

SUMATHI REDDY INSTITUTE OF TECHNOLOGY FOR WOMEN

LIST OF MAJOR EQUIPMENT - A.Y.:2024-25

S.No	Degree	Department	Lab Name	Major Equipment
1	B.TECH	CSE	Data Structures Lab	Computer Systems with C Compiler installed
2	B.TECH	CSE	Data Visualization- R programming/ Power BI	Computer Systems with Python/R/ Tableau installed
3	B.TECH	CSE	Object Oriented Programming through Java Lab	Computer Systems with JDK installed
4	B.TECH	CSE	Database Management Systems Lab	Computer systems with OS oracle/mysql/postgresql/sqlserver installed
5	B.TECH	CSE	Node JS/ React JS/ Django	Computer Systems with Visual Studio Code installed, Linux, Apache, Tomcat Server, MySQL, PHP, JAVA, JAVA Script, JSP installed
6	B.TECH	CSE	Operating Systems Lab	Computer Systems with Linux and C installed
7	B.TECH	CSE	Computer Networks Lab	Computer Systems with C Compiler, Nmap, Wire shark and NS2 simulator Installed- 30
8	B.TECH	CSE	DevOps Lab	Computer Systems with Jenkins/Puppet/ Apache Maven/ Gradle
9	B.TECH	CSE	Full Stack Development Lab	Computer Systems with Visual Studio Code installed
10	B.TECH	CSE	Internet of Things Lab	1. Computer systems with MySQL and JDK installed/ Raspberry Pi Imager OR Raspberry Pi OS with desktop and recommended software & NodeMCU & GPIO Zero library & DHTLib library 2. Raspberry Pi Boards(SD Card, HDMI to VGA cable and PowerAdapter) 3. Arudino Boards 4. Sensors & Components / connecting Wires. Relay Module and Sensors(DHT11, IR and LDR) 5. LED Resistors 6. Bread Boards
11	B.TECH	CSE	Artificial Intelligence Lab	Computer Systems with C/ Python installed
12	B.TECH	CSE	Machine Learning Lab	Computer Systems with any Python (IDE) software installed
13	B.TECH	CSE	Mobile Application Development Lab	Computer Systems with Android Studio installed
14	B.TECH	CSE	Scripting Languages Lab	Computer Systems with Linux OS and Ruby, TCL, Perl installed
15	B.TECH	CSE	Skill Development Course (Big Data -Spark)	Computer Systems with Spark installed
16	B.TECH	CSE	Skill Development Course (UI design- Flutter)	Computer Systems installed with Flutter
17	B.TECH	CSE	Software Testing Methodologies Lab	Computer Systems with WinRunner and Selenium installed
18	B.TECH	CSE	Cryptography & Network Security Lab	Computer Systems with C Compiler installed
19	B.TECH	CSE(AI&ML)	Software Engineering Lab	Computer Systems with Rational Rose/ Star UML/ UML Graph / Topcased installed

