AVIT
AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY
VINAYAKA MISSION'S RESEARCH FOUNDATION
(Deemed to be University under section 3 of the UGC Act 1956)
Accredited by NAAC
Approved by AICTE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

LIST OF EXPERIMENTS

PROG, BRANCH,	**M.E., E.S.T**
YEAR/ SEMESTER, SECTION	**I/ I, -**
SUBJECT	**EMBEDDED SYSTEMS LAB - I**
ACADEMIC YEAR	**2021-2022 (ODD SEMESTER)**

1. Design with 8 bit Microcontrollers 8051/PIC Microcontrollers
   i) I/O Programming, Timers, Interrupts, Serial port programming
   ii) PWM Generation, Motor Control, ADC/DAC, LCD and RTC Interfacing, Sensor Interfacing
   iii) Both Assembly and C programming
2. Design with 16 bit processors
   I/O programming, Timers, Interrupts, Serial Communication,
3. Design with ARM Processors.
   I/O programming, ADC/DAC, Timers, Interrupts,
4. Study of one type of Real Time Operating Systems (RTOS)
5. Electronic Circuit Design of sequential, combinational digital circuits using CAD Tools
6. Simulation of digital controllers using MATLAB/LabVIEW.
7. Programming with DSP processors for
   Correlation, Convolution, Arithmetic adder, Multiplier, Design of Filters - FIR based , IIR based
8. Design with Programmable Logic Devices using Xilinx/Altera FPGA and CPLD
   Design and Implementation of simple Combinational/Sequential Circuits
9. Network Simulators
   Simple wired/ wireless network simulation using NS2
10. Programming of TCP/IP protocol stack.

HOD/ ECE