

ANNAMACHARYA

INSTITUTE OF TECHNOLOGY AND SCIENCES

(Autonomous)



Tirupati – 517 520

INSTITUTIONAL POLICIES

&

MAINTENANCE PROCEDURES

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1. Maintenance Policy and Procedures:: Facilities Maintenance Services Department

Basic Services Section:

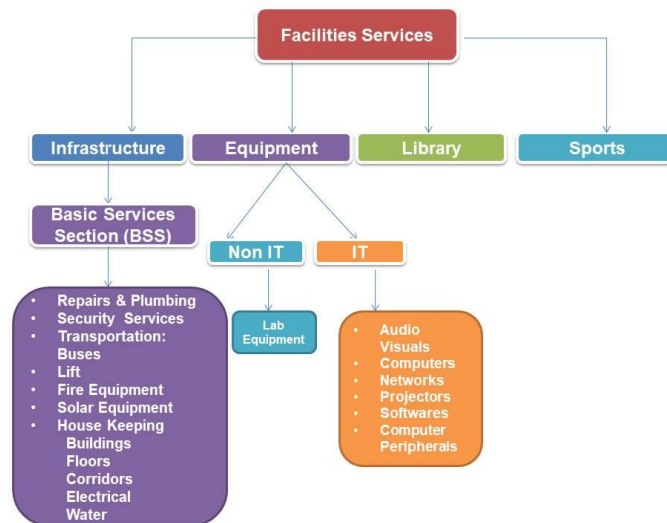
Introduction:

AITS Tirupati is situated in renigunta sector of Tirupati city and consisting of many academic buildings, with hostels, food complex, sports complex within beautifully landscaped, secured campus.

There are approximately 2523 students, 229 faculty and 46 technical and 15 maintenance personnel respectively at this institution. There are separate car and two wheelers parking for staff and students and visitors situated far away from the academic premises.

Facilities Maintenance Services Department:

AITS Tirupati developed maintenance procedures for maintaining the infrastructure, equipment and library support facilities mentioned in the policy document of the institute.



Infrastructure:

Basic Services:

Facilities Management includes all activities necessary to operate, maintain and provide services for institute buildings, mechanical equipment and utilities to keep them in good operating condition. All of these services are provided to all the departments. Activities which are classified as building Management, maintenance and services are performed by Facilities Management. These activities include building operational maintenance, custodial servicing, refuse removal and recycling, utilities services and distribution and other services.

For maintenance of lifts, centralized UPS and water coolers/filters annual maintenance contract (AMC) is given.

Basic Services includes:

- Repairing plumbing systems, stopped drains, drinking water system (ROR) etc
- Custodial Services
- Performing cleaning services, Facilities Management is responsible for cleaning offices, classrooms, circulation space, restrooms, laboratories, studios, auditoriums, gyms and conference rooms.
- Providing routine custodial services include cleaning public spaces, pest control, trash removal and recycling.
- Repairing electrical systems, defective lights, interior and exterior doors, windows, roofs, masonry work, general classroom furniture,
- Removing solid waste, recycling and surplus materials

Basic Services Section: Composition:

1. G.Suresh Kumar : **Site Engineer**
2. K. Venkateswara Rao: **System Admin**
3. Dr. K. Balaji Nandakumar Reddy: Expert, Electrical Maintenance
4. Campus Electricians:
 - a) K. Muni Reddy: Electrician
 - b) T. Balaji: Electrician
 - c) V. Sankar Reddy: Plumber
5. S. Shafi, Senior Assistant, Transport

6. K. MuniRaja, Crew Manager, Transport

7. G. BhanuMurthy: Supervisor, House Keeping and 25 Regular Maintenance staff works for housekeeping

Policy Statement/Guidelines:

(Includes e classroom, seminar halls, auditorium and lecture halls)

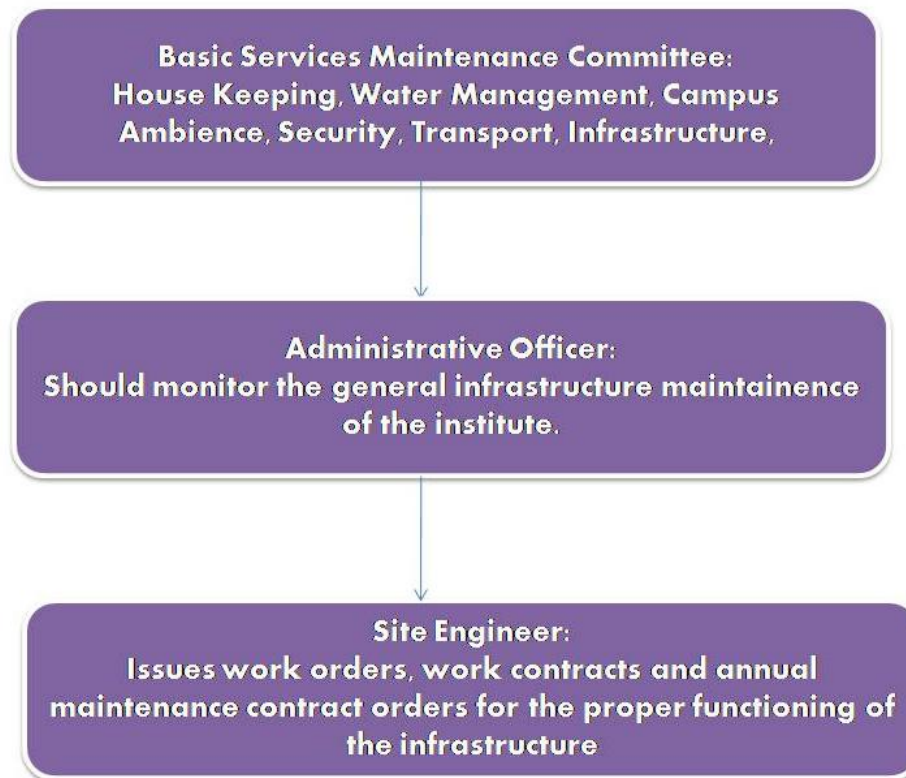
Maintenance:

The Class schedules are sent to the classroom in-charge well in advance from different departments for making up prior arrangements of the lectures in time. Unscheduled extra classes are also informed to the concerned personnel for making the arrangements. After each session, the hall is cleaned with support from housekeeping department and made ready for next schedule.

In case any equipments in the above mentioned halls are not working properly, the same has to be addressed to the IT section which handles the repair and Maintenance of audio visual equipments.

Guest lectures, Seminars, Workshops etc to be conducted in the lecture hall/seminar hall/auditorium; arrangements are to be done for the programs as per their requirement.

Maintenance report has to be addressed to the HOD of the concerned Department.



Service Requests:

Required to arrange for services which are not included in Basic services. The cost of these services will be charged to the department requesting the service which include Furniture repair, Emergency repair when there is imminent danger of functional loss to the department; emergency repair service may be initiated by calling the facilities.

Repairing departmental equipment (for eg: electric fans, heaters, teaching aids, installing equipment which requires minor changes)

Other special requests:

- ✓ Adding electrical service
- ✓ Building shelves and equipment
- ✓ Painting
- ✓ Carpeting

(Apart from basic services, any emergency repair service or minor replacements can be done through service request from concerned Department HOD.)

Energy Management:

Troubleshooting in energy equipments and routine checkups will be done by campus electrical staff. In addition, preventive care will be taken through AMC's.

Utility Outages:

When it is necessary to upgrade, modify or repair equipment, such work may require temporary interruptions of utility service to buildings. When unplanned outages occur, Facilities Management personnel will work to restore service as soon as possible. If a department is working in a special project that involves a utility service, it is necessary to contact the Facilities Management.

