

About Vizag Steel Plant.

Rashtriya Ispat Nigam Limited – the corporate entity of Vishakhapatnam steel plant is a Navratna 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

PATRON

PROF. ANIMESH BISWAS
DIRECTOR
NIT ROURKELA

CHAIRMAN

PROF. B.B. V. L. Deepak
HEAD OF THE DEPARTMENT
DEPARTMENT OF MECHANICAL ENGINEERING

Programme Co-ordinators

Prof. B B V L Deepak (HOD, ID-Department)
+91-661-246 2855 (o);
+918984180965(M)
Email Id: bbv@nitrrkl.ac.in

Prof. D R Parhi (HOD, Mech. Department)
+91-661-246 2514 (o);
+919861067309 (M)
Email Id: drkparhi@nitrrkl.ac.in

A
FIVE DAY SHORT TERM COURSE
ON

Smart Manufacturing and Materials
Selection towards Steel Industry
needs (S2M2SI-2018)

(08th – 12th October 2018)

Sponsored By
RINL



ORGANIZED BY

DEPARTMENT OF INDUSTRIAL DESIGN
&
DEPARTMENT OF MECHANICAL ENGINEERING



NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA-769008
ODISHA

A
FIVE DAY SHORT
TERM COURSE
ON

Smart Manufacturing and Materials Selection towards Steel Industry needs (S2M2SI-2018)



Course Content:

- Role of automation in manufacturing
- Parameter optimization in manufacturing process
- Sensors & Actuators to control the industrial process (Specifically for steel sectors)
- Programmable logical drives for automating the manufacturing operations
- Computer aided design, manufacturing and reverse engineering
- Materials selection and applications for steel sectors
- Practice on CAD/CAM
- Automation Lab. visit
- Advanced Manufacturing Lab. visit



Technical session Description & Speaker

Role of automation in manufacturing

Prof. B B V L Deepak

Parameter optimization in manufacturing process

Prof. D R K Parhi

Sensors & Actuators to control the industrial process (Specifically for steel sectors)

Prof. S Gopalakrishna

Programmable logical drives for automating the manufacturing operations

Prof. J Srinivas

Computer aided design, manufacturing and reverse engineering

Prof. M Rajik Khan

Materials selection and applications for steel sectors

Prof. S Karak & Prof. M Lal

Practice on CAD/CAM

- Modelling in CAD (CATIA) environment
- Part program generation through CAM software for CNC operation

Prof. B B V L Deepak & Prof. D R K Parhi

Automation Lab. visit

- Sensors & actuators interfacing for the material handling
- Temperature measurement through Lab View software

Prof. B B V L Deepak & Prof. S Gopalakrishna

Advanced Manufacturing Lab. visit

- 3D printing technology
- 3D scanning technology
- Programming & operation of CNC systems

Prof. B B V L Deepak & Prof. M Rajik Khan

Objective of the Course:

The main objective of the proposed short term course is to make participants aware of the advanced technologies being used for various manufacturing processes. Further, the course covers the selection of materials especially for steel sectors and its characterization. This training is useful for the RINL executives of various fields those are working in Mechanical, Electrical, Electronics and Material Science sectors.

Date, Time & Activity

08-10-2018

(Monday) 9.30 – 10.30 Inauguration & Registration

10.30 – 11.00 High Tea & Refreshments

11.00 – 01.00 Technical Session

01.00 - 03.00 Lunch

3.00 – 4.00 Technical Session

4.00 – 4.30 High Tea & Refreshments

4.30 – 5.30 Technical Session

09-10-2018

(Tuesday) 9.30 – 10.30 Technical Session

10.30 – 11.00 High Tea & Refreshments

11.00 – 01.00 Technical Session

01.00 - 03.00 Lunch

3.00 – 4.00 Technical Session

4.00 – 4.30 High Tea & Refreshments

4.30 – 5.30 Technical Session

10-10-2018

(Wednesday) 9.00 – 2.00 Industrial Visit

8 PM-9PM GRAND DINNER

11-10-2018

(Thursday) 9.30 – 10.30 Technical Session

10.30 – 11.00 High Tea & Refreshments

11.00 – 01.00 Technical Session

01.00 - 3.00 Lunch

3.00 – 4.00 Technical Session

4.00 – 4.30 High Tea & Refreshments

4.30 – 5.30 Technical Session

12-10-2018

(Friday) 9.00 – 2.00 Rourkela Site Seeing

2.00 – 3.00 Lunch

3.00 – 4.00 Valedictory