## **About MNIT Jaipur**

Malaviya National Institute of Technology Jaipur is one of the NITs established in Jaipur known as Pink City. Institute was established as a joint venture of the Government of India and the Government of Rajasthan in 1963. Subsequently; on June 26, 2002 the college has been given the status of National Institute of Technology and on 15 August 2007, Proclaimed Institute of National Importance through Act of Parliament. The Institute is fully funded by Ministry of Human Resource Development (MHRD), Government of India. MNIT campus spreads over 325 acres of lush green area in the central location of Jaipur city. At present the Institute offers undergraduate and post graduate courses (M.Tech./M.Sc./MBA & Ph.D.) to about 5000 students in almost all leading fields of engineering, technology, management and sciences. The Institute has renowned faculty and labs with state of the art equipment. The institute is actively engaged in research, consultancy and developmental activities besides imparting regular teaching.



### **About the Course**

MATLAB is a high-level language and interactive environment for numerical computation, visualization, and programming. Using MATLAB, one can analyze data, develop algorithms, and create models and applications. The language, tools, and built-in math functions make it possible to multiple approaches and reach a explore solution faster than with spreadsheets or traditional programming languages, such as C/C++ or Java. MATLAB can be used for a range of applications, including signal processing and communications, image and vide processing, control systems, test and measurement, computational finance, and computational biology. More than a million engineers and scientists in industry and academia use MATLAB, the language of technical computing. Whether you are new to MATLAB and modeling or are looking for a refresher course, you will find this STC a great way to get up to speed quickly in a simulation field.

### **Contents**

- Fundamentals of Computational Method and *MATLAB*.
- *➤ MATLAB* Programming
- ➤ Linear & Non Linear Algebra.
- Linear and Non linear Ordinary Differential Equations
- ➤ Partial Differential Equations.
- ► Linear and Non Linear Regression
- ➤ Optimization Techniques.
- ➤ Introduction to *SIMULINK*.
- ➤ Specialized Toolboxes/Apps: Neural Networks, Statistics etc.
- Solving about 50 problems related to above topics for steady and unsteady system using *MATLAB*

## **Experts from**

- IIT/NIT/Central Universities
- MNIT, Jaipur

#### Venue

Prabha Bhawan, MNIT Jaipur

## **Target Participants**

- Faculty members dealing with courses in any branch of Engineering, and Science.
- Research scholars pursuing PhD, PG and UG students.
- Scientists, Engineers, Educationist, and Managers from Industry and R & D Organization.

### Registration

The application in the prescribed format along with the registration fee should be sent to the program coordinator via post or email latest by October 12, 2018. The participants will be intimated by October 15, 2018. The bank demand draft should be drawn in favor of "**Registrar**, **MNIT Jaipur**".

## **Registration Fee**

Participants from Industry :Rs.5000/-Participants from Academic Institutes :Rs.2500/-Student Participants :Rs.1500/-

Limited accommodation (payment basis) can be arranged on shared basis in the Guest House-2 / Hostel at MNIT Jaipur on first come first serve basis. The program will provide registration kit and working Lunch and Refreshment for the participants on working days. No TA/DA will be provided to the participants

# REGISTRATION FORM Short Term Course

on

"Computational Research Techniques using MATLAB" (October 22-26, 2018)

Namas

| Designation: Address:  Teaching Experience (in years): Contact No.: Email: |                 |
|--|-----------------|
|  |                 |
|  |                 |
| Accommodation rec  | quired: Yes/ No |
| Sponsoring/Forward   | ling Authority: |
| Name:  |                 |
| Signature of   | Signature of    |

Signature of Signature of Sponsoring Authority (With seal)

## **Patron**

Prof. Udaykumar R. Yaragatti Director, MNIT Jaipur

## **Advisors**

Prof. Kailash Singh Prof. S. P. Chaurasia

## Conveners

Dr. Sushant Upadhyaya Dr. M. L. Meena Dr. Rajeev Dohare

## **Coordinators**

Dr. Prabhat Pandit Dr. Madhu Agarwal Dr. Manish Vashistha Dr. Vikas Sangal

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### **SHORT TERM COURSE**

On

"Computational Research Techniques using MATLAB"

(October 22-26, 2018)

**Sponsored by TEQIP-III** 



# Organized by

Department of Chemical Engineering Malaviya National Institute of Technology Jaipur-302017