

## ABOUT THE INSTITUTE

National Institute of Technology Trichy is situated in the heart of Tamil Nadu on the banks of river Cauvery. NITT is an autonomous co-educational technological institute, with 10 undergraduate and 28 graduate programs. Undergraduate programs lead to the B.Tech degrees, while the graduate students and postgraduate students earn M.Tech, M.S. (by Research) and Ph. D degrees respectively. NITT is located in Thuvakudi on the Trichy-Tanjore national highway, 17 km from Trichy Railway Junction.

## ABOUT THE DEPARTMENT

The Department of Mathematics is one of the pioneering and the most distinguished departments in National Institute of Technology, Trichy. Applying a multi-disciplinary research and teaching methods, the department strongly believes in finding mathematical solutions for various social-economic, technological and work related processes and challenges. The department is committed to outstanding graduate training to produce leading scholars in various fields of mathematics. Since its inception, the department molds Ph. D graduates to carry out challenging research problems which have wide ranging industrial and social implications.

## OBJECTIVE OF THE COURSE

The objective of the course is to familiarize various numerical algorithms for the numerical simulation of natural processes arising in science and engineering. There are many problems in science and engineering which simply do not have analytical solutions, or those whose exact solution is beyond our current state of knowledge. There are also many problems which are too long (or tedious) to solve by hand. When such problems arise we can exploit numerical analysis to reduce the problem to one involving a finite number of unknowns and use a computer to solve the resulting equations and for numerical simulation. This course also cover brief introduction session on MATLAB and sufficient lab session for implementation of these algorithms in MATLAB.

## COURSE CONTENTS

- Numerical Linear Algebra
- Nonlinear Optimization
- Differential Equations
  - Finite Difference method
  - Finite Element method
  - Finite Volume method
- Approximation Techniques.
- Basics of MATLAB

## SELF SPONSORED

### Short Term Course on Numerical Analysis using MATLAB

(15-05-2019 to 19-05-2019)

Coordinator(s):

Dr. P. Saikrishnan  
Dr. Jitraj Saha  
Dr. K. Murugesan

Organized by



Department of Mathematics,  
National Institute of Technology,  
Tiruchirappalli- 620015  
Tamil Nadu, India.

Self-Sponsored Short Term Course  
on  
Numerical Analysis using MATLAB

Registration form

1. Name:
2. Date of Birth:
3. Designation & Affiliation:
4. Address:
  
5. Mobile No:
6. E-mail ID:
7. Accommodation required : Yes/No
8. Registration fee: DD/Cheque number:

Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the course and shall attend the course for the entire duration. I also undertake the responsibility to inform the coordinator in case, I am unable to attend the course.

Place:

Date:                      Signature of Applicant

PROGRAM DETAILS

Sessions will be handled by experts from NIT Trichy and leading academic institute.

HOW TO REGISTER

Candidates have to register by sending the filled and scanned copy of Registration form along with the scanned copy of DD through email to [psai@nitt.edu](mailto:psai@nitt.edu) and the originals by post.

Total number of participants is restricted to 40. (First come first serve basis).

Registration fee (with 18% GST)

Students	Faculty members	Participants from R & D and Industry
₹ 885	₹ 1770	₹ 3540

DD/Cheque should be drawn in favor of “The Director, NIT-Tiruchirappalli”, payable at SBI, NIT-Tirucirappalli.

Venue: Seminar Hall, Department of Mathematics

ACCOMMODATION

Limited room on sharing basis are available in the institute guest house/hostels on payable basis. No TA/DA will be paid to the participants by NIT Tiruchirappalli.



IMPORTANT DATES:

Last date of receiving application:30/04/19

Acceptance of Notification: 08/05/19

Registration form shall be sent to  
Course Coordinator,

Dr. P. Saikrishnan,  
Associate Professor & Head,  
Department of Mathematics,  
National Institute of Technology,  
Tiruchirappalli- 620015  
Tamil Nadu, India  
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