# **About Jaipur**

Jaipur is a lively and vibrant city in the state of Rajasthan and is situated in Northern India at a distance of around 265 km from Delhi. Also, Jaipur is a world heritage city which offers a multitude of interesting places and tourist attractions. There are several magnificent historical monuments such as the Hawa Mahal, Amber fort, Jaigarh fort, Nahargarh fort, Jal Mahal, City palace, Jantar Mantar etc. The city is popularly known as the city of fun, food and festivals. It is also known as the "Pink City" which is a heady mix of tradition and modernity. The city is very well connected with most parts of the country via air, rail and road. The weather of Jaipur in the month of July is warm, and the temperature in the day time ranges between 35 to 40 °C.

## **About MNIT**

The Institute was established in 1963, formerly known as Malaviya Regional Engineering College, Jaipur, as a joint venture of the Government of India and the Government of Rajasthan. Subsequently on June 26, 2002, it was rechristened as National Institute of Technology; later on 15 August 2007, it was accorded the status of an institute of National Importance through an act of Parliament. The Institute is fully funded by Ministry of Human Resource Development (MHRD), Government of India.

# **About the Mechanical Engineering department**

Mechanical Engineering department of MNIT offers academic programmes at three levels leading to Bachelor of Technology (B.Tech.), Master of Technology (M.Tech.), and Doctor of Philosophy (Ph.D.) degrees. An extremely dynamic and large faculty, and a well experienced support staff, give the department a breadth of research focus and wide range of technical expertise.

The department strives to provide its students best exposure by engaging them in experiments, project work, and hands-on trainings to enhance their learning process.

# **About the STC**

Computational modelling and simulation is truly an interdisciplinary area catering to various engineering disciplines viz. Mechanical, Material science, Chemical, Electrical, Aerospace & Biomedical Engineering. With the rise of computers and ever-growing computational power computational fluid dynamics (CFD) has become an indispensable tool for research and development; and demand for professionals with adequate training and skills is constantly on the rise. The goal of this course is to introduce the virtues and capabilities of CFD analysis to engineers, research scholars, professionals and scientists. STC sessions will be conducted by eminent speakers from IITs, NITs, CFTIs, and reputed institutions etc.

# **Organizing Committee**

# **Chief Patron**

Prof. (Dr) Udaykumar R. Yaragatti

Director, Malaviya National Institute of Technology Jaipur

# Co-Patron

Prof. (Dr) M L Mittal

Head, Mechanical Engineering department, MNIT Jaipur

#### Convener

Dr. Nirupam Rohatgi

Professor, MED, nrohatgi.mech@mnit.ac.in

Dr. Ram Dayal

Assistant Professor, MED, ramdayal.mech@mnit.ac.in

## Coodinator(s)

**Dr. Manish Kumar,**Assistant Professor, MED, manish.mech@mnit.ac.in

Dr. Amit Arora,

Assistant Professor, MED, amit.mech@mnit.ac.in

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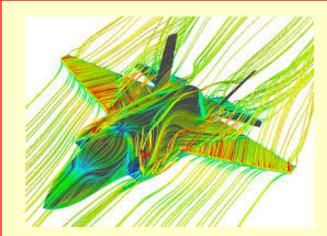


One week Short term course (online)
(sponsored by TEOIP-III)

Computational Fluid Dynamics
For Solving Engineering Problems
(7 – 11 August, 2020)



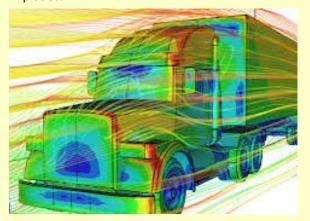
Organized by
Mechanical Engineering department
MNIT Jaipur



#### Thrust of the STC

The STC comprises of five modules as mentioned below.

- Introduction to CFD, Governing Equations, boundary conditions
- Numerical methods for CFD: FDM, FVM, discretization schemes
- Solution algorithms, pressure correction
- Convergence, verification and validation
- · CAD modelling, domain discretization
- Data interpretation and visualization
- Mesh generation, grid independency & order of accuracy test using commercial package
- Numerical simulation of benchmark thermo-fluid problems
- Post processing Contour plot, vector plot, streamlines, XY plot etc.



#### Eligibility/ targeted audience

Short term course may be attended by the following: Students - UG, PG, PhD (Mechanical, Civil, Chemical, Aerospace, Mechatronics Engineering)
Faculty of Engineering - Mechanical, Civil, Chemical, Aerospace, Mechatronics Engineering
Other professionals - Engineers and scientists from Industry and R&D organisations

#### **Participation Fee**

All registered participants will get participation certificate. The participation fee including GST is mentioned below.

Category 1: Participants from TEQIP Institutes General: INR 250 (student), INR 500 (faculty)

Women/ SC/ ST/ OBC participants: Complete fee waiver

## **Category 2: Participants from Non-TEQIP Institutes**

General: INR 500 (student), INR 750 (faculty)

Women/ SC/ ST/ OBC participants: Complete fee waiver

## **Category 3: Participants from Industry**

General: INR 1000

Women/ SC/ ST/ OBC participants: Complete fee waiver

#### Payment mode: NEFT/IMPS

Account Details: Registrar, MNIT, Jaipur (TEQIP-Phase III), A/C No. **36875887782**, State Bank of India, MNIT Campus Jaipur.

## How to apply

Use either of the following modes to apply.

**Mode 1:** Link for the online application "https://forms.gle/Di7iBgAP7PCw3kit5"

**Mode 2:** Fill the registration form enclosed at the back side of this brochure and e-mail scanned copy to the following ID "stcmechmnit@gmail.com"

## **Accommodation & Registration support**

Not Applicable.

## **Important dates**

Last date of registration : August 6, 2020

# Contact(s) for registration & accommodation support

Mr. Swapnil Chitnis, +91-90965-72327

Email: stcmechmnit@gmail.com

# Malaviya National Institute of Technology Jaipur, Rajasthan – 302017

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One week Short term course (online) (sponsored by TEQIP-III)

Computational Fluid Dynamics For Solving Engineering Problems (7 - 11 August, 2020)

## **REGISTRATION FORM**

Name:
Designation:
Department:
Organization:
Email:
Mobile:
Registration Details:
Transaction/ Reference No
Date of transaction:
Registration amount:
Date: Signature of Candidate

Note: The candidate must send the scanned copy of filled registration form to "stcmechmnit@gmail.com"