

Electronics and ICT academy at National Institute of Technology Patna

Setup under scheme of

Department of Electronics and Information Technology (DeitY), Ministry of Communications and IT, Govt. of India



In Collaboration With
MCA Department,
Techno India
Saltlake, Kolkata



Proposes
Faculty Development Programme
on

Pattern Recognition

Duration: 20/07/2016 – 29/07/2016

Chief Investigator

**Prof. (Dr.) Asok De, Director
NIT Patna**

Organised by
CSE Department, NIT Patna

Course Coordinator:

**Prof. Rajib Ghosh,
Assistant Professor
Department of CSE, NIT Patna**

About NIT Patna

National Institute of Technology Patna is the 18th National Institute of Technology created by the Ministry of H.R.D. Government of India after rechristening the erstwhile Bihar College of Engineering Patna on 28. 01. 2004. NIT Patna marked its humble beginning in 1886 with the establishment of pleaders survey training school which was subsequently promoted to Bihar College of Engineering Patna in 1924. This made this Institute the 6th oldest Engineering Institute of India. The Institute is situated on the south bank of holy river Ganges behind Gandhi Ghat (where the ash of father of the Nation, Mahatma Gandhi was offered in the river Ganges). The campus has a picturesque river view with historic building presenting a spectacle of architectural delight and natural beauty. The Institute imparts high level education training, research and development in science, engineering technology and humanities along with high quality education and values at UG, PG and Ph.D level. At present the Institute has seven degree offering disciplines viz. Architecture, Civil Engineering, Computer Science & Engg., Electrical Engg., Electronics & Communication Engg., Information Technology and Mechanical Engg., and well established departments of physics, Chemistry, Mathematics and Humanities and Social Science.



About Electronics and ICT Academy

DeitY has sponsored a scheme entitled "Scheme of Financial Assistance for setting up of Electronics and ICT Academies". The objective of the above scheme is to set up seven (07) Electronics and ICT Academies as a unit in IITs, NITs, and IIITs etc. for faculty/mentor development/up-gradation to improve the employability of the graduates/ diploma holders in various streams, through collaboration of States/Union Territories with financial assistance from the Central Government. Electronics and ICT Academy would aim to provide specialized training to the faculty members of Engineering, Arts, Commerce & Science colleges, Polytechnics etc., by developing state-of-

the-art facilities. The Scheme has been approved on 14.11.2014. Subsequently, an Empowered Committee under the chairmanship of Secretary, DeitY has accorded approval for setting up academy in NIT Patna.

Course Objective

This program is essential for enhancing the vision of faculty members of engineering institutions by exposing them to the new development taking place in the areas of Pattern Recognition along with the traditional and classical ways both theoretically and practically.

Topics Covered

- Introduction to pattern recognition: pattern, classes, clusters, supervised and unsupervised learning
- Feature Selection: Fisher's discriminant, PCA, LDA, FA etc.
- Bayes decision rule, probability of error, Bayes classifier
- Neural network, Deep learning
- Multilayer perceptron, Back-propagation
- Unsupervised learning and Clustering
- Statistical models of Pattern Classification: Gaussian mixture models and Hidden Markov models (HMM)
- Nearest neighbor methods
- Support Vector Machine (SVM)
- Learning with decision Trees
- Applications of PR in document image analysis

Invited Speakers

- Prof.(Dr.) Malay Kundu, ISI Kolkata
- Prof.(Dr.) Shantanu Chowdhury, Professor, IIT Delhi
- Prof.(Dr.) Prabir Biswas, Professor, IIT Kharagpur
- Prof.(Dr.) C. Chandra Sekhar, Professor, IIT Madras
- Prof. (Dr.) K.K.Biswas, Professor, IIT Delhi
- Prof.(Dr.) Umapada Pal, Professor, ISI Kolkata
- Prof.(Dr.) C. A. Murthy, Professor, ISI Kolkata
- Prof.(Dr.) Sumeet Agarwal, Assistant Professor, IIT Delhi

➤ Prof.(Dr.) Suresh Sundaram,
Assistant Professor, IIT
Guwahati

Venue:

**Techno India, Salt Lake
EM 4/1, Sector V, Salt Lake
Kolkata – 700091.**

Application Form
Faculty Development Program
on
“Pattern Recognition”
20th July – 29th July, 2016

Who can attend:

Programmes are open to faculty and research scholars from all the colleges and universities in India. Industry personnel working in the concerned/allied discipline may also apply. Limited seats are also available for **research scholars** engaged in teaching.

How to apply:

By Email – Scanned copy of the filled in application form duly endorsed by the forwarding authority and the demand draft are to be mailed at rajib.ghosh@nitp.ac.in. Application format is given in this brochure. Spot Registration is also possible depending on the availability of seats. In that case all necessary documents along with demand draft may be submitted at the time of on-site registration on July 20, 2016. No Travelling Allowance will be paid by the Academy.

Important Dates:

Last Date of Registration: 18th July, 2016

Course Dates: 20th July -29th July, 2016

For details of the programme and course contents etc., please log on to www.nitp.ac.in.

Registration Fee (lunch inclusive):

Rs. 2000/- for participants from academia

Rs. 5000/- for participants from industry and research organizations

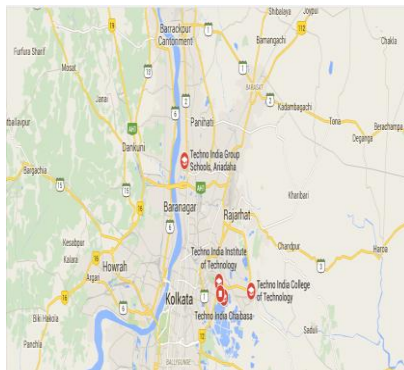
The draft should be drawn in the name of

The Director, NIT Patna Payable at Patna

Accommodation (if needed):

Accommodation expenses will have to be borne by the participants. However, full assistance will be provided in arranging the accommodation.

How to reach Techno India, Saltlake, Kolkata



For more details or a query please contact

➤ **Course Coordinator:**
Prof. Rajib Ghosh, NIT Patna
Email: rajib.ghosh@nitp.ac.in
Phone: +91-8084023813

➤ **Local Coordinator:**

Prof. Sudipta Chakrabarty,
Assistant Professor, MCA deptt.,
Techno India, Saltlake, Kolkata
Email:
chakrabarty.sudipta@gmail.com
Phone: +91-9433316800

Name of the Applicant (first, last):

Gender: _____

Designation: _____

Name and Address of the Organisation/
Institute/College:

City/town: _____ Email: _____

Alternate email (if any): _____

Phone Number: _____

Mobile Number: _____

DD Number: _____ Date: _____

Issuing Bank: _____

Payable at: _____

Signature of the Applicant

I hereby agree to relieve Mr./ Ms./ Dr.

in case she/he is selected to attend the programme.

Signature and Seal of the Forwarding Authority

Name

Designation _____