

**A Short Term Course on  
“Optimization using  
MATLAB”**

during

**27<sup>th</sup> - 31<sup>st</sup> August - 2018**

**REGISTRATION FORM**

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Mobile No.: \_\_\_\_\_

College Name: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Experience: \_\_\_\_\_

Area of Research: \_\_\_\_\_

Accommodation required: Yes/No

**DECLARATION**

The information provided above is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the workshop.

Signature of the Applicant

Date:

Place:

Note: Send Registration forms to  
mechhod@nrtec.ac.in  
Any queries contact: +91-9692464540

**ABOUT THE COLLEGE**

The Narasaraopeta Engineering College was established in the year 1998 by Gayatri Educational Development Society, Narasaraopet, under the leadership of Sri M.V.Koteswara Rao, who has a vision of developing this college as an autonomous institution of higher learning & knowledge in the heart of Palnadu region. The college is approved by AICTE, permanently affiliated to JNTUK Kakinada, Accredited ‘A’ Grade by NAAC, Accredited twice by NBA and ISO 9001: 2008 certified. NEC is announced as ‘AUTONOMOUS’ in the year 2016. The college has launched Incubation Centre where the students can implement their ideas. The college management has an MOU with Oracle University (USA). NEC is the first Engineering College in A.P. to sign MOU with a Foreign University. The college has AP CM Excellence centre, AI&ML centre and MSME centre. The college offers six M.Tech programmes, Two PG courses of MCA, MBA and five courses at B.Tech level in the branches EEE, CSE, ECE, ME and CIVIL. The college has well equipped laboratories including 1000 computers with a bandwidth of 100 MBPS internet. Microsoft Innovation Centre was established in the college through which more than 200 Mobile Apps, 50 Cloud Apps and 100 Windows Apps are uploaded every year.

Narasaraopet is on the railway line of Guntur to Guntakal and is on the state highway. It is 240 km from Hyderabad and 50km from Guntur, A.P.



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In Association

With

**NITTTR-Chandigarh**



Organized

By

**Department of  
Mechanical Engineering**



Kotappakonda Road, Yellamanda (P.O)

Narasaraopet – 522601, Guntur District, A.P.

Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada,  
Accredited ‘A’ Grade by NAAC, Accredited Twice by NBA,  
ISO 9001: 2008 Certified.

Recognized R&D center by JNTUK

Phone : 08647-239923

FAX : 08647-239902

E-Mail : mechhod@nrtec.ac.in

## ABOUT THE DEPARTMENT

The Department of Mechanical Engineering was established in the year 2002 with an intake of 60 students and in course of time it has increased to 180. The department offers UG and PG programs. PG programs are being offered in specialization of Machine Design and Thermal Engineering. The department is recognized as research and development center by JNTUK, Kakinada. The department has excellent infrastructure like E class rooms, AC seminar hall and is well equipped with modern laboratories. Department has equipment beyond curriculum like stir casting machine, 3D printer, Fatigue testing machine, Five gas analyzer, Ultrasonicator, Tool makers microscope, magnetic particle tester etc.. The department has highly qualified, experienced, dedicated faculty with industry and research background. The department has received funding from different agencies like UGC, AICTE towards MODOROBs, FDP etc. Department frequently organizes guest lectures, industrial visits, workshops, training programs and provide internships for betterment of students.

## OBJECTIVE OF WORKSHOP

The classical optimization techniques are useful in finding the optimal solution or unconstrained maxima or minima of continuous and differentiable functions. These are analytical methods and make use of differential calculus in locating the optimum solution. The classical methods have limited scope in practical applications as some of them involve objective functions which are not continuous and/or differentiable.

Yet, the study of these classical techniques of optimization form a basis for developing most of the numerical techniques that have evolved into advanced techniques more suitable to today's practical problems.

Therefore, the course is aimed at making participants aware about the different optimization techniques and the tools available for this purpose. The participants will be exposed to application of MATLAB in optimization.

Even though, the course is intended to cover fundamental theoretical and algorithmic aspects of optimization, the emphasis will be on applied optimization using MATLAB and its applications in the context of Engineering.

## COURSE CONTENT

- Basic concepts and classification of optimization techniques
- Objective functions and constraints
- Mathematical Modeling
- Nonlinear optimization
- Multiobjective optimization
- Solutions of optimization problems using MATLAB

## WHOM TO ATTEND

- PG students of all disciplines
- Research scholars in Engineering and Applied Sciences.
- Faculty from all disciplines.

## RESOURCE PERSONS

Dr. S. S. Dhani, Professor & HOD, Mech., NITTTR, Chandigarh.

Dr. B. S. Pabla, Professor, Mech., NITTTR, Chandigarh.

Group of faculty from IIT, Roorkee

Group of faculty from NIT, Kurukshetra

## Chief Patrons

**Sri M.V. Koteswara Rao** B.Sc.,  
Chairman, NEC Group

**Sri M.S. Chakravarthi**  
B.Tech, MS (US), MBA(ISB-Hyd)  
Director, NEC Group

**Sri M. Ramesh Babu**  
Secretary, NEC Group

## Patron

**Dr. M. Sreenivasa Kumar**  
M.Tech, Ph.D (UK), M.I.S.T.E, FIE(I)  
Principal

## Conveners

**Dr. D. Suneel**  
Professor & HOD, Dept. of Mech.

**Dr. B. Venkata Siva,**  
Professor

## ORGANIZING COMMITTEE

|                       |                         |
|-----------------------|-------------------------|
| Dr. D. Jagadish       | Mr. B. Saida Rao        |
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| Mr. M. Venkanna Babu  | Mr. T. Ashok Kumar      |
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