DEPARTMENT OF ELECTRONICS

LEADERS GROUP

WINTER INTERNSHIP PROGRAM 2012

CHIEF COORDINATOR:

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Share your Ideas !

Students & Faculty with Creative & Exceptional Brains are being gathered to explore new equipment, tools and research!

WHO CAN APPLY?

- Have Winter break plans?
- Want to experience firsthand on the new equipment and tools arrived at the Department of Electronics for Embedded System Design?
- Want to gain experience, work in creative, dynamic, exciting and challenging research environment? And become part of LEADERS group?
- Got an idea to implement, which can be part of your research / class project or your Final year project? Prototype your creative thoughts & then present these prototypes to your peers & professionals to help improve your ideas?

THEN COME JOIN US!

LEARDERS (Leading Electronic Applications & Design Researchers Setup) group of Department of Electronics Mehran UET Jamshoro is offering an attractive internship program in this winter. The program will provide valuable learning experience and opportunity to participate in active research.

INTERNSHIP LAYOUT/ PATTERN

The internees will be divided in groups according to their selected fields, in which they will be assigned different tasks. After completion of the task the groups can shuffle their tasks.

Attendance will be marked daily for all the fields and groups, and certificates will be awarded based on the regularity and performance. There are many special award certificates as well to encourage the internees and raise the level of work.

Students have to submit the internship report at the end of internship.

After learning and exploring a trainer/ equipment or a tool, you have to develop an application or project using the concepts and resources acquired during this internship.

This is not a conventional internship where a teacher teaches and student takes lectures, rather it's a team work where teachers and students both collectively try to learn and explore and guide each other according to their knowledge and experience.

Students have to select one from the available fields and then further selection of trainers will be done at the start of internship in their respective field and group.

Register & Join Today!

Contact Us

LEADERS TEAM

Engr Attiya Baqai

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Microprocessors & Microcontrollers

Digital Electronics

FPGA'S

DSP

PBL

WHAT'S PBL?

Problem-based learning (PBL) is a student-centered pedagogy in which students learn about a subject through the experience of problem solving. They learn both thinking strategies and domain knowledge. The goals of PBL are to help the students develop flexible knowledge, effective problem solving skills, self-directed learning, effective collaboration skills and intrinsic motivation. Working in groups, students identify what they already know, what they need to know, and how and where to access new information that may lead to resolution of the problem. The role of the instructor (known as the tutor in PBL) is that of facilitator of learning who provides appropriate scaffolding and support of the process, modelling of the process, and monitoring the learning. The constructs for teaching PBL are very different then traditional classroom/lecture teaching.

In this category students who are doing research or who are working on their final year project, can participate. They can get maximum benefit from this program, they can get help from students as well as teachers. In case of any complex problem, the students and teachers will try to solve that problem together.

EQUIPMENT & TOOLS

For the offered fields, plenty of newly purchased lab equipment is available for internship as listed in Table1.The internees will be assigned different trainers or tasks to work upon.The equipment available in Tools section is to be used by all the subgroups. Prerequisites for the internship are the theoritical concepts of the offered fields.

TOOLS

VIRTUAL OSCILLOSCOPE mod. IU11-A/EV
2 channel oscilloscope connected to the PC through USB

VIRTUAL GENERATOR mod. IU12-A/EV
PC function generator (USB connection)

PERSONAL LOGIC ANALYSER mod. IU13/EV
16/32 input Channels
Rs-232, SPI and I2C Bus Serial Analysis
Parallel Port PC Connection

SIMULATION SOFTWARE

SOFTWARE TINA v7
Software for Analog, Digital, Symbolic, RF, VHDL, MCU & Mixed Code circuit Simulation & PCB Design

MATLAB SOFTWARE
Video & Image Processing ToolBox
3D Animation

MODULES

MODULE Z2/EV
16bit microprocessor system

MODULE Z3/EV
32bit microprocessor including development software

MODULE Z10/EV
ST62E25 microcontroller including development software

MODULE Z11/EV
PIC16F84 microcontroller including development software

MODULE Z12/EV
8051 microcontroller including development software

MODULE MCM 8/EV
Sequential & Combinational Module

ATK V11-1 AVR TRAINERS
ATMEGA16 Microcontroller Boards (Star Engineering) including development software

FPGA
Spartan3 based NEXYS2 board and Peripheral Modules FX2BB,PMOD AD1,PMOD RF1,PMOD CON3, PMOD LS1, PMOD MIC, PMOD DA2,PMOD TMP,PMOD CLS,VDEC1

Table 1: Equipment, Tools & Software available

PRIZES

- Perfect attendance award certificate
- Outstanding leadership award certificate
- All rounder award certificates for completing maximum number of tasks
- Bright idea award certificate for PBL
- International Certificates for all participants

REGISTRATION

Forms available @ : http://es.muet.edu.pk/

Registration Deadline: 7th December

Internship Schedule: 17 Dec 2012 -6th January 2013

Internship Timings: 8:00 AM-3:00PM

Internship Duration: 3 Weeks

Forms Sumbission: Download, fill and email the forms to info@es.muet.edu.pk