

Gujarat Technological University Affiliation 2024-25

| Name of1 Department | Name of Laboratory | Major Equipment Name | List of equipment added during previous year | Edited During Previous |
|---------------------------|---------------------------|--|--|------------------------------|
| ELECTRICALENGINEE RING | Power system Lab | DIRECTIONAL IDMT DUAL POLORITE RELAY (NOS.2 Numerical Protection Relay Micom:P127 Horn Gap Apparatus | NA | NO |
| ELECTRICALENGINEE RING | Power Electronics | Dimmerstat(240)(415)2 nos. DIGITAL STORAGE OSCILLOSCOPE (NOS.2) DC POWER SUPPLY (5 A)NOS.2 XPO-PE/MU Master Unit 3 Phase thyristor firing card | NA | NO |
| ELECTRICALENGINEE RING | Machine Lab | 1). Control Panel With Polycarbonate Facia For 5hp Dc Shunt Motor,). 3hp/220v/1500rpm Dc Shuntmotor, 3). 5hp/415v/440rpm/Tefc/3 Phase Data Connected Sq.Case Industion Motor With Mechnical Loading Arrangement, 4). Dc Thyristor Controlled Regulated Power Supply With Close Loop Feed Back & Isolation Transformer Input 3 Phase 415 V Ac Supply O/P 0-220v -100 Amp Dc, Etc 5). 1.5hp Universal Motor With Artificial Mechnical Loading Arrengemet Along With Suituble Control Panel 6). Trasformar | NA | NO |
| ELECTRICALENGINEE RING | Microprocessor Lab | CRO DIGITAL oscilloscope | NA | NO |
| ELECTRICALENGINEE RING | EEE Lab | 1). 0-30 V Power Supply ,Single Phase Variac Electricity Lab,Omega Make Super Position Thevenin's Kit Model Etb-201 Etc | NA | NO |
| ELECTRICALENGINEE RING | Circuits & Network Lab | 1). Reciprocity Theorem,Maximum Power X'mer Theorems,Ac Servo Mechnism,Stepper Motor Demostration, Etc | NA | NO |
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| ELECTRICALENGINEE RING | Mesurement Lab & Protection Lab | Universal Motor Speed Control With Power Supply & Motor, Singal Phase Series Inverter, Siingal Phase Parallel Inverter, Dc To Ac Inverter, | NA | | NO |
| ELECTRONICS & COMMUNICATION | MICROWAVE LAB | 2 nos .100 Mhz 1 GS /S color digital storage oscilloscope with FFT KLYSTRON BASED MICROWAVE TRAINNER "ADD ON MODUAL TO UPGRADE MT- KLYSTRON BASIC AND MT-GUNN BASIC TO ADVANCE CONFIGURATION" "COMPONENTS FOR POLAR PATTERN AND GAIN CHARACTERISTIC FOR HORN ANTENNA" | NA | | NO |
| ELECTRONICS & COMMUNICATION | MICROPROCESSO R & MICROCONTROLL ER LAB | 1). ADM made universal trainer, kitec made M-8501 MICRO 85 kit, 8051 trainer kit Ni kit 51 2). 8051 dotter board, opto sensor card, 8051 trainer kit Ni kit 51, ADC/DAC card,spi base ADC/DAC card,RTC & Eprom Stepper motor card | NA | | NO |
| ELECTRONICS & COMMUNICATION | OPTICAL FIBER COMMUNICATION LAB | ADVANCED FIBER OPTIC TRAINER DUAL CHANNEL MODEL ST2502 (2 NUMBERS) | NA | | NO |
| ELECTRONICS & COMMUNICATION | BASIC ELECTRONICS | Analog Lab Kits Analog Lab | NA | | NO |
| ELECTRONICS & COMMUNICATION | VLSI LAB | (1)Logic Analyzer hosted /up gradable Universal Trainer / Development System Includes Model: TK Base (2)Xilinx FPGA SPARTAN3 XC3S400 Daughter board with Serial EPROM and JTAG Connector MODEL: TK3SXX – D | NA | | NO |
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| Date Of Signature | Na | me & Sign Of Director / Principal | <u>,</u> | Institu | ite Seal |
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| CIVIL ENGINEERIING | ' ' ' ' | | | | NO |
| | | Density Apparatus | S.S.Crucibal Leachatrial flask glass Proving Ring 50 KN HSN CODE: Testing Machine Integral Type (Compression Type) 5000 kgf. Sr.No. 02674 Relative Density Apparatus HSN Code: Scientific Instrument Dial Gauge HSN Code: Measuring Instrument Dial Gauge: 0.01 mm x 30 mm for C.B.R with Certificate | | |
