

## REGISTRATION FORM

Short Term Course on  
Smart Sensing and Intelligent Systems  
(SSIS 2016)  
June 14-18, 2016

Dept. of Electrical Engineering, National Institute of  
Technology, Durgapur –713209,  
West Bengal, India

1. Name in Block Letters: \_\_\_\_\_
2. Designation & Affiliation: \_\_\_\_\_  
\_\_\_\_\_
3. Male/Female: \_\_\_\_\_
4. Mailing Address: \_\_\_\_\_  
\_\_\_\_\_
5. Mobile No. : \_\_\_\_\_
6. E-mail ID : \_\_\_\_\_
7. Registration fees: Demand Draft No. \_\_\_\_\_  
Date \_\_\_\_\_ Amount \_\_\_\_\_

(DD should be drawn in favour of "SSIS 2016", payable at Durgapur.)

8. Vegetarian / Non-Vegetarian: \_\_\_\_\_

*N.B.: Photocopy of this form may also be used for registration.*

*Signature of the Applicant with date*

**The Applicant is hereby sponsored and will be permitted to attend the above short term course, if selected.**

*Signature and Seal of the Sponsoring Authority/  
Head of the Department/Organization*

### ORGANIZING COMMITTEE

**Patron:** Prof. Asok De, Director, NIT Durgapur

#### Advisory Committee:

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Prof. S. Chattopadhyay, Dean (R & C)  
Prof. A. Gangopadhyay, Dean (Faculty Welfare)  
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Prof. Subrata Banerjee, Head, EE Department, NIT Durgapur

#### Workshop Coordinators:

Dr. Ciranjib Koley  
Dr. Partha Sarathee Bhowmik  
Dr. Suman Halder

#### Members:

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Mr. S. Sarkar, EE Department., NIT Durgapur  
Mr. R Dey, EE Department., NIT Durgapur

### ADDRESS FOR CORRESPONDENCE

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Coordinator, SSIS 2016

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*Please send the completed application form together with demand draft to the coordinator on or before May 31, 2016, also send the scanned copy of the said documents by E-mail to [intellegentsensing@gmail.com](mailto:intellegentsensing@gmail.com)*

TEQIP-II Sponsored Short Term  
Course on

# Smart Sensing and Intelligent Systems (SSIS 2016)

June 14 - 18, 2016

Organized by

Department of Electrical Engineering



Course Coordinators:

**C. Koley, P. S. Bhowmik, & S. Halder**

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## THE INSTITUTE

National Institute of Technology Durgapur (NITD) is a leading technical institute offering undergraduate, postgraduate and doctoral programmes in various disciplines of engineering, technology, science, social science and management. NITD was established as a Regional Engineering College (REC) in 1960 as a joint venture of the Government of India and Government of West Bengal. REC Durgapur was converted to NIT Durgapur under the full administrative and financial control of the Ministry of Human Resource Development of Government of India with a Deemed University status on 3rd July, 2003. Subsequently NITD has been given the status of a University by the UGC Act. The Institute was declared an **Institute of National Importance** by the Government of India on August 15, 2007.

The city of Durgapur is recognized as one of the fastest developing Tier-II cities in the national scenarios. Durgapur is situated at a distance of about 180 KMs from Kolkata. It is located right on the major railway and expressway (NH-2) connecting Kolkata to Delhi and Durgapur can be reached from Kolkata (and vice versa) in ~ 2 hrs. 30 minutes.

## THE DEPARTMENT

The Electrical Engineering course was initiated along with the Institution in 1960. Besides UG and PG courses, the Department also offers Ph.D. program. A good number of Ph.D. degrees have been awarded under the supervision of the faculty members of the Department and a number of students are perusing for their Ph.D. degrees. The Department, over the years, has successfully completed a number of sponsored and consultancy projects. Theoretical and experimental investigations are being carried out in the areas like power systems, control systems, power electronics & machine drives, high voltage, instrumentation etc. Since inception the department is continuously contributing novel and innovative ideas in Electrical Engineering to keep pace with the latest technological developments. The department regularly organizes invited lectures by experts from academic and R&D institutions as well as industries in various fields of Electrical Engineering. The Department is well equipped with highly sophisticated and modern laboratories.