Equipment Policy:

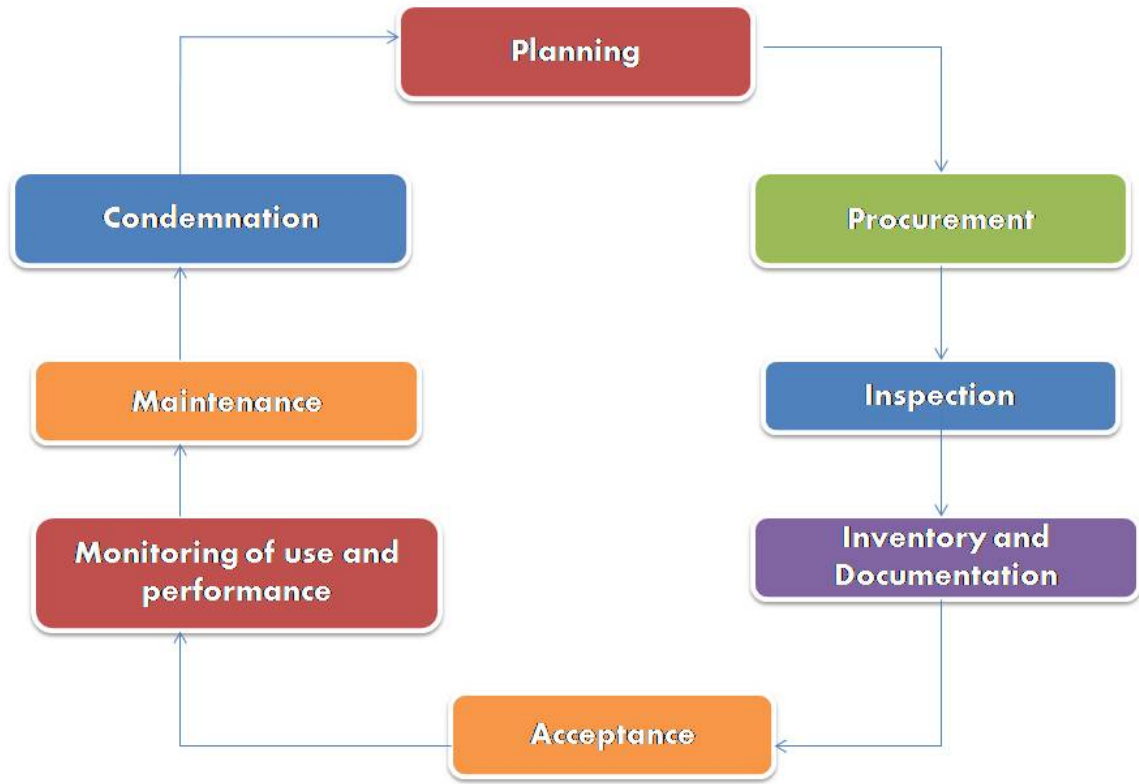
Policy Statement/Guidelines:

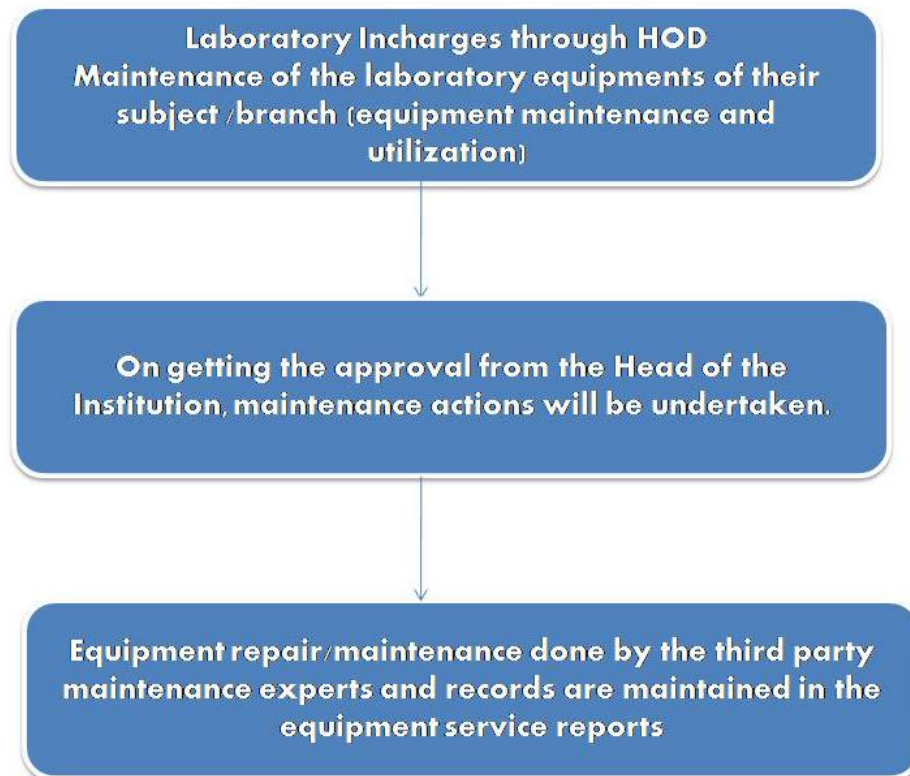
Safeguarding of all the property will benefit to ensure that the maximum amount of equipment will be readily available. The staff and students are intended to make all possible efforts to insure that all the equipment will be protected from theft/damage as described herewith:

- Annual Maintenance contracts (AMCs) are finalized on the tendering process for major equipment/facility
- All computer/AV equipments should be secured depending on its use
- The physical protection of IT and AV equipment is important both on and off campus
- Equipment used in the Department must be arranged to reduce the risk of the equipment being damaged/stolen/accessed by unauthorized persons.
- All valuable portable/AV equipments should be locked especially overnight
- Heads of the Departments are responsible for maintaining inventories for the equipments and furniture in their respective departments.
- Laboratory Incharge maintains and monitors the record of the equipment, any other material and furniture.
- Laboratory incharges are required to submit a report on laboratory experimental support.
- The workshop facility is also utilized for minor repairs.
- In case of any replacement, write-off process is to be followed and approval of the management is taken for replacement
- Based on the letters of the laboratory incharge, through the Heads of the Department, Principal/Management reinspects and recommends the write-off of the old and out dated equipment.

Purchase Committee Composition:

- The Equipment Purchase Committee include:
- Chief Operating Officer: Chairman
- Purchase Director: Principal : Member
- Concerned Department HOD: Member
- Concerned Department Lab Incharge: Member





Equipment Maintenance:

Equipments and Machinery are very important for an established academic institution. At times it is more economical to replace the equipment before it completely breaks down. Equipment must be maintained in working order and periodically calibrated for effectiveness and accuracy of the results. Whenever the maintenance of equipment is required, the concerned laboratory incharge issues a maintenance request to the HOD.

Equipments/Machinery replacement can be categorized in the following manner

- a) Equipments which gradually deteriorated to wear and tear
- b) Equipments which fail suddenly without any warning

The Maintenance consists of:

Planned Preventive Maintenance (PPM)

Breakdown Maintenance (BDM)

1. Planned Preventive Maintenance (PPM):

PPM is performed to extend the life of the equipment and prevent its failure. It is scheduled at specific intervals and includes specific maintenance such as calibration, cleaning or replacing parts that are expected to wear or have a finite life.

There are two types of planned preventive maintenance:

- i) In-house maintenance done by the Concerned Department with the expertise available with the technical staff and faculty– Half Yearly
- ii) Maintained by Manufacturer or external agency – as per their policy

2. Breakdown Maintenance Policy (BDM):

Performed to identify, isolate and rectify the fault so that the out of order equipment, machine or system can be restored to an operational condition. All equipment in use should be free from any fault or defect and all repair work should be carried out to accepted standards by competent repair team.

In case of breakdown:

- 1. Report should be filed by the user Department with Basic Maintenance services section
- 2. Details should be entered in the Breakdown register
- 3. BMSS inspects the equipment, check whether it is repairable, and if not, suggests for Contacting external expertise.

Departmental Labs:

Civil:

Sr.No	Name of the Laboratory	No. of Students per setup (Batch Size)	Name of the important Equipment	Weekly Utilization status (all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical Staff	Designation	Qualification
1.	Surveying Lab	3 students per setup, 30 students per batch, 2 batches per section	<ul style="list-style-type: none"> ● Total station ● Automatic Level ● Digital planimeter ● Levelling staff 4m ● Surveying umbrella ● Measuring chains 30m ● Fiber tapes 30m ● Cross staff 100 mm ● Prismatic compass ● Plane table ● Dumpy level ● Theodolites ● Planimeter 	18 Hr/Week	Mr K Sivakumar	Lab Technician	Diploma
2.	Strength of materials Lab	3 students per setup, 30 students per batch, 2 batches per section	<ul style="list-style-type: none"> ● Universal Testing Machine ● Brinell Hardness test attachment ● Double shear attachment ● Extensometer ● Digital control panel ● Impact testing machine ● Rockwell cum Brinell hardness test ● Torsion Testing Machine ● Spring testing machine ● Compression testing machine ● Digital indicator for CTM and sensor 	18 Hr/Week	Mr E Chandraker	Lab Technician	ITI

