

Department of Electronics & Telecommunication Engineering

Sr. No	Name of the Course(s)	Duration in Hrs.	Learning Outcomes
1	Embedded system course on STM32 and MSP430 [Certification Course]	50 Hrs	<ol style="list-style-type: none"> 1. To use the resources of MSP 430 and STM 32. 2 To Interface various sensors with MSP430 and STM32. 3. To interface actuators with MSP30 and STM 32. 4. To develop IoT infrastructure using MSP430 and STM32, 5. To develop IoT application with MSP430 and STM32. 6. To analyze IoT data.
2	Programming in C and Python [VAP]	90 Hrs	<ol style="list-style-type: none"> 1. To understand usage of C Programming 2. To learn how to use data types, conditional statement, functions, array etc., 3. To apply knowledge of c programming to solve the real-life problems. 4 To understand why Python is a useful scripting language for developers. 5 To design and program Python applications. 6 To design object-oriented programs with Python classes. 7 To use class inheritance in Python for reusability. 8 To use exception handling in Python applications for error handling. 9 To analyze the data using Python
3	Embedded Programming using Arduino with Internet of Things and Raspberry Pi Programming with OpenCV. [VAP]	90 Hrs	<ol style="list-style-type: none"> 1 To program for interfacing of Analog and Digital devices with Arduino. 2. To use behavior of analog sensors and its usage with Arduino. 3. To use python programming in Raspberry Pi. 4. To learn how to use image processing using Raspberry Pi. 5. To understand peripherals with hands-on circuits and python programming. 6. To implement mini projects based on real life problems using Arduino and Raspberry Pi.