

A
FIVE DAY SHORT
TERM COURSE
ON

Advanced Manufacturing Systems and Metallurgical Studies towards Steel Industry Needs



Course Content:

- Metallurgical advancement in Steel Industry.
- Heat Treatment of various Carbon Steel.
- Micro structure and hardness measurement of various steels.
- Stress – Strain control during rolling, pass design.
- Grain size & Micro structure uniformity in rolled products.
- Effect of various alloying elements.
- Factors effecting drawability, forgeability of rods/bars.
- Decarbonisation & its control.

About Mechanical Department

Mechanical Engineering is often called the mother of all engineering. It covers a host of subjects: properties of materials, structural design, material processing, manufacturing, heat engines, refrigeration and air conditioning, industrial management, robotics and much more. The Mechanical Engineering Department of NIT, Rourkela is known for research in most of these fields. The main foci of research are on mechanical vibration, robotics, 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 Engineer but also the research specialization of the faculty. The department at present has over one hundred research scholars pursuing projects on diverse fields. The faculty is organized under three divisions and six groups. 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. Among the major sponsors are BRNS, DST, ARDB, BRFST, HBL Power Systems and Lechier India Private Limited.



About Vizag Steel Plant.

Rashtriya Ispat Nigam Limited – the corporate entity of Vishakhapatnam steel plant is a navaratna PSE under the ministry of steel. Vizag steel is first Shore based Integrated steel plant in the country and is known for its Quality products and customer delight. Vizag steel caters to the requirements of the construction, manufacturing automobile, general engineering and fabrication sectors.

About NITR

National Institute of Technology Rourkela is an institute of national importance created under the act of parliament. Times World Rankings has figured NIT Rourkela in the list of 601-800 universities in the world in 2016-17. NIT Rourkela is the only NIT to appear in the top 980 universities in the world. BRICS 2016 has figured NIT Rourkela in the list of 111-120 top universities in Brazil, Russia, India, China and South Africa in 2016-17. NIT Rourkela provides quality education in a diverse and multi-cultural environment.

About ID Department

Industrial Design involves the design and development of industrially produced items. Industrial designers use drawings, models, and computer programmes to design products and processes. Industrial design products include items such as mobile phones, automobiles, household appliances, electronic equipment, furniture, jewelry etc. and products which will be made as one-offs, such as craft products, trophies, or models and full-scale mock-ups. The industrial designers also use their skills to invent completely new products, to do computer modelling and animation, and to propose new ways of doing everyday things. In addition to aesthetic concerns, social references, global interactions and the expectations of the users are taken into consideration.

How To Reach Rourkela

Rourkela is on the Howrah (Kolkata)– Mumbai main line of South Eastern railway. The railway station and intrastate bus stand are 6kms and 2kms from NIT Rourkela campus respectively. The airports near to Rourkela are Ranchi, Bhubaneswar and Kolkata. Rourkela is well connected to these cities by rail and train frequency is very good.



NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA-769008
ODISHA



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PATRON

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ORGANIZED BY

DEPARTMENT OF MECHANICAL ENGINEERING
&
DEPARTMENT OF INDUSTRIAL DESIGN



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