ABOUT NIT, JALANDHAR

Dr B.R. Ambedkar National Institute of Technology Jalandhar (NITJ) was established in the year 1987 as Regional Engineering College and was conferred the status of National Institute of Technology (Deemed University) by the Government of India on October 17, 2002 under the aegis of Ministry of Human Resource Development, New Delhi. The Government of India has declared the Institute as an "**Institute of National Importance"** under an act of Parliament in 2007. As one of the National Institutes of Technology (NIT), the Institute has the responsibility of providing high quality education in Engineering, Technology and Sciences to produce competent technical and scientific manpower for the country. The Institute offers B Tech, M Tech, M Sc, MBA and PhD programmes in several disciplines of Engineering, Technology and Sciences.

LOCATION

The institute is located on G.T Road Amritsar by-pass at a distance of 15 km from Jalandhar Bus Stand, 12 km from Jalandhar City Railway Station, and 18 km from Jalandhar Cantt. Railway Station. It is connected to New Delhi by Road through AC bus service and Rail through Shatabadi/Superfast trains. The city is surrounded by famous rivers Sutlej and Beas. Jalandhar is internationally famous for the sports goods industry and hand tools industry.

VISION

To build a rich intellectual potential embedded with interdisciplinary knowledge, human values, and professional ethics among the youth, aspirant of becoming scientists, engineers, and technologists so that they contribute to society and create a niche for a successful career.

MISSION

To become a leading and unique institution of higher learning, offering state-of-the art education, research, and training in science, engineering, and technology to students who are able and eager to become change agents for the industrial and economic progress of the nation. To nurture and sustain an academic ambience conducive to the development and growth of committed professionals for sustainable development of the nation and to accomplish its integration into the global economy.

ORGANIZING COMMITTEE

PATRON

PROF. (DR.) L K AWASTHI

Director, Dr. B R Ambedkar National Institute of Technology Jalandhar

CHIEF CONVENER

DR. DINESH KUMAR SHUKLA

HOD, Associate Professor,
Department of Mechanical Engineering

COORDINATORS

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CONVENER

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One Week Short Term Course

(Under TEQIP- III)

On

Multi-physics Modelling Techniques using Computational Fluid Dynamics (CFD): Hands-on Experience

(06th - 10th June, 2020)

Organized by

CHIEF CONVENER

DR. DINESH KUMAR SHUKLA

COORDINATORS

DR. RAJAN KUMAR
DR. DWESH KUMAR SINGH

CONVENER
DR. KARAN VEER

Dr. B R Ambedkar National Institute of Technology Jalandhar - 144011 (Punjab)

OBJECTIVES OF THE SHORT TERM COURSE

Almost every engineering problem comprises interactions between matter: water, air, oil, solid particles, etc. For this reason, the Computational Fluid Dynamics (CFD) analyst should carefully specify the problem, taking these factors into consideration. In order to understand the complex nature of multi-physics flow behaviour, it is necessary to know basics of the physical phenomenon and modeling techniques. This training program aims at imparting the much needed skills to the participants for handling complex real life problems using CFD. Extensive modeling techniques such proper mesh generation, how to apply relevant boundary conditions, who to decide on 2D or 3D models etc. will be covered in the program. This unique workshop is a must for engineers, scientists, and faculty to acquire much needed skills that are needed in 21st Century for 'simulation drove research and innovation'.

COURSE CONTENTS

In this short term course, resource persons of eminence from various organizations will deliver expert lectures and will take practice sessions on various topics like:

- CFD theory
- Complex geometry handling
- Surface and volume meshing
- Mesh quality and checks
- CFD Boundary Conditions for internal/external flows
- Multi-physics modeling techniques
- Multi-phase modeling techniques
- Heat Transfer modeling techniques
- Post-Processing techniques

WHO SHOULD ATTEND?

- ***Students/faculty/engineers from Civil, Mechanical, Structural, Automotive, Electrical, Construction, Aerospace, Biomedical, etc. can attend.***
- ***This course is not just a course, it is a skill building program. Anyone interested to enhance their skills in the CAE domain is welcome to participate.***

GENERAL INFORMATION

- The registration fee for participants is INR 1000/- to be deposited in form of DD in the favor of "The Director, NIT Jalandhar", payable at "Jalandhar". Registration fee includes Registration kit, Course material, coffee/tea during session breaks, working lunch and course certificate. The registration fee may also be paid in CASH at registration desk on the spot.
- No TA/DA shall be paid to the participants. Limited accommodation would be available in the NITJ Guest Rooms/Hostels for outstation participants on nominal charges at first come first serve basis..
- Last date of receiving registration forms: 02nd June, 2020. Reporting date and time/venue at the Institute: 06th June, 2019 at 9.00 a.m. in NKN Hall of IT Park, NIT Jalandhar.

Note: ***Participants are requested to bring their own Laptops for better learning experience during practice sessions on various software including ANSYS, HyperWorks, SOLIDWORKS, etc.***

ABOUT THE DEPARTMENT

Mechanical Engineering is amongst one of the early branch of engineering started in the institute. It came into existence in 1992. The Department of Mechanical Engineering offers B Tech, M Tech and PhD programmes. The B Tech programme is accredited by the NBA. Quality teaching is what we aim at so as to stimulate intellectual curiosity, creativity, and innovativeness. With a dedicated team consisting of highly qualified and experienced faculty members in all streams of Mechanical Engineering, the department aims at providing education and research of world class level. The department is enriched by 21 faculty members. The autonomy of the Institute is a privilege to the department in terms of flexibility to modify and revise courses/syllabi at different time intervals to cater contemporary needs of the Industry. The Department has established state-of-the-art facilities in various laboratories. Adequate inputs of practical training, industrial tours, project work, and computer applications are given to support core theory courses.

REGISTRATION

Email the scanned copy of filled registration form along with DD to: rajank@nitj.ac.in or singhdk@nitj.ac.in

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Dr. B R Ambedkar National Institute of Technology
Jalandhar - 144011 (Punjab)

One-Week Short Term Course

(Under TEQIP- III)

Multi-physics Modelling Techniques using Computational Fluid Dynamics (CFD): Hands-on Experience

(06th - 10th June, 2020)

REGISTRATION FORM

Name: Mr./Ms/Dr_____

Designation:_____

Department:_____

Organization:_____

Address for Correspondence:_____

_____

Mobile No: _____

E-mail ID:_____

Accommodation Required (Yes/No)_____

DD Number: _____ Date:_____

Signature and Date

RECOMMENDATION OF THE SPONSORING AUTHORITY:

The applicant is hereby sponsored and will be permitted to attend the short term course if selected.

Date: Signature and Seal of Sponsoring Authority