			<ul style="list-style-type: none"> ● Mandrel for conducting 180° bend test. 				
3.	Geotechnical Engineering lab	3 students per setup, 30 students per batch, 2 batches per section	<ul style="list-style-type: none"> ● CBR Testing Apparatus ● Consolidation Apparatus ● Direct Shear apparatus ● Shrinkage Limit set ● Sensitive Volume Change gauge ● Liquid Limit Device ● Plastic Limit set ● Sand Pouring Cylinder apparatus ● Fine Test sieves ● Hydrometer ● Permeability apparatus ● Light Compaction Test apparatus ● Heavy Compaction Test apparatus ● Hand Extractor ● Measuring Cylinders ● Electric oven ● Core cutter ● Soil extractor (Electric cum hand) ● Unconfined compressive test ● Vane shear apparatus ● Triaxial test apparatus ● Shrinkage dish ● Hydrometer ● Measuring Cylinders ● Electronic balance 30kg ● Digital weighing balance - 5 kg ● Digital weighing balance - 10kg ● Digital weighing balance - 15kg. ● Proctor's apparatus 	12 Hr/Week	Mr.B Ravishankar	Lab Technician	ITI
4.	Environmental Engineering	3 students per	<ul style="list-style-type: none"> ● Jar Test apparatus ● COD extraction 	12 Hr/Week	Mr.T Pavan	Lab Technician	Diploma

	ng Lab	setup, 30 student s per batch, 2 batches per section	<ul style="list-style-type: none"> ● Dissolved Oxygen meter ● Micro controller turbidity meter ● Digital conductivity meter ● Digital PH meter ● Hot air oven ● Muffle furnace ● BOD incubator ● Digital electronic precision balance 				
5.	Concrete lab	3 student s per setup, 30 student s per batch, 2 batches per section	<ul style="list-style-type: none"> ● Vicat apparatus ● Specific gravity bottle ● Soundness test (Lechatelier Mould) ● Compaction factor apparatus ● Slump test apparatus ● Vee Bee consistometer ● Longitudinal compressometer ● Vibrating table 1000 x 1000 mm ● Cube moulds 15 cm, ● Rebound hammer apparatus ● Digital weighing machine 100kg ● Flexural setup 20cm to 40cm ● Split tensile setup ● Two point load setup ● Cylindrical mould 100 dia and 200mm ht ● Lechatelier flask ● Pan Mixer ● Ultra sonic pulse velocity apparatus 	12 Hrs/ Week	Mr B Akhil Reddy	Lab Technici an	Diplom a
6	Highway Engineering lab	3 student s per setup, 30 student s per batch,	<ul style="list-style-type: none"> ● Aggregate crushing value apparatus ● Aggregate impact test ● Specific gravity and, water absorption test apparatus ● Devals Attrition test ● Los Angels abrasion 	12 Hrs/ Week	Miss.J Haristha	Lab Technici an	Diplom a

		2 batches per section	<ul style="list-style-type: none"> ● Flakiness and elongation apparatus ● Bitumen penetration setup ● Bitumen ductility setup ● Ring & Ball apparatus ● Pensky Martens apparatus 				
7.	Engineering Geology Lab	3 students per setup, 30 students per batch, 2 batches per section	<ul style="list-style-type: none"> ● Hardness collection set of 9 minerals ● Luster collection set of 10 minerals ● Cleavage collection set of 10 minerals ● Fracture collection set of 6 minerals ● Tenacity collection set of 4 minerals ● Streak collection set of 10 minerals ● Feel collection set of 10 minerals ● Form & Structure ● Structural geology models ● Geological map of India ● Mineral map of India ● Tectonic map of India 	12 Hrs/Week	Mr.P.Vinodh Kumar	Lab Technician	ITI
8	CADD lab	3 students per setup, 30 students per batch, 2 batches per section	<ul style="list-style-type: none"> ● Intel Core i5 7100/16GB DDR4 RAM 	15 hrs/Week	Mr. T Rajasekar	Lab Technician	MCA
9	STAAD lab	3 students per setup, 30 students per	<ul style="list-style-type: none"> ● Intel Core i3 7100/4GB DDR4 RAM 	8 hrs/Week	Mr Annadurai	Lab Technician	M Tech

		batch, 2 batches per section					
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ECE:

S.No	Name of the Laboratory	No. of Students per setup (Batch Size)	Name of the important Equipment	Weekly Utilization status (all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical Staff	Designation	Qualification
1.	Electronic Devices and Circuits Lab	4	<ul style="list-style-type: none"> ● Cathode Ray Oscilloscope ● Function Generators ● Regulated Power Supply ● Bread board Trainer System ● IC Power Supply ● AC milli Voltmeter ● Decade Resistance Box ● Decade Inductance Box ● Decade Capacitance Box ● Digital Multimeters ● Series Voltage Regulator kit ● Tuned RF Amplifier kit ● Class A Power Amplifier kit ● Shunt Voltage Regulator 	24Hr/Week	Ms.A.Vimala	Lab Technician	Diploma

			<ul style="list-style-type: none"> kit ● Class B Power Amplifier kit ● Class B Pushpull Amplifier kit ● RC Couple amplifier kit ● Colpitts Oscillator kit ● Hartley Oscillator kit ● RC Phase shift oscillator kit ● Current and voltage series feedback amplifier kit ● Current and voltage shunt feedback amplifier kit ● Analog Ammeters (0-10mA, 0-50mA, 0-100mA, 0-100uA, 0-500uA) ● Digital Ammeters (0-100mA, 0-50mA, 0-100uA) ● Analog Voltmeters(0-1V, 0-10V) ● Digital Voltmeters(0-1V, 0-10V) ● Rheostats ● Servo Controlled Voltage stabilizer 				
2.	IC Applications Lab	4	<ul style="list-style-type: none"> ● Function Generators ● Analog IC Tester ● Analog System Lab Starter Kits ● Digital Multimeters ● Cathode Ray Oscilloscope ● Regulated Power Supplies ● DC Power Supplies ● Bread board Trainer systems ● Decode Resistance Box 	36Hr/Week	Ms.B.Madhavi	Lab Technician	M.Tech

			<ul style="list-style-type: none"> ● Decade Inductance Box ● Decade Capacitance Box ● Digital IC Tester ● Servo Controlled Voltage Stabilizer ● Bistable Multivibrator kit ● Monostable Multivibrator kit 				
3.	Analog and Digital Communications	4	<ul style="list-style-type: none"> ● Cathode Ray Oscilloscope ● Amplitude Modulation and Demodulation Trainer kit ● Frequency Modulation and Demodulation Trainer kit ● Study of Pre-emphasis and De-emphasis Trainer kit ● Digital Phase Detector Trainer kit ● Phase Locked Loop Trainer kit ● Synchronous Detector Trainer kit ● SSB System Modulation and Demodulation Trainer kit ● Squelch Circuit ● Frequency Synthesizer Trainer Kit ● AGC Characteristics Trainer kit ● Balanced Modulator and Demodulator Trainer kit ● Mixer Characteristics Trainer kit ● Pulse Modulation and Demodulation Trainer kit ● Pulse Width Modulation and Demodulation 	18Hr/Week	Mr.S.Kiran kumar	Lab Technician	M.Tech

			<p>Trainer kit</p> <ul style="list-style-type: none"> ● Pulse Position Modulation and Demodulation Trainer kit ● Phase shift Keying modulation and demodulation Trainer kit ● Frequency shift keying modulation and demodulation trainer kit ● Time division Multiplexing Trainer kit ● Sampling Theorem Trainer kit ● Differential Phase shift Keying Modulation and Demodulation Trainer kit ● Pulse code Modulation and Demodulation Trainer kit ● Differential Pulse code Modulation and Demodulation Trainer kit ● Delta Modulation and demodulation trainer kit ● QPSK/DQPSK Modulation and Demodulation Trainer kit ● 3GHz Spectrum Analyzer ● Servo Controlled Voltage Stabilizer ● Regulated Power Supply ● Function Generator ● Digital Multimeter 				
4.	Microwave and Optical Communication	4	<ul style="list-style-type: none"> ● Cathode Ray Oscilloscope ● Klystron Power Supply ● Klystron tubes 	12Hr/Week	Mr.S.Kiran kumar	Lab Technician	M.Tech

