



## FACULTY DEVELOPMENT PROGRAMME (FDP) ON

### INTELLIGENT ELECTRONIC SYSTEMS DESIGN USING BIO INSPIRED ALGORITHMS

(28-10-2017 to 02-11-2017)

**Organized by**

**KKR & KSR Institute of Technology & Sciences,  
Vinjanampadu, Prattipadu Road, Guntur, Andhra Pradesh**

**in association with**

**National Institute of Technology, Warangal.**

**Under the Scheme of Electronics & ICT Academy**

**(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)**



#### **Preamble:**

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, Gol. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy role is to offer faculty development programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

Emerging and evolving systems are integrating intelligent attributes to enable the thrust towards making technology adaptive and functional as an aid to improve existing designs. Intelligent system integrates different techniques of genetic algorithms, particle swarm optimization, and hybrid models to solve many real-world problems. Nowadays main challenge in data driven problem is getting optimal solutions in time, which can be overcome by application of bio-inspired algorithms. Bio-inspired algorithms are always research topics in artificial intelligence communities. This FDP provides theoretical and practical knowledge on the design and implementation of intelligent systems related to emerging areas of Electronic systems, communication, computer vision, Mechanical Systems, soft computing and related issues. This course offers an applied approach driven by innovation, to facilitate intelligent design and implementation.

#### **Major Course Contents:**

- Intelligent systems design
- Genetic Algorithms
- Particle swarm Optimization
- Differential Evolution
- Teacher Learning based Optimization Algorithm
- Neural Networks Applications
- System Identification
- Channel Equalization
- Image processing
- Wireless Sensor Networks
- Design and synthesis of antenna
- Speech Processing

#### **Faculty conducting this programme:**

The programme will be conducted by the faculty members from NIT Warangal; Academicians in the concerned field from IITs/NITs/IITs are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the course.

#### **Eligibility:**

The programme is open to the teachers of Engineering Colleges, MCA Colleges and other allied disciplines in Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry, Andaman and Nicobar Islands. Industry personnel working in the concerned /allied discipline can also attend.

#### **Registration Fee Particulars:**

Faculty and Research Scholars from Telangana, Andhra Pradesh, Karnataka, Puducherry, Andaman and Nicobar Islands, Goa	Rs. 2500/-
Faculty of SC/ST Category from Telangana, Andhra Pradesh, Karnataka, Puducherry, Andaman and Nicobar Islands, Goa	Rs. 1250/- (SC/ ST participants should submit the copy of their caste certificate to claim the concession along with application form)
Industry Participants	Rs. 7500/-
Participants from other states	Rs. 8500/-

SC/ST concession is only for faculty of mentioned states. Research Scholars are not eligible for SC/ST concession.

The participants need to send a crossed demand draft (DD) drawn in favor of "Director, NIT Warangal" and payable at SBH, NIT Warangal branch.

#### **Organized at:**

The programme will be coordinated and conducted by Department of Electronics and Communication Engineering of KSR & KKR Institute of Technology and Science, Guntur. The whole course is handled by academicians from premier institutions, Industry experts and Research advisors.

#### **Accommodation:**

All the selected participants will be provided FREE boarding & lodging in the institute guest house. No TA will be paid for the participants.

#### **How to apply:**

A filled in form of application in the prescribed format duly signed and sponsored by appropriate authorities (along with demand draft) should reach the coordinator by speed-post. It is also mandatory to send scanned application form and demand draft through e-mail to ravikumar@nitw.ac.in and kitseceict@gmail.com as selection will be intimated only through mail.

#### **Selection Criteria:**

Selection will be done based on first-come-first-serve basis to a maximum number of 50 (fifty). Additionally 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

#### **Important dates:**

Last date (Application & DD)	26 <sup>th</sup> Oct 2017
Selection List by E- mail	27 <sup>th</sup> Oct 2017
Duration	28 <sup>th</sup> October to 02 <sup>nd</sup> November 2017

#### **About NIT Warangal:**

**National Institute of Technology, Warangal** is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years the college has established itself as a premier Institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech. and Ph.D programs in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

#### **About KITS, Guntur:**

**KKR & KSR INSTITUTE OF TECHNOLOGY AND SCIENCES (KITS)** was established in the year 2008, by GSR & KKR EDUCATIONAL SOCIETY in Vinjanampadu village, Vatticherukuru Mandal of Guntur district by Sri. Koye Subba Rao. The Institution was started with four AICTE approved undergraduate programmes in Departments of Electrical and Electronics Engineering (EEE), Electronics and Communications Engineering (ECE), Computer Science and Engineering (CSE), with an overall intake of 180 each. Later programmes in MBA, Departments of Civil Engineering and Mechanical Engineering were inducted. The intake of programmes approved by AICTE and affiliated to JNTUK Kakinada.



## APPLICATION FORM



### **FACULTY DEVELOPMENT PROGRAMME (FDP) ON**

#### **INTELLIGENT ELECTRONIC SYSTEMS DESIGN USING BIO INSPIRED ALGORITHMS (28-10-2017 to 02-11-2017)**

**Organized by  
KKR & KSR Institute of Technology & Sciences, Guntur  
in association with  
National Institute of Technology, Warangal.**

1. Name :
2. Designation :
3. Institution :
4. Email :
5. DD No:                      Bank:                      Date:
  
- Amount:
6. Address for Correspondence:

#### **SPONSORSHIP CERTIFICATE**

Dr. /Mr. /Ms. .... is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on “**Intelligent Electronic Systems Design using Bio Inspired Algorithms**”, sponsored by Electronics & ICT Academy during 28<sup>th</sup> Oct – 2<sup>nd</sup> Nov 2017 at KITS, Guntur-522017

Signature of Head of Institution  
(with seal)

7. Educational Qualification:
8. Subjects taught so far:
  
9. No. of refresher courses/workshops attended:
10. Experience (in years):  
Teaching:                      Research:                      Industry:
  
11. Accommodation required:                      YES / NO
12. Do you belong to SC/ST :                      YES / NO  
(If yes, please specify and attach a copy of caste certificate to claim the concession)

**Address for correspondence**  
*Post your application form with DD to*

**Dr. M. S.G Prasad, Professor & HOD  
Coordinator, FDP on Research Aspects in Signal  
Processing  
Department of Electronics & Communication Engineering  
KKR & KSR Institute of Technology & Sciences  
Vinjanampadu village, Prathipadu Mandal,  
Guntur – 522017, Andhra Pradesh State, India**

*E-mail the scanned copies of filled-in and duly signed application form along with DD to*  
[kitseceict@gmail.com](mailto:kitseceict@gmail.com)

*For more details about Electronics & ICT Academy, NIT, Warangal, please visit:*  
<https://nitw.ac.in/eict>

*For more enquiries please contact:*  
*Mobile: +91-9491956535*

#### **Declaration**

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Signature of the Applicant

### **Coordinators**

**Dr. M.S.G Prasad  
Professor & HOD  
Dept. of E.C.E.,  
KKR & KSR Institute of Technology & Sciences  
Vinjanampadu, Prattipadu Mandal, Guntur-522017  
Andhrapradesh, India.**

**Dr. J. Ravi Kumar  
Asst Professor  
Dept. of E.C.E.  
National Institute of Technology  
Warangal-506004  
Telangana State, India**