

S.S.B.N. DEGREE COLLEGE

**(AUTONOMOUS)
ANANTAPURAMU – 515 001**

DEPARTMENT OF ELECTRONICS



DEPARTMENTAL PROFILE

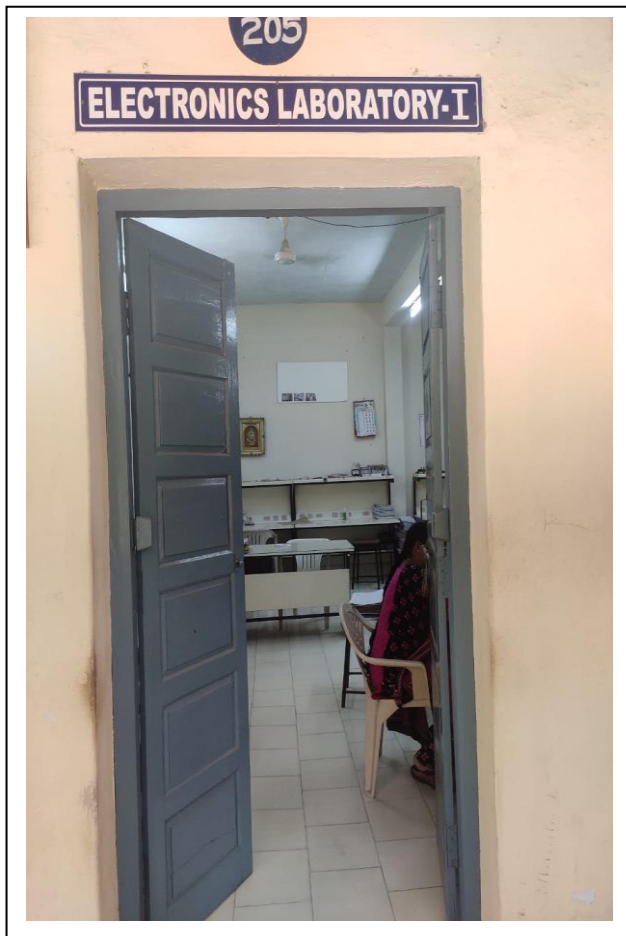
Infrastructure Facilities :

The Department consists of five well established laboratories with advanced equipment with the following dimensions.

- **Laboratories : 5** (Each of 30x20 Sq.Ft.)
- **Staff Room : 1** (20x12 Sq.Ft.)
- **Research Centre : 1** (25x12 Sq.Ft.)

LABORATORY 1 :

The following images shows the inner and outer view of lab-1. This lab is mainly used for first and second year students. This lab is equipped with **Analog devices**. In this lab maximum of 25 students can perform practicals at a time.



EQUIPMENT AVAILABLE IN THE LABORATORY-1

| S.No. | Name of the Equipment | Quantity available | Cost in Rupees |
|-------|---------------------------------------|--------------------|------------------|
| 1 | Dual trace Oscilloscopes (CRO) 25 MHz | 4 | 17,000=00 (each) |
| 2 | Function Generators | 6 | 4000=00 (each) |
| 3 | Dual power supplies | 10 | 1,250=00 (each) |
| 4 | Regulated Power supplies | 6 | 850=00 (each) |
| 5 | Digital Multimeters | 8 | 1,850=00 (each) |
| 6 | Resistance Boxes | 15 | 700=00 (each) |
| 7 | Capacitance Boxes | 10 | 1,000=00 (each) |
| 8 | Transistorized Power Supply | 5 | 3,400=00 (each) |
| 9 | Personal Computer (Dual Core) | 1 | 25,000=00 |
| 10 | Printer | 1 | 17,000=00 |

LABORATORY – 2:

The following images shows the inner and outer view of lab-2. This lab is mainly used for first and second year students. This lab is equipped with **Basic electronic devices**. In this lab maximum of 25 students can perform practicals at a time.