	Lab		<ul style="list-style-type: none"> ● VSWR Meters ● Isolators ● Variable Attenuators ● Slotted line ● Matched Termination ● Frequency Meter ● Fixed short ● Movable short ● AC Axial Fan ● Waveguide stands ● Detector Mount ● Gunn Power Supply ● Gunn Oscillator ● Directional Coupler ● Magic Tee ● Fixed attenuator ● Pin Modulator ● Tunable Probe ● Fiber optic LED characteristic and testing ● Laser Diode Characteristics and testing ● Intensity Modulation of laser output ● Measurement of Numerical Aperture ● Analog fiber optic link Transmitter ● Fiber optic digital link Transmitter ● Fiber optic Trainer kit for Glass and plastic fiber ● Basic antenna Measurement Trainer ● Function Generator 				
5.	Signal Processing and Simulation Lab	1	<ul style="list-style-type: none"> ● Intel Core i3 7100/8GB DDR4 RAM ● CC Studio ● MATLAB 2015b ● Multisim – NI Circuit Design suite 	36Hrs/ Week	Mr.C.Gir iprasad	Lab Technician	B.Tech

			<ul style="list-style-type: none"> ● D-Link 24 port switch ● D-link Box ● IDBox, RJ45 Jack D-Link ● Switch 24 Port D-Link ● Rack 6U D-Link ● DSP Trainer kits ● Cathode Ray Oscilloscope ● Function Generators ● Regulated Power supplies ● Printer HP Laser Jet ● IoT kits 				
6.	VLSI & Embedded Systems Lab	1	<ul style="list-style-type: none"> ● TIVA C-Series Launch pack ● Xilinx 9.2ISE ● MSP430FR5969 Launch pad Development kit ● Wifi CC3100 booster pack 	12Hrs/Week	Mr.U.V. Prasad	Lab Technician	ITI, BA, PGDC A
7.	Microprocessors and Microcontrollers Lab	1	<ul style="list-style-type: none"> ● Dual DAC kit ● 8086 Microprocessor Trainer ● 8051 Microcontroller Trainer kit ● Dual DAC Interface ● Elevator Interface ● 8279 study card ● 8259 study card ● 8253 study card ● Traffic lights Interface ● 8255 study card ● Inter Core2 Duo Processor 	36Hrs/Week	Ms.M.Hemavathi	Lab Technician	B.Tech
8.	Basic Electronics Lab	4	<ul style="list-style-type: none"> ● Ammeters ● Voltmeters ● Rheostats ● Cathode Ray Oscilloscope ● Regulated Power supply 	15Hrs/Week	Mr.K.Srinivasulu Reddy	Lab Technician	ITI

S.No	Name of the Laboratory	No. of Students per setup (Batch Size)	S.No	Name of the important Equipment	Weekly Utilization status (all the courses for which the lab is utilized)	Technical Manpower Support		
						Name of the Technical Staff	Designation	Qualification
1.	Electrical Machines Lab-I	4		DC Shunt Generator Coupled to DC Shunt Motor	24Hr/ Week	Mr.R.Subbaraju	Lab Technician	Diploma
				D.C Shunt Motor				
				DC Compound Generator Coupled to DC Shunt Motor				
				DC Series Generator Coupled to DC Series Motor				
				DC Series Generator Coupled to DC Shunt Motor				
				DC Compound Motor.				
				Ammeter –(0-1/2)A-MC				
				Ammeter –(0-10/20)A-MC				
				Rheostats-(0-100Ω/5A)				

				Rheostats-(0-50Ω/5A)				
				Rheostats-(0-1200Ω/0.6A)				
				Rheostats-(0-750Ω/1.2A)				
				Rheostats-(0-110Ω/1.2A)				
				Resistive Loads- single phase 2.5KW,10A/220V				
				Resistive Loads- single phase 5KW,20A/230V				
				Tachometers				
				Voltmeters-(0-150/300)V-MC				
				Voltmeters-(0-300/600)V-MC				
2.	Electrical Machines-II	4	1	2KVA Transformer	24Hr/Week	T. Venkata Vishnu	Lab Technician	Diploma
			2	1 Phase Resistive Load @10/20A				
			3	1-Φ Auto Transformers(0-240/270V/10A)				
			4	3-Φ Auto				

				Transformers(0-470V/20A)				
			5	Voltmeter – Moving Iron :(0-150V /300v)				
			6	Voltmeter – Moving Iron :75/150V				
			7	Voltmeter – Moving Iron :(0- 300V/600V)				
			8	Voltmeter – Moving Coil :0-300V				
			9	Ammeter - Moving Iron :0-10A/20A				
			1	Ammeter - Moving Iron :(0-1A/2A)				
			1	Ammeter - Moving coil :(0-1A/2A)				
			1	Rheostat :470 Ohms/1.2A				
			1	Rheostat :370 Ohms/1.7A				
			1	Rheostat :150 Ohms/5A				
			1	Rheostat :50 Ohms/2A				
			1	Watt meters :U.P.F :0-				

				600V/10A				
			1	Watt meters :L.P.F :0-300V				
			1	Clamp Meters :				
			1	Single Pole single Throw Switch :SPST				
			2	Digital Tachometer				
			2	3- ϕ induction motor				
			2	1- ϕ induction motor				
			2	Synchronous motor				
			2	Dc shunt motor coupled with alternator				
			2	Dc shunt motor coupled with salient pole alternator				
3.	Electrical Measurements Lab	4	1	Calibration and Testing of Single Phase Energy Meter	24Hr/ Week	Mr.R.Subbar aju	Lab Technician	B.Tech
			2	Calibration of Dynamometer Power Factor Meter				
			3	Crompton D.C.				

				Potentiometer Calibration of PMMC Ammeter and PMMC Voltmeter				
			4	Kelvin's Double Bridge – Measurement of Resistance Determination of Tolerance				
			5	Measurement of % Ratio Error and Phase Angle of Given C.T. by Comparison				
			6	Schering Bridge & Anderson Bridge				
			7	Measurement of 3 Phase Reactive Power with Single-Phase Wattmeter				
			8	Measurement of Parameters of a Choke Coil Using 3 Voltmeter and 3 Ammeter Methods				
			9	Calibration LPF Wattmeter by				

				Phantom Testing				
			1	LVDT and Capacitance Pickup Characteristics and Calibration				
			1	Measurement of 3 Phase Power with Two Watt-Meter Method (Balanced & Un balanced).				
			1	Dielectric Oil Testing Using H.T. Testing Kit				
			1	Resistance Strain Gauge – Strain Measurements and Calibration				
			1	1 Φ Resistive load, 5A/10A/220V				
			1	3 Φ Resistive load, 10A/415V				
			1	1 Φ Power factor meter, 5/10A, 150/300/600V				
			1	3 Φ Auto transformer				

			1	1 Φ Auto transformer				
			1	Regulated power supply(0-30V),2A				
4.	<u>Power Electronics & Simulation Lab</u>	4	1	Study of characteristics of SCR, MOSFET, IGBT	24Hr/Week	T. Venkata Vishnu	Lab Technician	B.Tech
			2	Gate firing circuits of SCR's				
			3	Single Phase AC Voltage Controller With R & RL Loads				
			4	Single Phase Fully Controlled Bridge Converter With R & RL Loads				
			5	Forced Commutation Circuits for SCR				
			6	DC Jones Chopper with R & RL Loads				
			7	Single phase Cyclo Converter R & RL Loads				

			8	Single Phase Series Inverter with R & RL Loads				
			9	Single Phase Parallel Inverter with R & RL Loads				
			1	Single Phase Half Controlled Bridge Converter with R & RL Loads				
			1	Three Phase Half Controlled Bridge Converter R & RL Loads				
			1	Single Phase Dual Converter Trainer Kit				
			1	Rheostats-50Ω/2A				
			1	Rheostats-150Ω/5A				
			1	Cathode Ray Oscilloscope				
			1	5 KVA SERVO STABILIZER				
			1	Illumination				

				control/Fan motor control using TRIAC:- Fan motor(230V AC) speed control circuit using Triac-Diac				
			1	Using TPS7A4901 and TPS7A8300,S tudy kit				
			1	Study of DC-DC Buck converter TPS54160 study unit				
			2	Study of Buck regulator LM3475 study unit				
			2	WEBENCH EXPERIMENTS				
5.	Electrical circuits and Network Analysis Lab	4	1.	Digital Multimeters	24Hr/Week	T. Venkata Vishnu	Lab Technician	
			2.	Bread Boards				
			3.	Regulated power supply(RPS) Dual				
			4.	Milliman's theorem Kit				
			5.	Current locus diagram kit				
			6.	Decade Resistance				

				Box				
			7.	Decade Inductance Box				
			8.	Decade Capacitance Box				
			9.	Decade Resistance Box				
			10.	Decade Inductance Box				
			11.					
				Decade Capacitance Box				
			12.	CRO with probes				
			13.	Function Generator				
			14.	Single phase Variac				
			15.	Analog volt meters, AC 600V				
			16.	Analog ammeter, AC 10 A				
			17.	UPF watt meter 600V/10A				
			18.	LPF watt meter 300V/150V, 5 A/2.5 A				
			19.	Three phase resistive load				
			20.	Three phase Variac				
			21.	Three phase Inductive load				
			20.	Constant K- Low pass & High pass filter Kit				
6.	Power	4	1	Alternators	24Hr/	Mr.R.Subba	Lab	Diploma

