Summer Internship

(Sponsored by TEQIP Phase-III)

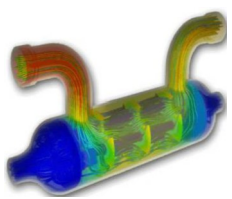
Applied Computational Fluid Dynamics using OpenFOAM®

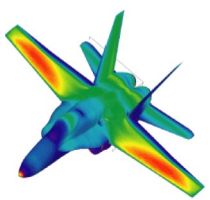
3 June to 12 July, 2019

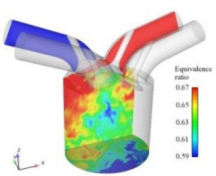
Organized by:

Department of Mechanical Engineering
Malaviya National Institute of Technology
Jawahar Lal Nehru Marg, Malaviya Nagar
Jaipur – 302017

www.mnit.ac.in/dept_mech







Synopsis

Computational modelling and simulation is truly an interdisciplinary area encompassing aspects of mechanical, material, chemical, electrical, aerospace and biomedical engineering. With the rise of computers and ever-growing computational power, Computational Fluid Dynamics (CFD) has became an indispensable tool for research and development leading to huge demand for professionals with adequate training and skills. The goal of this internship program is to train the graduate students outside the typical classroom environment with focus on practical hands-on training. Therefore, exposing students to essential CFD concepts in a much shorter time frame and expand the learning experience with real-world applications.

Internship Break Down

The internship will be divided into three modules of two weeks each.

- **Module 1** will focus on fundamentals of computational fluid dynamics, applications, scope and limitation of CFD.
- **Module 2** is dedicated to training on use of open source CFD tool OpenFOAM. Unlike commercial software, OpenFOAM is free and has unlimited scope for user based customization.
- The final module consists of **two weeks project** in a group of 3 to 4 students.

Eligibility / Target Audience

This summer internship program is targeted towards UG, PG students and Faculty of Govt. / Govt. aided / self-financed engineering colleges who have interest in Computational Fluid Dynamics. All the undergraduate students (preferably from Mechanical, Civil, Chemical, Aerospace and Mechatronics engineering) who are appearing in the 4th, 6th and 8th semester examinations are eligible to apply.

Registration fees

Students: Rs. 10000/-
Faculty: Rs. 12000/-
Payment mode: NEFT/IMPS
A/c Name: **The Registrar MNIT, Jaipur (TEQIP-Phase III)**, A/c No. **36875887782**, IFSC Code: **SBIN0015921**
OR Demand Draft (DD) payable at Jaipur in name of: **The Registrar MNIT, Jaipur (TEQIP-Phase III)**

How to register

Please use the registration form enclosed at the end of this brochure for registration and e-mail scanned copy of same to course coordinator:

Dr. Ram Dayal
Assistant Professor | Dept. of Mechanical Engg.
Malaviya National Institute of Technology Jaipur
JLN Marg, Jaipur – 302017
Phone: +91 9782616007
E-mail: ramdayal.mech@mnit.ac.in

Accommodation

Limited accommodation is available in the MNIT Hostels for outstation participants on nominal charge and first come first serve basis. The participant will not be paid any TA/DA. Charges of Institute Hostels Guest rooms are approximately Rs. 200/- per day including food and accommodation.

Important Dates

- Last date for registration: 20th April, 2019
- Confirmation of selection: 1st May, 2019
- Internship start date: 3rd June, 2019

Benefits to participants

- Training from subject experts
- Course material for reference
- Dedicated lab facility for hands on training
- Internship Certificate on completion

About Instructors

Dr. Ram Dayal, Assistant Professor, MNIT Jaipur

Dr. Ram Dayal is assistant professor at department of Mechanical Engineering, MNIT Jaipur. He is a former scientist at BARC, Mumbai and has completed his PhD from Technical University Darmstadt in Germany. His areas of interest are Computational Fluid Dynamics (CFD), heat transfer enhancement and metal additive manufacturing.

Dr. Dilip Sharma, Professor, MNIT Jaipur

Dr. Dilip Sharma is a professor and Head of Mechanical Engineering department at MNIT Jaipur. His research focuses on alternate energy sources, IC engines, Solar Cogeneration & Trigeneration systems. He is recipient of University Gold Medal from University of Roorkee (IIT-Roorkee now) for securing highest marks in Post Graduation. He has authored 9 books and published more than 150 research papers.

Dr. Nirupam Rohatgi, Associate Professor, MNIT Jaipur

Dr. Nirupam Rohatgi is an Associate Professor at Dept. of Mechanical Engineering, MNIT Jaipur. He is a graduate, postgraduate and doctorate from IIT Delhi. His research interests are CFD of Natural Convection Flows, Transient Analysis of Vapour Compression Systems and Thermal Analysis of Energy Systems.

Registration Form

Malaviya National Institute of Technology Jaipur
मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

Summer Internship Program on

Applied CFD using OpenFOAM

3rd June to 12th July, 2019

Name: _____
Category (UG/PG/Faculty): _____
Branch: _____
Semester: _____
Institute: _____
Mailing Address: _____
_____
_____
Phone: _____
Mail: _____
Accommodation Required? Yes/No: _____

Registration Details:
Transaction/Reference No. _____
Date of transaction: _____
Registration amount: _____

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

Date: _____ **Signature of Candidate**

The applicant will be permitted to participate in the above program, if selected.

Date: _____ **Signature of HOD with Seal**