

REGISTRATION FORM

Research Methods for Engineers

(31st May 2016 to 4th June 2016)

Name _____

(in Block Letters)

Qualification _____

Male / Female _____ Age _____ (in yrs.)

Designation _____

Institution _____

Address _____

Mobile _____

Email ID _____

Accommodation required:

Yes / No _____

Date _____

Signature of the Applicant

Signature & Stamp of Sponsoring Authority

ORGANIZING COMMITTEE

Patron

Prof. (Dr.) M.S. Saini
Director

Chief Co-ordinator

Prof. (Dr.) Sehjpal Singh
Head of the Department

Coordinators

Prof. (Dr.) Harwinder Singh
Prof. (Dr.) Paramjit Singh

Co-Coordinators

Prof. Ardamanbir Singh
Prof. Aprinder Singh

Organizing Committee

Faculty,
Dept. of Mech. Engg.

CONTACT PERSONS

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ONE WEEK FACULTY DEVELOPMENT PROGRAM

(Under TEQIP - II)

on

RESEARCH METHODS FOR ENGINEERS

(31st May 2016 to 4th June 2016)



Organized by
Dept. of Mechanical Engineering
GURU NANAK DEV ENGINEERING COLLEGE
Ludhiana - 141 006, Punjab

ABOUT THE INSTITUTE

Guru Nanak Dev Engineering College was founded in memory of the most sacred temple of Nankana Sahib, birth place of Guru Nanak Dev Ji. It was established in 1956. The campus is spread over 86 Acres of prime land. The foundation stone of the College Building was laid by Late Dr. Rajendra Prasad Ji, the First President of India. Nearly 25,000 Graduate and 7500 Post Graduate Engineers have passed out from this college during the last 60 years and are at present successfully employed in India & abroad.

The college is now ISO 9001-2008 Certified, NBA accredited and has signed MoU with many reputed organizations and institutions for exchange of students and faculty.

GNDEC runs seven UG programme viz. Civil Engg., Mech. Engg, Elect. Engg, Electronics, Comm. Engg. Computer Sc. & Engg, Information Technology, Production Engg. and fifteen PG level courses including MBA, MCA. College is the recognized center for Ph.D in all Engg. branches and is a QIP Centre under AICTE.

ABOUT THE DEPARTMENT

The department was established in 1957. The salient features of the department are:

- Accredited thrice by national board of accreditation.
- QIP center of AICTE for pursuing Ph.D.
- Supported under TEQIP and FIST funded by the World Bank and DST, GOI respectively.
- Average experience of Faculty is 10 years.

Programmes:

Programme	Year of Start	Present Intake
B.Tech. (M.E.)	1957	120+60*
M.Tech. (P.E.)	1980	25
M.Tech. (I.E.)	1997	25
Ph.D.	2002	----

*Second Shift

LOCATION

Guru Nanak Dev Engineering College is located about 5 Kms. from Bus Stand and 8 Kms. from Ludhiana Railway Station on Ludhiana-Malerkotla Road. Ludhiana City is a well known Industrial hub in Northern India and is well connected by direct rail, road service with all parts of India. The weather in the month of May is hot having temperature varying from 35°C to 39°C.

ABOUT FDP

The programme is designed for the faculty & researchers working in the area of Engineering. The objective of this programme is to enhance the capabilities of teaching faculty in the domain to select better research methods for their research applications. The programme provides the participants an opportunity to practice on software applications like SPSS & MINI TAB.

This platform will acquaint the participants with qualitative as well as qualitative research techniques. Each Day will comprise of minimum four sessions in which the experts will deliver lectures followed by practice sessions on relevant software's.

Session I	09:30 a.m. to 11:00 a.m. Tea Break (11:00 a.m. to 11:15 a.m.)
Session II	11:15 a.m. to 12:45 p.m. Lunch (12:45 p.m. to 01:30 p.m.)
Session III	01:30 p.m. to 03:00 p.m. Tea Break (03:00 p.m. to 03:15 p.m.)
Session IV	03:15 p.m. to 04:45 p.m.

FOCUS OF THE PROGRAMME

- Introduction to Engineering Research
- Literature Review
- Statistical Analysis
- Optimization Techniques
- Simulation and Modeling
- Survey Methods
- Experimental Techniques
- Design of Experiments
- Research Communication
- Practical sessions on different software's

RULES FOR REGISTRATION

- Faculty members, research scholars must fill in the enclosed registration form in order to confirm their willingness to attend the FDP. It must be positively sent by 20th May 2016 at harwin75@gndec.ac.in or by post.
- There is no registration fee for participant from Academic Institutes. Participants from industry / field shall have to pay registration fee of Rs. 5,000/-.
- Certificates will be issued after the completion of the FDP.
- Accommodation will be provided to out station participants as per availability.
- No TA/DA shall be provided to the participants.
- Limited Seats.

PROGRAMME SCHEDULE

31st May, 2016 to 4th June, 2016

	CONTENTS	OUTCOME
Day 1	<ul style="list-style-type: none"> ● Introduction to Engineering Research ● Literature Review 	<ul style="list-style-type: none"> ● Recognize the value of Engineering Research. ● Undertake extensive and intensive literature review.
Day 2	<ul style="list-style-type: none"> ● Data Analysis - Survey Methods ● Hands on practice on SPSS and MINI TAB 	<ul style="list-style-type: none"> ● Understand and Utilize Basic and Advanced Statistics
Day 3	<ul style="list-style-type: none"> ● Data Analysis - Experimental Methods ● Training & practical sessions on Design Expert 	<ul style="list-style-type: none"> ● Comprehend and employ the concept of design of experiments in engineering research
Day 4	<ul style="list-style-type: none"> ● Optimization Techniques: <ul style="list-style-type: none"> ● (a) Single Objective; (b) Multi Objective ● Simulation and Modelling 	<ul style="list-style-type: none"> ● Recognize and implement various optimization techniques in engineering research ● Demonstrate the application of TORA software
Day 5	<ul style="list-style-type: none"> ● Research Communication 	<ul style="list-style-type: none"> ● Communicate the findings of engineering research following accepted standards for publishing quality papers and for filing patents ● Appreciate points to be taken care of in research work