

Whom will the course benefit?

Faculty members and practicing engineers in the disciplines of Aerospace Engineering, Control and Instrumentation, Chemical Engineering, Electrical & Electronic Engineering, Mechanical Engineering, Systems and Control, Robotics etc.

Course Objective:

To provide basic theoretical background on Nonlinear and Adaptive control topics as well as to give a good exposure about a few selected research topics.

Course Contents:

- ❖ Introduction and Motivation
- ❖ Overview of Linear Modern Control
- ❖ Dynamic Inversion Design
- ❖ Lyapunov Stability Theory
- ❖ Back-Stepping Design
- ❖ Neuro-Adaptive Control
- ❖ Model Reference Adaptive Control
- ❖ Advanced Concepts in Adaptive Control
- ❖ Differential Geometric Control
- ❖ Sliding Mode Control
- ❖ Selected Topics from Literature

Faculty:

- Prof. Radhakant Padhi, IISc, Bangalore
- Prof. Ravi Banavar, IIT Bombay
- Dr. Subhendu Bhasin, IIT Delhi
- Dr. Sachit Rao, IIIT Bangalore

Eligibility:

The course is meant for faculty of engineering colleges recognized by All India Council for Technical Education (AICTE), National Institutes of Technology (NIT's) and National Institute of Technical Teachers' Training & Research (NITTTRs). Selected teachers will be paid TA at actual subject to the limit of Three tier AC train/bus fare by the shortest route from the place of work to Bengaluru and back. **However, the maximum TA payable is Rs.3000/-**. They will be provided with a daily allowance of Rs.500/- towards boarding and lodging as per QIP rules, and will be supplied with the course materials. **The lodging charges will be Rs.300/- per day. Local participants will be paid DA @ Rs.150/- per day for 5 days.**

Course Fee and Accommodation:

A few seats are available for non-sponsored (self-support) teachers, scientists from research labs, practicing engineers from industries and other interested persons, the fee for them will be as follows:

Private Industries : **15,000 INR**

Academic Institutes, Govt. R&D Labs: **10,000 INR**

Single room accommodation is available on the Institute campus at the Hoysala House subject to availability. The participants have to request in advance along with the registration form for such accommodation. The lodging charges will be **Rs.1500/- per day for Industry participants and Rs.1000/- per day for self-support college teachers and scientists from national R&D labs.**



CENTRE FOR CONTINUING EDUCATION
Indian Institute of Science,
Bengaluru -560 012

QIP Short Term Course On

“Nonlinear and Adaptive Control Design”

12-16 June, 2017

Registration Form

(Please mail to reach before **15 May 2017**)

1. Name.....
2. Age:..... Sex: Male/Female
3. Office address
.....
.....
.....
4. Landline No. with STD code:.....
5. Mobile No.
6. Email ID:.....
7. Academic Qualifications
Degree subject year University
Diploma/B.Sc./B.A.....
B.E/B.Tech/M.Sc.
M.E/M.Tech./M.Phil.....
Ph.D. Completed/Pursuing/Intend pursuing:.....
Thesis title/Proposed Research Area:.....
.....
8. Teaching Experience.....(Years)

9. Industry Experience(Years)
10. Course taught/professional responsibilities.....

11. Accommodation required Yes / No
12. Self-support candidate :
 Academic Institutes, Govt. R&D Labs: **Rs. 10,000**
 Private Industries : **Rs. 15,000**

Demand Draft No..... dated.....

I agree to abide by the rules of the QIP courses. If selected, I shall participate in the course for the entire duration.

Date: _____
 Place: _____ Signature _____

The applicant Mr/Ms.....

.....
 from our institution will be permitted to attend the QIP Short Term Course on “**Nonlinear and Adaptive Control Design**” to be held during **12th-16th June, 2017** at the Indian Institute of Science, Bengaluru, if selected. He/she will be granted necessary leave of absence.

It is certified that our college is recognized by AICTE Order No:.....Date:.....

Place: _____
 Date: _____ Signature of Head of the Department _____

Signature and Seal of the Principal of the Institution

(Xerox copy of this form may also be used)

Intending participants may use the attached application form or a xerox copy of the same. Applicants from AICTE recognized colleges, NIT’s and NITTTRs are required to submit their applications sponsored by their colleges Non-sponsored (self-support) teacher applicants should send their application along with a **DD for the course fee** drawn in favor of “**Registrar, Indian Institute of Science, Bengaluru -560012**” payable at Bengaluru. The course fee will be **Rs. 10,000** for participants from **academic institutions and government R&D labs**, and **Rs. 15,000** for participants from **other organizations**.

Deadlines:

- Receiving completed applications: **15 May 2017**
 Intimation of selection: **18 May 2017**

Please mail the filled-in application form to:

The Officer-in-charge
 Centre for Continuing Education
 Indian Institute of Science
 Bengaluru - 560 012
 Telephone: 080-23600911, 22932055
 Email: so@cce.iisc.ernet.in/
 office@cce.iisc.ernet.in

To reach on/before: 15th May 2017

**QIP Short Term Course On
 “Nonlinear and Adaptive
 Control Design”**

12-16 June, 2017

Coordinator

Prof. Radhakant Padhi
 Dept. of Aerospace Engineering

Sponsored by
 AICTE, NEW DELHI



Centre for Continuing Education
 Indian Institute of Science
 Bengaluru – 560 012
<http://www.cce.iisc.ernet.in>