EQUIPMENT AVAILABLE IN THE LABORATORY-2:

| S.No. | Name of the Equipment | Quantity available | Cost in Rupees |
|-------|---------------------------------------|--------------------|------------------|
| 1 | Dual trace Oscilloscopes (CRO) 25 MHz | 4 | 17,000=00 (each) |
| 2 | Function Generators | 6 | 4000=00 (each) |
| 3 | Dual power supplies | 6 | 1,250=00 (each) |
| 4 | Regulated Power supply | 8 | 850=00 (each) |
| 5 | Digital Multimeters | 6 | 1,850=00 (each) |
| 6 | Resistance Boxes | 10 | 700=00 (each) |
| 7 | Capacitance Boxes | 8 | 1,000=00 (each) |
| 8 | Desktop Computer | 1 | 30,000=00 (each) |
| 9 | Printer | 1 | 17,000=00 |
| 10 | SCR Characteristics | 4 | 1,800-00(each) |
| 11 | UJT Characteristics Kits | 4 | 1,800-00(each) |
| 12 | BJT Characteristics | 4 | 6,200=00 (Each) |
| 13 | FET Characteristics | 4 | 5,600=00 (Each) |
| 14 | Bread Board trainers | 4 | 4,500-00(each) |
| 15 | LCR Meter | 1 | 8,000-00 (Each) |

LABORATORY – 3:

The following images shows the inner and outer view of lab-3 and which is a **Computer aided electronics lab**. This lab is mainly used for final year students. This lab is equipped with **VLSI and EMBEDDED trainer kits with the interfacing of PCs**. In this lab maximum of 30 students can perform practicals at a time.

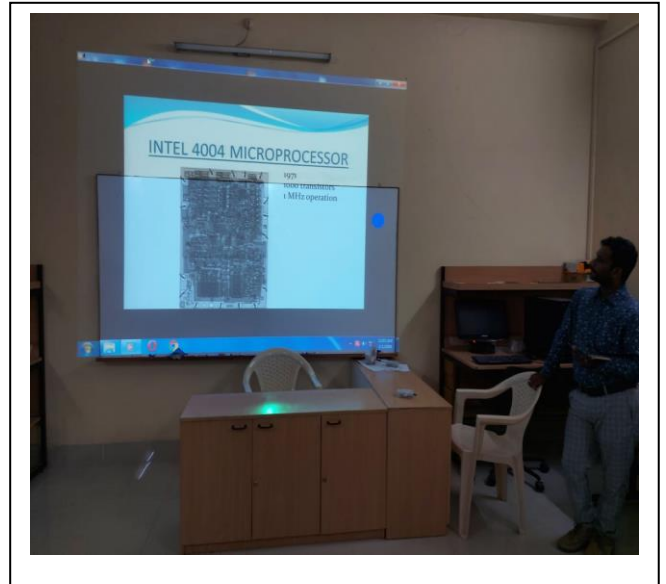


EQUIPMENT AVAILABLE IN THE LABORATORY – 3:

| S.No. | Name of the Equipment | Quantity available | Cost in Rupees |
|-------|--|--------------------|------------------|
| 1 | Dual trace Oscilloscopes (CRO) 25 MHz | 2 | 21,000=00 (each) |
| 2 | Desktop Computers | 30 | 30,000=00 (each) |
| 3 | DSP(TI-TMS320C54XX) Processor Development Kits | 6 | 12,300=00 (each) |
| 4 | VLSI Trainers (FPGA) | 6 | 17,500=00 (each) |
| 5 | Embedded Trainers | 6 | 16,500=00(each) |
| 6 | ARM 7 Trainer(Development Kits) | 6 | 15000=00 |
| 7 | Parallel port Programmers | 4 | 2,000=00 |
| 8 | Philips Flash Microcontrollers | 4 | 10,200=00 |
| 9 | PIC Microcontrollers | 1 | 7,400=00 |
| 10 | Printer | 1 | 15,000=00 |
| 11 | LPC2378 Development Kits | 4 | 21,000-00 |
| 12 | FPGA Trainer Kits | 4 | 20,200-00 |
| 13 | ARM 7 Development board (ALS-SDA-ARM-03-2148-plus) | 2 | 14,500-00 (each) |
| 14 | ARM 7 Development board (ALS-SDA-ARM-7-05) | 4 | 9,100-00 (each) |
| 15 | DSP Trainers (TMS320VC5416 based) | 4 | 21,530-00 (each) |
| 16 | Field Programmable Gate Array Trainers | 6 | 8760-00 (each) |
| 17 | MATLAB Software (Licensed) | 1 | 95,000-00 |

LABORATORY – 4:

The following images shows the inner and outer view of lab-4, which contains **LCD projector** so there is a provision of taking **digital classes** by the teachers. This lab is mainly used for final year students. This lab is equipped with **DSP and FOC trainer kits**. In this lab maximum of 30 students can perform practicals at a time.

