

# SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN

(Autonomous)

Department of Electronics & Communication Engineering

Vishnupur, Bhimavaram - 534202

## MICROPROCESSOR AND MICROCONTROLLERS LAB

**Laboratory-In-charge** : Dr. M. V. Ganeswara Rao

**Laboratory-Technician** : Mr. Ch. Santhosh

### OBJECTIVE:

This lab provides students with hands-on experience with ARM processors and 8051 microcontroller. Students are trained to write programs using various instructions for ARM processor and the 8051 microcontroller, utilizing TASM and Keil IDE. Additionally, they learn to write Embedded C programs for the ARM processor. The lab also introduces students to interfacing various input and output devices, such as displays and rotating motors, with the ARM Processor and the 8051 microcontroller.



**LAB EQUIPMENT:**

S.NO	ITEM DESCRIPTION	QTY
1.	Single chip MCU Trainer based on 89C51ED2 with USB comm. & user Manual ESA MCB 51 analog with power Adapter ADP DC5	18
2.	Dual DAC Interface with UserManual:Model IF-DDAC analog with power supply ESA PS M2	2
3.	4 * 4 Matrix Hex Keypad interface with User Manual Model :IF-Hex KPD	2
4.	Stepper Moter interface with stepper motor(3Kgcm) & Power adapter with User manual : Model IF-STEP	2
5.	Logic Controller interface with User Manual ; Model IF-LC	2
6.	KEIL PK51-ED25-LC (C51 Professional Developer's Kit 25 user class room (Node Locked) License, Electronic Delivery	1
7.	Arduiono Kits 1.6.3 (Development Boards)	6
8.	Allianztec STM32F103C8T6 ARM STM32 minimum System Development Board Module STM32F103C8T6 Core Learning Board (B)93WPZ51k(STM32F103C8T6 ARM Development Board - HSN:85423100	15
9.	ST Link V2 Programmer for STM8 and STM32 B09JWBGGJP (ST2001DV0095) HSN:8542	5
10.	ROBOTICSSIGN NUCLEO-F446RE STM32 Nucleo064 MCU STM32F446RE St Microelectronics Development Board -B0B1JCMK9D (CT-7T17-3K7U) HSN: 8542	10
11.	NUCLEO-F446RE STM32 Nucleo-64 MCU STM32F446RE St Microelectronics Development Board  B09KTS4TFW( RTC 360) HSN: 847950	9
12.	Computers: AMD R5,5600G,16GB RAM Single Dim, 512 SSD ,21.5" Monitor,Key board, Mouse, DOS 3 year Warranty , Lenovo V55t	36