



K. S. INSTITUTE OF TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Name of the Lab : Analog and Digital Electronics Laboratory/
Microcontrollers and Embedded Systems
Laboratory/System Software and Operating
Systems Laboratory

Location : 3rd Floor (OB-304)

Name of the Lab In-charge : Mr. Sanjoy Das

Name of the Instructor : Mr. S. Om Prakash

Lab Details:

Sl.NO	NAME OF THE LAB	SEM	NO. OF STUDENTS PER BATCH	LAB UTILIZATION PER WEEK	LAB MANUAL LINK
1	Analog and Digital electronics Laboratory/ Microcontrollers and Embedded Systems/ Laboratory/System Software and Operating Systems Laboratory	III,IV	23	18 Hours- 2018 Scheme 12 Hours- 2021 Scheme (IPCC)	https://drive.google.com/file/d/1BEtNRF07qyCSv9GeOO5xAjTJgUz08EK4/view?usp=sharing

Major Equipments in the Laboratory:

Sl.NO	Name	Quantity
1	Computers	25
2	Trainer Kits	10
3	Oscilloscope	6
4	Oscilloscope	6
5	Function Generator	10
6	Regulated power supply	12
7	Microcontroller kits	10
8	Embedded Microcontroller kits	20
9	IoT Lab Components	12

Software used

PSPICE 9.1,XLINX 7.1,KEIL uVISION 4,Windows 8,Ubantu 16

Additional Facility Created

Arduino UNO R3 board, Galileo KITS



Description:

This lab has a total area of 136 sq m. It is utilized by 3rd semester students for learning concepts of Analog and Digital Electronics during the Odd semester of the academic calendar. During Even semester the lab is used by 4th semester students to understand concepts of Microcontroller and Embedded Systems, along with 6th semester students for System Software and Operating System lab.

Ambiance:

This lab has projector for aid of presentations and program logic explanations. It is provided with uninterrupted power supply with aid of UPS capacity of 25KVA. White/black board, Notice boards, Display boards, Instruction Boards (Do's and Don'ts), Experiment charts, Lab programs lists, Lab Layouts, Vision and Mission board, PEO and PSO board are displayed in laboratory. Laboratory manuals are maintained for reference. The lab also contains Shoe Racks and Bag Racks for student convenience.

Safety:

General Rules of Conduct in Laboratories are displayed. Electrical maintenance such as electrical ports, switches, network cables, lights and fans are serviced. Any failure in components is timely serviced. **e-Waste** is periodically handed over to "E-Parisaraa Pvt Ltd", which is a government authorized electronic waste recycler. Safety aids available in the laboratory are

- Firewall
- First aid box
- Fire extinguisher