

Indian Institute of Technology (Indian School of Mines), Dhanbad

Department of Computer Science & Engineering

Deadline Extended to 18 January, 2017

Short Term Course on

Recent Trends in Wireless Sensor Networks and Internet of Things

(21-25 January, 2017)

Importance and Scope of the Course

The field of Wireless Sensor Networks (WSNs) is one of the most emerging areas which has gained enormous popularity worldwide due to their potential applications. It has got new flavour due to emergence of Internet of Things (IoT) in the recent years. There is a need to develop expertise in WSNs augmented with IoT for their successful applications in smart grids, smart cities, health care, intelligent transportation and so on. The major objective of this course is to provide a solid algorithmic background to the participants through lecture presentations and hands on laboratory works on these related fields. Each theoretical session will be demonstrated with hands-on practical session in MATLAB environment.

Course Content

The short term course aims to include the following topics:

- An introduction to WSNs
- · Clustering and routing algorithms
- Evolutionary algorithms for WSNs
- Target tracking algorithms
- · Coverage-aware algorithms
- Fault Tolerant algorithms
- Mobile sink and associated algorithms
- Power transfer with mobile chargers
- Introduction to IoT
- Building Blocks and Architecture for IoT
- Convergence of Cloud and Big Data
- Basics of Security
- · Applications of IoT

Who Can Attend

UG and PG Students, Research Scholars, Faculty members, Scientists and persons from industries

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Speakers:



Prof. Prasanta K. Jana

Department of Comp. Sc. & Engg. IIT(ISM), Dhanbad



Dr. Sudip Mishra

Department of Comp. Sc. & Engg. IIT, Kharagpur



Dr. Tarachand Amgoth

Department of Comp. Sc. & Engg. IIT(ISM), Dhanbad

Coordinators:

Prof. Prasanta K. Jana & Dr. Tarachand Amgoth IIT(ISM), Dhanbad

About IIT(ISM), Dhanbad



IIT(ISM), Dhanbad, previously known as Indian School of Mines, Dhanbad is a fully residential institution, situated in Jharkhand, India. It was established in 1926 on the model of Royal School of Mines, London. Apart from earth and mineral science departments of national and international reputation, the institute has expanded with diverse branches in engineering including Computer Science and Engineering, Electronics Engineering, Electrical Engineering, Mechanical Engineering, and also Master of Business Administration. Due to its significant contributions in technical education, research and technology development, institution has been upgraded to full-fledged IIT.

About CSE Department



The Department of CSE was established in the year 1997 to keep abreast with the recent technological advancements in the field of Computer Science. The Department has presently 16 faculty members. It offers two UG courses, B. Tech. in CSE and Dual Degree in CSE selected through IIT-JEE (Advanced), two PG courses, M. Tech. in CSE and M. Tech. with Specialization on Information Security, selected through GATE. The department also offers Ph.D. in CSE. The department has several projects sponsored by government organizations like CSIR, MIT, DRDO and UGC. Organizing conferences, workshop, short term courses etc is the regular practice of the department. The International Conferences RAIT-2016, RAIT-2016, and RAIT-2012, National Seminars RAIT 2009 and RAIT 2007, workshop WPDC 2008 are some of the events organized by the department.

Location Details

IIT(ISM) is well connected by rail and road. The institution is located at a distance of about 3 Kms from Dhanbad Railway Station in Jharkhand State. Dhanbad station is on the grand chord of Eastern Railways and well connected with Howrah, Delhi, Mumbai, Chennai, Hyderabad, Lucknow, Aligarh, Tata Nagar and Ranchi.

Course Fee

Participants	Course fee
PG Students	Rs. 4000 + 15% Service Tax
Research Scholars	Rs. 6000 + 15% Service Tax
	or
	*Rs. 10000 + 15% Service Tax
Faculty members / Scientists from R&D/ industries	Rs. 8000 + 15% Service Tax
	or
	*Rs. 12000 + 15% Service Tax
Foreign Participants	*USD 250 + 15% Service Tax
	or
	*USD 310 + 15% Service Tax
Internal Candidates	Rs. 500 + 15% Service Tax
(PG & RS, full time)	

^{*} Includes accommodation and meal (breakfast, lunch & dinner) charges

Accommodation

Limited accommodations are available at EDC and IIT(ISM) HOSTELS (PG & RS only) on payment basis. Registered candidates with accommodation and meal will be housed at EDC of IIT(ISM) during 20-25 January 2017 on sharing basis.

Registration Information

Please fill-up the registration form (see last page) and deposit the registration fee online to A/C No. 0986101009746 of Canara Bank, IFSC Code: CNRB0000986, Name of A/C holder: Registrar, IIT (ISM), Dhanbad and email the filled up registration form to the course coordinator by 18th January, 2017. Participants can also send the hard copy of the registration form along with the Demand Draft (DD) drawn in favor of "Registrar, IIT(ISM) Dhanbad", payable at Dhanbad.

Contact Details

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REGISTRATION FORM

Name:	
Designation:	
Name of the Institute/Organization:	
Academic Qualifications:	
Address for Correspondence:	
E-mail:	
Mobile No:	
Accommodation Required: (Yes/No?)	:
Details of Demand Draft /Online payr	ment:
Amount:	
DD Number/ Online Transaction ID:	
Date of payment:	
Place:	
Date:	Signature of Applicant