

**BABA FARID COLLEGE
OF ENGINEERING & TECHNOLOGY**

through

SCHOOL OF SKILL DEVELOPMENT

organizes

**FACULTY DEVELOPMENT
PROGRAMME**

on

**EMBEDDED
SYSTEM AND ROBOTICS**

21st to 31st December, 2016

ABOUT

It is believed that the most important resource of any educational institution is its faculty members, who teach & nurture the students and also prepare them to cater the needs of society and industry. Keeping in sync with this belief Baba Farid College of Engineering & Technology (BFCET) organizes faculty development programme (FDP) in order to deal with rapid changes and shifting paradigms in education. Without such programme, teachers are reduced to instructors presenting their knowledge of the subject by one-way lecturing.

Faculty Development Programme refers to range of activities that helps academicians in improving their professional skills that are vital for carrying out their teaching and research. It also develops administration qualities such as assessment, designing improved & effective curriculum, assistance to faculty members in getting their research project funded from Government and Corporates, FDP also works to enhance the ICT skills, to carry out consultancy projects improving the institute's climate by educating & transferring of knowledge which involves generation of new ideas & techniques for organizational leadership & mentoring etc.

FDPs are categorized in three ways instructional development, personal development and organizational development. The first one includes practice such as curriculum development, teaching diagnosis and training. Personal development generally involves activities to encourage faculty growth, for example enhancement of interpersonal skills, career counseling etc. Organizational development aims to advance the institutional environment for research and innovation.

Baba Farid College of Engineering & Technology has been always practicing innovating teaching practices to attain its mission of being committed to excellence in education, research and training, use of contemporary participant-centric pedagogies and teaching methods and establishing a presence in emerging segments of technical education sector. In this endeavor BFCET is committed to provide research and teaching skill enhancement programmes for fellow faculty members. This Faculty Development Programme (FDP) is carefully designed to bridge the gap in quality research and teaching skills that are required in contemporary technical education.

OBJECTIVES

- To inculcate the knowledge of basic working of a microcontroller system and its programming in assembly language.
- To learn about integrated hardware and software for microcontroller application system.
- To develop and maintain applications using Embedded Software.
- To design and develop a hardware platform encompassing a microcontroller and peripherals.
- To effectively use of software tools for analysis and design of robotic systems.

PROGRAMME CONTENTS

- Basic components of electronics/embedded system.
- Basics of microcontroller architecture & pin description.
- Hands on session on programming of microcontroller.
- Testing of electronic components.
- Real time embedded systems.
- Integrated development environment (IDE).

EXPECTED OUTCOME

The faculty will be able to:

- Gain knowledge of embedded system concepts and architecture of embedded systems.
- Apply effectively the fundamentals of assembly level programming of microprocessors.
- Able to analyse abstract problems and apply a combination of hardware and software to address the problem.
- Make use of standard test and measurement equipment to evaluate digital interfaces.
- Able to build a program on a microprocessor using arithmetic & logical instruction set.

PROGRAMME DURATION

21st to 31st December, 2016

EVENT COORDINATOR

Er. Pushpinder Sharma

Assistant Professor, Electronics & Communication Engineering



BABA FARID COLLEGE OF ENGINEERING & TECHNOLOGY

Bathinda (Punjab) -151001, www.bfcet.com