Declaration by the Candidate

The information furnished above is true to the best of my knowledge and belief. I agree to abide by the rules and regulations governing the programme. If selected, I shall attend the programme for the entire duration.

Signature of the applicant with date

Sponsorship Certificate

Certified that Dr/Mr/Ms..................... is an employee of our Institution and is hereby sponsored for the QIP sponsored STC on “Recent trends in Development of communication: Cognitive Networks”, organized by the Department of ECE, Pondicherry Engineering College, from 16th to 20th November, 2015. He / She will be permitted to attend the course fully, if selected.

Place: Signature of the Sponsoring Authority with seal

Date:

Contact Address:
Dr. D. Saraswady
Dr. M. Thachayani
Department of Electronics and Communication Engineering
Pondicherry Engineering College,
Puducherry – 605 014.
Mobile: 9003529550/9442563577
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Fax: 0413 – 2655101. Website: www. pec.edu
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About the Institution

Pondicherry Engineering College is an autonomous institution promoted and fully funded by the Government of Puducherry. The College was started in the academic year 1985-86 under the seventh five year plan. Ever since its inception, the college has registered speedy progress and presently it is offering eight undergraduate courses, eleven post graduate courses and Ph.D programmes in all branches of Engineering and basic Sciences. The College is spread across 210 acres and has excellent infrastructure, well equipped laboratories and highly qualified faculty members. The college has signed several MoUs with leading international/national institutions/organizations of eminence and is actively involved in various research projects. The college is situated at Pillaichavady, about 12 Km from Pondicherry town and about 150 Km from Chennai along the scenic East Coast Road (ECR) on the shores of the Bay of Bengal. The lush green campus of great scenic beauty and picturesque environment forms an excellent setting for the pursuit of studies in Engineering, Science and Technology.

About the Department of ECE

The Department of Electronics and Communication Engineering (ECE) was started in the academic year 1985-86. The department is offering a B.Tech course in ECE, two M.Tech courses (ECE, and Wireless Communication) and Ph.D program. The department has a team of highly qualified and dedicated faculty members. The department has laboratories equipped with modern and state-of-the-art equipment, a well-furnished seminar hall, smart class room, excellent computing facilities and a department library with several volumes of books. The department has been recognized as a minor QIP centre for pursuing Ph.D programs.

About Puducherry

The coastal town of Puducherry with the French ambience is known for the serene atmosphere. Sri Aurobindo ashram and the nearby Auroville international township lend a unique spiritual flavour to the city. Sri Manakula Vinayagar temple, Promenade beach, Ousteri lake and Chunnambar boat house are some of the major tourist attractions in and around Puducherry.

QIP Sponsored Short Term Course on

**RECENT TRENDS IN DEVELOPMENT OF COMMUNICATION: COGNITIVE NETWORKS**

**November 16th - 20th, 2015**

**Coordinators**

Dr. D. Saraswady
Dr. M. Thachayani

**Organized by**

Department of Electronics and Communication Engineering
Pondicherry Engineering College
Puducherry – 605 014.
Website: www. pec.edu
Fax: 0413 - 2655101
Preamble
Cognitive network is a revolutionary concept in communication networks. A cognitive network is a kind of network that can detect network conditions, traffic patterns and user demands and is able to efficiently take decisions adapting to the new network state on each moment of time. This kind of network is able to meet the needs of a particular user while optimizing available resources of the whole network. Cognitive Radio (CR) is an emerging communications paradigm, wherein a wireless transceiver unit can sense the surrounding environment and adapt itself accordingly. CR technology, along with dynamic spectrum access, has the potential to alleviate the shortage of radio resource. In addition, the cooperative and adaptive nature of the radios has significant impact on jamming/anti-jamming in military communications, representing both a threat to the current systems and an opportunity for their evolution to more secure modes. Similarly, the software-defined Cognitive Optical Networks (CON) utilizing intelligent software as well as flexible optics offers advanced capabilities. These include quality of transmission awareness, client service awareness and sub-wavelength bandwidth services.

This course is intended to provide the participants a comprehensive exposure to the fundamentals and recent developments of cognitive communication and the topics include radio-spectrum sensing, spectrum decision, spectrum sharing and spectrum mobility in CR. Implementation issues and probable solutions thereof will be covered. The features of CON such as flexible optics, advanced capabilities and scope for research will also be covered. The course is designed with due emphasis on the laboratory sessions on the implementation of theoretical concepts through LabView platform.

Eligibility
The faculty Members of AICTE approved institutions/polytechnics and industry professionals are eligible to attend the STC. Admission will be offered subject to the availability based on QIP course norms. The number of seats is limited to 30. Engineers from industries have to pay a course fee of Rs. 5,000/- and they must meet the TA and DA from their own organizations.

Registration
The applicants can submit their duly filled - in registration form in the given format. The demand draft (for participants from industry) should be drawn in favour of “The Principal, Pondicherry Engineering College”, payable at Puducherry. Registration form can be downloaded from the Institute website. Selected candidates will be informed through E-mail and college website. Candidates will be paid Sleeper Class TA and DA as per QIP norms.

Important Dates
Last date for receipt of filled in: 29.10.2015 applications
Date of intimation regarding selection Via E-mail & College Website)