ltd.**
  Hyderabad
- **MindTree Consulting Pvt. Ltd.**
  Bangalore
- **MedialQ**
  Bangalore
- **Mu Sigma Business Solutions (I) Pvt. Ltd.**
  Bangalore
- **Myntra**
  Bangalore
- **Nalco Ecolab**
  Pune
- **Noodle.ai**
  Bangalore
- **OAT Systems Inc.**
  Bangalore
- **Oracle India Pvt. Ltd.**
  Bangalore & Hyderabad
- **PayPal**
  Chennai
- **Probyto**
  Coimbatore
- **Qualcomm**
  Bangalore
- **SAP Labs India**
  Bangalore
- **Société Générale**
  Bangalore, Chennai
- **Tata Consultancy Services Ltd.**
  Chennai
- **Thorogood Associates**
  Bangalore
- **Thought Works**
  Bangalore
- **Zenefits**
  Bangalore
- **Zoho**
  Chennai

Alumni Feedback

Susindrakrishnaa Natarajan
Namecheap
Web Services Pvt Ltd
Coimbatore
M.Sc. SE: 1997-2002

The M.Sc. Software Engg. program is a comprehensive niche package in itself, for every aspiring Software Professional comprising of the contemporary subjects of study taught by the best of faculties.

This programme gave us an unmatched opportunity to get to study software engineering in depth from a reputed college like PSG Tech with a state of the art infrastructure and to walk out equipped with industry-readiness after two six month internships working at leading software companies. We were given exposure to all areas of software like databases, networking, system programming, web applications, etc. We could choose our area of interest and specialise further during our final two years in the form of electives and in the form of projects/internships in companies that offered work in areas of our interest.

Shankar Anand R

Extreme Networks, Chennai
M.Sc. SE: 1998 – 2003

Gokul Raj R

IBM, Bangalore
M.Sc. SE: 1999 – 2004

I am proud to be a part of the M.Sc. (Software Engineering) programme. The course offered me to explore the cutting edge technologies with excellent guidance from dedicated professors. The two internships played a vital part as it gave me an exposure to the IT industry. This shaped my profession that provided the zeal to face the global challenges in the IT world. Hats off to the Department for making me reach these heights.

The fact that Goldman Sachs, one of the premier investment banks in the world, recruits M.Sc. (SE) students from PSG Tech speaks volumes about the programme . Students get placed into top class companies literally during the 7th semester when they undertake their first internship. The fact that they have industry exposure even before they attend their first interview gives them that extra edge over the students of other programmes. The programme focuses a lot on encouraging students to hone their Practical and Analytical skills unlike other courses which just offer theoretical knowledge.

Saketharaman S

Goldman Sachs, Bangalore
M.Sc. SE: 2000 – 2005

Sunil G

Founder, Untumble.com
Coimbatore
M.Sc. SE: 2001-2006

M.Sc. SE is extremely well modeled for overall development of students making them most suited for the software industry. At the end of the programme students are much more capable than candidates with experience in the industry. The programme format is structured for both theoretical and practical learning. I've personally experienced being better equipped than seniors in the industry. Taking up this programme was one of the best decisions of my life and I'm grateful to the faculty and PSG Institutions for giving me this opportunity.

M.Sc. SE programme provides strong fundamentals to software engineering, hands-on lab work, active industry exposure and awesome campus placements. Gives an opportunity for students to step-up and pursue their own interests like get on some with research, paper publications, which is a huge add-on. This programme from PSG Tech is indeed worthwhile for investing five years into it.

Rukaiya Dahodwala

Wayfair, Boston
M.Sc. SE: 2001-2006

Alumni Feedback

Arun D K

D.E. Shaw India Pvt. Ltd., Hyderbad

M.Sc. SE: 2002-2007

I am a proud alumnus of M.Sc. (Software Engg.). The programme contents are always ahead of time and contained very good mix of concepts and tools for students to appreciate computer science, software design and engineering. The internship programs and attention to lab sessions are the biggest assets of this course. The amount of learning and collaboration we could achieve working as a team and implementing new ideas were enormous.

Choosing to do "M.Sc. Software Engineering" was one of the best decisions of my life. I've heard from other colleagues that what they learnt in college and what they work on now, has no connect. But, honestly speaking, I can confidently say that I'm what I'm and where I'm because of what I learnt in college.