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| CIVIL ENGINEEDUNG | | | previous year | During Previous |
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| CIVIL ENGINEERIING | TRANSPORTATION LAB | "Absolute Viscosity Testing Equipments (HSN Code: Scientific Instrument) IS: 1206 (PART - II) Sr. No. 101027" | Tubes HSN CODE: Spare of Scientific Instrument Canon Manning Viscometer Tube SIZE NO: 13 Kinematic Viscocity Tube HSN CODE: Spare of Scientific Instrument SIZE NO: 6 U Tube Viscometer HSN CODE: Laboratory glassware Canon Manning Vaccum Viscometer as per IS: 1206 Part II 1978 Size No: 12 C.B.R. Mould HSN Code: Testing Machine with Certificate Slotted Weight 2.5 kg HSN Code: Testing Machine Spare Weight 2.5 kg Annular/Slotted for C.B.R with Certificate Slotted Weight 5 kg HSN Cod | NO |
| MECHANICAL ENGINEERING | IC ENGINE | 4 strock 4 cylinder Petrol Engine test Rig (Morse test) Compression ratio valve lift in 4s engine Single cylinder 4s petrol engine Single cylinder 2s petrol engine Variable Compression ratio engine Sectional view of 4s single cylinder petrol engine Sectional view of 2s single cylinder petrol engine Valve timing Diagram of 4s single cylinder petrol engine Port timing Diagram of 2s single cylinder petrol engine Marse test Digital anemometer Single cylinder Diesel Engine test Ri | NA NA | NO |
| Date Of Signature | No | me & Sign Of Director / Principal | Institu | ute Seal |

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| MECHANICAL ENGINEERING | Material Science & Metallurgy | Radical' Inverted Binocular Miroscope RMM-77 Digital Eyepiece Camera Std Samples of Metallugical Microstructure (set of 23) Liquid Penetrant Testing (LPT) kit Digital Muffle Furnace Rockwell Hardness Tester | NA | • | NO |
| MECHANICAL ENGINEERING | COMPUTER AIDED MANUFECTURING | VERTICAL MACHINING CENTER | VERTICAL CENTER | . MACHINING | NO |
| HUMANITIES DEPARTMENT | PHYSICS LAB | TO STUDY THE CHARACTERISTICS OF DIODE TO STUDY THE SERIES AND PARALLEL COMBINATION OF SOLAR CELL TO STUDY THE VELOCITY MEASUREMENT OF ULTRASONIC WAVE TO STUDY THE BAND-GAP MEASUREMENT OF SEMI CONDUCTOR TO STUDY ZENER DIODE AS A VOLTAGE REGULATOR | NA | | NO |
| ELECTRICALENGINEE RING | CONTROL SYSTEM LAB | 2). Ac Servo Mechnism, Dc Position Servo Mechnism Stepper Motor Demostration Type 'O' Control System Type '1' Control System, Type '2' Control System 3). Linear System Advance Version Control Engineering Tutror Synchron Trasmitter/Recevir Pair | NA | | NO |
| ELECTRICALENGINEE RING | MICROCONTROLL ER LAB | Micro Controller Trainer USB TO Serial Cable Micro Controller Trainer Kit | NA | | NO |
| ELECTRICALENGINEE RING | SIMULATION LAB | 30 COMPUTERS | NA | | NO |
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| ELECTRICALENGINEE | ELECTRICAL WORKSHOP | Digital Multi meter (12C) Digital Multi meter (16C) Differents Type of wiring Panel Energy Meter Panel Digital Multi meter LAMP BOARD R-C CIRCUIT MECO MAKE AMMETTER 0-5/10 A AC MECO MAKE VOLTMETTER 0-150/300 V AC MULTI METTER Solder iron with component LAMINATED SHEET J 5-30A S.P METER GELCO 32A DP SURAKSHA ELCB+MCB SUPER 16A/415V/ICTP SWITCH BLOWER TRANSFPRMER GSB 13 RE IMPECTDRILL M/C Digital multimeter(12s) Digital multimeter(16s) TCLC/D-123/129 CONTACTOR TC T | added during previous year NA | | NO |
| MECHANICAL ENGINEERING | COMPUTER AIDED DESIGN LAB | "(1) 42 COMPUTERS of latest configuration. (2) Solidworks Education Bundle- perpetual Network License." | Bundle- 60 | s Education) Users with network license. | NO |
