



SV ENGINEERING OF COLLEGE

Karakambadi road, Tirupati.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

**Department Lab Infrastructure & Details**

**1. NI LAB VIEW ACADEMY (Room No: 9101)**

S.NO	NAME OF THE EQUIPMENT	MAKE	NUMBER
1	NI LABVIEW Academy software	National Instruments	01 (30 user)
2	NI LabVIEW Hardware bundle – NI My DAQ	National Instruments	10
3	Computer with Monitor & keyboard Optical Mouse	Dell	39

## 2. ANALOG & DIGITAL COMMUNICATION LAB (Room No: 9202)

S.NO	NAME OF THE EQUIPMENT	MAKE	NUMBER
1	Amplitude Modulation & Demodulation	SS Labs, Aquila, Akadamika	7
2	Frequency Modulation & Demodulation	SS Labs, Aquila	6
3	Balanced Modulator	SS Labs	2
4	Pre-emphasis & De-emphasis	SS Labs	2
5	Characteristics of Mixer	SS Labs, Aquila	6
6	Phase Locked Loop	SS Labs	2
7	Synchronous Detector	SS Labs	2
8	SSB System	SS Labs	2
9	AGC Characteristics	SS Labs	2
10	Digital Phase Detector	SS Labs	2
11	Diode detector Characteristics	SS Labs	2
12	Squelch Circuit	SS Labs	2
13	PAM modulator and Demodulator	SS Labs, Aquila	4
14	PWM modulator and Demodulator	SS Labs, Aquila	3
15	PPM modulator and Demodulator	SS Labs, Aquila	3
16	Basic antenna measurement kit	Akadamika	1
17	SAMPLING THEOREM	SS Labs, Aquila	4
18	TDM	SS Labs, Aquila	4
19	FSK	SS Labs, Aquila	4
20	DM	SS Labs, Aquila	4

<b>21</b>	PSK	Aquilla	1
<b>22</b>	DPSK	SS Labs, Aquilla	4
<b>23</b>	Pulse Code Modulation Kit	SS Labs, Akadamika	4
<b>24</b>	DPCM/ADPCM Modulation/ Demodulation Kit	SS Labs, Akadamika	4
<b>25</b>	QPSK/DQPSK kit	Akadamika	1
<b>26</b>	Dual Display Tracking Power supply	Scientific	1
<b>27</b>	Cathode Ray oscilloscope's	Scientific	8
<b>28</b>	Function generator's	Scientific	4
<b>29</b>	Digital Storage Oscilloscope's	Akademika	10
<b>30</b>	Noise power spectral density Measurement Kit	Akademika	1
<b>31</b>	Filter/Noise and audio amplifier kit	Akademika	1
<b>32</b>	CRC Encoder/Decoder and MSK modulation/ Demodulation kit	Akademika	1
<b>33</b>	Convolution Encoder & Viterbi Decoder	Akademika	1

### 3. BASIC SIMULATION /DSP LAB (Room No: 9206-A)

S.NO	NAME OF THE EQUIPMENT	MAKE	NUMBER
1	Computer with Monitor & keyboard Optical Mouse Pentium® Dual 2 GHz 4 GB Ram 500 GB hard Desk	Dell	36
2	MATLAB 8.5	Capricot Technologies Pvt Ltd	25
3	Simulink 8.5	Capricot Technologies Pvt Ltd	10
4	Signal processing toolbox 7.0	Capricot Technologies Pvt Ltd	10
5	DSP System toolbox 9.0	Capricot Technologies Pvt Ltd	10
6	Communication system toolbox 6.0	Capricot Technologies Pvt Ltd	10
7	Image processing toolbox 9.2	Capricot Technologies Pvt Ltd	10
8	Multi-Sim	Trident Tech Labs	1
9	DSP Starter kits	Cranes Software int Ltd	5

#### 4. MICROPROCESSORS AND MICROCONTROLLERS LAB / VLSI & ES LAB (Room No: 9206-B)

S.NO	NAME OF THE EQUIPMENT	MAKE	NUMBER
1	Computer 23 With Monitor & keyboard Optical Mouse Pentium® Dual 2 GHz,2 GB Ram,150 GB Hard Disk	Dell	36
2	8086 Micro Processor Kits with Software	Electro Systems Pvt Ltd	10
3	8051 Microcontroller Kits	Electro Systems Pvt Ltd	5
4	Fixed Power supply +5, -5, +12, -12 volt	Electro Systems Pvt Ltd	15
5	16 Channel 8-bit ADC Interface	Electro Systems Pvt Ltd	2
6	Elevator Interface	Electro Systems Pvt Ltd	2
7	4 Digit,7 segment LED display interface	Electro Systems Pvt Ltd	4
8	8255 Study cord interface	Electro Systems Pvt Ltd	5
9	8259 Study cord interface	Electro Systems Pvt Ltd	5
10	MSP-ESP 430G2553	Digital Shark	15
11	MSP-ESP 430F5529LP	Digital Shark	5
12	CC3100 booster pack	Digital Shark	4
13	MSP-ESP FR5969	Digital Shark	5
14	FPGA kits with Xilinx Software	VI Micro systems Pvt Ltd	5

