

**SHORT TERM TRAINING PROGRAMME ON  
Mathematical Modeling**

**&**

**Advanced Numerical Techniques**

*Organized by*

*Department of Mathematics, NIT Warangal*

**on 2<sup>nd</sup> -7<sup>th</sup>, DEC 2016**

**REGISTRATION FORM**

Name: .....

Designation: .....

Qualification: .....

Organization: .....

Address for Correspondence :

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Tel. (O) .....(M) .....

E-mail: .....

DD Particulars:

Amount .....No.....

Date .....Bank .....

Accommodation Required: Yes / No

Date:

Place:

Signature of the Applicant

Forwarded through Head Dept/ Institution

**PATRON**

Prof. G. R. C. REDDY,  
Director, NIT Warangal

**ADVISORY COMMITTEE**

Prof. Y. N. Reddy (Registrar)  
Prof. G. R. K. Acharya  
Prof. K. N. S. K. Viswanadham  
Prof. J. V. Ramana Murthy  
Prof. Debasish Dutta (HOD of Mathematics)

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**SHORT TERM TRAINING PROGRAMME  
ON**

**Mathematical Modeling**

**&**

**Advanced Numerical Techniques**

**(2<sup>nd</sup> - 7<sup>th</sup>, DEC 2016)**

**Under  
Continuing Education Programme  
(Self Financed)**



**Coordinators**

**Dr. A. BENERJI BABU  
Prof. Y. N. REDDY**

*organized by*

**DEPARTMENT OF MATHEMATICS**

**National Institute of Technology Warangal**

**Warangal-506 004, Telangana,**

**India**

## THEME

Modeling and simulation are intellectually creative and quantitatively rigorous, mainstream ways of connecting ideas with reality. The time has come when everyone engaged in intellectual inquiry needs to model and simulates the phenomena of his or her interest. Models help us understand how things are organized and function. Simulating models is a way to learn how systems and their components grow and change.

A powerful and rigorous understanding of systems results when thinking is connected to quantitative simulation using the systems diagrams and simulation programs. The process of representing the fundamentals of science also shows how similar all the branches of knowledge are, often using similar functions under different names.

The importance of the program is to give training to the participants of various disciplines related to Mathematics to acquire the knowledge of recent developments in mathematical problems modeled by differential equations and their numerical computations through a series of lectures by reputed speakers.

## FOCUS OF THE STTP

- **Mathematical Modeling:** Linear and non-linear models.
- **Discretization:** Finite difference, Finite element and Finite-volume methods.
- **Analytical, Computational Techniques,** HAM and Perturbation Methods.
- **Overview of different sources of Nonlinear problems in Science & Engineering**

## RESOURCE PERSONS

Resource persons will be mainly from the Department of Mathematics, NIT Warangal. In addition, the following eminent speakers would also be delivering lectures.

- ✓ Prof. J. Brestensky (CU, Slovakia)
- ✓ Prof. D. Anil Kumar (ASU, USA)
- ✓ Prof. R.V Reddy (IIGM)
- ✓ Prof. A. K. Pani (IITB)

## REGISTRATION FEE

	Accommodation, Training kit, Breakfast, lunch & Dinner	Training Kit & lunch
For Faculty	6,000/-	4,000/-
Research Scholars and PG Students	3,500/-	2,500/-
Industry and R&D Organizations	12,000/-	8,000/-

The registration fee should be paid through Demand Draft (DD) drawn in favor of "**Professor-in- charge, Continuing Education Programmes, NITW**" payable at SBH, NITW Branch. The completed registration form along with the DD should reach the coordinators on or before 6<sup>th</sup> Nov 2016. Selected candidates will be informed through E-mail by 20<sup>th</sup> Nov 2016. No TA and DA will be paid to the participants.

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## ABOUT THE INSTITUTE

National Institute of Technology (formerly Regional Engineering College, REC), Warangal, is the first among RECs, setup in 1959. Over the years the institute has established itself as a premier institution imparting technical education of a very high standard leading to B.Tech degrees in various branches of engineering and M.Tech and Ph.D. programs in various specializations. With a view to give further impetus to the technical education, the Central Government upgraded the RECs into NITs and declared them as *Institutes of National Importance*. According to NASSCOM Data Quest Survey, NITW clinches the 13<sup>th</sup> rank among the technical institutes in the country.

## ABOUT WARANGAL

Warangal city is known for its rich historical and cultural heritage. It is situated at a distance of 140 km from Hyderabad. Warangal is well connected by rail and road. NIT is just 2km away from Kazipet railway station and 12km from Warangal railway station.

## ABOUT THE DEPARTMENT

The department of mathematics is one of the reputed departments, which functions with 'excellence' as its motto. Started in the year 1959, along with the other engineering and science departments, it has steadily grown as a dynamic center for academic and research activities. The Department offers two 2-year PG programmes namely: M.Sc (Applied Mathematics) and M.Sc. (Mathematics and Scientific Computing). The Department also offers PhD programme in Mathematics and also has been recognized as QIP centre for Ph. D. in Mathematics.