## ABOUT THE SHORT TERM COURSE

Intelligent systems are a new wave of embedded and real-time systems that are highly connected, with massive processing power and performing complex applications. Their pervasiveness is reshaping the real world and how we interact with our digital life. These intelligent systems are creating new opportunities for industry, business, and new experiences for users, consumers, and researchers. These systems are now quite visible in the domains of

automotive, rail, aerospace, defence, energy, healthcare, telecoms and consumer electronics.

'Smart' sensors with embedded microprocessors and wireless communication links have the potential to change fundamentally the way civil infrastructure systems are monitored, controlled, and maintained. Intelligent sensors are likely to play an important role in science and engineering, but eventually its influence may extend much further. Smart sensors represents a significant paradigm shift in the aims of sensing.

The main goal of intelligent systems is to solve nonlinear and mathematically un-modelled systems. Several soft computing techniques like, Fuzzy Logic, Neural Network, Support Vector Machines, Evolutionary Computation and Machine Learning and Probabilistic Reasoning play an important role in developing intelligent systems. Most of these systems comprises of human knowledge such as cognition, recognition, understanding, and learning.

## TOPICS TO BE COVERED

The main focus of the course will be on the following topics:

- Measurement and Instrumentation
- Sensor and Sensor Technology
- Biomedical Instrumentation
- Soft Computing
- Machine Learning
- Intelligent Systems

## CALL FOR PAPERS

In this programme, there will also be a scope of paper presentation (not mandatory) among the participants of SSIS-2016 covering the theme of the course. No extra fee will be charged for paper presentation. The last date of paper submission: 31<sup>st</sup> May, 2016

Prospective authors are invited to submit their original technical papers for publication in the course proceedings and for oral presentation. All submissions should be in standard IEEE format with a maximum paper length of four (4) printed pages. Authors should send PDF files only for review *by E-mail to [intellegentsensing@gmail.com](mailto:intellegentsensing@gmail.com)*

Research papers are invited on (but not limited to) the following topics:

- Biomedical Systems,
- Electrical System
- Measurement and Instrumentation
- Computer Science and Information Technology
- Electronics and Communication
- Civil Engineering

- Mechanical Engineering

## RESOURCE PERSONS

The resource persons constitutes of experts/faculty members from NIT Durgapur and guest speakers from other reputed institutions and industries including IIT's, JU, CU, ITER Bhubaneswar, ISM, BESU, CMERI, DSP, PGCIL etc.

## WHO CAN ATTEND SSIS 2016

**SSIS-2016** is aimed to attract and bring together Faculty Members, Scientists, Engineers, Technologists, Research Scholars and PG students from Academic and Research Institutions and Industries. The participants will get new insights and knowledge about the topic through close interactions/discussions with the Scientists and Experts of the respective field.

## BOARDING & LODGING

Boarding, lodging and travel expenses shall be borne by the participants. Limited shared accommodations may be available in the Institute Guest House on first come first served basis. Several good hotels are available in and around Durgapur. Participants may contact directly or through the coordinator(s) for accommodation in hotels. No TA/DA will be paid to the participants by NIT Durgapur.

## REGISTRATION FEES

Fees applicable for participants from

Industry: Rs. 4000.00

Academic & R& D Institution: Rs. 1800.00

Research Scholar: Rs. 1500.00

Post Graduate Student: Rs. 1000.00

*Registration fee includes registration kit, study/lecture materials / proceedings, refreshment and lunch for 5 days during the course.*

## SPONSORSHIP

- Proceedings Back Cover : Rs. 2000.00
- Proceedings Inside Cover : Rs 1000.00
- Proceedings Full Page : Rs. 5000.00
- Proceedings Half Page : Rs 3000.00

Payment may please be made by cheque/draft in favour of **SSIS 2016**, Payable at Durgapur.