	Systems & Simulation Lab		2	Motors	Week	raju	Technician	
			3	Rheostat				
			4	Transformers				
			5	Tachometer				
			6	3 Point Starter				
			7	Transmission Line Model Kit				
			8	Voltmeter				
			9	Wattmeter				
			10	Ac Power Supply Panel				
			11	Ammeter				
7.	Control systems and Simulation Lab	4	1	Characteristics of magnetic amplifier				
			2	Effect of feedback on AC Servo Motor				
			3	Characteristics of Synchros (Synchro Transmitter receiver pair)				
			4	Effect of P, PI, PID controller on a second order system				
			5	Linear System Simulator (Time response of second order				

				system)			
			6	Lead and Lag Compensation of Magnitude and Phase Plot			
			7	Transfer function of DC Motor			
			8	Temperature controller using PID			
			9	5kva Servo Stabilizer			
			1	Decade Resistance Box			
			1	Decade Inductance Box			
			1	Decade Capacitance Box			
			1	Programmable logic controller-study & Verification of truth table of logic gates, Simple Boolean Expression			
			1	Effect of feedback on DC Servo			

				Motor.				
			1	CRO Dual Trace 30MHZ				
			1	CRO Probes				
			1	R Load (50Ω/2A)				
8.	Power Converters Lab (M.Tech-POWER ELECTRONICS)	4	1.	Speed Measurement and closed loop control using PMDC motor (With Motor)	24Hr/Week	T. Venkata Vishnu	Lab Technician	B.Tech
			2.	Thyristorised drive for PMDC Motor with speed measurement and closed Loop control.(With Motor)				
			3.	IGBT used single 4 quadrant chopper drive for PMDC motor with speed measurement and closed loop control. (With Motor)				
			4.	Thyristorised				

			drive for 1Hp DC motor with closed loop control. (1HP DC Motor with loading arrangements)				
			5. 3-Phase input, thyristorised drive, 3 Hp DC motor with closed loop.(3HP DC Motor with loading arrangements)				
			6. 3-Phase input IGBT, 4 quadrant chopper drive for DC motor with closed Loop control equipment.(1 HP DC Motor with loading arrangements)				
			7. Cyclo-converter based AC Induction motor control equipment. (0.5 HP AC Induction				

				Motor)				
			8.	Speed control of 3 phase wound rotor Induction motor.				
9.	Power systems Lab (<u>M.Tech-POWER SYSTEMS</u>)	4	1	IDMT over current relay kit (Electromagnetic Type)	24Hr/Week	Mr.R.Subbaraju	Lab Technician	Diploma
			2	Negative sequence relay kit (static type)				
			3	Over voltage relay kit (Electromagnetic kit)				
			4	Over voltage relay kit (Microprocessor Type)				
			5	Percentage biased Differential Relay kit (Static Type)				
			6	Three winding Transformer kit				

Communicative English Lab:

S. No.	Name of the laboratory	No. of students per setup (Batch size)	Name of the important equipment	Weekly utilization on status (all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the technical staff	Designation	Qualification
1	Communicative English lab	1	Computers-66 and 1 projector Audio Amplifier-1 Air Conditioners-4	36Hr/Week	T. Rajasekhar	Programmer	MCA

Applied Physics and Engineering Physics:

S.No	Name of the Laboratory	No. of Students per setup (Batch Size)	Name of the important Equipment	Weekly Utilization status (all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical Staff	Designation	Qualification
1.	Applied Physics Lab	4	<ul style="list-style-type: none"> ● Microscope ● Spectrometer ● Diffraction grating ● Deflection magnetometer ● Variable Power Supply. ● Rheostat. ● Power supply for Sodium Vapour Lamp. ● Power supply for Mercury Vapour Lamp ● B-H curve Kit ● Cathode Ray Oscilloscope ● Laser Source ● Particle slide ● Hall effect Kit ● Energy gap of a Semiconductor Kit ● X-Ray diffraction spectra ● Four probemethod. ● Dielectric constant by charging and discharging method Kit. ● Temperature dependence of resistance of a thermister - Kit 	6Hrs/Week	Ms. S. Devi	Lab Technician	Intermediate
2.	Engineering Physics Lab		<ul style="list-style-type: none"> ● LASER Source ● Diffraction grating. ● Particle slide. 	6Hrs/Week	Ms. S. Devi	Lab Technician	Intermediate

		4	<ul style="list-style-type: none"> ● Spring constant of springs using Coupled Oscillator – Kit. ● Hall effect – Kit. ● Dielectric constant of dielectric material using charging and discharging of capacitor – Kit. ● Deflection magnetometer ● Variable Power Supply. ● Rheostat. ● Power Supply. ● Torsional pendulum. ● B-H curve – Kit. ● Optical Fiber Kit. ● Magnetic susceptibility by Gouy’s method. ● Ultrasonic velocity in liquid (Acoustic grating) ● Pressure variation using Strain Guage sensor ● Temperature change using Strain Guage sensor. ● Pressure variations using optical fiber sensors. ● Temperature changes using optical fiber sensors. 				
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Chemistry Lab and Engineering Chemistry Lab:

S.No	Name of the Laboratory	No. of Students per setup (Batch Size)	Name of the important Equipment	Weekly Utilization status (all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical Staff	Designation	Qualification
1.	Chemistry Lab	4	<ul style="list-style-type: none"> ● Conductivity meter ● PH meter ● Potentiometer ● Colorimeter ● Electronic Balance ● Physical Balance 	24Hr/Week	Ms. S.Devi	Lab Technician	Inter
2.	Engineering Chemistry Lab	4	<ul style="list-style-type: none"> ● Conductivity meter ● PH meter ● Redwood Viscometer 1 ● Redwood Viscometer 2 ● Colorimeter ● Electronic Balance ● Physical Balance 	6Hr/Week	Ms.S.Devi	Lab Technician	Inter

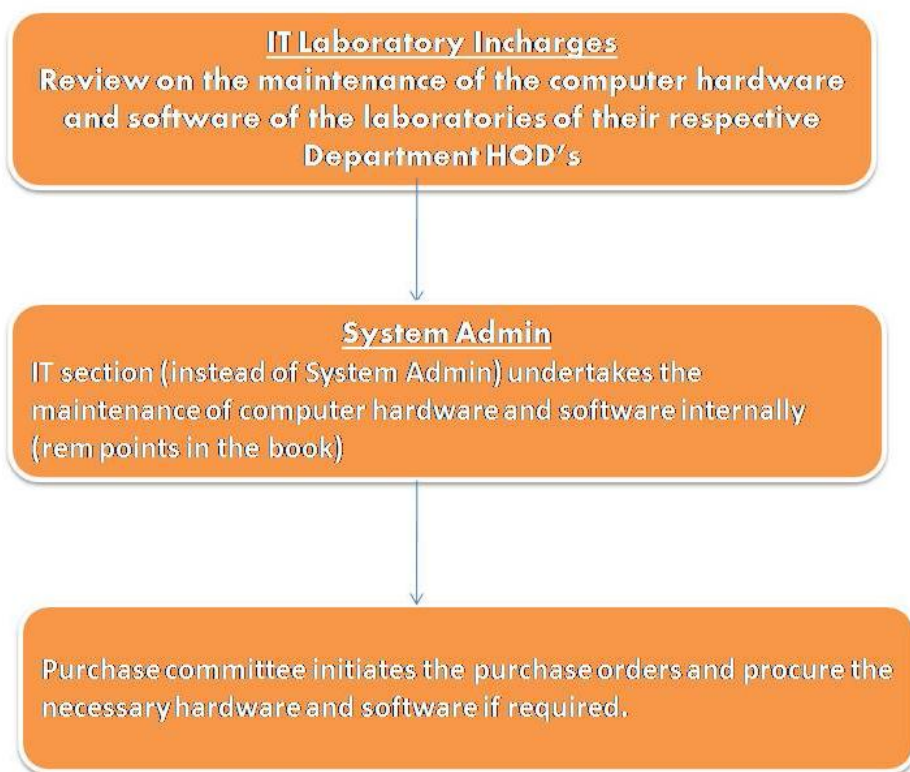
ME:

Sr. No	Name of the Laboratory	No. of Students per setup (Batch Size)	Name of the important Equipment	Weekly Utilization status (all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical Staff	Designation	Qualification
1.	Fluid Mechanics & Hydraulic Machinery Lab	4	<ul style="list-style-type: none"> ● Impact of Jet on Vanes ● Centrifugal Pump Test Rig(Single Stage) With 1 Hp DC Motor&Control ● Centrifugal Pump Test Rig(Multi Stage) With 1 Hp DC ● Reciprocating Test Rig With DC Motor ● Venturi & Orifice meter Test Rig ● Pipe Friction Apparatus ● Loss of Head due to Contraction Apparatus ● Pelton Turbine Test Rig ● Francis Turbine ● Orifice & Mouth Pieces Setup with all Standard Accessories ● Notch Apparatus with all Standard ● Bernoulli's Theorem Setup With all Standard Apparatus ● Hydraulic Pump Test Apparatus 	12Hr/ Week	Mr.M Meghasai	Lab Technician	ITI
2.	Thermal Engineering Lab	4	<ul style="list-style-type: none"> ● Cut model 2- Stroke Single Cylinder Petrol Engine Test Rig ● 4-Stroke Slow Speed Diesel Engine Test Rig ● 2- Stroke Single Cylinder Petrol Engine(Ac Generator Loading) ● 4-Stroke Three Cylinder 	12Hr/ Week	Mr.S.Pradeep	Lab Technician	ITI

			Petrol Engine Test Rig <ul style="list-style-type: none"> ● Cut Section 4-Stroke Single Cylinder Diesel Engine ● 2- Stroke Air compression Test Rig 				
3.	Manufacturing Technology Laboratory	4	<ul style="list-style-type: none"> ● Sand Rammer(A) ● Permeability Tester ● Universal Strength Machine (Hydraulic) ● Shear Strength Attachment ● Tensile Strength Attachment ● Hydraulic Press ● Die for Hydraulic Press (V-Block) ● Blow Moulding Machine ● Die for Blow Moulding Machine ● Injection Moulding Machine ● Die for Injection Moulding Machine ● Spot Welding Machine ● Combined Machine For Arc & Tig Welding ● Electronic Balance ● Sand Tester ● Sand Shiver ● Hardness Test ● Tig Welding Equipments ● Plasma Welding Machine ● Brazing Machine ● Press Tool 	12Hr/ Week	Mr.M.Raj kumar	Lab Technician	ITI
4.	Heat Transfer Lab	4	<ul style="list-style-type: none"> ● Thermal Conductivity of Insulation Powder ● Thermal Conductivity of Composite Walls ● Natural Convection Apparatus ● Heat Transfer Through Pin-Fin Apparatus ● Heat Transfer Through Forced Convection Apparatus ● Emissivity Measurement Apparatus 	12Hr/ Week	Mr.T.Nag araj	Lab Technician	Diploma

			<ul style="list-style-type: none"> • Parallel/Counter Flow Heat Exchanger • Stefan – Boltzmann Apparatus • Thermal Conductivity Of Metal Rod • Lagged Pipe Apparatus 				
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Maintenance of Computers and IT:



		No. of	Name of the		Technical Manpower support
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SL	Name of the Laboratory	students per setup (Batch Size)	Important equipment	Weekly utilization status	Name of the Technical Staff	Designation	Qualification
1.	Grid & Cloud Computing Laboratory (Venue: VINT CERF Lab)	60	Lenovo S500 Desktop Intel H110 chipset, Intel i3 Processor, 4GB DDR4 RAM, 1TB HDD, LED 19.5 Monitor	9hrs/Week	Mr.K.Venkatesh wara Rao	System Administrator	M.Tech
2.	Mobile Application Development Laboratory (Venue: TIM BERNERS LEE Lab)	60	HP 280G4 Desktop Intel Core i3-8100, 8GB RAM, 1TB HDD, 18.5 TFT monitor USB mouse and USB Key Board	9hrs/Week	Mr.T.Rajasekar	Lab Programmer	MCA
3.	Object Oriented Analysis and Design & Software Testing Laboratory (Venue: GOSLING Lab)	60	LENOVO M60 DESKTOP G-41, Chipset, Intel Pentium G630 2.40Ghz processor, 2 GB DDR3 RAM, 250 GB HDD, Keyboard, Optical Mouse, 15.6" LED Monitor.	9hrs/Week	Mr.B.Thulasi Prakash	Lab Programmer	BCA
4.	Operating Systems Laboratory (Venue: JOHN MCCARTHY Lab)	60	HP280G6 Desktop : Core-i5 -10500, 16GB DDR4 RAM, 1TB HDD, 18.5 TFT Monitor, USB mouse and USB Key Board	9hrs/Week	Mr.K.Venkatesh wara Rao	System Administrator	M.Tech
5.	AI Lab (Venue: JOHN MCCARTHY Lab)	60	HP280G6 Desktop : Core-i5 -10500, 16GB DDR4 RAM, 1TB HDD, 18.5 TFT Monitor, USB mouse and USB Key Board	9hrs/Week	Mr.T.Rajasekar	Lab Programmer	MCA

6	Compiler Design Lab (Venue: JOHN MCCARTHY Lab)	60	HP280G6 Desktop : Core-i5 -10500,16GB DDR4 RAM,1TB HDD ,18.5 TFT Monitor ,USB mouse and USB Key Board	9hrs/Week	Mr.B.Thulasi Prakash	Lab Programmer	BCA
7.	Basic Python Programming Lab (Venue: RITCHIE Lab)	60	WIPRO NET POWER Z2501 Intel XEON 1.86GHz Processor, Intel chipset, 1 GB DDR- II RAM, 2*160 GB SATA Disk, DVD Writer, Key Board, Optical Mouse,17" CRT Monitor	24hrs/Week	Mr.K.Venkatesh wara Rao	System Administrator ,	M.Tech
8.	Database Management Systems Lab (Venue: VINT CERF Lab & AHOULLMAN Lab)	60	Lenovo S500 Desktop Intel H110 chipset, Intel i3 Processor, 4GB DDR4 RAM,1TB HDD,LED 19.5 Monitor & HP 280G4 Desktop Intel Core i3-8100, 8GB RAM,1TB HDD, 18.5 TFT monitor USB mouse and USB Key Board	18hrs/Week	Mr.T.Rajasekar	Lab Programmer	MCA
9.	Design Thinking & Product Innovation Lab (Venue: RITCHIE Lab)	60	WIPRO NET POWER Z2501 Intel XEON 1.86GHz Processor, Intel chipset, 1 GB DDR- II RAM, 2*160 GB SATA Disk, DVD Writer, Key Board, Optical Mouse,17" CRT Monitor	9hrs/Week	Mr.K.Venkatesh wara Rao	System Administrator ,	M.Tech
10.	Computer Organization Lab (Venue: JOHN MCCARTHY Lab)	60	HP280G6 Desktop : Core-i5 -10500,16GB DDR4 RAM,1TB HDD ,18.5 TFT Monitor ,USB mouse and USB Key Board	9hrs/Week	Mr.T.Rajasekar	Lab Programmer	MCA
11.	Object Oriented Programming through Java Lab (Venue: RITCHIE Lab)	60	WIPRO NET POWER Z2501 Intel XEON 1.86GHz Processor, Intel chipset, 1 GB DDR- II RAM, 2*160 GB SATA Disk, DVD Writer, Key Board, Optical Mouse,17" CRT Monitor	18hrs/Week	Mr.B.Thulasi Prakash	Lab Programmer	BCA
12.	Problem Solving and	60	WIPRO NET POWER Z2501	24hrs/Week	Mr.K.Venkatesh wara Rao	System Administrator	M.Tech

	Programming Lab (Venue: RITCHIE Lab)		Intel XEON 1.86GHz Processor, Intel chipset, 1 GB DDR-II RAM, 2*160 GB SATA Disk, DVD Writer, Key Board, Optical Mouse,17" CRT Monitor				
13.	Computer Science and Engineering Workshop Lab (Venue: GOSLING Lab)	60	LENOVO M60 DESKTOP G-41, Chipset, Intel Pentium G630 2.40Ghz processor, 2 GB DDR3 RAM, 250 GB HDD, Keyboard, Optical Mouse, 15.6" LED Monitor.	9hrs/Week	Mr.T.Rajasekar	Lab Programmer	MCA
14.	Data Structures Lab (Venue: GOSLING Lab)	60	LENOVO M60 DESKTOP G-41, Chipset, Intel Pentium G630 2.40Ghz processor, 2 GB DDR3 RAM, 250 GB HDD, Keyboard, Optical Mouse, 15.6" LED Monitor.	24hrs/Week	Mr.B.Thulasi Prakash	Lab Programmer	BCA
15	Data Warehousing and Data Mining Lab (Venue: AHOULLMAN Lab)	60	HP 280G4 Desktop Intel Core i3-8100, 8GB RAM,1TB HDD, 18.5 TFT monitor USB mouse and USB Key Board	9hrs/Week	Mr.T.Rajasekar	Lab Programmer	MCA
16	Web and Internet Technologies (Venue: VINT CERF Lab)	60	Lenovo S500 Desktop Intel H110 chipset, Intel i3 Processor, 4GB DDR4 RAM,1TB HDD,LED 19.5 Monitor	9hrs/Week	Mr.B.Thulasi Prakash	Lab Programmer	BCA
17	Project Lab (Venue: VINT CERF Lab)	60	Lenovo S500 Desktop Intel H110 chipset, Intel i3 Processor, 4GB DDR4 RAM,1TB HDD,LED 19.5 Monitor	24hrs/Week	Mr.B.Rajasekar	Lab Programmer	MCA

Condemnation and Disposal Policy:

- If the equipment is beyond the economical repair, official letter will be given to the purchase director through proper channel describing its status and cost of repair.
- The equipments are then sent to general stores for disposal.
- Chemical waste like acid, base and neutral are collected separately and incineration and disposal in landfills.

