

## **National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh**

National Institute of Technical Teachers Training and Research, Chandigarh, formerly known as Technical Teachers Training Institute (TTTI), was established by Ministry of Human Resource Development, Government of India in 1967 to meet the requirements of training Polytechnic teachers for the growth and development of polytechnic education in the northern region of the country. It had the collaboration of Royal Netherlands Government up to 1974. The institute ushered into a new era in November 2003, with its changed name and enhanced status as National Institute of Technical Teachers Training and Research (NITTTR). It is one of the four such National Institutes in the country with a focus on the northern region comprising the states of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, National Capital Territory of Delhi and Union Territory of Chandigarh. Presently, the outreach of the programmes and activities of the institute covers the entire gamut of technical education. It is now reckoned as a resource institute for the technical education system providing services to its clientele covering faculty/staff of technical institutions, officials of directorates/boards of technical education, central and state government departments, industry, students from technical institutes, community and trainees from overseas.

### **Sri Krishna College of Engineering and Technology**

Sri Krishna College of Engineering and Technology is one of the premier institutions of Sri Krishna Trust, established in the year 1998 with a mission of imparting high quality technical education to the aspiring students. This self finance, autonomous institution accredited by NAAC with 'A' Grade (with 3.42 CGPA out of 4) and National Board of Accreditation is located at a prominent place in Coimbatore city which can be easily accessible on the Palghat high way of NH 47. SKCET is one of the leading institutions in Tamil Nadu State that offers Under Graduate, Post Graduate and Research Programs in Engineering and Technology and in addition, the college has gained recognition for its uniquely tailored management education program. There are 6 branches of B.E./B.Tech., 5 branches of M.E., MBA and MCA. The college is one among the best self financing Engineering colleges imparting high quality of technical education in TamilNadu.

### **Course Objectives**

The objective of the short term course is to give relevant knowledge about general optimization techniques, theoretical aspects and their uses in engineering fields.



## **Short Term Course on "Optimization Techniques" 21- 25 Jan, 2019**



**Department of Science and Humanities**



Organised By

**National Institute of Technical Teachers Training and Research  
(NITTTR)  
Chandigarh**



**Department of Science and Humanities  
Sri Krishna College of Engineering and Technology  
Coimbatore**

## About the Programme

The course gives deep knowledge of various optimization techniques and non linear optimization methods. Nature inspired optimization is a technique that helps to find an optimum solution for a problem. The systematic introduction with theoretical understanding summarizes the latest developments in nature-inspired algorithms with comprehensive techniques. The course also gives the insight of wide application of PSO and GA in academia and the industry due to its intuitiveness, ease of implementation and the ability to solve highly nonlinear, mixed integer optimization problems effectively that are typical in complex engineering systems. The detailed understanding of optimization concepts, hands-on training on different techniques in OT, using softwares like Mat lab, Lingo and Mathematica.

## Course Contents:

Optimization Techniques:

- Introduction, Simple Optimization techniques
- Non linear optimization - NLPPs
- Simplex method (Big M and two phase methods)
- Nature Inspired Optimizations
- Overview of PSO
- Genetic algorithm
- Optimization with MATLAB
- Demonstration of LINGO and Mathematica software and use of OT in engineering problems
- Numerical illustrations and assessment etc

## Registration

Faculty interested in attending the programme must get registered with the programme coordinator either at NITTTR, Chandigarh or at SKCET, Coimbatore latest by 10<sup>th</sup> Jan,2019. Registration can be done at any one of the links below,

<https://goo.gl/forms/A1etCldw43yFGI0j1>

or

<http://www.nitttrchd.ac.in/sitenev1/stconline1/registrationform.php?oplan=AS-13&dept=Applied+Science&title=Optimization+Techniques++>

## Course Faculty

The course shall be conducted by the following Industrialists and Academicians

1. Dr. G. K. Revathi, Assistant Professor, Vellore Institute of Technology, Chennai
2. Dr.R.Prabakaran, Assistant Professor, Coimbatore Institute of Technology, Coimbatore
3. Dr. M. Muthuchelvam, Assistant Professor, Government College of Technology, Coimbatore
4. Dr. K.Nagarajan, Director, MBA, Sri Krishna College of Engineering and Technology, Coimbatore.

## Course Coordinator from NITTTR, Chandigarh:

Dr. Kailash C Lachhwani, Assistant Professor, NITTTR, Chandigarh.

## Local Course Coordinator from SKCET,Coimbatore :

Ms.A.Jayapradha , Assistant Professor, SKCET,Coimbatore.

## Accommodation

Outstation candidates shall be provided accommodation in the Hostel of SKCET, Coimbatore (on sharing basis). For further details, please contact: Ms.A.Jayapradha

**Registration Fee : Free**

**For any further clarification, please contact:**

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