## 5. MICROWAVE & OPTICAL COMMUNICATION LAB (Room No: 9302)

S.NO	NAME OF THE EQUIPMENT	MAKE	NUMBER
1	Solid state Klystron Power supply	Southern Scientific Instruments	4
2	Klystron Mount with tube	Southern Scientific Instruments	4
3	Isolator	Southern Scientific Instruments	5
4	Frequency Meter	Southern Scientific Instruments	5
5	Variable attenuator	Southern Scientific Instruments	5
6	Slotted section unit	Southern Scientific Instruments	4
7	Tunable Probes	Southern Scientific Instruments	4
8	Detector Mount	Southern Scientific Instruments	5
9	Moveable short	Southern Scientific Instruments	4
10	Matched Termination	Southern Scientific Instruments	5
11	VSWR Meter	Southern Scientific Instruments	3
12	Wave Guide Stand	Southern Scientific Instruments	13
13	SS Tunner	Southern Scientific Instruments	4
14	Cooling Fan	Southern Scientific Instruments	5
15	BNC to BNC Cable	Southern Scientific Instruments	9
16	Gunn Power Supply	Southern Scientific Instruments	1
17	Gunn Oscillator	Southern Scientific Instruments	1
18	Pin Modulator	Southern Scientific Instruments	1
19	TNC Cable	Southern Scientific Instruments	1
20	Laser Diode Trainer Kit	Sciotech	2
21	Fiber Optic Digital Link	Sciotech	2

<b>22</b>	Fiber Optic Analog Link	Sciencetech	2
<b>23</b>	Power supply for scientech	Sciencetech	4
<b>24</b>	Magic Tee	Southern Scientific Instruments	3
<b>25</b>	Fixed Attenuator (3 db)	Southern Scientific Instruments	3
<b>26</b>	Fixed Attenuator (6-db)	Southern Scientific Instruments	3
<b>27</b>	MHD Coupler (3-db)	Southern Scientific Instruments	2
<b>28</b>	MHD Coupler (10-db)	Southern Scientific Instruments	2
<b>29</b>	Tunable probe detector for slotted section	Southern Scientific Instruments	4
<b>30</b>	Crystal Diode	Sciencetech	1
<b>31</b>	Cathode Ray Oscilloscopes	SCIENTIFIC	5
<b>32</b>	Function generator (Scientific SM 5070)	SCIENTIFIC	4
<b>33</b>	Digital Multi meter	FALCON	5
<b>34</b>	Ammeters	Meco	3
<b>35</b>	Voltmeters	Meco	1

**6. ELECTRONIC DEVICES AND CIRCUITS LAB /  
ELECTRONIC CIRCUIT ANALYSIS LAB (Room No: 9402)**

<b>S.NO</b>	<b>NAME OF THE EQUIPMENT</b>	<b>MAKE</b>	<b>NUMBER</b>
<b>1</b>	SM 410,30MHz Oscilloscopes	SCIENTIFIC	13
<b>2</b>	SM 5070, 3 MHz Function Generator	SCIENTIFIC	10
<b>3</b>	PSD 3203 Dual Display Tracking Power supply	SCIENTIFIC, FALKON	15
<b>4</b>	SM7022, Handheld Digital Multimeter	SCIENTIFIC, FALKON	6
<b>5</b>	Decade Resistance Box	SS Labs	5
<b>6</b>	Decade inductance Box	SS Labs	4
<b>7</b>	Decade Capacitance Box	SS Labs	4
<b>8</b>	Ammeters	Oxford, Meco	30
<b>9</b>	Voltmeters	Oxford, Meco	26
<b>10</b>	Trainer kits	Harsha Electro TechnolOgy	5



## 7. BASIC ELECTRONICS LAB (Room No: 9503)

S.NO	NAME OF THE EQUIPMENT	MAKE	NUMBER
1	SM 410,30MHz Oscilloscopes	SCIENTIFIC	5
2	SM 5070, 2 MHz Function Generator	SCIENTIFIC	6
3	Dual Display Tracking Power supply	FALKON, SCIENTIFIC	11
4	Handheld Digital Multimeter	FALKON, SCIENTIFIC	4
5	Decade Resistance Box	SS Labs	5
6	Ammeters	Oxford, Meco	33
7	Voltmeters	Oxford, Meco	24
8	Trainer kits	Harsha Electro Technol0gy	3

## 8. IC APPLICATIONS LAB / PROJECT LAB (Room No: 9505)

S.NO	NAME OF THE EQUIPMENT	MAKE	NUMBER
1	ASLK Pro Kits	EDGATE Technologies	10
2	SM 410,30MHz Oscilloscopes	SCIENTIFIC	3
3	SM 5070, 3 MHz Function Generator	SCIENTIFIC	3
4	Dual Display Tracking Power supply	FALKON, SCIENTIFIC	10
5	SM7022, Handheld Digital Multimeter	FALKON, SCIENTIFIC	3
6	IC Tester	MMEADIT	1
7	Trainer kits	Harsha Electro Technol0gy	5