Factors for the Replacement of the Equipments:

- Demand for more number of equipments
- Excessive and frequent maintenance
- Advanced Technology
- Decreased Efficiency
- Due to Failure
- To Maintain Symmetry

Group Replacement:

1. Certain Category Equipments do not require maintenance services once in a while. through out the life time, they operate and give service more or less to the design service and fall suddenly.
2. Eg: Sensors, Detectors, Valves etc

Conclusion:

- Equipment replacement is a vital decision in the academic institutions
- The decision of replacement is usually taken by the department in consultation with the purchase director.
- In case of high value capital items, the final decision will be taken by the management.

Library Maintenance:

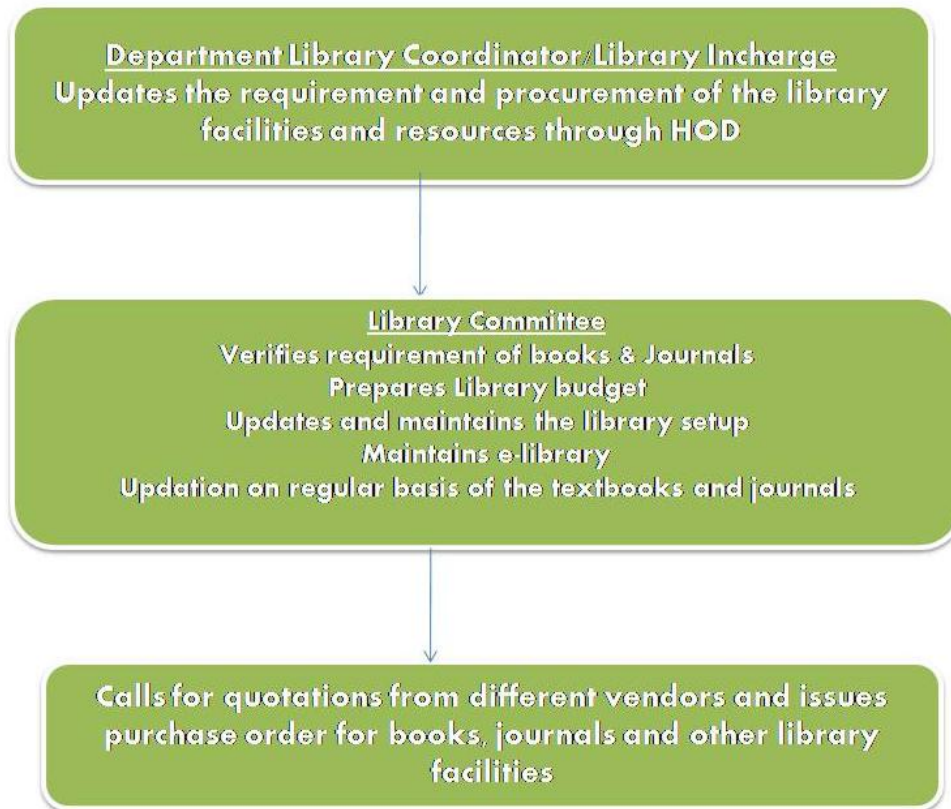
AITS Tirupati library of the college has a rich collection of books, journals and e-resources. Library committee of the college holds the responsibility of maintenance of the library.

Maintenance of books in library is done periodically and internally. However, in the case of old books help of external agency is taken for soft/hard binding.

Library Committee:

1. Dr. C. Nadhamuni Reddy, Principal - Chairman

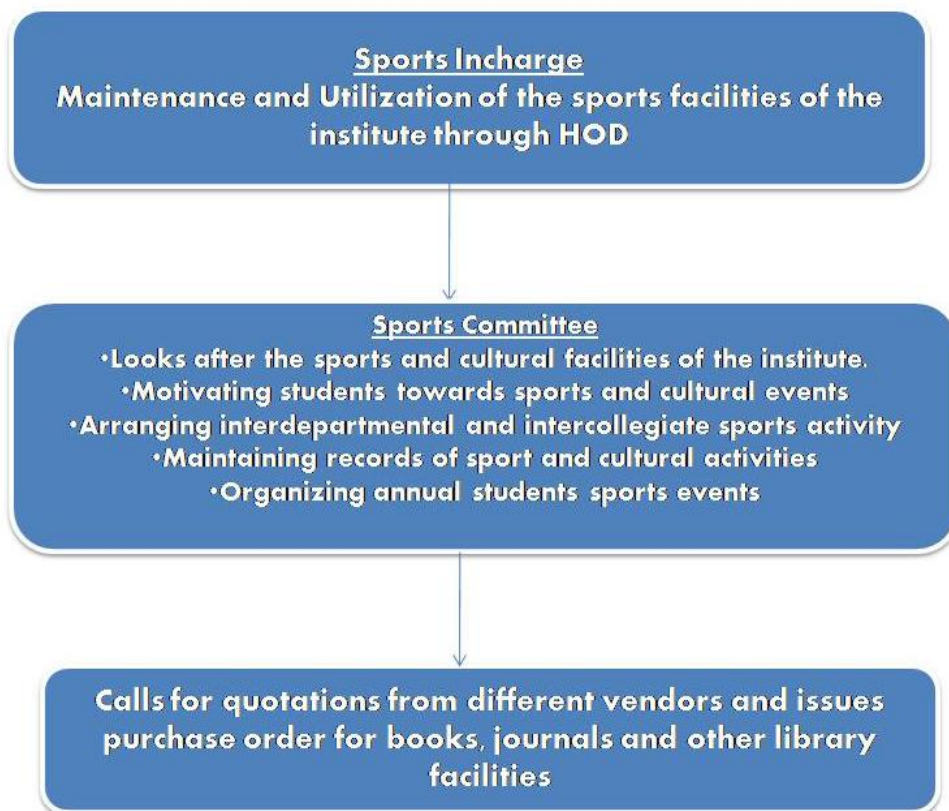
2. Dr. J. Guru Jawahar, Professor in CE - Coordinator
3. Mr. B. Ramana Reddy, HOD (CSE &CIC) - Member
4. Dr. K. Navaz, HOD (AI DS&AI ML) - Member
5. Dr. N. Pushapalatha, HOD ECE- Member
6. Dr. R. Murugesan, EEE- Member
7. Mr. A. Anil, HOD CE- Member
8. Mr. M. Balaji, HOD ME- Member
9. Dr. K. Haritha, HOD MBA- Member
10. Dr. B. Ramachandra, HOD H &S- Member
11. Mr. V. Rajasekhar, Librarian- Member Secretary



Sports Committee:

College recognizes extra-curricular activities like sports, games and entertainment for holistic development of the students and accordingly plans, schedules and conducts these events at the appropriate time every year and encourages the students to participate in the competitions as intramurals, extramurals like the intercollegiate tournaments, inter university tournaments and national level events.