Ramya A

Senior SDET
Freshdesk
M.Sc. SE: 2002-2007

Karthikeyan K IPS

Superintendent of Police
M.Sc. SE: 2003-2008

M.Sc. Software Engineering is one of the best programmes available from one of the prestigious institutions in the country. They beauty is, all lectures are taught with real world examples, problems, solutions and best practices by experienced faculties in their best way. In a way we are learning life skills along with programming. At the end, we become a best fit in any profession and anywhere. The program makes us complete both personally and professionally.

M.Sc. (Software Engineering) is an unique course which perfectly molds a fresh student into a promising software engineer. The constantly revised and upgraded course provides the students with a very good theory knowledge and the skill to apply the concepts learnt by completing the lab assignments and mini projects(packages) every semester. The two six month internships gives the students a very good industry experience and provides an edge over other course

Vinodh N V

EMC^2
M.Sc. SE: 2004-2009

Sethuraman V

Zenefits, Canada
M.Sc. SE: 2005 – 2010

Five years in M.Sc. Software Engineering is one of the most fortunate things happened in my life. This programme @ PSG Tech is 'Special' and offers handful of opportunities, be it High Profile Campus recruitments in MNC`s, Higher Studies (MS, MBA), Entrepreneurial experience, Research Oriented (Ph.D) or even fun, you`ll get catered a way better than any of the top notch Engineering Schools in India such as IIT`s, NIT`s, etc. The Dept has got awful infrastructure, technically sound and experienced faculty and the two industry based internships give a cutting edge amongst the other peers.

M.Sc. (S.E) curriculum which gets constantly updated based on feedback from industry personnels and strong alumni forum, helped us to excel in the industry. I was not lost when I joined my company as a fresher, the two internship programs helped me to learn the business etiquette, apply classroom knowledge and network with representatives from companies. I can recollect how the healthy discussions with our professors motivated us to learn the subject more passionately. I can see its impact when I get into any technical discussions in the company and how easily I can share my ideas, influence peers and help my company innovate.

Jeevan Ram

Xome, Chennai
M.Sc. SE: 2006-2011

Alumni Feedback

Premika Mani

Microsoft, USA
M.Sc. SE: 2006 – 2011

M.Sc. - Software Engineering programme, offered by PSG College of Technology is a proud asset for the college itself. The internships help us to understand clearly why we study - what we study. They provide great industry exposure needed for placements and mould the students for the industry. Frequent updation of the curriculum on par with the industrial needs makes the course unique. Apart from the technical exposure, over the years, the programme has built strong confidence in its students. Every student dares to think beyond the ordinary.

Michael Jaison G

Apple Inc.
M.Sc. SE: 2007-2012

M.Sc. Software Engineering program has the right balance of theoretical and practical courses which creates engineers with relevant expertise in software design and engineering. Students are well prepared to start their career with the help of two internships and research opportunities. I am thankful for the support and encouragement from the faculties and department which helped me accomplish my Masters in Computer Vision at Carnegie Mellon University. The strong foundation of the program has motivated me to pursue my passion to work on cutting-edge technology at Apple Inc.

Sudhakar Kandasamy

Ernst & Young
M.Sc. TCS : 2007-2012

M.Sc. Theoretical Computer Science is one of the unique courses in India whic was designed for Research & Development. The course concocts a perfect proportion of Mathematics and Computer Science to brew Analytics. The two internships propels the students to solve real world business problems in leading analytics firms in India and abroad.

Veeramani Rajarajan

Yahoo! Inc.
M.Sc. TCS : 2008-2013

M.Sc. Theoretical Computer Science programme at PSG Tech is one of the rarest courses in India which exposes a student to fields in computer science that are active, with exciting breakthroughs and intriguing challenges. The programme is rigorous and courses are taught by faculty who takes pride in their teaching and care about their students. The department continues to pursue research in many areas of theory and runs joint activities with the country's leading R&D institutions. This presence of active research groups ensures the students that almost every day there is an exciting topic to learn.

Srinath SS

Flipkart
M.Sc. TCS : 2008-2013

M.Sc. Theoretical Computer Science has been tailored to provide a perfect platform for building a research oriented career in computer science without compromising on the flexibility to take the industry path. The lab packages every semester gives the opportunity to build cool stuff at a small scale. The twin internships gives a great exposure to the real world and the culture over here is such that it helps students to develop not just their academic skills but also their overall personality.

Niveditha L

KLA Tencor
M.Sc. TCS: 2009-14

M.Sc. Theoretical Computer Science is an amalgam of computer science and mathematics. The programme structure covers the breadth and depth of foundational areas of computer science. Two semester internships and other initiatives such as workshops, meets, lecture talks provide immense opportunity to the student to interact with top academicians and researchers in the field. The core focus of the program is to develop research aptitude among students but it is not limited to it.

