Subject: CPD One Day Short Course on “MIMO for Wireless Communications”

We are proud to inform you that COMSATS Institute of Information Technology Islamabad Campus (CIIT Islamabad) in collaboration with Pakistan Engineering Council (PEC) is organizing Continued Professional Development (CPD) Short Course titled “MIMO for Wireless Communications” to be held on 26th December 2012 at COMSATS campus, Park Road, Chak Shahzad, Islamabad.

During the last decade multi-antenna techniques for Wireless Communications have drawn significant interest from academia and telecommunication industry. Research in multi-antenna systems, often called multiple-input-multiple-output (MIMO) systems, has resulted in the inclusion of MIMO techniques in emerging wireless communications standards. Therefore knowledge of MIMO concepts is necessary for understanding the working of modern wireless systems, an issue which is addressed in this course.

CIIT is endeavoring to provide a platform to provide an overview of MIMO for wireless communications. After attending this course the participants are expected to be able to explain the motivation for MIMO Wireless Communications, describe the basic principles of MIMO, identify major areas of research in MIMO and trends in usage of MIMO in emerging Wireless Standards.

It is requested to please nominate interested students/ engineers/ staff members from your esteemed Organization up to December 20th, 2012. CPD cell of CIIT will award certificates to the registered participants.

We are looking forward for your active participation.

Sincerely yours,

Engr. Ahsan Malik
CPD Coordinator
Lecturer, Department of Electrical Engineering
Email: ahsan_malik@comsats.edu.pk
Phone: 051-9247000-3 ext: 251
Who Can Attend
Professional Engineers and Students in the discipline of Electrical Engineering

Requirements to Attend the Course
• Provide the following information in writing along with Registration Fee latest by December 18, 2012:
  ⇒ Name, Qualification, Organization
  ⇒ PEC registration number (for graduate engineers only, A PEC reg. no. is required for obtaining Pakistan Engineering Council CPD credits)
  ⇒ Contact details (cell, phone, email)
  ⇒ Address (department, business) etc.
  ⇒ Registration Fee:
    ⇒ Professionals Rs 1000/- per person
    ⇒ Students Rs. 500/- per person
Payment can be made by Pay Order/Bank Draft in favor of “CIIT Islamabad”

Filled Registration Forms with Registration Fee should reach the address given below by Dec 21, 2012:
Engr. Ahsan Malik, CPD Coordinator (Lecturer, Dept. of Electrical Engineering), COMSATS Institute of Information Technology, Park Road, Chak Shahzad, Islamabad
Email: ahsan_malik@comsats.edu.pk
Tel: 051-9247000-3 ext: 251

Course Venue
Seminar Hall, Academic block 1
COMSATS Institute of Information Technology, Park Road, Chak Shahzad, Islamabad.

Program
December 26, 2012 Wednesday
Event                  Time (Hours)
Registration           0830-0900
Recitation from holy Quran     0900-0910
Opening Remarks         0910-0915
Session No: 1           0915-1015
  • Introduction to Wireless Communications
  • Motivation for Multiple-Input-Multiple-Output (MIMO) Wireless Communications
  • Basic Concepts in MIMO
Q & A Session           1015-1045
TEA BREAK               1045-1115
Session No: 2           1115-1215
  • Applications of MIMO
  • MIMO in Wireless Communication Standards
  • International Resources (Research Centers, Conferences, Journals, etc.)
Q & A Session           1215-1245
Closing Remarks and Certificate Distribution 1245-1300
LUNCH                   1300-1330

About the Resource Person
Dr Shurjeel Wyne received his B.Sc. in Electrical Engineering from UET Lahore, Pakistan in 1995. From 1995 to 2001 he worked at the Advanced Engineering Research Organization (AERO), Wah Cantt, Pakistan. He received his Masters in Digital Communications from Chalmers University of Technology, Gothenburg, Sweden in 2003. From 2003 to 2004, he was a research associate with the Radio Systems Group at Lund University, Lund, Sweden. In 2009 he obtained his Ph.D. from Lund University in the area of Wireless Communications. From 2009 to 2010 he was a post-doctoral research fellow funded by the High-Speed Wireless Center at Lund University. Since 2010 he is serving as an Asst. Professor at the Dept. of Electrical Engineering, COMSATS, Islamabad.
Dr Shurjeel has worked on measurements and characterization of radio channels for multiple-input-multiple-output (MIMO) systems, ultra-wideband (UWB) systems and sensor networks. He has published over 20 papers in prestigious international journals and conference proceedings. He is a member of the Institute of Electrical and Electronics Engineer (IEEE), USA, and the IEEE Communications Society. He is also an invited reviewer for many international journals such as the IEEE Transactions on Wireless Communications and the IEEE Transactions on Communications.

Purpose and Background
Continuing Professional Development Short Course (0.5 CPD Credit Points)
MIMO FOR WIRELESS COMMUNICATIONS December 26, 2012

Resource Person
Dr. Shurjeel Wyne
Assistant Professor
Department of Electrical Engineering

Organized by
Department of Electrical Engineering
COMSATS Institute of Information Technology
ISLAMABAD CAMPUS
Park Road, Chak Shahzad, Islamabad
Tel: 051 9247000-3

Course Objectives
• To give a concise understanding of underlying principles of MIMO Communications
• To present applications of MIMO in modern wireless communication systems
• Introduce some areas of research in MIMO

Learning Outcomes
The course is designed to provide an overview of MIMO for wireless communications. After attending this course the participants are expected to be able to:
REGISTRATION FORM

For half day Continuing Professional Development (CPD) Course on
MIMO for Wireless Communications
On December 26, 2012 at Department of Electrical Engineering,
COMSATS Institute of Information Technology, Park Road Chak Shahzad, Islamabad
in collaboration with Pakistan Engineering Council (PEC)

Title Prof./DR./Engr./Mr./Mrs./Ms): ____________________________________________
First Name: ___________________________________________________________________
Last Name: ___________________________________________________________________
PEC Registration No: __________________ Status (PE/RE): ____________________________(Mandatory for PEC Registered Participants (PE/RE both) to update CPD record to PEC for verification of returns field by individuals PEC member)
Position & Title: ___________________________________________________________________
Institution/Organization: __________________________ Department: __________________
Academic Background (B.Sc./M.Sc./M.Phil./Ph.D.): __________________________________
Field of Interest / Area of Specialization: ____________________________________________
Mailing Address: __________________________________________________________________
Phone No: ___________ Cell No ___________ E-Mail ________________________________
Registration Fee: ________________________________________________________________
1. Participant Rs. 1000/-Per person
2. Students Rs. 500/-Per person
Pay Order/ Bank Draft No: __________________________ Amount: ____________________
Payment can be made by Pay Order/ Bank Draft/ in the favor of CIIT Islamabad

Please return filled form with registration fee to

CPD Coordinator
Name: Engr. Ahsan Malik
Designation: Lecturer
Department of Electrical Engineering,
COMSATS Institute of Information Technology, Park Road, Chak Shahzad, Islamabad
Phone: 051- 9247000-3 Ext: 251 E-mail: ahsan_malik@comsats.edu.pk
URL: http://ciit-isb.edu.pk/default2.aspx

Signature of Participant
Date: ____________________