National Level SHORT TERM TRAINING PROGRAMME ON "Numerical Methods and Optimization Techniques using MATLAB (NMOTM 2017)" Nov 20-24, 2017

#### **COORDINATORS**

Dr. V. K. Gaba Dr. A. R. Singh Dr. S. Bhowmick

#### **CONVENOR**

Dr. Anil Kumar Tiwari



#### **ORGANIZED BY**

Mechanical Engineering Department National Institute of Technology Raipur (C.G.) - 492 010, INDIA

## About the Institute



National Institute of Technology, Raipur (Formerly Government Engineering College Raipur), situated in the capital of a newly incepted state of Chhattisgarh, has proven

to be "avant-grade' in the field of science and technology over past few decades in this region. With sweet memory of foundation ceremony by our president Hon'ble Dr. Rajendra Prasad on 14<sup>th</sup> September 1956. The institute started with two departments namely Metallurgical and Mining Engineering. Later the inauguration of the Institute building was done by our Prime Minister Hon'ble Pt. Jawahar Lal Nehru on 14th March 1963. From 1st December 2005, the institute has become the National Institute of Technology. It is well connected with Mumbai, Delhi, Hyderabad, Kolkata, Bhopal, Ahmedabad, Bangalore, Chennai and Chandigarh by regular flights and railway route.

### <u>About Department</u>

The Mechanical Engineering Department came in existence since 1958. The department provides an outstanding research environment and offers academic program leading to the award of B.Tech., M.Tech (Thermal Engg., Machine design & Industrial Engineering & Management) and Ph.D. degree.

### Introduction

One week short term training program "**Numerical Methods and Optimization Techniques using MATLAB (NMOTM 2017)** is scheduled to be held during Nov 20-24, 2017. The aim of the program provide a platform in which participants get knowledge about the basics of Numerical Methods & Optimization. It will help to bridge the gap between Numerical Method & Optimization theory and its application in

## <u>Objective</u>

The objective of this program is to train the faculty members, research scholars, young scientists, and post graduates students of various organizations. The objective of workshop is to provide a platform for interaction and exchange of ideas in the field of Numerical Mehods, Multicriteria Decision Making and Optimization along with the MATLAB Programming. This workshop involves invited lectures by distinguished experts in the field of Numerical Methods, Multicriteria Decision Making and Optimization.

#### **Topics to be covered:**

- Basics of MATLAB
- Various Techniques of Numerical Methods
- > Matrix Algebra
- Finite Difference Techniques
- > MWR
- Finite Element Method
- Advances in MCDM Theory
- MCDM Techniques
- Behavioural Issues in Decision Making
- Taguchi Method
- ANOVA Analysis
- Classical Optimization Techniques (Single and Multi Variable)
- Unconstrained and Constrained Optimization
- Multi- Objective Optimization Techniques

## <u>Venue</u>

E-Class Room NIT Raipur (CG) – 492 010, INDIA

### **IMPORTANT DATES**

Last date of receipt of application: 10.11.2017 Notification of confirmation (By Email): 15.11.2017

# <u>Eligibility</u>

This programme is an interdisciplinary in nature so faculty members, research scholars and PG students from all background of engineering, mathematics and basic sciences are eligible for this Short Term Training Program (STTP). Scientists who are working in the R&D organizations/ Industry persons can also attend this programme.

# **Selection**

Since the numbers of seats are limited to **30**, the selection will be made on **first cum first serve** basis and intimation will be sent to the candidates by email as per the schedule. Certificates will be issued to the participants only after attending the complete course. Accommodation may be provided on payment basis in institute hostels of NIT provided earlier request is made in the registration form.

## **Contact Persons**

Dr. Amit Raj Singh		
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91-8085829797		

Dr. V. K. Gaba vivekgaba@gmail.com 91-9406173242

## **REGISTRATION FEE**

For Persons from Industries/R&D	Rs.	3000/-
For Faculty members	Rs.	2000/-
For Students / Research Scholars	Rs.	1000/-

The **non-refundable registration fees** should be sent in the form of a DD in favor of "Director, NIT, Raipur" payable at SBI, GCET Branch Raipur.

In case, **if a candidate is not selected** for the training program, then the DD sent by him/her will be **sent back** to his/her address before the beginning of the training program.

# <u>Resource Person:</u>

Facilitators from Institute and subject experts from other colleges will be the resource persons for the STTP.

# CHIEF PATRON

**Prof. A.M. Rawani** Director, NIT Raipur

# <u>PATRON</u>

**Prof. S. Sanyal** Dean(R&C), NIT Raipur

## **Organizing Committee**

Dr. Govardhan Bhatt Dr. N.K.Nagwani Dr. Sarsij Tripathi

### **REGISTRATION FORM**

National Level Short Term Training Programme On Numerical Methods and Optimization Techniques using MATLAB (NMOTM 2017) Nov 20-24, 2017

Organized by Mechanical Engineering Department NIT, Raipur

Full Name (Block Letter):	
Name of College/Institution/Organization:	
Qualification: Designation: Address:	· · · · · · · · · · · · · · · · · · ·
Pin code: Phone No.: Mobile No.: E-mail:	

Do you need accommodation: ( Yes/ No ):

I have enclosed the registration fee of Rs.....by D.D. No ...... Dated.....in favour of "Director, NIT, Raipur" payable at SBI, GCET Raipur Branch.

Place: Date:

Signature of the participant

Duly filled registration form must reach to Department of Mechanical Engineering, NIT-Raipur before last date of receipt of registration form by post/by hand along with registration fee.