NEHRU MEMORIAL COLLEGE

(AUTONOMOUS)

NATIONALLY ACCREDITED WITH "A" GRADE BY NAAC

PUTHANAMPATTI, TRICHY – 621007

Embedded System

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs

Name of the Programme	Course code	Title of Course	Need	Description
M.Sc. Embedded systems	19PE101	Fundamental of Embedded Systems	Local	An embedded system can be thought of as a computer hardware system having software embedded in it. An embedded system can be an independent system or it can be a part of a large system. An embedded system is a microcontroller or microprocessor based system which is designed to perform a specific task.
M.Sc. Embedded systems	19PE102	Analog Interfacing Devices for Embedded Systems	Local	Provides hard-to-find information on interfacing analog devices and technologies to the purely digital world of embedded microprocessors. It gives the reader the insight and perspective of a real embedded systems design engineer, including tips that only a hands-on professional would know
M.Sc. Embedded systems	19PE103	Design of Embedded Systems with PIC Microcontroller	National	PIC microcontroller allow electronics designers and hobbyists add intelligence and functions that mimic big computers for almost any electronic product or project.
M.Sc. Embedded systems	19PE104L	PIC Microcontroller Programming lab	Global	Embedded system design and programming skills for different commercial

				and industrial applications are enhance
M.Sc. Embedded systems	19PE105L	Embedded C Programming Lab	Global	Embedded C programming plays a key role in performing specific task by the processor. In day-to-day life we used many electronic devices such as mobile phone, washing machine, robotics, digital camera, etc. These all device working is based on microcontroller that are programmed by embedded C programming.
M.Sc. Embedded systems	19PE206	Engineering Mathematics	Local	Study of Vector Analysis, Fourier Serious, Statistics and ODE for embedded applications
M.Sc. Embedded systems	19PE207	Mixed Signal Processors for Embedded Systems	National	Mixed signal processing implies that both analog and digital processing is done as part of the system. Recent advances in Very Large Scale Integration processing technology allow complex digital processing as well as analog processing to be performed on the same chip. Hardware and software skills are enhanced by hands on training with MSP.
M.Sc. Embedded systems	19PE208	AVR Architecture and Programming	National	Hardware and software skills are enhanced by hands on training with AVR microcontrollers

M.Sc. Embedded systems	19PE208L	Mixed Signal Processors and AVR Programming Lab	National	Embedded system design and programming skills for different commercial, medical, defence and industrial applications.
M.Sc. Embedded systems	19PE311	Real Time Operating System with ARM Microcontroller	Global	Hardware and software skills are enhanced by hands on training with microcontrollers
M.Sc. Embedded systems	19PE312	Programmable System on Chip	Global	Understand the concepts of PSoC and internal resource, function of analog to digital blocks and concepts of timer counter, PWM blocks. .
M.Sc. Embedded systems	19PE313L	ARM &PSoC Microcontroller Programming Lab	Local	Develop Embedded system programing skills to design of different commercial, communication and bio medical applications.
M.Sc. Embedded systems	19PEIS	Internship	Local	To apply the Concepts and get practical experience in real time embedded applications
M.Sc. Embedded systems	19PE314L	Circuit Design And Simulation Lab	Local	Embedded system design and programming skills for different commercial and industrial applications are enhance
M.Sc. Embedded systems	19PE315	Candidate has to choose any one of the course from Group–II	Local	Understanding of essentials of embedded Linux or learn the OOP specific programming languages or learn the key aspects of neural networks and fuzzy logic
M.Sc. Embedded systems	19PE416	Candidate has to choose any one of the	Global	Gain knowledge and understanding of wireless sensor networks

		Course from Group- III		
M.Sc. Embedded systems	19PE417	Candidate has to choose any one of the Course from Group- IV	Global	Familiarize the accessories and communication techniques
M.Sc. Embedded systems	19PE418P	Project	Global	Gain Practical knowledge through participated learning method.