Alumni Feedback

Vijaya Raghavan Swetha

University of Texas, Alrington
M.Sc. TCS : 2010-15

Theoretical Computer Science is an excellent combination of mathematics and computer science. Our department has come up with the finest coursework. The courses and the way it is structured defines its uniqueness. The teachers are highly knowledgeable in this domain and can really explain well in a way that the students can understand. Having internships as part of the course curriculum enables us to work with the domain experts and learn from them.

Lots of time and energy is spent by experts from academia and the industry while designing the syllabus of M.Sc. Theoretical Computer Science. The programme curriculum and the internships give the perfect combination of knowledge, attitude, confidence and experience to succeed in both software industry and research/academic institutions around the globe. The encouragement and the support given by every faculty in the department is by far the best that is known to me.

Gowtham Kannan B

Indiana University, Bloomington
M.Sc. TCS : 2010-2015

Santhosh Kumar R

University van Amsterdam, Amsterdam
M.Sc. TCS : 2011-2016

I can confidently say that choosing M.Sc. Theoretical Computer Science, was one of the best decisions I have ever made in my academic life. One of the best things about the programme is its curriculum, which prepares the students for both industry and academia. I couldn't be more grateful for having met such amazing teachers who always kept me motivated and shaped me of who I am today. Having attained an integrated degree, I always had an upper hand after I finished my programme , both in industry and in my higher studies. Five years I spent at PSG will truly be memorable, having met my classmates who have become my lifelong friends.

Theoretical Computer Science is a programme I am glad to have stumbled upon. The syllabus was progressive, constantly revised with alumni feedback. Research opportunities midway through the programme made it all the more exciting. I'm extremely thankful to have had encouraging faculty and supportive seniors and alumni. And for all the amazing people I got to meet here, it's undeniably the best five years of my life.

Meera V S

Myntra Designs
M.Sc. TCS : 2011-2016

Guruprasanna S

Microsoft
M.Sc. TCS : 2011-2016

I feel glad and thankful for taking up the five-year M.Sc. TCS programme and graduating out of it. There is a committed, supportive faculty team and a constantly evolving syllabus. Students can choose between an academic and industrial route. The two six-month internships that are part of the programme provide immense experience and exposure before they step out into the world. Combined with a vibrant group of peers, it gives a great platform for students to launch their careers.

The programme has made me capable of diving deeper into problems by laying down a strong mathematical foundation. The coursework along with two internship opportunities makes it really unique and complete.

Harish Gajapathy

Amazon
M.Sc. TCS : 2011-2016

Alumni Feedback

Sujitha Suresh

Citrix R & D India Pvt. Ltd.
Bangalore
M.Sc. SE: 2011 - 2016

The most important single aspect of software development is to be clear about what you are trying to build. Software Engineering programme provides a fresh start on expanding what is possible in this IT world along with it shows how to handle academics with other soft skills. Definitely one of the best programmes offered at PSG College of Technology.

Theoretical Computer Science never fails to amaze the students who would love a tinge of mathematics in everything they learn! With finely crafted programme structure and amazing faculty members, the programme coupled with two six-month internships which lay a strong foundation to our professional carrier and also aspires young researchers to pursue their field of interest in reputed research universities. TCS is indeed "a programme with a difference" and the wisest choice to make as well!

Aravind P

Intel
M.Sc. TCS: 2012-17

Gayatri Anita Nair

Microsoft
M.Sc. TCS: 2012-2017.

I am glad I made the decision of joining the M.Sc. Theoretical Computer Science programme. The programme offers one so much - the chance to learn from excellent faculty along with an exceptional peer group, opportunities for some stellar internships as well as an atmosphere that fosters an aptitude towards research.

Without continual growth and progress, such words as improvement, achievement, and success have no meaning. M.Sc Software engineering has grown over the years and helped me grow along the way, with enthusiastic faculty willing to work towards a common goal of instilling us with the knowledge to help us become who we are today!

Gayathri Balasubramani

PayPal, Chennai
M.Sc. SE: 2012-2017

Sri Hare G R

KLA Tencor, Chennai
M.Sc. SE: 2012-2017

M.Sc. Software Engineering is a well-structured programme that gives priority to practical and hands on approach to all the subjects throughout the programme. With a very good syllabus and two internships with many high-profile companies before graduation, this programme is a good place to get into the field of Computer Science.

