ABOUT THE INSTITUTE

Vellore Institute of Technology (VIT) was founded in 1984 by Chancellor Dr. G. Viswanathan as Vellore Engineering College. Students from all around India and more than 60 countries come to VIT because of its stellar academic reputation. The Ministry of Human Resource Development (MHRD), Government of India, awarded the institution university status in 2001 in appreciation of its accomplishments in research, academics, and extracurricular activities. VIT has multiple campuses in India, including Vellore, Chennai (Tamil Nadu), Amravati (AP), Bhopal (MP) and Bengaluru (Karnataka), and an international campus in Mauritius. National Institutional Ranking Framework (NIRF) ranked VIT at 21st in the Overall category, 14th in the Research category, 16th in Engineering, and 14th in the University category in 2025, as announced by the Ministry of Education, Government of India. The institution adheres to world-class academic standards and is accredited by NAAC (India), IET (UK), and ABET (USA). VIT is ranked 691 among the top universities worldwide by the QS World University Rankings in 2026, ranked 352nd worldwide and 7th in India by the QS World University Rankings: Sustainability 2026, placed 9th in Engineering and Technology in India by the QS World University Rankings by subject 2025, and is among top 600 universities in world by the Shanghai ARWU Ranking 2025.

VIT offers a dynamic academic environment enriched by strong industry engagement, research culture, and initiatives such as Hack-a-thon, Make-a-thon, Math-a-thon, and Stat-a-thon, fostering problem-solving skills and experiential learning.

ABOUT THE SCHOOL

The School of Advanced Sciences (SAS) houses the Departments of Mathematics, Physics, and Chemistry, with 281 faculty members dedicated to high-quality teaching and research. The school offers 2-year M.Sc. programs in Chemistry, Physics, Data Science, and Business Statistics, and 5-year Integrated M.Sc. programs in Mathematics, Physics, Chemistry, and Computational Statistics & Data Analytics.

All departments are supported by DST-FIST, enabling advanced laboratory and research facilities. SAS hosts 1174 Ph.D. scholars, and faculty members hold several national and international research grants from agencies such as NBHM, CSIR, UGC, DRDO, and DST.

ABOUT THE DEPARTMENT

The Department of Mathematics at VIT holds a strong academic standing, with the QS World University Rankings by Subject 2026 placing Mathematics at 104 globally and 5th in India. The department has secured DST-FIST support to strengthen its research infrastructure.

The department offers Ph.D. programmes in Mathematics, Statistics, and Data Science, along with M.Sc. (Data Science), M.Sc. (Business Statistics), Integrated M.Sc. (Computational Statistics & Data Analytics), and Integrated M.Sc. (Mathematics). VIT's Data Science & Artificial Intelligence discipline is also ranked in the 101–200 global band and 7th in India in the QS World University Rankings by Subject 2026, reflecting the institute's strong performance in interdisciplinary domains.

VIT®
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

One-Day Workshop on Computational Foundations: Finite Element Methods and Machine Learning for PDEs (Online Mode)

Organized by

Department of Mathematics,
School of Advanced Sciences,
VIT Vellore

Date: 21st April 2026

ABOUT THE WORKSHOP

This workshop introduces the fundamental principles of FEM for solving PDEs, along with an overview of machine learning approaches in computational modeling. Participants will gain insight into the formulation and implementation of classical FEM techniques and explore how data-driven methods can complement traditional numerical approaches.

WORKSHOP CONTENTS

- Variational Formulation
- Galerkin Finite Element Method (FEM)
- Fundamentals of FEM
- One-Dimensional Finite Element Analysis
- Implementation Aspects of FEM
- Introduction to Machine Learning for PDEs
- Neural Networks for Function Approximation
- Basics of Physics-Informed Neural Networks (PINNs)
- Applications and Demonstrations

Resource Persons:

- Dr. Avijit Das, Assistant Professor, Department of Mathematics, NIT Silchar
- Dr. Gautam Singh, Assistant Professor, Department of Mathematics, NIT Trichy
- Dr. Ramesh Chandra Sau, Assistant Professor, Department of Mathematics, IISER Tirupati
- Dr. Tamal Pramanick, Assistant Professor, Department of Mathematics, NIT Calicut

ORGANIZING COMMITTEE

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Dr. G. Viswanathan, Founder & Chancellor

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Convener

Dr. Khadar Babu SK, HoD, Department of Mathematics

Coordinators:

Dr. Gouranga Mallik, Department of Mathematics, School of Advanced Sciences
Dr. Abhishek Das, Department of Mathematics, School of Advanced Sciences

WHO CAN APPLY?

Undergraduate and postgraduate students in Mathematics, Engineering, and related disciplines. Beginners in finite element methods and machine learning for differential equations. Research scholars and faculty seeking a foundational understanding of FEM and data-driven approaches

COURSE FEE

Registration Fee: Rs.100 + GST
E-Certificates will be provided.

ONLINE REGISTRATION & PAYMENT LINK

Link: https://events.vit.ac.in/
or
Scan the QR code

LAST DATE FOR REGISTRATION:
20th April 2026

CONTACT:

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