

ABOUT THE COLLEGE

The Gudlavalleru Engineering College was established in 1998 by A.A.N.M. & V.V.R.S.R. Educational Society, Gudlavalleru. The College, situated at Gudlavalleru is surrounded by lush green fields providing serene atmosphere to the learners. The college offers B.Tech. programme in six branches of Engineering, viz., Civil, EEE, ME, ECE, CSE & IT., and PG courses in MCA, MBA and M.Tech.(DECS), M.Tech. (ES), M.Tech (CSE), M.Tech (CS), M.Tech (PEED), M.Tech (SE) and M.Tech (MD). The institution is granted autonomous status by UGC for six years and it is recently inspected by the National Board of Accreditation (NBA) of AICTE, New Delhi for 2nd re-accreditation. The college is accredited by NAAC with A grade. The college is also accredited by TCS.

ABOUT THE DEPARTMENT

The Department is offering B.Tech Programme in Electronics & Communication Engineering since 1998 and M.Tech. in Digital Electronics and Communication Systems since 2004 and M.Tech. in Embedded Systems from the academic year 2008-09. The Department has recognized as Research Center by JNTUK-Kakinada in the year 2014. The department has well qualified staff specialized in Microelectronics, Instrumentation and Control, Digital Systems & Computer Electronics, Digital Communication and Networks, Systems & Signal Processing, Microwave Engineering, VLSI Design. Department Labs are equipped with specialized equipment like spectrum analyzer, Digital Storage Oscilloscope, Universal Programmer, Curve Tracer, DSP, VLSI & Embedded System Development Kits supported by software like CCS (Code Composer Studio) for DSP, MATLAB, Aldec VHDL, FPGA Express, Altera Quartus-II, Mentor Graphics (Front End , Back End Tools), Xilinx 13.1i (Project Navigator), Modelsim, Multisim, Ride, etc.

ABOUT THE FDP

Cognitive radio is one of the enabling technologies for future generations of wireless communications systems. The cognitive concept allows cognitive radio users (or secondary users) to have opportunistic access to the radio spectrum when licensed users (or primary users) are not present or when the interference caused by secondary users' access is below a given threshold. This can result in a substantial improvement of the system's spectral efficiency. Continuous sensing and careful monitoring of the spectrum are required in order to allow secondary user access without harming licensed users.

The radio spectrum cycle includes sensing, learning, planning, decision-making, and actions. The set of actions made by cognitive radio users can take different forms such as spectrum access, packet routing, handover, and resource allocation. The actions depend usually on the environmental information acquired during the sensing and learning processes. This information may include the status of the cognitive radio network and the primary network, quality of service, physical channel conditions, trading rules, economic indicators, social impact, environmental impact, etc.

Objectives of the workshop:

- Understanding the principles of SDR and Cognitive Radio Networks.
- Understanding the basics of Spectrum sensing, Spectrum Handoff, spectrum management in Cognitive Radio Network and its RF Challenges.
- Orientation towards taking up research activities in the field of Cognitive Radio Networks.

Course Content:

- Cognitive Radio and its RF Challenges

- Dynamic spectrum access and cognitive radio techniques
- Types of CR systems
- Spectrum sensing
- Co-operative sensing
- Spectrum Handoff
- Global CRN
- OFDM based Cognitive radio
- Spectrum Management of Cognitive Radio Networks

RESOURCE PERSONS

1) Dr. Ram Murthy Garimella

Associate Professor, International Institute of Information Technology, Hyderabad (IIIT-H)

Areas of Research: Cognitive Radio Networks, Computer Networks, Neural Networks and Cybernetics

2) Prof. G. T. Rao

Ex Scientist at Indian Space Research Organization (ISRO), and currently Professor of GVP COE and Visakhapatnam

Areas of Research: Communication Technologies, Network Layer Fiber Optic Systems, Antenna Engineering Estimation Theory Image Processing, Electrical Power Distribution, Adhesive Analysis

WHO CAN ATTEND??

- Faculty of Engineering
- Research Scholars
- Engineers From Industry
- M.Tech Students

REGISTRATION FEE: 200/-

Registration Procedure:

1. All the interested candidates can confirm their participation by sending an e-mail to the coordinator
2. Participants have to pay Registration fee at registration desk.