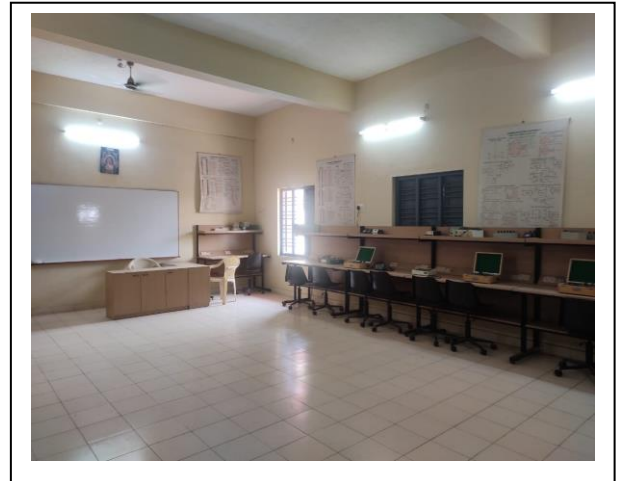


EQUIPMENT AVAILABLE IN THE LABORATORY - 4:

| S.No. | Name of the Equipment | Quantity available | Cost in Rupees |
|-------|---|--------------------|------------------|
| 1 | Dual trace Oscilloscopes (CRO) 25 MHz | 4 | 14,000=00 (each) |
| 2 | Function Generators | 4 | 4000=00 (each) |
| 3 | Regulated Power supply | 6 | 850=00 (each) |
| 4 | Digital Multimeters | 4 | 1,500=00 (each) |
| 5 | Resistance Boxes | 6 | 700=00 (each) |
| 6 | Capacitance Boxes | 6 | 1,000=00 (each) |
| 7 | Desktop Computer | 1 | 30,000=00 (each) |
| 8 | FOC Trainer kits (Analog & Digital Links) | 6 | 7,200=00 (each) |
| 9 | Delta modulation Kits | 4 | 2,200=00 (each) |
| 10 | TDM Demultiplexer | 4 | 1,800=00 (each) |
| 11 | Fiber optic digital link | 2 | 14,500-00 (each) |
| 12 | Fiber optic analog link | 2 | 14,500-00 (each) |
| 13 | Function Generators (Hi-Q)Digital | 6 | 7,500-00 (each) |
| 14 | AM Modulator and Demodulators | 4 | 1,200-00(each) |
| 15 | FM Modulator and Demodulators | 4 | 1,200-00(each) |
| 16 | Phased lock loop trainer | 4 | 1,200-00(each) |
| 17 | (RPS)Power supply (0-12V) | 6 | 950-00(each) |
| 18 | Digital function generators | 4 | 12,500-00 (each) |
| 19 | Digital CROs | 4 | 18,000-00 (each) |
| 20 | Digital Multimeters | 12 | 2,100-00 (each) |

LABORATORY – 5:

The following images shows the inner and outer view of lab-5. This lab is mainly used for second and final year students. This lab is equipped with **Microprocessor and Microcontroller kits**. In this lab maximum of 30 students can perform practicals at a time.



EQUIPMENT AVAILABLE IN THE LABORATORY -5 :

| S.No. | Name of the Equipment | Quantity available | Cost in Rupees |
|-------|--|--------------------|------------------|
| 1 | Dual trace Oscilloscopes (CRO) 25 MHz | 3 | 16,000=00 (each) |
| 2 | Microprocessor Kits 8085 (ESA) | 10 | 3,375=00 (each) |
| 3 | Microcontrollers Development Kits (ALS& Vi Microsystems) | 22 | 7,300=00 (each) |
| 4 | Digital Multimeters | 6 | 1,400=00 (each) |
| 5 | 8086 microprocessors (ESA) | 6 | 6,900=00 (each) |
| 6 | Digital LED kits | 2 | 3,500=00(Each) |
| 7 | Digital Logic Gates | 2 | 2,500=00(Each) |

FACULTY ROOM :

