Faculty of Electrical Engineering

M.E. Embedded System Technologies

(R 2021) Semester - I

Course Code: ET4111 Course Title: Embedded System Laboratory – I		
Sl. No.	**Description of Equipment**	**Required numbers (for batch of 25 students)**
1.	8051 Microcontrollers/ any other CISC 8 bit microcontroller with peripherals; IDE, Board Support Software Tools , Assembler , C Compiler/suitable open source software	**10**
2.	PIC Microcontrollers/ any other RISC 8 bit microcontroller with peripherals; IDE, Board Support Software Tools , Assembler , C Compiler/suitable open source software	**6**
3.	8 Bit CISC/RISC microcontroller Compatible ADC interface Unit	**3**
4.	8 Bit CISC/RISC microcontroller Compatible DAC interface Unit	**3**
5.	LCD interface	**3**
6.	Sensors and Interfacing	**6 sets**
7.	Stepper Motors and Interface	**3**
8.	BLDC motor & Interface	**2**
9.	Desktop computer/Laptop	**10**
10.	CRO	**1**

Faculty of Electrical Engineering

M.E. Embedded System Technologies

(R 2021) Semester – I

Course Code: ET4112 Course Title: Embedded Programming Laboratory – I		
Sl. No.	**Description of Equipment**	**Required numbers (for batch of 25 students)**
1	Desktop computer/Laptop	**20**
2	C/C++/Java/Embedded C/Embedded Java/ Compilers &Platforms/cloud	**20**
3	Arduino Boards with peripherals ;IDE, Board Support Software Tools /Compiler/others	**10**
4	FPGA Processor Boards with Board Support Tools & Interfaces	**3**
5	Simulation Tools Proteus/ ORCAD	**5 users**
6	Simulation Tools MATLAB /any other suitable Simulation software packages for programming/open source simulators	**5 users**

Degree: PG	Name of the Course: M.E. EMBEDDED SYSTEM TECHNOLOGIES	
Course Code: ET4211	Course Title: EMBEDDED SYSTEM LABORATORY - II (R 2021) Semester: II	
Sl. No.	**Description of Equipment**	**Required numbers (for batch of 25 students)**
1.	ARM7 / ARM9/ARM Cortex/ any other ARM higher end processor with peripherals; IDE, Board Support Software Tools , Assembler , C Compiler/suitable open source software	**5**
2	Arduino Boards with peripherals ;IDE, Board Support Software Tools /Compiler/others	**10**
3	Rasperry Pi Boards with peripherals ;IDE, Board Support Software Tools /Compiler/others	**5**
4	DSP Processor Boards with Board Support Tools & Interfaces	**5**
5	LCD Interface	**2**
6	Sensors and Interfacing	**6 sets**
7	Stepper Motors and Interface	**3**
8	BLDC motor & Interface	**2**
9	Real Time Operating Systems (RTOS)- Any open source RTOS/ VXWorks/ Keil/ Android/Tiny OS/ RT Linux	**1**
10	Desktop computer/Laptop	**25**

Degree: PG	Name of the Course: M.E. EMBEDDED SYSTEM TECHNOLOGIES	
Course Code: ET4212	Course Title: EMBEDDED PROGRAMMING LABORATORY - II (R 2021) Semester: II	
Sl. No.	**Description of Equipment**	**Required numbers (for batch of 25 students)**
1	Desktop computer/Laptop	**25**
2	Open source IDE for programming (Visual Studio code/code blocks/any other IDE)	**25**
3	Any MEMS simulation package /Open source	**1**
4	Any CAD package/open source	**1**
5	Labview/ any other software package /open source tools for instrumentation and control	**5**
6	NS2/NS3/optNet	**25**
7	Python compilers	**25**
8	Linux OS (Ubuntu/any other Linux OS)	**25**