



Online Short -term Course

On

Recent Trends in Modeling and Control of Dynamical Systems (RTMCDS)

Under the banner of

Department of Electrical Engineering at National
Institute of Technology Rourkela

23rd June to 27th June, 2023



Patron

Prof. K. Umamaheshwar Rao
Director, NIT Rourkela

Coordinators

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Dept. of Electrical Engineering,
NIT Rourkela

Organized by

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<https://website.nitrkl.ac.in/EE/>

Technical Co-Sponsor



About NIT Rourkela

National Institute of Technology Rourkela was founded as Regional Engineering College, Rourkela in 1961. It is a prestigious Institute with a reputation for excellence at both undergraduate and postgraduate levels, fostering the spirit of national integration among the students, a close interaction with industry and a strong emphasis on teaching and research in both basic and applied fields. The Institute houses twenty versatile departments across different fields of engineering, science, management, and humanities. Being an Institute of National Importance, it has been consistently ranked within TOP 20 engineering institutes for last five consecutive years as per NIRF ranking of Ministry of Education, Government of India. It is ranked 15 in the NIRF Rankings 2022 of Indian Engineering Universities.

Course Overview

This online short-term course on “Recent Trends in Modeling and Control of Dynamical Systems (RTMCDS)” brings an opportunity for academicians, research scholars and PG/UG students across various engineering disciplines and mathematics to explore the field of control systems engineering. This program will help participants not only to grasp the various modern control engineering concepts but also their applications. In this era of interdisciplinary research and practice, control engineering concepts are widely used across other engineering domains as

well. Therefore, knowing the basics and design techniques enables one to think, create and make efficient use of control engineering for solving problems in their respective domains. Therefore, this is an attempt to get experts related to control engineering from premier institutes of India, abroad and industry to give participants a good exposure to the emerging trends in the field of control engineering.

Objectives of the Program

- To impart knowledge of principles, challenges, and practices in modelling and control of real-world dynamical systems for academicians, researchers and students
- To promote the use of control theoretical tools to solve problems in various engineering domain
- To introduce cutting-edge research trends in the field of control system engineering

Application Areas

The following application areas will be covered with possible simulation/experimental exposure:

- Energy storage systems (Battery, Fuel Cell, Solar PV Cell etc.)
- Multi-agent systems
- Power Electronics & Drives
- Smart Grid
- Electric Vehicle
- Cyber-physical systems
- Biological systems

Key Speakers

1. Prof. Abhilash Patel, IIT Kanpur
2. Dr. Ramnarayan Mohanty, INTEL Bengaluru
3. Prof. Parijat Bhowmik, IIT Guwahati
4. Prof. Arnab Dey, IIT Roorkee
5. Prof. Satnesh Singh, IIT Ropar
6. Dr. Sabyasachi Bhattacharya, KPIT Bengaluru
7. Prof. Pratyasa Bhui, IIT Dharwad
8. Dr. Arunava Naha, Uppsala University, Sweden
9. Prof. Joyjit Mukherjee, BITS Pilani, Hyderabad
10. Dr. Kushal Chakrabarti, TCS Research Mumbai
11. Prof. Krishnama Raju S, VNIT Nagpur
12. Bikky Routh, Exide Energy, Bengaluru
13. Prof. Somnath Maity, NIT Rourkela
14. Prof. Susovan Samanta, NIT Rourkela
15. Prof. Asim K. Naskar, NIT Rourkela
16. Prof. Shubhobrata Rudra, NIT Rourkela
17. Prof. Arijit Guha, NIT Rourkela
18. Prof. Abhishek Dey, NIT Rourkela

Short Term Course includes

Five Days Training will be taken by a group of experts from India and Abroad from academia and industry. The training hour is 6 hours each day. Mode of training is Instructor-led live online.

- 30 Hours Instructor-led live online Hands-on based learning & Interactive Query Session.
- Soft copy of study material, Training PPTs
- Participants will get recorded sessions after completion of training

- E-Certificates will be given to participants who have attended more than 70% sessions in the workshop.

Who Can Participate

Faculty members, Research scholars of recognized Universities from both India and Abroad, Research scholars, Students and Industry personals. However, priority will be given to the faculty members.

Registration Fee

For Indian Nationals: Rs. 500/- (Faculty/ Research Scholar/Student), Rs. 1000/- (Industry)

For Foreigners: 60 US Dollars (Faculty/Research scholar/student), 80 US Dollars (Industry)

Registration Process

1. Registration fee should be paid through online mode, the account details for this purpose is
Account Name: CONTINUING EDUCATION,
NIT ROURKELA
Account No.: 10138951784
IFSC Code: SBIN0002109
2. Registration link:
<https://forms.gle/iH1hCAWNee4J4qBu9>
(Please fill the google form and attach proof of payment.)
3. Registration deadline: 22 June 2023 11:59 PM (IST)