

**A Short Term Course**  
on  
**Mechatronics and Electrohydraulic System**  
*from May 14 to May 18, 2018*  
under  
Twining Plan of World Bank assisted  
**TEQIP –III Program of Government of India**  
Organized by  
Mechanical Engineering Department  
Jadavpur University, Kolkata 700032

**Overview of the Course**

A mechatronic system has a dynamic core that is essentially a mechanical or electromechanical system interfacing with electronic equipment like sensors, amplifiers and real-time processors. Some examples of mechanical systems are the whole or a unit of a washing machine, an auto-focus camera, the fuel-injection, steering and braking systems of a car, elevon and rudder of an airplane for its navigation control, serial and parallel manipulators used in excavation, mining and manufacturing. The electrical system could be a heater in a heat-treatment furnace or a solenoid in an actuator. Indeed the devices are electrohydraulic, in case the applications require motion of heavy payloads. Modern industrial practices demand that mechanical and automobile engineering students should have good exposure on this subject right from undergraduate level. The aspects of technological advancements and designing energy-efficient systems and high-precision controllers keep the research interest very much alive. With a view to equip the faculty members and research scholars to this emerging area, a five-day short-term course will be conducted by Mechanical Engineering Department of Jadavpur University from May 14 to May 18, 2018. The department has a long-term association to many collaborative projects of national importance and quality research in this area. Besides theoretical dispositions, use of software packages for design analysis and real-time systems will be discussed along with provisions for hands-on sessions.

**Resource Persons and Coordinators**

1. Prof. Dipankar Sanyal, Mechanical Engineering Department, Jadavpur University
2. Prof. Saikat Mookherjee, Mechanical Engineering Department, Jadavpur University
3. Prof. Rana Saha, Mechanical Engineering Department, Jadavpur University

**Registration Fees:** Nil

**Maximum number of Participants:** 20 including 5 from Mentee Institution

**Eligibility for Participation:** Faculty members and scholars in pertinent engineering discipline

## **Registration Form**

1. Full Name
2. Mobile Number
3. Email
4. Designation
5. Institute
6. Mailing Address

**Signature of Applicant (with seal)    Forwarding Signature of Head Institute/Department (with seal)**

Applicants may contact Prof. Dipankar Sanyal at [dipans26@gmail.com](mailto:dipans26@gmail.com) or at the mobile number 9831483461 for any clarification. The maximum number of participants will be restricted to 20. The program will be conducted from 10am to 5pm on all the days. An advanced invitation for attending the course will be sent to an applicant submitting a scanned copy of the registration form. The application must be received by May 1, 2018 at the indicated email address. However, the ink-signed hard copy should be submitted at the time of attending the program.