



Department of Mechatronics Engineering

Course Name: Embedded System Design

Class: TE Mechatronics Engineering

Course Code: 317550 (2019 Course)

Course Objectives:

The course aims to:

1. Help Students understand Architecture of PIC 18F458 microcontroller.
2. Create and enhance ability to write and Interpret Assembly and C language for PIC 18F458.
3. Make students understand procedure to interface peripherals with PIC 18F458 for various Applications.

Course Outcomes:

CO1 Explain architecture of PIC 18F458 microcontroller, its instructions and the addressing modes.

CO2 Use Ports and timers for peripheral interfacing and delay generation.

CO3 Interface special and generate events using CCP module.

CO4 Effectively use interrupt structure in internal and External interrupt mode.

CO5 Effectively use ADC for parameter measurement and also understand LCD interfacing.

CO6 Use Serial Communication and various serial communication protocols.