

## About PIET

Panipat Institute of Engineering and Technology is run by Vidhyapeeth Education Trust. The Institute is affiliated to Kurukshetra University, Kurukshetra and approved by AICTE, Govt. of India. It is situated on National Highway-1 (Now NH-44) near Samalkha, and is about 21 Kms from Panipat and 50 Kms from Karnal-Delhi bypass. It is easily approachable by rail and road. It is spread over an area of 19 acres of land with a well planned layout. The main aim of the Institute is to promote academic growth by offering Diploma, Undergraduate and Postgraduate programmes in Engineering and Management. The academic program reflects the Institute's commitment to stay in tune with the expanding frontiers of knowledge worldwide.

## Department of Mechanical Engineering

The department of Mechanical Engineering is one of the largest departments of the Institute and offers Diploma, B.Tech and M. Tech courses. The department has highly qualified and motivated faculty; actively involved in quality teaching and research. The department hosts excellent research facilities of high standards which boost up the research environment in the department.

## Course Theme

Design of Experiments (DOE), data analysis and parameter optimization have become an essential part to solve the engineering problems. Advanced optimization techniques are important computational tools for conducting research and development in engineering sciences. In this context, Mechanical Engineering Department of Panipat Institute of Engineering & Technology (PIET) will organise a five-days short term course on "**Design of Experiments and Advanced**

**Optimization Techniques" (DEAOT-2017).** Practicing technologists in industries, academicians, researchers and students who require to brush up and enrich their knowledge on relevant issues will be benefitted from the discussions. Experienced faculty from reputed institutes/universities will deliver lectures.

## Course Content

The proposed topics of discussion in the short term course include but not restricted to:

- What is DOE?
- DOE Requirements: Before You Can Run an Experiment
- Full Factorial Experiments
- DOE Statistical Analysis
- Fractional (Partial) Factorial Experiments
- Robust Design Experiments/Taguchi
- Response Surface Modeling (RSM)
- Analyzing Taguchi/RSM Experiment Data Using MiniTab™ and Design-Expert™.
- Methods for Finding Optimum Factor Values
- Optimization Techniques: Constrained and Unconstrained Optimization
- Single-objective optimization
- Multi-objective optimization
- Soft-computing: ANN, Fuzzy and GA etc.
- Fuzzy Optimization
- Labs: Labs on DOE and optimization techniques based using MiniTab™, Design-Expert™ and MATLAB
- Case Studies and Demonstrations of Applications

## Eligibility for Participation

The program is open to engineering professionals from industries, faculties from Engineering Institutions / Universities, employees from R&D organizations, students and research scholars.

## Registration Fees

- 1) Participants from Industries: Rs 2,000/-
- 2) Participants from R&D organizations and faculty members from academic Institutes: Rs 1,000/-
- 3) Students/research scholars: Rs 700/- \*

The registration fee includes kit/study material, tea/coffee, snacks and lunch on all five days of the programme.

## How to apply?

Filled-in registration form along with a demand draft in favour of "**Panipat Institute of Engineering & Technology**" payable at **Samalkha** should be sent to **Mr. Satish Kumar Sharma**, one of the coordinators of the course. The registration performa may be photocopied, if necessary.

## Accommodation

Accommodation for few pre-registered participants can be arranged in campus guest house or hostels on payment basis if available. The participants will have to bear the expenses. TA/DA will not be paid for attending the STC.

*\*Students must bring their identity card and attach a copy of it with the registration form.*

## Registration Form

Short Term Course  
on  
**Design of Experiments and Advanced  
Optimization Techniques**  
(DEAOT-2017)  
July 10-14, 2017

1. Name: .....
2. Designation: .....
3. Organisation/Institution: .....
4. Qualification: .....
5. Experience: .....
6. Mailing Address: .....
7. Accommodation required: Yes/No
8. Mobile No. : .....
9. E-mail ID: .....
10. Category (Please tick):  
Industry   
Academic Institution / R&D Org.   
Student/research scholar
11. D.D. details:  
Bank .....
- Amount.....
- DD No. and Date: .....

It is certified that the information filled above is true and correct to the best of my knowledge and belief.

Date: Signature of applicant

## ORGANISING COMMITTEE

Chief Patrons : Sh. Hariom Tayal, Chairman, BOG  
Sh. Suresh Tayal, Secretary BOG  
Patron: Prof. (Dr.) K.K. Paliwal, Director, PIET  
Chairman: Sh. Sunil Dhull, Head  
Mechanical Engg. Dept., PIET

Course coordinators: Mr. Satish Kumar Sharma  
Mr. Gyander Ghangas

Co-coordinator & Treasurer: Mr. Ajay Singh

Members:  
Dr. Pardeep Sharma  
Mr. Naveen Vashisht  
Mr. Sunil Kadiyan  
Mr. Vishal Dabra  
Mr. Deepak Gumber  
Mr. Anand Kumar

Completed registration forms should be e-mailed and posted to the course coordinator at the following address:

**Mr. Satish Kumar Sharma**  
Assistant Professor  
Dept. of Mechanical Engineering  
Panipat Institute of Engineering & Technology  
Patti-Kalyana, Samalkha-132102  
Mob.: +91 9582923508  
E.mail: satish.mech@piet.co.in

### Important Dates

Last date for receiving registration form: 25.06.17  
Date of confirmation: 30.06.17

## Short Term Course

on  
**Design of Experiments and  
Advanced Optimization  
Techniques**  
(DEAOT-2017)

July 10-14, 2017

Organised by



Department of Mechanical Engineering  
Panipat Institute of Engg. & Technology,  
Pattikalyana, Samalkha-132102