1. Mr. A. Ram Prasad Raju: Physical Director
2. Mr. G. Suresh Kumar: Site Engineer
3. Mr. T. Ramesh: Attender



2. Energy Policy:

Preamble:

The Energy Policy of AITS, Tirupati is to manage energy in a systematic way so as to minimize its impact on the environment. Energy harvesting and Eco-friendliness are the two crucial elements for developing Sustainable Development Goals (SDGs) for the organization. Increasing energy demand is the factor of significance, hence as the conventional sources alone cannot meet the requirements easily; AITS Tirupati has incorporated the establishment of alternate energy resources in the form of Solar PV generation. Our institute has also taken an efficient energy management and conservation through established procedures specified in the policy. This policy will help us to embed efficiency and environmental awareness into our everyday activities, thus helping us to realize our responsibilities and commitment to conservation of natural resources and to limit its usage. In order to accomplish the energy management goals, this policy implies to explore and use the renewable energy resources to steer for the regulation, involvement and inculcation to lower the usage of the artificial energy sources. AITS Tirupati campus stays committed in maintaining the ecological balance in Tirupati smart city.

Statement:

The Energy Policy of AITS, Tirupati monitor, conserve and manage the demand supply rate of the energy in the institute. The Primary responsibility of the institute is to create awareness on the energy conservation measures to the staff and the students. Effective maintenance of the electric energy in accordance with the renewable energy sources available in the institute.

Objectives:

- ✓ Improvement of the energy efficiency by the reduction of energy consumption and its cost.
- ✓ Eliminate wastages by good house keeping practices
- ✓ Minimize environmental degradation
- ✓ Minimize the energy consumption by effective usage of day light and natural ventilation.

Energy Management Principles:

- Produce Energy at low cost
- Use energy at highest possible efficiency
- Use of Renewable energy
- Reduce, Reuse and Recycle

Energy Statistics in AITS Tirupati:

1. Electrical Energy:

- Maximum demand of the institute: 180 KvA
- Average utilization by the institute/ annum: 2,98,416 KvAh/Annum
- Average utilization by the institute/ month :24868 KvAh/month

2. Solar Energy:

- Installed : 200 Kw solar plant
- Solar generation per annum: 2,78,652 kWh
- Solar generation per month : 23054 kWh

Action Plan:

- Create awareness among the students and staff in Energy conservation and management by conducting training programs.
- Encourage faculty members to obtain Energy Audit certification.
- Provide experts to industry and other organizations in the area of energy management by offering Energy Audit Services.
- To count CO₂ emissions generated by our means of transportations- vehicles.
- To reduce local air pollution emissions using environment-friendly vehicles, including bicycles, public transportation and use of pedestrian-friendly roads.
- To install photovoltaic solar panels for the generation of alternate energy.
- To develop systematic waste management mechanism.

- To develop rain water harvesting unit.
- To undertake tree plantation drive.
- To engage in dialogue with the government agencies, municipal corporation and the affiliating university and actively work with the local organizations in the areas of environment, energy efficiency and sustainable development.
- To Conduct External Energy Audit once in a year and internal energy audit once in six months.
- Maintaining the uninterrupted energy supply needs of the campus with back up power supply.
- Establishment of energy efficient utilization measures.
- Implementation of Sensor-based energy conservation.
- To provide information and training opportunities on energy saving measures.
- To offer opportunities for employees and students to engage in initiatives those contribute to environmental protection.
- To train our employees and students through our Enviro Club to make them 'Go Green Specialists' and partners to plant trees each year.
- Replacement of the existing conventional lighting with the LED lamps in phased manner.
- Expansion of Solar PV System.
- The Institute shall continuously review and update the approved policy and is committed to its implementation and all the updates will be placed in the website.

3. Information Technology (IT) Policy:

Introduction (Need for IT Policy):

1. The Purpose of the policy is to present various IT resources and services with respect to their usage, maintenance and security in order to establish the consistency in campus practice and process.
2. Basically the AITS, Tirupati IT policy exists to maintain, secure, and ensure legal and appropriate use of Information technology infrastructure established by the college on the campus.
3. IT Policy is being documented for fair and transparent academic purpose for the use of various IT resources in the Campus for Students, faculty, Staff, Management and visiting Guests and Research Fellowship Members.
4. This policy establishes College-wide strategies and responsibilities for protecting the Confidentiality, Integrity, and availability of the information assets that are accessed, created, managed, and/or controlled by the college.
5. Information assets addressed by the policy include data, information systems, computers, network devices, Printers, Servers, WIFI details, Antivirus details , as well as documents and verbally communicated information

Vision:

- To provide state of the art of IT infrastructure and make all the institution content and services of IT enabled.
- To strictly adhere to the norms of the approval and affiliating bodies in maintaining IT infrastructure in the campus to realize the benefits of Outcome Based Education (OBE).

Mission:

- To upload the information technology infrastructure regularly and remain at the cutting edge of technology
- To confirm to legalized use of software system and applications.
- To provide fail safe and secure IT infrastructure that can provide a platform for all types all type of information, statics and dynamics

Objectives:

1. To provide all required IT resources as per the academic programs laid down by AICTE. Also, introduce new IT technologies which will benefit the students and research staff.
2. To effectively have an annual plan of introducing new technologies in-line with the Academia.
3. Create provision for priority up-gradation of the products
4. Create provision for annual maintainance expenses to ensure maximum up time of the products.
5. Plan and invest for redundancy at all levels
6. To ensure that the products are updated and catered 24x7 in the campus or as per the policies laid down by the college management.
7. Leveraging information technology as a tool for the socio-economical development of the Institute.

Applicability:

1. Stake holders on campus or off campus
2. Students: UG, PG, Research
3. Employees (Permanent/ Temporary/ Contractual)
4. Faculty
5. Administrative Staff (Non-Technical / Technical)
6. Higher Authorities and Officers
7. Guests

Resources:

1. Network Devices wired/ wireless
2. Internet Access
3. Official Websites, web applications
4. Official Email services
5. Data Storage
6. Mobile/ Desktop / server computing facility
7. Documentation facility (Printers/Scanners)

8. Multimedia Contents

Composition and Role:

Head of the institute and all the Head of the Departments: for the fair assessment, advice the things to be added, to do the fair assessment and get approval from the governing bodies.

Prohibited Downloads:

The following downloads are specifically not allowed on computers unless approved in writing by CCF (College Computing Facility).

1. Any peer to peer file sharing application: Such applications may be used to utilize bandwidth inappropriately.
2. Further, these applications contain third-party applications – called adware or spyware, that collect information about a user's Web surfing habits, change system settings, or place unwanted advertising on the local computer.
3. Any third party personal antivirus or firewall: Since adequate security has already been provided for on all machines via pre-defined firewall rules, third party firewalls may interfere with these rules thus endangering the network.
4. Any Proxy servers, private fire wall, tunnelling software, connectivity sharing software
5. Hacking tools of any sort: The use of any such tools on college network is strictly prohibited.
6. Games & Movie trailers or previews
7. Any other copyrighted content/materials/software which are not appropriate to the user

Hardware Infra structure:

1. Computers (900+ NO.'s)
2. Servers (3 NO.'s)
3. Data Centre
4. Projectors (30 NO.'s)
5. Printers (25 NO.'s)

Networking Infra structure:

1. LAN:1000 nodes
2. Wifi network : 25 access points
3. Active and passive components for networking
4. Core switch
5. Firewall security system
6. Internet applications

The Institution has campus network and Wi-Fi facility with around 1000 nodes. BSNL, HyFy Giga Fibre Private Ltd optic cables are available for faster and efficient connectivity. Old and outdated Computers are upgraded periodically. They are either replaced or enhanced with respect to configuration. Additional computing facilities are added based on the need arising out of requirements of students, research scholars and faculty.

Available Optical Cables:

1. Bandwidth details : 300 Mbps HyFy Giga Fibre Private Ltd internet leased line and 40 Mbps BSNL Broad band connection
2. LAN facility details : 1000 nodes LAN with OFC backbone
3. Wifi details : Centralised Controller with 25 access points

4. Fire Safety Policy:

a) Fire Extinguishers of ISI mark of adequate capacity and 210 numbers are provided in eye-catching spots in the college building.

FIRE EQUIPMENT

S.No	Name	NOs
1.	Fire Extinguishers'	210
2.	Hose Real	25
3.	Down Commer	5
4.	Manually operated Electric fire alarm System	35
5.	Fire pump	900LPM



FIRE FIGHTING EQUIPMENTS

b) First Aid Kits kept in college to meet out any eventuality. A list of items like burnol, hydrogen

Peroxide, pain killer tablets, pain killer sprays, Band aids etc kept in the First Aid Kit

c) Emergency telephone numbers are displayed in the prominent Place and list of persons to be contacted in case of any eventuality displayed in the prominent places in the college premises.

d) No High Tension Lines run inside or over the premises of a campus.

Extinguisher Operation:

1. Pull/remove the locking pin.
2. Aim the nozzle at the base of the fire
3. Press the lever down.
4. Starting from the edge of the fire sweep the nozzle from side to side advancing ahead.