

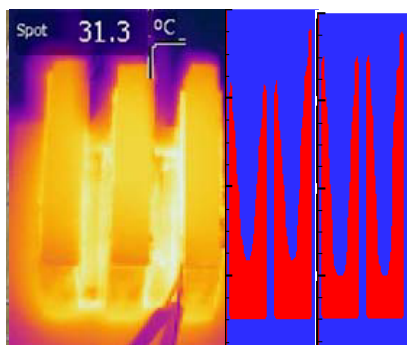
Learning CFD/HT through Industry Relevant Problems

June 07 - 18, 2021

Course as approved under the AICTE-TEQIP Scheme



School of Mechanical Sciences
IIT Bhubaneswar



Course Objectives

The proposed course sponsored by AICTE under TEQIP Scheme is aimed at educating researchers, scientists, field engineers, faculties and students working in the field of Mechanical/Chemical Engineering with special emphasis on CFD/HT and its potential industrial applications.

Course Contents

(1) Introduction: Fundamentals of transport mechanism involving fluid flow and heat/mass transfer, CFDHT as a tool for Industrial problems, Introduction to FDM, FEM and FVM, Design of Framework for Finite volume method (FVM) based General Purpose Solver for Thermo-fluid Problems

(2) Applications of CFD/HT: Conjugate Heat Transfer Problems, Materials Processing, Bioheat Transfer, Heat and mass transfer through porous media, complex multiphase flow.

(3) CFD Tool Introduction: Usage of ANSYS FLUENT

(A Commercial CFD package) for Heat/Mass transfer and fluid flow problems, Introduction to Meshing using ANSYS-Fluent Workbench, GUI of Fluent Solvers, Post Processing using Fluent and CFD post, UDF writing, etc.

Registration Fees

Participants from abroad: US \$100/-

Industry/ Research Organizations: Rs.1500/-

Academic Institutions:

Students: Rs.500/- , Faculty: Rs.1000/- (beyond 30 nos.)

The above fee includes all digital instructional materials, video lectures.

N.B: Participants must register for the course before **May 31, 2021**.

Application Procedure

An amount of Rs.1000/- may required to be paid while registering in the above said course. Participants should further submit the **Registration Fee** (as mentioned above) as Demand Draft in favor of "CEP IIT Bhubaneswar" or through NEFT (Customer Name-CEP, IIT Bhubaneswar, **Account No: 24282010001960, IFSC Code: SYNB0002428**, Bank Name:Syndicate Bank, Branch Address: IIT, Bhubaneswar) latest by **May 31, 2021** to the course coordinators.

Selection Process

The first 30 faculty participants from AICTE approved institutions will be selected on first come, first served basis subject to payment of the required refundable registration fee. The registration fee of first 30 faculty participants will be refunded after successful completion of the course.

Course Coordinators:

Prof. S. K. Mahapatra and Dr. P. Rath

IITBBS faculty members expertise on CFD will deliver lectures and in addition outside experts from other IITs (Prof. G. Biswas, Prof. T. Basak and Prof. P. K. Panigrahi) will also take lectures on special topics. Scientists and senior CFD engineers from R&D labs and industries also deliver special lectures.

REGISTRATION FORM

AICTE-TEQIP Sponsored Short Term Course
on
Learning CFD/HT through Industry Relevant Problems
(07-18 June, 2021)

Name: _____

Designation: _____

Organization: _____

Field of Work/Research: _____

Mailing Address: _____

Tel: _____ Fax: _____

Email: _____

Category of Participants: Tick the appropriate box

A ☐ B ☐ C ☐ D ☐

Payment Details:

Dated _____ for Rs. _____ paid by
(Draft No./NEFT Trans-ID _____)

On bank _____

Date _____ Signature _____

Signature of Sponsoring Authority

Participants Category	Category Details	Course Fees
A	Faculty of AICTE approved Engineering College (Within 30) (Selection of 30 eligible participants will be made first come first basis)	1) No Course fees 2)* They need to deposit DD of Rs. 1000/- in favor of CEP, IIT Bhubaneswar (Which will only be refunded on joining & on completing the course)
B	Faculty of AICTE approved Engineering College/ Research Scholar (Exceeding 30)	Rs.1000/- (Faculty) and Rs.500/- (Research students)
C	Scientist /Engineer/ Officer/Industry participants	Rs.1500/-
D	Participants from outside India	US\$100.00

Contact address:

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