

**Online Short Term Course (STC)  
On  
Mechatronics, Instrumentation, Intelligent  
and Bio-Inspired Materials (MIIBM-2021)**

**10<sup>th</sup> – 14<sup>th</sup> February, 2021**



**Department of Mechatronics Engineering  
IIIT Bhagalpur, Sabour, Bhagalpur – 813210  
(Bihar)**



**Patron  
Prof. Arvind Choubey  
(Director, IIIT Bhagalpur)**

**Coordinators**

Dr. Abhinav Gautam, Asst. Prof., IIIT Bhagalpur  
Dr. Tameshwer Nath, Asst. Prof., IIIT Bhagalpur

**Advisory Committee**

Dr. Gaurav Kumar, Registrar in Charge, IIIT Bhagalpur  
Dr. Pradeep Kumar Biswal, Head CSE, IIIT Bhagalpur  
Dr. Dheeraj Kumar Sinha, Head ECE, IIIT Bhagalpur

**Organizing Committee**

Dr. Purnendu Mandal, MEA, IIIT Bhagalpur  
Dr. Prakash Ranjan, ECE, IIIT Bhagalpur  
Dr. Suraj, ECE, IIIT Bhagalpur  
Dr. Babul Prasad Tewari, CSE, IIIT Bhagalpur  
Dr. Dilip Kumar Choubey, CSE, IIIT Bhagalpur

**About IIIT Bhagalpur**

Indian Institute of Information Technology, Bhagalpur (IIIT Bhagalpur) is one of the 25 IITs set up by MHRD, Govt. of India and it started functioning from the academic year 2017. The institute has already got the status of “National Importance” under the act of parliament. The institute will be set up in 50 acres of area with the-state-of-the art campus and will boast of multimedia board room, smart class room, lecture halls and Wi-Fi facilities etc. Presently the institute offers three-degree engineering courses in Mechatronics Engineering, Electronics and Communication Engineering and Computer Science and Engineering. The institute is going to start M.Tech, Ph.D., and dual M.Tech-PhD program from July 2021.

The department of Mechatronics Engineering is currently offering graduate course. The program aims to provide core concepts and skills in the area of Mechatronics Engineering supported by practicums. It combines mechanical design, manufacturing, automation and electrical/electronics control within a foundational context of design and manufacturing.

The department has state-of-the-art infrastructure and Instrumentation equipment in Mechatronics Laboratory, advanced machining

and manufacturing facilities in the workshop. The manufacturing equipment like 3D printer, CNC Wire EDM, automated lathe, milling, shaping, shearing machine are able to support research activities and industry solutions in the field of Robotics, Automation, Intelligent materials and EV mobility.

**About the Short Term Course**

In the era of interdisciplinary research, the importance of Mechatronics Engineering is signified by its capabilities to enhance the functionality and features of traditional systems. Its application domain ranges from basic appliances, health and defense sector to automation industry. Reliability of any product or system depends upon the manufacturing process those are well supported by precise and accurate measurement. Increased automation in the workplace has led to remarkable technological advances. Application of instrumentation leads to measurement which will give precise and accurate results for enhancement of system reliability. Development of materials like intelligent/smart materials and bio-inspired material provide the combination of high quality, cost efficient and increased application domain in various engineering field. The ability to change their physical properties in a specific manner in response to specific stimulus input make the intelligent a hot cake in the field of materials research, while properties like self-healing give bio-inspired material a unique identity. The discussion of above mentioned filed is going to make the short term course not only very interesting and informative but also thought provoking.

## Objective and Outcomes

The major objective of this on line short term course is to address a detail exposure to Students, faculty members and research scholars of different Institutes about recent advancement and technical challenges in the field of Mechatronics & Instrumentation and application of Intelligent and Bio-inspired Materials.

At the end of the course, the participants should be able to understand and apply the following topics:

- Instrumentation and Automation
- Data Acquisition System
- Intelligent Materials and its application
- Material behavior under different loading condition
- Thermal Management on Mechatronics
- Bio-Inspired Materials and its application domain
- Fundamental of Robotics

## Resource Persons

Internationally acclaimed faculty members from premier institutions like IIT, NIT, IIT and abroad.

## Who Can Participate

Students, Research Scholars and Faculty members of UGC/AICTE recognized

Universities and Engineering colleges all over India and abroad

## Number of Seats (Tentative)

25 (on first come first serve basis)

**Participant will get certificate after the successful completion of the course.**

## Registration Process

Registration will be done through attached brochure (Send to Coordinators) or online using google form.

**Last date of submission of application: 08<sup>th</sup> February , 2021.**

## Registration Fee (INR)

From Academic: 500

From Industry: 1000

## Mode of Payments

For Internet Banking User:

**Bank Name:** UCO Bank, Sabour, Bhagalpur.

**Account Number:** 11270110047149

**IFSC Code:** UCBA0001127

**Account Name:** Indian Institute of Information Technology Society Bhagalpur.

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### REGISTRATION FORM

Name (Mr/Ms/Dr.).....

Designation.....

Department.....

Institute/Organization.....

Address.....

.....

.....

Email: .....

Mobile Number .....

WhatsApp Number.....

Payment Details:

Online payment Reference number

.....

Date .....

Amount.....

Signature of Applicant

Click the following link for online registration:

<https://forms.gle/FKmd7Wt7LJWEPRTXA>