



**Five Days Workshop on  
Finite Element Method: Theory,  
Computation, and Application  
(Hybrid Mode) organized by  
Department of Mathematics,  
National Institute of Technology Tiruchirappalli  
4<sup>th</sup>-8<sup>th</sup> December 2023**



## The Institute

The National Institute of Technology, Tiruchirappalli, (NITT), is an Institution of National Importance under the Ministry of Education (MoE), Government of India. The Institute is ranked no. 1 among the NITs, and 9th among all the engineering colleges in the National Institutional Ranking Framework (NIRF). NITT is an autonomous co-educational technological institute, which offers Undergraduate Courses in ten branches and Post Graduate Courses in twenty-eight disciplines of Science, Engineering & Technology besides M.S. (by Research) and Ph.D. in all the departments.



## The Department



The Department of Mathematics is one of the pioneering and most distinguished departments in NITT. The Department has been producing batches of successful doctorates since its inception. Until 1993, the Department of Mathematics and Computer Applications offered M.Sc. in Applied Mathematics which was restructured as M.Sc. (OR & CA). Recently, with a vision to produce mathematicians who can excel in teaching, research, and meet industrial demands, the department has started offering post-graduation in Mathematics since 2019 and the department is supported by DST-FIST for five years from 2021.

## Objective of the workshop

A workshop on the Finite Element Method, Focusing on Theory, Computation, And Applications, is scheduled to take place at NIT Trichy from December 4 to December 8, 2023. The primary objective of this workshop is to promote and provide training for undergraduate, postgraduate students, PhD students and faculty member who are engaged in the area of numerical solutions for Partial differential equations.

## Topics to be covered

- Elliptic and Parabolic PDEs
- Finite Difference Method for PDEs
- Basics of Functional Analysis
- Introduction to Sobolev spaces
- Finite Element Method for one and two-dimensional Elliptic and Parabolic PDEs
- FEM Programming
- FEM Application

## Speaker

- Prof. Natesan Srinivasan, Professor, IIT Guwahati
- Prof. A.K. Nandakumaran, Professor, IISc Bangalore
- Prof. P.S. Datti, Professor, TIFR Bangalore
- Dr. E. Natarajan, Associate Professor, IIST Thiruvananthapuram
- Dr. Ram Jiwari, Associate Professor, IIT Roorkee
- Dr. N. Siva Shanmugam, Associate Professor, NIT Trichy
- Dr. V. Shanthi, Associate Professor, NIT Trichy
- Dr. Vamsinadh Thota, Assistant Professor, NIT Trichy
- Dr. N Prakash, Assistant Professor, NIT Trichy
- Dr. Gautam Singh, Assistant Professor, NIT Trichy

## Important Dates

Workshop Date- 04<sup>th</sup>-08<sup>th</sup>  
December 2023

Registration ends on 20-11-2023

## Registration Fees

UG and PG students: ₹ 1000

Research Scholar (PhD): ₹ 1500

Faculty and others: ₹ 2500

## Payment procedure

1. Go to the SBI-collect using the link <https://www.onlinesbi.sbi/sbicollect/icollecthome.htm>
2. Select the state as 'Tamil Nadu', and category as 'Educational Institutions'.
3. Select "Conference and Workshop NIT Trichy".
4. Select payment category as "MATHSVS FEM TCA 2023".
5. Make payment through UPI/ Net Banking/ Credit card/ NEFT.
6. Once the fee is paid, fill up your details and upload the payment receipt in the workshop registration form.

## Programme Details

The workshop will be conducted in hybrid mode. For workshop schedule and regular updates, visit the workshop webpage <https://femtca.nitt.edu/>

**Registration link** Please fill the following registration form-  
<https://forms.gle/wnt6jY8ZQo4rK8BPA>

### Chairman

Dr. V. Shanthi  
Associate Professor,  
Department of Mathematics, NITT  
Email: [shanthi@nitt.edu](mailto:shanthi@nitt.edu)  
Mobile: +91-9487440341

### Convener

Dr. Gautam Singh  
Assistant Professor,  
Department of Mathematics, NITT  
Email: [gautam@nitt.edu](mailto:gautam@nitt.edu)  
Mobile: +91-9085857312

### Coordinator

- Dr. K. Murugesan, Professor, HAG
- Dr. T. N. Janakiraman, Professor, HAG
- Dr. V. Kumaran, Professor, HOD
- Dr. V. Ravichandran, Professor
- Dr. P. Saikrishnan, Professor
- Dr. R. Tamil Selvi, Associate Professor
- Dr. V. Lakshmana Gomathi Nayagam, Associate Professor
- Dr. I. Jeyaraman, Assistant Professor

- Dr. N. Prakash, Assistant Professor
- Dr. Jitraj Saha, Assistant Professor
- Dr. Vamsinadh Thota, Assistant Professor
- Dr. N. Shivaranjani, Assistant Professor
- Dr. Atul Kumar Verma, Assistant Professor
- Dr. Abhijit Das, Assistant Professor
- Dr. R. Gowthami, Assistant Professor
- Dr. Balasubramani N, Assistant Professor