S.No	Degree	Department	Lab Name	Major Equipment
20	B.TECH	CSE(AI&ML)	Java Programming Lab	Computer Systems with JDK installed
21	B.TECH	CSE(AI&ML)	Prolog/Lisp/Pyswip	Computer systems with SWI-Prolog installed
22	B.TECH	CSE(AI&ML)	Natural Language Processing Lab	Computer Systems with any Python (IDE)/NLTK
23	B.TECH	CSE(AI&ML)	Data Analytics Lab	Computer Systems with Python/R/ Tableau installed
24	B.TECH	CSE(AI&ML)	Skill Development Course (DevOps)	Computer Systems with Jenkins/Puppet/ Apache Maven/ Gradle
25	B.TECH	CSE(AI&ML)	Deep Learning Lab	Computer Systems with any Python (IDE)
26	B.TECH	CSE(CS)	Network Security and Cryptography Lab	Computer Systems with C Compiler installed, Computer Systems with JDK Compiler installed
27	B.TECH	CSE(CS)	Cyber Security Essentials Lab	Computer Systems installed with C, Linux OS and Snort tool
28	B.TECH	CSE(CS)	Cyber Crime Investigation & Digital Forensics Lab	Exchange EDB viewer, MBOX viewer Foxton Forensics Tool,SAFT Mobile Forensics Tool Dumpzilla, Process Monitor,X-way Forensics tools Timestomp Utility Network Miner Tool,Crowd Response Tool, Autopsy, FTK Imager, Volatility Framework
29	B.TECH	CSE(CS)	Mobile Application Security Lab	Computer Systems with Android Studio installed
30	B.TECH	CSE(CS)	Blockchain Technology Lab	Web browser with meta mask extension, Ganache Tool, Remix IDE, Hyperledger Fabric,Docker, Linux Operating System
31	B.TECH	CSE(CS)	Vulnerability Assessment & Penetration Testing lab	wire shark, Nmap,Openware, Mapping-(information gathering), NS Lookup RECON-NG, Metasploit framework,wire shark, ARP spoof, DNSCHEF, NSLookup, Nessus, Nikto & burp suite
32	B.TECH	CSE(DS)	R Programming Lab	Computer systems installed with R- Studio
33	B.TECH	CSE(DS)	Skill Development Course (ETL- Kafka/ Talend)	Computer Systems installed with Kafka/ Talend
34	B.TECH	CSE(DS)	Big Data Analytics Lab	Computer systems with Hadoop - PIG, HIVE installed
35	B.TECH	CSE(DS)	Data Visualization Techniques Lab	Computer Systems with Python/R/ Tableau installed
36	B.TECH	CSE(DS)	Cryptography and Network Security Lab	Computer Systems with C Compiler installed, Computer Systems with JDK Compiler installed
37	B.TECH	CSE(DS)	Web and Social Media Analytics Lab	Computer Systems with Python/R installed
38	B.TECH	ECE	C Programming for Engineers Laboratory	Computer Systems with C Compiler installed
39	B.TECH	ECE	ELECTRONIC DEVICES AND CIRCUITS LAB	AMMETERS, Regulated power supply, BREAD BOARDS, Cathode ray oscilloscope, MULTIMETER,Trainer Boards with voltmeters ammeter DRB & center tapped transformer
40	B.TECH	ECE	Applied Python Programming Laboratory	Computer system with Python Program software
41	B.TECH	ECE	Analog Circuits Laboratory	Regulated power suply (0-30 v),Dual Channel CRO (20MHZ), Funtion generators, Multimeter,Components - Transistors, FETs, Diodes, Resisters , Capacitors...etc
42	B.TECH	ECE	DIGITAL LOGIC DESIGN LAB	0-5 v Regulated power suply, 0-12 v Regulated power suply, CROs (0-20 Mhz) dual channel, 74xx Digital ICS, Trainer kits for Logic gates
43	B.TECH	ECE	BASIC SIMULATION LAB	Computers, MATLAB Software

S.No	Degree	Department	Lab Name	Major Equipment
44	B.TECH	ECE	ANALOG AND DIGITAL COMMUNICATIONS LAB	Pulse position modulation & demodulation Kit, PCM Generation and detection kit, Frequency division multiplexing kit & demultiplexing kit, Delta modulation kit, Pulse Amplitude modulation & demodulation Kit, DPSK generation & detection kit, Spectrum Analyzer 3Mhz, CROs (0-20 Mhz) dual channel, etc..
45	B.TECH	ECE	ELECTRONIC CIRCUIT ANALYSIS LAB	Power Amplifier kit(class A &Class B Complementary symmetry kits), Regulated power supplies (0-30v), CROs (0-20 Mhz) channel dual, Tuned Amplifier kit, computer system with latest specification (licence or open source), Millar sweep Circuit kit, Components - BJTs, FETs, Diodes, Resisters , Capacitors, Analog Circuit Simulation Software, Hartley and Colpitt's Oscillators Circuit kit, Multivibrators - Bistable, Multivibrators - Monostable, Multivibrators - Astable, Sampling Gates- Unidirectional and Bidirectional
46	B.TECH	ECE	Linear and Digital IC Applications Laboratory	Cathode Ray Oscilloscopes 0-20 MHz, Function Generators 0-1 MHz, Regulated Power Supplies 0-30 V, RC Phase shift and Wien Bridge Oscillators using IC741 Op-Amp kit.
47	B.TECH	ECE	MICROCONTROLLERS LABORATORY	8086 Processor Kit, 8051 Microcontroller Kit, 7 Segment Display, Matrix Keypad, Sequence Generator Using Serial Interface, 8 bit ADC Interface, Triangular Wave Generator through DAC interface, MASM Software
48	B.TECH	ECE	IoT Architectures and Protocols Laboratory	Arduino,NodeMCU,Raspberry Pi Board, DHT11 sensor, Ultrasonic sensor, Web camera,Aurdino Software,
49	B.TECH	ECE	DIGITAL SIGNAL PROCESSING LABORATORY	MATLAB Software, DSP processor Kits
50	B.TECH	ECE	CMOS VLSI Design Laboratory	Xilinx Vivado Software
51	B.TECH	ECE	Microwave and Optical Communications Lab	Klystron/ gunndiode based Microwave bench setup including corresponding Power Supply, Gunn diode based microwave bench setup including Gunn Power Supply, Klystron based Microwave bench setup including Klystron Power Supply, Micro Ammeter(0-500µA), VSWR meter, Microwave Components, PN detector mounts, Fiber Optical analog Transmitter/Receiver kit, Laser diode kit, Fiber Optical Digital Transmitter/Receiver kits, Signal Generators 0-1 MHZ, CRO's (20MHZ), Numerical Aperture kit

