



ROURKELA

**FIVE-DAY SHORT
TERM COURSE
09-13 JANUARY
2023**

rourkela | NATIONAL INSTITUTE OF TECHNOLOGY

राष्ट्रीय प्रौद्योगिकी संस्थान
ରାଜ୍ୟ ପ୍ରଯୁक्ति ପ୍ରତିଷ୍ଠାନ

FINITE ELEMENT METHOD AND COMPUTATIONAL FLUID DYNAMICS IN ENGINEERING APPLICATIONS

Department of Mechanical Engineering
National Institute of Technology Rourkela
Rourkela 769008 (Odisha) India

For details about this course please visit <https://tinyurl.com/2023FEMCFD>





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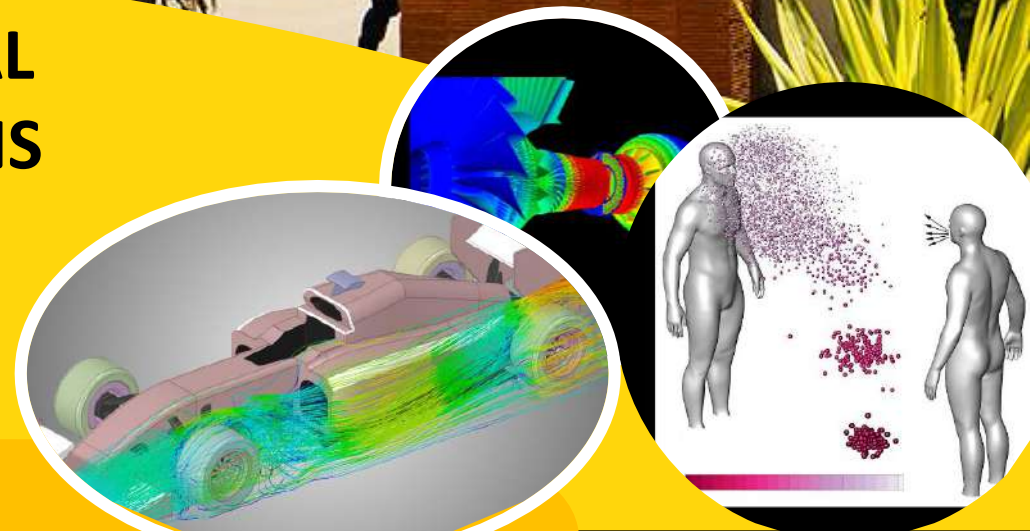
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Principal Coordinator: Dr. Rabindra Kumar Behera

Co-Cordinators: Dr. Manoj Kumar Moharana



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ROURKELA

AN INSTITUTE
OF NATIONAL
IMPORTANCE
Estd. 1961



About NIT Rourkela

Where everyone strives to attain their potential

NIT Rourkela is one of the premier national level institutions for technical education in India. It is an institute of national importance created under the act of the parliament of India. It provides quality education in a diverse and multi-cultural environment. The Institute aspires to be among the internationally highly acclaimed institution of higher learning that will serve as a source of knowledge and expertise for society and be a globally preferred destination for undergraduate and graduate studies.

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THE World University
Ranking by Subject
(Engineering) 2021

RANK : 601-800



THE World University
Ranking by Subject
(Physical Sciences)
2021

RANK : 601-800



THE IMPACT Ranking
2021

RANK : 401-600



Qs World University-
ASIA Rankings-2022

RANK : 271-280



QS Asian University
2021

RANK : 250



THE Emerging
Economies 2021

RANK : 201-250



THE Asia University
2021

RANK : 201-250

NIRF Ranking 2021

- ✓ 20 (Engineering)
- ✓ 31 (Research)
- ✓ 41 (Overall)



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Course Content

This course will provide a practical insight to researchers pursuing master's or doctoral degree or any research activity. The main objective of this program is to impart practical knowledge essential for successfully conducting research and disseminate the same for the welfare of the society as a whole. The course content include Introduction to Finite Element Method (FEM), One-dimensional & Two-dimensional element modeling, In addition, Introduction to Computational Fluid Dynamics (CFD), Introduction to discretization methods, CFD Solution technique, Essentials of CFD solution analysis, Practical guidelines for CFD simulation and analysis, Some applications of CFD with examples etc. to name a few.

For details about this course please visit <https://tinyurl.com/2023FEMCFD>



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Course Content

Other topics include but not limited to

- ❖ Introduction to Finite Element Method (FEM)
- ❖ One-dimensional element
- ❖ Truss, beam, frame
- ❖ Two-dimensional element
- ❖ Plane stress and plane strain
- ❖ Vibration of beam
- ❖ Buckling of column
- ❖ Introduction to Ansys FEM
- ❖ Introduction to Computational Fluid Dynamics (CFD)
- ❖ Fundamentals of CFD techniques
- ❖ Essentials of CFD solution analysis
- ❖ Practical guidelines for CFD simulation and analysis

For details about this course please visit <https://tinyurl.com/2023FEMCFD>

Contact us: +91 8895593400 (Whatsapp), +91 7008111684, mkmoharana@gmail.com



Course Details

HYBRID MODE: BOTH ONLINE & OFF-LINE

The course will be organized in hybrid mode of both online and off-line. The course consists of approx. 40 hours to be conducted during 09.00 AM to 05.00 PM (Indian Standard Time)

Dates: 09-13 January 2023

Venue:

Department of Mechanical Engineering, NIT Rourkela

Course registration link

<https://tinyurl.com/FEMCFD2023>

Course website link

<https://tinyurl.com/2023FEMCFD>





COURSE FEE

For Online registration

Please visit:

<https://tinyurl.com/FEMCFD2023>

Indian Nationals

Attending online:

- ❖ Rs 885 (Rs 750 + 18 % GST) *
- ❖ Rs 1062 (Rs 900/- plus 18% GST)**

Attending in person:

- ❖ Rs 1180 (Rs 1000/- plus 18% GST, accommodation cost extra)

Other than Indian Nationals

- ❖ US\$ 50/- (Online during 9.00 AM-6.00 PM Indian Standard Time)*

MODE OF PAYMENT

Online bank transfer to the following bank account

Bank account number: 10138951784

Account name (as per bank record): CONTINUING EDUCATION NIT ROURKELA
IFS Code: SBIN0002109

Name of Bank: State Bank of India

Bank Branch Address: NIT Campus, Rourkela, Odisha 769008 (India)

MICR No: 769002007, SWIFT Code: SBININBB137

*Digital participation certificate (PDF or TIFF) will be provided via email

**Printed participation certificate will be provided via speed-post



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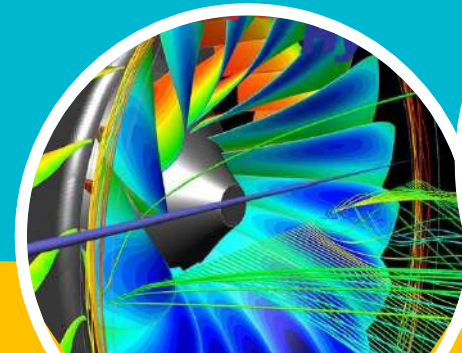
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