# **Course Plan**

Modules delivered by International and National faculty and Industry experts

# Advanced Course on Sustainability in Material and Design

- Carbon Footprint Calculations
- Production Design for environment
- Materials and Environment
- Circular Economy
- Life Cycle Assessment
- MQL towards Sustainability

#### Fee:

Participants from abroad: \$100

Industry/Research organizations: INR 8000

Academic faculty: INR 5000

Students: INR 2000

The above fee includes all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24-hour free internet, lunches and high tea. Fee must be paid by April 21st, in the form of a crossed bank draft drawn in favour of

The Registrar, MNIT, Jaipur and payable at Jaipur.

# Coordinators

Prof. G.S. Dangayach, Dr. Amit Singh Dr. M.L. Meena, Dr. Amar Patnaik

# **International Expert**

Dr. Nageswara Rao Posinasetti Professor, Department of Technology University of Northern Iowa, USA

# Registration Fee

Registration Fee (exclusive of GIAN Portal Registration Fee)
Participants from abroad US \$100
Industry/ Research Organizations INR 8000
Faculty from Academic Institutions INR 5000
Students from Academic Institutions INR 2000

# How to register?

GIAN Portal registration fee: INR 500 (mandatory for all participants).

- 1. Create login and password at http://www.gian.iitkgp.ac.in/GREGN/index.
- 2. Login and complete the Registration Form and select Course(s).
- 3. Confirm application and pay INR 500/- (non-refundable) through online payment gateway.
- 4. Download "pdf file" of the application form and email it to the Course Coordinator.
- 5. Once course coordinator shortlists the applicant, an email shall be sent to him/her.
- 6. He/she may proceed for course registration as described in next section.

Fees can be paid via Demand Draft in favour of "REGISTRAR (SPONSORED RESEARCH) MNIT Jaipur" payable at Jaipur.

#### OR

Fees can be paid through National Electronic Funds Transfer (NEFT)

Account No.: 676801700388

In name of "REGISTRAR (SPONSORED RESEARCH) MNIT Jaipur"

Bank: ICICI Bank, Branch MNIT Jaipur

IFSC Code: ICIC0006768.

Email filled in "Registration Form", scan copy of

"Demand Draft/ NEFT Transaction Receipt"

and pdf file (downloaded from GIAN Portal Registration) to

asingh.mech@mnit.ac.in

Please mention, "GIAN (Advanced Course on Sustainability in Material & Design)" in subject of the email.



# Advanced Course on Sustainability in

# Material & Design

Under the aegis of

Global Initiative of Academic Networks (GIAN)

May 21st to June 1st, 2018



# GIAN (An Initiative of Government of India)

Govt. of India approved a new program titled Global Initiative of Academic Networks (GIAN) in Higher Education aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence. GIAN is envisaged to achieve the following objectives:-

- a) To increase the footfalls of reputed international faculty in the Indian academic institutes.
- b) Provide opportunity to our faculty and students to learn and share knowledge and teaching skills in cutting edge areas.
- c) To create avenue for possible collaborative research.
- d) To increase participation and presence of international students in the academic Institutes.
- e) Opportunity for the students of different Institutes/Universities to interact and learn subjects in niche areas through collaborative learning process.
- f) ) Motivate the best international experts in the world to work on problems related to India.

# **ABOUT THE ORGANIZING INSTITUTE**

The college was established in 1963 with the name as Malaviya Regional Engineering College, Jaipur as a joint venture of the Government of India and the Government of Rajasthan. Subsequently, on June 26, 2002 the college has been given

the status of National Institute of Technology and on 15 August 2007, and proclaimed Institute of National Importance through Act of Parliament. The Institute is fully funded by Ministry of Human Resource Development (MHRD), Govern-

ment of India. MNIT Jaipur is centrally located in Jaipur City famously known as "Pink City". Jaipur is one of famous tourist destination in India and situated around 250 km from Delhi. One can reach Jaipur by Air, Train or Bus from different parts of India. Weather is generally pleasant in Jaipur in the month of May. This course is being organized by the Department of Mechanical Engineering. We look forward to your participation and support in making this workshop a success



# **Course Objective**

- 1. Understand the concept of Sustainability in relation to environment and how it needs to be applied for industrial scenarios. Apply resource accounting methods to sustainability problems.
- 2. Examine the ISO Life Cycle Assessment (LCA) standard and understand the various implications thereof. Review various tools available for the purpose and apply the LCA methods to analyze products and services.
- 3. Review the product design procedures and apply LCA in various forms to product design to minimize the energy requirements in the total life cycle of the product.
- 4. Review the manufacturing processes from the Sustainability point of view and examine the methods to improve their sustainability.
- 5. Examine the manufacturing systems from the Sustainability point of view and model them taking various sustainability approaches with the ultimate aim to improve their sustainability

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RECOMMENDATION OF THE SPONSORING A	UTHORITY
The application of Dr./Mr./Mrs./Ms	is

Department of Mechanical Engineering, MNIT Jaipur.

Date: Signature of the Supervisor/

Head of the Dept./

Place: Institute/Organization with seal

# **Contact Us**

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