

**DST-Science and Engineering Research Board (SERB), Govt of India, New Delhi
Sponsored Five days Seminar on Next Generation Automation: Bridging Electronics
and Mechanical systems in Industry 4.0**

Objective of the Seminar

Educating future students and researchers in interdisciplinary approaches prepares them to tackle the complex challenges of the future and fosters a more adaptable and resilient scientific workforce. The Interdisciplinary study promotes collaboration and communication skills among faculties, students & researchers, as they learn to work effectively across disciplinary boundaries. Interdisciplinary training helps faculties and students to develop a broader skill set and a more flexible mindset, making them more adaptable to changes in research trends, methodologies, and the evolving needs of society. In Industry 4.0, there's a growing emphasis on integrating electronics and mechanical systems to create interconnected and intelligent production environments. IoT plays a crucial role in next-generation automation by connecting devices and equipment across the manufacturing floor. Here are some key aspects and trends within this broad area: Advanced Robotics, Cyber physical Systems, Additive manufacturing (3D printing), Digital twins, Artificial Intelligence and machine learning, Block chain technology etc

Course Contents of the Program

- Introduction to Industry 4.0: Trends and Challenges
- Fundamentals of Electronics and Mechanical Integration
- Sensor Technologies for Smart Automation Systems
- Advanced Robotics and Machine Learning in Industry 4.0
- Internet of Things (IoT) Applications in Manufacturing
- Cyber-Physical Systems Security in Industry 4.0
- Additive Manufacturing and 3D Printing Innovations
- Autonomous Vehicles: for Smart Transportation
- Safety and Compliance in Industry 4.0: Integrating Electronics and Mechanical Controls
- Cloud Computing

- Safety and Compliance in Industry 4.0: Integrating Electronics and Mechanical Controls
- Cybersecurity Challenges in Integrated ElectronicsMechanical Systems of Industry 4.0
- Quantum Computing
- Blockchain Technology
- Machine Learning
- Data Analytics
- Python Programming
- Drone Technology for Industry 4.0

Registration Details

- Participants are requested to fill online registration form.
- Payment should be done through online mode.
- Eligible participants will be selected based on First Come First Serve (FCFS) basis and selected participants will be intimated via E-mail.
- On the last day of the program an assessment test will be conducted for all registered participants.
- Those who have an attendance of minimum 80% and score more than 60% in the test will be issued a certificate.
- Registration Fee: Rs. 300/-
- Payment Link : <https://www.reva.edu.in/payment>

DST & SERB sponsored Faculty Development Programme (FDP) on
" Next Generation Automation: Bridging Electronics & Mechanical Systems in Industry 4.0 ",

Payment link:

<https://www.reva.edu.in/payment>