

Self Finance
Short Term Training Program (STTP) on
Experimental and Computational Fluid
Mechanics for Engineering and Basic
Sciences
From 7th Nov. – 11th Nov. 2016

REGISTRATION FORM

Name:
Designation:
Organization:
Qualification:
Correspondence Address:
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Tel. (O) (R)
(M)
E-Mail:

Amount
DD/NEFT/RTGS No.....
Date
Bank Details

Accommodation Required: Yes / No

Date: Place:

Signature of candidate.....

Signature of Supervisor / HoD / Principal /
Director.....

Note:

DD/NEFT/RTGS should be made in favor of Director, National Institute of Technology Raipur, payable at Raipur (CG), SBI bank, GCET Raipur branch. Accommodation charge has to be borne by the candidates.

Chief Patron
Dr. Sudarshan Tiwari
Director, NIT Raipur

Patron
Dr. S. Sanyal
Dean, R & C, NIT Raipur

Chairman
Dr. A. K. Tiwari
Professor & HOD – Mechanical Engineering

Convener
Dr. (Ku.) Shobha Lata Sinha

Coordinators
Dr. (Ku.) Shobha Lata Sinha
Dr. Satish Kumar Dewangan

Organizing Committee Members

Dr. Ravindra Kumar Yadav
Dr. Amit Raj Singh
Dr. Somnath Bhattachaya
Mr. Shashikant Verma
Ms. Yogita Weiky

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One Week Self Financed
Short Term Training Program
on

“Experimental and Computational Fluid
Mechanics for Engineering and
Basic Sciences”

From 7th Nov. – 11th Nov. 2016



Organized by
Mechanical Engineering Department



National Institute of Technology – Raipur
492 010 (Chhattisgarh)

About the Institute

National Institute of Technology Raipur situated in the capital of Chhattisgarh, has proven to be 'avant-grade' in the field of science and technology over past few decades in this region. With sweet memory of foundation ceremony by our president Hon'ble Dr. Rajendra Prasad on 14th September 1956. the institute started with two departments namely Metallurgical and Mining Engineering. Later the inauguration of the Institute building was done by our Prime Minister Hon'ble Pt. Jawahar Lal Nehru on 14th March 1963. From 1st December 2005, the institute has become the National Institute of Technology. It is well connected with Mumbai, Delhi and all metro cities by regular flights and is on the main Howrah-Mumbai railway route. The institute is 5 km from the Raipur railways station and 18 km from airport on NH-6, the Great Eastern Road.

About Department

Mechanical engineering department was established in 1958. Department offers one undergraduate program (B.Tech.) in Mechanical Engineering [90 seats] and three Postgraduate program (M.Tech.) of specializations Thermal Engineering, Design Engineering and Industrial Engineering & management. It is one of the largest departments of the institute from the point of view of students and faculty strength. Department also offers Ph.D. program in all relevant discipline of Mechanical Engineering including Design, Production, Thermal and Industrial Management. Department has completed two research projects of worth 33.76 Lacs and three research projects of worth 20 Lacs are currently ongoing.

Venue

**Mechanical Engineering Department
NIT Raipur (CG) – 492 010, INDIA**

Theme and Objectives and Scope

The scope of fluid flow is vast. It has numerous applications in industrial situations, human activities, living organisms activities, environmental happenings etc. Thus understanding of the experimental and computational approach for such flow analysis is very important.

The main objective of this STTP is to take the participants ahead of their ability to relate the applications of experimental and computational techniques for various problems pertaining to fluid dynamics. Every lecture session is accompanied with a tutorial/lab session to give practice of the taught lectures and provide practical knowledge.

Program highlights

- Incorporation of experiments on rheology measurement by Marsh funnel and by Rheometer.
- Incorporation of design of experimental method including uncertainty and error analysis for the pipe flow and other such flow measurement experiments.
- Incorporation of the design of Computational method including uncertainty and error analysis for the computational methods for the fluid flow

Targeted Participants

Students, research scholars and faculties of Engineering and basic sciences of educational institutes and employees of industries

Topics to be covered

Physical laws of fluid mechanics, applications of it in flow measurement techniques, basic and advanced experimental techniques, Design of experiments, uncertainty and error analysis of experiments, Introduction computational methods for fluid dynamics problems, discretization techniques, Classification of conservation equations, Computational solution of Laminar flow problems, Turbulence modeling, application of computational techniques for turbulent flow, Design of computational techniques, uncertainty and error analysis, Computer applications on chemical reaction modeling, fire modeling, biological cases, physical flow cases etc. Lab and tutorial sessions are accompanied with these topics.

Registration Fee Details (in INR)

Participants	Amount (in Rs)
UG/PG/PhD Students	Rs 1000/-
Faculty	Rs 2000/-
Industry Delegates	Rs 3000/-

Application in the prescribed format with registration fee in the form of DD/NEFT/RTGS drawn in favor of “**Director, NIT Raipur**” must reach the coordinator on or before 07th Nov. 2016. Candidates may send scanned copy of the registration form along with scanned of DD/NEFT/RTGS transaction. Hard copy may then be submitted on the day of registration. Registration fee includes registration kit, high tea during the program and study materials. Fee is non-refundable. Fee does not include lunch & accommodation charges. Participants should bring their own laptop for lab sessions. Selected candidate will be informed by email/phone as per the schedule. Certificates will be issued to the participants only after attending the complete course.