DEPARTMENT OF MECHANICAL ENGINEERING

The Mechanical Engineering of NIT Rourkela comprises three divisions namely design, manufacturing and thermal engineering. The department is known for research in variety of fields that include mechanical vibration, robotics, heat transfer, CAD/CAM, precision engineering, metal forming, manufacturing, CFD, industrial refrigeration and cryogenics. The academic programmes of the department reflect not only the core areas of Mechanical Engineering; but also the research specialization of the faculty. The department at present has over one hundred research scholars pursuing the research on diverse fields. All the groups are working in close co-operation while retaining individual identities. Many Research and Development projects being pursued by the faculty are sponsored by government agencies and private industries. The major sponsors among these projects are BRNS, DST, ARDB, BRFST and HBL Power Systems.

ABOUT THE COURSE

The applications of CFD in engineering problems have changed a lot over the decades and have become truly multidisciplinary. The major focus of most of this work is to unravel complex flow physics involved in different multidisciplinary areas, such as biomedical, chemical industry, steel industry, stealth technology, etc. The focus of this program is to get a broader understanding of various cutting-edge research going on in the field of renewable energy and battery management systems.

Coordinators
Dr. Sushil Kumar Rathore
Dr. Jnana Ranjan Senapati
Dr. Saroj Ray
Department of Mechanical Engineering
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ABOUT NIT ROURKELA

National Institute of Technology Rourkela is an institute of national importance created under the act of parliament. NIT Rourkela provides quality education in a diverse and multi-cultural environment. The mission of the institute is to become an internationally acclaimed institution of higher learning that will serve as a source of knowledge and expertise for the society and be a preferred destination for both UG and PG studies. The vision of the institute is to advance and spread knowledge in the area of science and technology leading to creation of wealth and welfare of humanity.

The institute provides quality education in a diverse and multicultural environment. The mission of the institute is to become an internationally acclaimed institution of higher learning that will serve as a source of knowledge and expertise for the society and be a preferred destination for undergraduate and post graduate studies. The institute is offering undergraduate, post graduate and PhD programme in 21 branches of Engineering. The institute research centres are engaged in consultancy and research activities of several government bodies such as DST, DAE, CSIR, DRDO, BARC, ISRO and private industries.

NIT ROURKELA RANKINGS
Source: https://nitrkl.ac.in/About/Rankings

2024	Ranked 19 in NIRF Engineering
2024	Ranked 34 in NIRF Overall
2024	Times Higher Education World University Ranking 2023 has placed NIT Rourkela at 801-1000
2023	Ranked 59 in QS Southern Asia University Rankings
2023	Times Higher Education World University Ranking 2023 has placed NIT Rourkela at 1000-1200
2022	Ranked between 801-1000 in THE World University

A
FIVE DAYS
SKILL DEVELOPMENT COURSE
on

CFD APPROACH TO RENEWABLE ENERGY PROBLEMS USING ANSYS FLUENT

December 04-08, 2024
(Online Mode)

Patron
Prof. K. Umamaheshwar Rao,
Director, NIT Rourkela

Chairman
Prof. S. K. Patel, HOD-ME

Coordinators
Dr. Sushil K. Rathore, ME
Dr. Jnana R. Senapati, ME
Dr. Saroj Ray, ME

Department of Mechanical Engineering
National Institute of Technology
Rourkela-769008

NIT RKL

COURSE CONTENT & TRAINING SESSION

The course will cover the following major topics;

- Introduction to basics of computational fluid dynamics (CFD) from pre-processing to post processing (Basic Modelling using Space claim, Repairment of imported CAD model, Details of Meshing)
- Applications of CFD to various practical engineering problems.
- Thermal analysis of Solar PV Module
- Solar water/Air heaters Analysis
- Battery Pack Thermal management systems.
- CFD simulations of wind turbines

HANDS-ON SESSION BY EXPERT

FROM INDUSTRY

Special training session will be going to delivered by expert from ARK Infosolutions Pvt. Ltd.
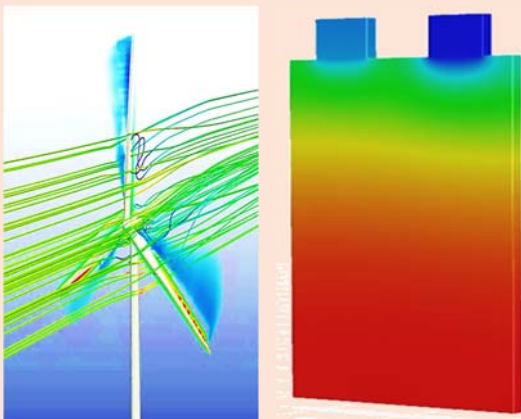
ELIGIBILITY

Participation in this workshop is open to Post Doctoral Fellows, Research Scholars/ PG/ UG students and Faculty of recognized technical institutes, Researchers from the research laboratory, Industrial Person/Engineers and any other interested personnel. The successful participants will be given a participation certificate.

IMPORTANT DATES

The last date for the registration is 03/12/24.

TARGET AUDIENCE

The selected applicants will be provided a secured meeting code of the web platform one day before the commencement of course.

ADDRESS FOR CORRESPONDENCE:

Dr. Sushil Kumar Rathore
Department of Mechanical Engineering
National Institute of Technology, Rourkela
Rourkela-769008, Odisha, India
Contact No. +91-9474828662
Email-id: *rathoresk@nitrkl.ac.in*
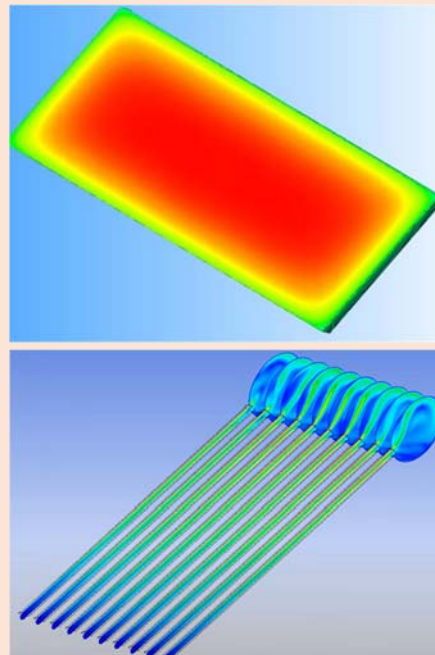
COURSE FEE

- Student: 1000/-
- Academic faculties: 1500/-
- Industry professionals: 2000/-

* INCLUSIVE OF GST

REGISTRATION FORM

For registration use the following link:
https://forms.gle/qXpCBRzLgu8HUJ9p7

MODE OF PAYMENT: (ONLINE ONLY)

Please transfer the Fee amount to the following bank account (details given below). Attach the payment receipt along with the google form for registration (link mentioned above).

Name: CONTINUING EDUCATION NIT ROURKELA
Acct. No.: 10138951784
Bank: State Bank of India
Branch: NIT Campus Rourkela
IFS Code: SBIN0002109

UPI ID: 01389517841@sbi

Merchant Name : Continuing Education NIT

Online certificates will be given to the participants who attend all sessions of the course.

FOR FURTHER ASSISTANCE

Student coordinators
Shovit (+91-9777437167)

Amit (+91-6370034573)