



**POTTI SRIRAMULU CHALAVADI MALLIKARJUNA RAO
COLLEGE OF ENGINEERING & TECHNOLOGY**

Sponsored by: SKPVV Hindu High School Committee, Estd: 1906
(Approved by AICTE Affiliated to JNTU Kakinada)

ISO 9001:2015 Certified

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DEPARTMENT OF ELECTRONICS and COMMUNICATION ENGINEERING

Lab Equipment Details

S.NO	Name of the laboratory	Name of important equipment
1	Electronic Devices & Circuits Lab (Room No 212)	<ul style="list-style-type: none">➤ Dual Channel regulated power supplies➤ Dual channel Cathode Ray Oscilloscopes➤ Function Generators➤ Digital Multi Meters➤ Decade Resistance Boxes➤ Decade Capacitance Boxes➤ Decade Inductance Boxes➤ Digital LCR meter
2	Electronic Circuit Analysis Lab/ Linear Integrated Circuits Applications Lab (Room No 201)	<ul style="list-style-type: none">➤ Dual channel regulated power supplies➤ Dual Channel Cathode Ray Oscilloscopes➤ Function Generators➤ Digital Multi Meters➤ Decade Resistance Boxes➤ Decade Capacitance Boxes➤ Decade Inductance Boxes➤ Voltage Regulator Trainer Kits(IC 723,7812,7912)➤ Op Amp Applications (Adder, Subtractor, voltage follower) Trainer Kits➤ Op Amp Applications (comparator, level detector, zero crossing detector) Trainer Kits➤ Active Filter Applications LPF,HPF
3	Analog Communications Lab (Room No 226)	<ul style="list-style-type: none">➤ Dual channel Cathode Ray Oscilloscopes➤ Spectrum Analyzer➤ Function Generators➤ Dual channel regulated power supplies➤ Amplitude Modulation and Demodulation trainer kits➤ Diode Detector Characteristics Trainer kits

		<ul style="list-style-type: none"> ➤ Frequency Modulation and Demodulation Trainer kits ➤ Balanced Modulation Trainer kits ➤ Pre-Emphasis and De-Emphasis Trainer kits ➤ Mixer Characteristics Trainer kits ➤ Digital Phase Detector Trainer kits ➤ Phase Locked Loop Trainer kits ➤ SSB Modulation and Demodulation trainer kits ➤ Squelch Trainer for FM Demodulator ➤ Digital Frequency Synthesizer kits. ➤ AGC characteristics kits. ➤ PAM modulation & demodulation kits. ➤ PWM/PPM modulation & demodulation kits. ➤ Analog signal sampling and reconstruction kits.
4	<p style="text-align: center;">Microprocessor & Microcontrollers Lab</p> <p>(Room No 220)</p>	<ul style="list-style-type: none"> ➤ 8086 Microprocessor Kits ➤ 8051 Micro Controller kits ➤ Interfaces/peripheral subsystems ✓ 8259 PIC ✓ 8279-KB/Display ✓ 8255 PPI ✓ 8251 USART ✓ A/D and D/A Interface ✓ Traffic Controller interfacing kits ✓ with cables ✓ Elevator Interfacing kits with cables ✓ Stepper motor interfacing with 3kgs/cm, 5vps with power supply adaptor. ➤ ALS-SDA-86MEL Microprocessor trainer kits ➤ ALS-SDA-51MEL Microcontroller trainer kits ➤ ALS-NIFC-51 SRAM interface module. ➤ CPLD and FPGA Hardware Kits. ➤ TMS 320C kits
5	<p style="text-align: center;">Pulse & Digital Circuits Lab/ Digital Communications Lab</p> <p>(Room No 214)</p>	<ul style="list-style-type: none"> ➤ Dual channel regulated power supplies ➤ Function Generators ➤ Digital Multi Meters ➤ Digital Storage Oscilloscopes ➤ PAM Time Division Multiplexing /De-Multiplexing Trainer kits ➤ TDM Pulse Code Modulation and Demodulation Trainer kits ➤ Data Conditioning and Carrier Modulation and De-Modulation

		<p>Trainer kits</p> <ul style="list-style-type: none"> ➤ DELTA/SIGMA Delta & Adaptive Delta Mod/De-modulation Trainer kits ➤ PAM/PWM/PPM Modulation/ De - modulation Trainer kits ➤ BPSK/DPSK/DEPSK Modulation/ Demodulation Trainer kits ➤ DPCM/ADPCM Modulation/Demodulation Trainer kits ➤ Convolution Encoder &viterbi Decoder Trainer kits ➤ CRC Encoder/Decoder & MSK Mod/De-mod Trainer kits ➤ Frequency shift keying and De-Modulation Trainer kits ➤ Phase shift keying and De-Modulation Trainer kits ➤ Linear Block code Encoder & Decoder Trainer kits ➤ Companding Trainer kits. ➤ Source Encoder & Decoder Trainer kits ➤ Binary Cyclic code Encoder & Decoder Trainer kits
6	Microwave Engineering Lab (Room No 224)	<ul style="list-style-type: none"> ➤ Klystron source microwave test benches ➤ Digital storage Oscilloscope ➤ GUNN source microwave test bench ➤ Directional Coupler ➤ Magic Tee ➤ Circulators ➤ Fixed attenuator ➤ Slotted section ➤ Standard gain horn antenna ➤ Fiber optic communication trainer kits(Link-A) ➤ 660nm Fiber optic analog link(AL-01) ➤ Fiber optic digital link kits ➤ Numerical aperture kits ➤ Laser diode and glass fiber based Fiber optic trainer kits(Link-E) ➤ Digital Multi meters
7	Simulation Lab (Abdul Kalam Lab)	<ul style="list-style-type: none"> ➤ Personal Computers ➤ Xilinx ISE Software. ➤ SCI LAB software ➤ CC Studio Software ➤ Tanner software ➤ Esim software