



SRM

INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

DEPARTMENT OF MATHEMATICS



BROCHURE

FACULTY OF ENGINEERING AND TECHNOLOGY
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
KATTANKULATHUR - 603203
CHENNAI, TAMILNADU, INDIA

The Department of Mathematics, Faculty of Engineering and technology, SRM Institute of Science and Technology is a thriving community of dedicated teachers, diligent researchers and devoted students sharing the enthusiasm for Mathematics






Vision



To merge as a world class hub of research that creates an academic pursuit and disseminates knowledge with high standards in Mathematics, Engineering and Technology.

Mission

To provide world class research and state of the art research environment for young minds to pursue a career in advanced areas of Mathematics and its Applications, enhancing quantitative reasoning and employability skills.

Department at a Glance

	Courses Offered by the department <ul style="list-style-type: none">• B.Sc,M.Sc,Ph.D (Mathematics)
	Current Strength of Faculty Members <ul style="list-style-type: none">• 89
	Funds Received <ul style="list-style-type: none">• 42.54 lakhs

	Number of Ph.D.s awarded <ul style="list-style-type: none">• 21
	Number of Publications during 2012-18 <ul style="list-style-type: none">• 396

Overview of the Department

The Department of Mathematics, Faculty of Engineering and Technology, SRMIST was established in the year 1985. The Department offers graduate, post graduate courses and Ph.D programmes in Mathematics. It consists of 91 highly qualified faculty members which includes 53 Doctorates and 71 Research Scholars (46 Part time / 25 Full time) to make sure the best education Imparted to the students. The faculty members are also actively involved in research and carrying out projects. The students are provided with ample opportunities to improve their organizational skills and group dynamics. They are motivated to handle seminars and participate in group discussions. Apart from emphasizing on consistent and good academic performance, the department encourages participation of students in curricular and co-curricular activities to bring out the best in them. The details of the department can be accessed using the following universal resource link

☞ <http://www.srmuniv.ac.in/engineering/school-of-basic-sciences/department-of-mathematics>

Academic Environment

Mathematics, in an earlier view, is the science of space and quantity; in a later view, it is the science of pattern and deductive structure. SRMIST programme of study for the Major in Mathematics has been designed to provide a platform for the students

- ☞ To expose to the primary areas and the central ideas of contemporary Mathematics (as well as their applications)
- ☞ To develop the skills of rigorous analytic reasoning along with a set of useful Problem solving skills and strategies.
- ☞ To apply mathematical concepts and theorems to new situations
- ☞ To develop the ability to transfer the mathematical types of thinking and reasoning to real life situations.

The enhanced curriculum and assessment ensures the students to attain proficiency in mathematics. The Mathematics program includes courses in algebra, geometry, analysis, differential equations, statistics / probability and discrete mathematics.

Core Competence

A core of basic mathematics provides with the fundamental mathematical knowledge and skills, and the basis for more advanced work later on. The core mathematics courses are aimed at building a strong foundation in the subject; the laboratory based courses give the exposure and training in application-oriented practical subjects. Students are exposed to advanced research topics through electives and project work.

Infrastructure

The Department of Mathematics has a well-equipped computing lab loaded with softwares like MATLAB, MAPLE, INTLAB, C++ , LATEX , SCILAB and Mathematica. The primary purpose of the Mathematical Computing Laboratory is to coordinate and support mathematical research projects that have a computational or computer visualization component.



Programmes Offered

Mathematics is a basic analytical tool in all engineering subjects. The department lays a strong foundation in Mathematics and its applications to engineering students of B.Tech and M.Tech courses. The syllabus is designed so as to cater to the needs of all engineering departments, both at undergraduate and postgraduate levels. Also the department offers UG, PG course and Ph.D in Mathematics.

∞ B.Sc Mathematics

The Bachelor of Science in Mathematics provides a strong background to the fundamentals of mathematics. There is a large demand for people with strong analytical skills and a broad-based background in the mathematical sciences. The 3 year B.Sc programme will prepare a student to avail many diverse attractive opportunities.

➤ M.Sc. Mathematics

M.Sc Programme is offered by the department to meet the growing demands of core mathematicians in the applied field of engineering and technology. The 2 year M.Sc. programme curriculum has been devised by the experts in the field which focuses not only on the conventional Mathematics course but also keeps in view of the current needs and demands in various upcoming fields.

➤ Ph.D Mathematics


The department strives to provide excellent teaching, encourage interdisciplinary research and service to students and teaching community in the application of Mathematics to other disciplines. The main objective of the PhD programme is to ensure that the candidates attain a higher level of scientific expertise in different specialization. This program is offered to full time and part time researchers. The number of research supervisors available in the department is 23.

Research thrust areas

The specific areas of research in which the department is actively engaged are


- Fuzzy Set Theory
- Computational Fluid Dynamics
- Graph Theory
- Queueing Models
- Algebra
- Analysis (Functional and Non Archimedean)
- Probability and Stochastic Processes
- Operations Research
- Mathematical Modeling
- Mathematical Biology
- Numerical Analysis & Differential equations
- Fractals
- Financial Mathematics

Funded Projects




Dr. Ritesh Kumar Dubey
SERV, DST India,
Matrix Project

Status: In Progress



Ms. G. Lavanya
SEED, SRM University

Status: In Progress




Dr. Ritesh Kumar Dubey
SERB, DST India,
EMR project

Status: In Progress



Dr. Vinay Kumar Gupta
SERB, DST India,

Status: In Progress



Dr. Ritesh Kumar Dubey
SERB, DST India,
Under Fast track

Status: Completed

Publications

A significant number of research papers have been published by the faculty members, research scholars and the students in reputed national and international journals.



Conferences and Other Activities Organized

The department of mathematics has so far conducted 10 National conferences on Mathematical Techniques and Applications, workshops, research colloquium, STTP and FDP programmes to update the skills of faculty members in the emerging fields of mathematical sciences.



Student Activities

Sri Ramanujan Mathematics Club was founded in the year 1991 through which an Intra Mathematics Festival(IMF) and Engineering Mathematics Festival(EMF) comprising of events like quiz, puzzles, dumbC, crossword, IQ, etc., are conducted every year to help the students to sharpen their analytical skills. The student seminar provides ample opportunities to present their specific topics and share their knowledge. All students have been encouraged to undergo short-term internships/ industrial visits to the leading centers in India as well as abroad.

Noteworthy Achievements

Many faculty members served as resource persons and chaired sessions in National and International conferences conducted in India and abroad. Also some faculty members are acting as reviewers in reputed international journals. Some faculty members have received travel grant for attending international conferences in countries like USA, Spain, France, Germany, Taiwan etc.

Future Plans

- ☞ To publish more papers in SCI indexed journals
- ☞ To conduct an International conference
- ☞ To conduct more faculty development programs
- ☞ To organize more guest lecturer's for B.Sc and M.Sc students
- ☞ To get more funded projects from the government agencies
- ☞ To increase employability of the students by offering more training in soft-skills
- ☞ To help the students become future educationalists by training them for CSIR-NET and SET examination
- ☞ To conduct socially relevant programmes in near by schools



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