

## ABOUT THE INSTITUTE

Vellore Institute of Technology (VIT) was founded in 1984 and attracts students from various parts of the world because of its academic excellence. The credentials of VIT in academics and research have placed 13<sup>th</sup> position among the research and 11<sup>th</sup> position in the university category in India by NIRF, Govt. of India. The world ranking body namely the QS has given 4 STAR rating to VIT, with that VIT becomes the first institution in India to have the 4 STAR rating. In addition to this, the consortium of industries, FICCI has adjudged VIT as the “Excellence in Faculty”. VIT has completed 4 cycles of NAAC accreditation and has been rated as “A++” grade institution. VIT has introduced many innovations in academic processes such as FFCS (Fully Flexible Credit System), PBL (Project Based Learning) which adds value to every student for better learning. Fully digitalized academic portals and library access assists the students in equipping themselves for 2023 marketplace. Hack-a-thon, Make-a-thon, Math-a-thon, Stat-a-thon as part of curriculum exercise which kindles the interest and the curiosity of students, which motivates them to be better problem solvers, last module in every subject being handled by the industrial experts, making the students contextualize the concepts they study in the classroom, are a few of the innovations that VIT has introduced in their learning system.

## ABOUT THE SCHOOL

School of Advanced Sciences, VIT consists of Mathematics, Physics and Chemistry departments. The school offers M.Sc. and Ph.D. programmes in all the three disciplines. The school comprises qualified and research-oriented faculty members whose expertise is in the frontier areas in sciences. Faculty members of SAS have received national and internationally recognized funded projects to the tune of 10 cores on-going projects in SAS. Several research projects of the school are financially supported by some of the leading funding agencies such as NBHM, UGC, CSIR, DRDO, DST, DBT, and others.

## ABOUT THE DEPARTMENT

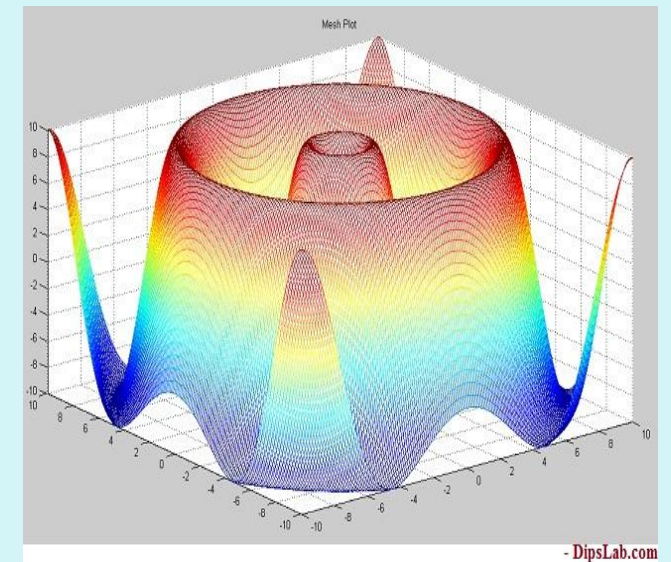
The Department of Mathematics at VIT, Vellore, holds a prominent position in the academic landscape: earning a QS World Subject Ranking of 201-250 in 2024, and ranking 7 - 9<sup>th</sup> within India. Recently, the department secured project funding from DST- FIST, further enhancing its research capabilities. The faculty’s areas of expertise span a wide spectrum, including algebra, analysis, differential equations, applied mathematics, optimization techniques, statistics, data science, theoretical physics, and computational sciences. The department offers Ph.D. programmes in Mathematics, Statistics and Data Science in addition to M.Sc. (Data Science), M.Sc. (Business Statistics), Integrated M.Sc. (Computational Statistics and Data Analytics) and Integrated M.Sc. (Mathematics) programmes.



**School of Advanced Sciences  
Department of Mathematics  
offers**

**A Five Day Workshop on  
Computational Mathematics with  
MATLAB**

**(Offline only)**



**14 - 18 October, 2024**

**Venue: MGR BLOCK 109  
VIT, VELLORE**

## ABOUT THE WORKSHOP:

MATLAB, a powerful mathematical software, is often used beyond its basic functionalities for complex engineering and scientific computations. While the basics of MATLAB are essential for understanding its syntax and functionality, delving into advanced applications can unlock a world of possibilities. This workshop will delve into advanced MATLAB applications, providing participants with a deeper understanding of its capabilities and how to leverage them effectively.

## WORKSHOP CONTENTS

- GUI concepts
- Basics of MATLAB
- Symbolic Math
- Conditional statements and looping
- 2D plotting
- Areas, Volumes, Maxima/Minima
- 3D plotting
- Maxima/Minima of two variables
- Double/Triple integrals
- Vector Calculus
- Applications to Engineering problems
- Numerical methods for initial value problems of ordinary differential equations.
- Numerical methods for boundary value problems of ordinary differential equations.
- Numerical methods for partial differential equations (explicit and implicit methods)

## WHO CAN ATTEND?

- ✓ The course is open to all under graduates, post graduates, research scholars, faculty members and representatives from industry.

## ORGANIZING COMMITTEE

### Honorable Patron

Dr. G. Viswanathan, **Founder & Chancellor**

### Chief Patrons

Shri. Sankar Viswanathan, **Vice President**

Dr. Sekar Viswanathan, **Vice President**

Dr. G.V. Selvam, **Vice President**

### Patrons

Dr. V.S. Kanchana Bhaaskaran, **Vice Chancellor**

Dr. Partha Sarathi Mallick, **Pro-Vice Chancellor**

Dr. T. Jayabharathi, **Registrar**

### Chairman

**Dr. N. Arunai Nambiraj**

Dean, SAS

### Convener

**Dr. M. S. Jagadeesh kumar**

HoD, Department of Mathematics

### Coordinators:

**Dr. R. Nageshwar Rao**

Associate Professor of Mathematics

**Dr. T. Poornima**

Associate Professor of Mathematics

## COURSE FEE:

**Registration Fee: Rs.600/-**  
(Inclusive of GST)

- Number of participants is restricted to 60 (first come first serve basis)
- Accommodation will be provided on payment basis (To contact in prior).
- Certificate, Course material, and project ideas will be provided.

## LAST DATE FOR REGISTRATION:

On or before : 10, October 2024

**For Registration & Accommodation contact:**

**Dr. T. Poornima**

Contact No.: 7989591890

## ONLINE PAYMENT LINK

Link: <https://events.vit.ac.in/>