Registration Procedure Open :03-01-2017

Last Date for confirmation by the candidates: 07-01-2017

Conformation to the Participants :08-01-2017

**Two Day
Faculty Development Programme
On
Research Issues in “Cognitive
Radio Networks”
09th -10th January 2017**

Registration Form

Name (in block letters) :
Age & Sex :
Designation & Dept. :
Institution / Organization :
Mailing Address :
Mobile Number :
E-mail Address :

Signature of the Applicant

Sponsorship Certificate

Dr./Mr./Ms. _____ of
_____ Department is permitted to attend
the Two Day FDP on **Research Issues on “Cognitive
Radio Networks”** organized by the Department
Electronics and Communication Engineering,
Gudlavalleru on 09th and 10th January 2017.

Date: _____ Signature of sponsoring
authority with seal

Organizing Committee:

Dr .V.V.K.D.V. Prasad, *Professor*
Dr.K.N.Prakash, *Professor*
Dr.R.S.Rao, *Professor*
Mr.V. Vittal Reddy, *Assoc. Prof*
Mr. Ch. Rambabu, *Sr. Gr. Asst. Prof*
Mr. P.Rama Krishna, *Asst. Prof*
Mr. K.Rushendra Babu, *Asst. Prof*
Mr. R. Chandra Sekhar, *Asst. Prof*
Mr. B. Ajay Kumar, *Asst. Prof*
Mr. K. Lakshmi Narayana, *Asst. Prof*
Ms. V.G.K. Reshma, *Asst Prof*
Mr. K. Rupesh Kumar, *Asst. Prof*
Mr. M. Veera Punnaiah, *Asst. Prof*
Mr. S. Rajeev, *Asst. Prof*
Ms. Salma Sultana, *Asst. Prof*
Mr. Ch. Amarnatha Sarma, *Asst. Prof*

Patrons:

Dr. Nageswara Rao V, *Chairman*
Sri. M. Srinivasa Rao, *Co-Chairman*
Er. Satyanarayana Rao V, *Secretary & Correspondent*
Sri. Rama Krishna V, *Co-Secretary & Correspondent*

College Officials:

Dr. P. Nageswara Reddy, *Principal*
Dr. P. Ravindra Babu, *Vice-Principal & Dean SA*

Convener:

Dr. M. Kamaraju, *Professor & HoD, ECE*

Co-Convener:

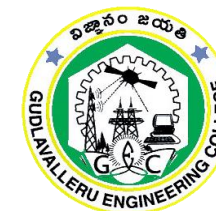
Dr. Y. Rama Krishna, *Professor of ECE*

Advisory Committee:

Dr. S.R.K. Reddy, *Advisor to Mgmt & Prof of CE*
Dr. A.V.N. Tilak, *Prof. of ECE & Dean R&D*
Dr. G.V.S.N.R.V.Prasad, *Prof. of CSE & Dean –AA*
Dr. B. Karuna Kumar, *Dean P&M*
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Dr. M. Siva Kumar, *HoD, EEE*
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Dr. M. Babu Rao, *HoD, CSE*
Dr. M.V.L.N. Raja Rao, *HoD, IT*
Dr. Ch. Nirmal Chand, *HoD, MBA*
Dr. G.S. Bhaskara Rao, *HoD, BS&H*
Dr. M. Vijaya Lakshmi, *HoD, English*

**Two Day
Faculty Development Programme
On
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Radio Networks”**

09th -10th January 2017



Organized by

**Communications Research Group
Department of Electronics and
Communication Engineering**

**GUDLAVALLERU ENGINEERING COLLEGE
(An Autonomous Institute with Permanent Affiliation
to JNTUK, Kakinada)**

**Seshadri Rao Knowledge Village
Gudlavalleru- 521 356, Krishna District, A.P
(Approved By AICTE, New Delhi, Accredited
by NBA & NAAC)**

**Phone: (08674)-273737, 273888
Fax: (08674)-273957
Website: www.gecgudlavalleru.ac.in**

Address for Correspondence:

Mr. R. Chandrasekhar, Asst. Prof, Coordinator
Mobile Number: +91-9492328090
Email id: chandrasekharece403@gmail.com