S.No	Degree	Department	Lab Name	Major Equipment
52	B.TECH	Humanities	Applied Physics Lab	Newtons Rings Appertus, Travelling Microscope, LASER circuit board, LED circuit board, Photo Diode board, Energy gap kit, Spectrometer, P-N Junction diode characteristics kit board, Optical fiber kit board, Solar Cell Kit board, Sonometer operator, Grating, Laser source
53	B.TECH	Humanities	Engineering Chemistry Lab	Conical flask 250 mL, Conductivity meter, Beaker 250 mL, tandard flask 100 mL, Potentio meter, Ostwald's Viscometer, etc..
54	B.TECH	Humanities	ENGINEERING WORKSHOP	Plumbing tools and Pipe Samples, Carpentry tools, viz., chisels, saws, jack planes, files, steel rulers etc.,, Lathe Machine with all accessories, ower hacksaw, Drilling machine, bench grinder, Fitting tools, viz., flat files, roll files, hack saw blades and frames, veriner gauges etc.,, Laboratory model of warer plasma cutting machine, Wood turning Lathe, Oil fired coal fired black smithy Furnace, Tin Smithy Tools,viz., smiths, rulers, dot punches, scribes, wooden mallet, hammers etc.,, Welding tools, viz., holders, safety equipment etc.,, Foundry tools, viz., rammer,moulding boards etc.,
55	B.TECH	Humanities	English Language and Communication Skills Lab	Systems, Head Phones, Globarena Software; Television, Camcorder, Public Address System
56	B.TECH	Humanities	Computer Aided Engineering Graphics	Desktop systems with latest configuraton and adequate graphic card
57	B.TECH	Humanities	Programming for Problem Solving Lab	Computer Systems with Python Compiler installed
58	B.TECH	Humanities	Python Programming Lab	Computer Systems with Python Compiler installed
59	B.TECH	Humanities	IT Workshop	Computer systems with MS office and MASM installed, Hardware components for assembly
60	B.TECH	Humanities	Basic Electrical Engineering Lab	DC Rectifier,dc shunt motor,Regulated power supply,1-phase Transformer,CROs, AFO
61	B.TECH	Humanities	Advanced Communication Skills Lab	Round Table for 30 students, Public Address System, Digital Stereo - Audio and Video System, Computer with Head Phone, TV, Camcorder
62	B.TECH	EEE	Elements of Electrical and Electronics Engineering	Variac 230v, Voltmeter (0-300V), Voltmeter (0-300V) MI, EDM: Watmeter LPF 150V/1A
63	B.TECH	EEE	Electrical Circuit Analysis Laboratory	Cro-30MHZ, Harmonic Analyzer, 1-φ Variac (0-230/270/10A), Voltmeter(0-150)V-MI, Rheostat 100Ω /2.8 A, Rheostat 50Ω /5 A, SPSTS, Choke 18W/0.86A, Voltmeter (0-30V)- MI, Ammeter (0-1) A-MI, Regulatory Power Supply (0-30V), (0-2A),DC, Voltmeter(0-30)V-DC- MC, Choke 80W/0.5A, etc.,