The programme is very rigorous, in a good way. The structure of the programme is very well defined, in terms of the courses and the packages we do every semester. Since there is a legitimate process of selection involved, your peer group is at least as good, and mostly better than what you are, as a student. This will create a very healthy and competitive environment. As a working professional now, I can vouch for the fact that this programme is an opportunity for every student, because through the years, I have grown to be a better student, a professional and a person. It has been a very wholesome journey.

Rajeshwari S

Juniper Networks
M.Sc. TCS: 2012-17

M.Sc Data Science Student Interns Feedback

Kavya Parthiban

M.Sc. Data Science
(2015-2020)
Intern @
Myntra Designs Pvt Ltd.

The programme strives to give students a holistic view into what Data Science is, with the buzz around big data and artificial intelligence students who undertake this programme are always sure to be one step ahead. Although coming from a non-computer science background, the curriculum, which is revised periodically by both academia and alumni feedback, is built in such a way that each student has a strong foundation in both mathematics and computer science. Data Science is a solid programme which I am glad to have stumbled upon.

Kamesh C

M.Sc. Data Science
(2015-2020)
Intern @
Société Générale

Being the student of the first batch of M.Sc. Data Science is always fascinating. Choosing this five year integrated programme has been the best decision I have made in my entire career. This curriculum is well structured in a way to face the industry trends. With an amazing faculty team and fellowship, the learning becomes interesting and easier. Through the period of five years, the amount of exposure that we could acquire through different competitions and technical hackathons is humungous. I uphold that choosing M.Sc. Data Science, would be the smartest decision if you are looking forward to a Tech-oriented career.

Sayee Raghavan R

M.Sc. Data Science
(2015-2020)
Intern @
J P Morgan Chase

When someone asked me what makes this programme special my reply was all of us do not have equal talent, but here all of us have an equal opportunity to develop our talents. Here you get to play with data which is at the foundation of all the megatrends that are happening today, from social to mobile to cloud to gaming. The faculty team with their fine presence and affable manners are well acquainted with the current industry trends and are experts in the subject. I consider myself blessed for choosing this programme.

Shruthi S

M.Sc. Data Science
(2015-2020)
Intern @
Noodle.ai

This programme has been one of its kind. With exemplary syllabi, I was able to gain wide knowledge in the stream of computer science, statistics and mathematics. It is evident that our entry into extraneous professional world, there will be endless opportunities. As a student of data science, we are given predilection in this field. The faculty of our department are extremely adept and supportive and are proficient in the subject. I could revamp myself with this programme and consider myself fortunate for choosing this.

Shraddha S Krishnan

M.Sc. Data Science
(2015-20)
Intern @
Société Générale

Data Science has given me wonderful professors and a strong foundation in the domain. The programme is designed to meet industry standards. The scope of the programme is just not constrained to the syllabus. The professors are understanding, supportive and approachable. The packages that we do make us challenge ourselves and explore the subjects in depth. The interaction with professionals from the industry keeps motivating us and gives a real view of the world. Overall I am happy to have chosen this programme.

Karunasagar M

M.Sc. Data Science
(2015-2020)
Intern @
JP Morgan Chase

"Data is the new oil" and to be honest this programme will be the best trainer to mine them out. The programme is structured in such a way that it gives rigorous training in all phases of the data life cycle. With faculty team having tons of experience and knowledge in the industry we are nurtured in a way to be the best. The consistent reputation of alumni network in industry is an added plus to us. The overall ambience for learning is very charming and I am sure you will explore the unexplored domain in your period of study.

PSG Institutions

PSG Sarvajana Higher Secondary School	1924
PSG Industrial Institute	1926
PSG Polytechnic College	1939
PSG Middle School, Vedapatti	1943
PSG College of Arts and Science	1947
PSG College of Technology	1951
PSG Rural Health Centre, Vedapatti	1961
Neelambur	1985
Karadivavi	1998
PSG & Sons' Charities Metallurgy and Foundry Divisions	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 Institue of Management	1994
PSG College of Nursing	1994
PSG STEP	1998
PSG College of Physiotherapy	1999
PSG College of Pharmacy	2001
PSG Centre for Advertising & Communication	2001
PSG Public Schools	2002
PSG Off shore Healthcare Management Services	2003
PSG Institute of Advanced Studies	2006
PSG Institute of Technology and Applied Research	2014
PSG Centre for Academic and Research Excellence	2015
PSG Software Technologies	2017

PSG COLLEGE OF TECHNOLOGY

(A Govt. Aided Autonomous Institution affiliated to Anna University)

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