

Details about Course

Ergonomics is the scientific discipline concerned with the understanding of interaction among human and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human wellbeing and overall system performance. This course will give insights of current trends of industrial revolution in manufacturing industries, knowledge of ergonomics: physical, cognitive and organizational in context of production/ manufacturing Industries. This course will familiarize the participants with various aspects of Industry 4.0. The current revolution in manufacturing Industries deals with automation of processes, however it does not entail zero manpower. The job requires skilled personnel who are trained in advanced manufacturing tools and techniques for successful implementation of 4th Industrial revolution. The course is intended to enrich participants with these basic skills. The course will generate knowledge about current trends in context of role of human factors engineering, human computer interaction in manufacturing industries.

Course Intend to Cover

- Fundamentals of Physical and Virtual Ergonomics
- Ergonomics Requirements in Manufacturing Industries
- Technology Pillars for Industry 4.0
- Ergonomics in MSME Sectors
- Design Thinking
- Ergonomics Evaluation in Industrial Sector
- Cognitive load Estimation Methods
- Ergonomics and OSH Health in Renewable Energy Sector
- Virtual demonstration on Research Facilities in Ergonomics Laboratory, DOD (PhD Students)

Course Benefit

- Participants engaged in technical education (Engineering/ Design), will be sensitized towards importance and principles of the Ergonomics in context of manufacturing industries.
- Encourage faculty members and professionals to establish lab facilities in their institutes and carry research work.
- This event will help faculty members to apply design thinking in Applied Ergonomics and it will help in teaching learning process to build employable workforce for future industries.
- Participants will become aware about the various facilities/ instruments available in Ergonomics Laboratory, Department of Design, IIT Guwahati.

Mode of Instruction

- Illustrated Lectures
- Interactive Sessions
- Virtual Tour of Ergonomics Lab.

Resource Person

Faculty members of Department of Design, IIT Guwahati will take lectures on different topics.

Course Material

Each participant will be provided with a set of Online Course material on the subject.

Category of Participants and Registration fee

The payment for registration fee is to be made by Demand Draft (DD) drawn on any Nationalised Bank in favour of "Registrar, IIT Guwahati", payable at Guwahati.

Category I: Faculty members/ PhD Research Scholars from TEQIP Mapped Institute

- Participation is free

Category II: Faculty members/ PhD Research Scholars from Non-TEQIP Mapped Institute

- Applicable Fee ₹ 3,000 + 18% GST (Total ₹ 3,540)

Category III: Professional from Industry and R&D Organization

- Applicable Fee ₹ 4,000 + 18% GST (Total ₹ 4,720)

Important dates

- Duly filled form along with DD should reach by **25th Nov, 2020**
- Intimation of Selection: **5th Dec, 2020**
- Workshop Date: **14th Dec -18th Dec, 2020**



Registration Form

Duly filled form along with DD to be submitted before 25th Nov, 2020

Name

Designation

Organization

Address

Mobile

E-mail

Highest Academic Qualification

Specialization

Experience in Year(s)

a) Teaching b) Professional

Category: Gen OBC - NCL OBC SC ST

Type of TEQIP – III Institute

(Refer <http://www.npiu.nic.in/> under the menu Institutions and the Sub-menu TEQIP III

Subcomponent 1.1 Subcomponent 1.3 ATUS

Twinned Institutions Not Listed

Please Register me for the TEQIP on 'Ergonomics in the Era of Industry 4.0' to be held online at IIT Guwahati.

Date

Signature of Applicant

Place

Cont...

SPONSORSHIP

(a) For applicants from TEQIP Mapped Institutions:

Prof./ Dr. / Mr. /Ms. /Mrs.

is a bona-fide student/ employee of our Institution and his/ her application is hereby sponsored/ endorsed. If selected, the applicant will be permitted to attend the short-term course on 'Ergonomics in the Era of Industry 4.0' at IIT Guwahati, from 14th - 18th, December 2020.

Date

Signature of HOD

Designation:

Official Seal

(b) For applicants from Non - TEQIP mapped institutes, Industries and Government organizations

Amount:

DD No. and Date:

Bank:

Signature of the Applicant

The duly signed / endorsed form along with DD should be mailed to: (before 25th Nov, 2020)

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IIT Guwahati

IIT Guwahati campus is spread over a sprawling 785 hectares plot of green land on the north bank of the river Brahmaputra around 25 km from the heart of the city. With hills and vast open spaces the campus provides an ideal setting for Education & Training. Details on how to reach IITG Campus are available on the [website : www.iitg.ac.in](http://www.iitg.ac.in)



Ergonomics Laboratory, Department of Design

Ergonomics laboratory at Department of Design, IIT Guwahati was set-up in 1999 under leadership of Prof. Debkumar Chakrabarti. This is a well-equipped laboratory with various basic and applied research facilities for both physical and cognitive ergonomics. Apart from equipment for traditional ergonomics evaluation, modern sophisticated equipment are also available for virtual ergonomics evaluation and cognitive workload study.



Contact

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TEQIP III Sponsored Short Term Course on

Ergonomics in the Era of Industry 4.0 (Online)

14 - 18 Dec, 2020

http://www.iitg.ac.in/erglab/TEQIP_Dec2020/



Organized by:
Center for Ergonomics: User Centered Design and Occupational Wellbeing,
Ergonomics Laboratory, Department of Design,
Indian Institute of Technology Guwahati