| COMPUTER ENGINEERING | SOFTWARE ENGINEERING | 60 COMPUTERS | NA | | NO |
| COMPUTER ENGINEERING | OBJECT ORIENTED,CPU, OOAD& UML LAB | 60 COMPUTERS | NA | | NO |
| COMPUTER ENGINEERING | OPERATING SYSEM | 60 COMPUTERS | NA | | NO |
| COMPUTER ENGINEERING | PROJECT LAB | 20 COMPUTRS | NA | | NO |
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| CIVIL ENGINEERING | MECHANICS OF SOLID | Fatigue Testing Machine Torsion Test Apparatus Universal Testing Machine 60 Tonne Capacity, Digital (Electronic) Model - AZ - UTM 60 Compression Testing Machine (200 KN) Digital Rockwell Hardness HSN Code- Testing Machine Model - Al- RABI - Rockwell Cum Brinell "Vibrating Machine (HSN Code: Testing Machine) As Per IS 4031 Supplied complete with Mortar Mould Base Plate Suitable for Operation on 230 V single Phase AC Supply With mechanical time switch Sr.No. 090830 " Beam Mould 150 | NA | NO |
| CIVIL ENGINEERING | ENGINEERING MECHANICS | Universal Force Table - 900 (Superior) Parallelogram of Forces Apparatus - 904 Triangle & Parallelogram Forces Apparatus Parallel Forces Apparatus Young's Modulus Apparatus Combined Coil and Belt Friction Apparatus Moments of Inertia of Flywheel Combined Inclined Plane Wheel And Differential Axle Winch Crab Single Purchase Izod impact apparatus | NA | NO |
| CIVIL ENGINEERING | SURVEYING | Dumpy Level AE – 19 with Stand Automatic Level C 410 Dumpy Level AE – 19 with Stand Line Ranger AE - 14 Automatic Level B 40 Transit Vernier Theodolite Digital Theodolite Digital Planimeter GPS Instrument (With Software To Plot Map on Geospatial base) Theodolites, Levelling Staff | NA | NO |
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| MECHANICAL ENGINEERING | Fluid Mechanics Lab | "METACENTRIC HEIGHT APPARATUS " "BERNOULLI'S THEOREM APPARATUS " "DISCHARGE THROUGH VENTURIMETER, ORIFICEMETER & ROTAMETER" "LOSSES DUE TO FRICTION IN PIPE LINES " "DISCHARGE OVER NOTCHES " "REYNOLD'S APPARATUS | NA | NO NO |
| | | "Losses due to pipe Fittings, Sudden Enlargement, and Contraction " "PITOT TUBE SETUP | | |
| MECHANICAL ENGINEERING | Dynamics of Machines | Software and Computer Static and Dynamic balancing appratus Whirling of shaft appratus Universal vibration appratus | NA | NO |
| MECHANICAL ENGINEERING | Elements of Mechanical Engineering | lancashire boiler model babcock and wilcox boiler centrifugal pump pelton turbine francis turbine | NA | NO |
| MECHANICAL ENGINEERING | Fluid Power Lab | IMPACT OF JET ON VANES CENTRIFUGAL PUMP TEST RIG RECIPROCATING PUMP TEST RIG PELTON WHEEL TURBINE TEST RIG, FRANCIS TURBINE TEST RIG, DOUBLE STAGE AIR COMPRESSOR TEST RIG | NA | NO |
| MECHANICAL ENGINEERING | Kinematics of Machine | Cam and follower (model 1042) HSN Gear set (model 1003) HSN | NA | NO |
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| MECHANICAL ENGINEERING | Machine Lab | Precision Lathe m/c,L.D.,4.5'Bed length H.C. 6.5", Harden bed,Fully norton gearbox 8? X3J True chuck, Ele. & standard accessories Precision Lathe m/c,L.D., 6' Bed length H.C. 6.5", Harden bed,Fully norton gearbox 8" X3J True | NA | NO |
| MECHANICAL ENGINEERING | Mechanical Measurement and Metrology Lab | Gauge Block Set(83 pieces) Height Gauge(300mm) | NA | NO |
| MECHANICAL ENGINEERING | Refrigeration and Air conditioning | "Eductional variable compression recycle test rig" Educational air conditioning test rig | NA | NO |
| MECHANICAL ENGINEERING | Heat and Mass Transfer | Composite wall appratus Thermal conductivity of insulation powder Thermal conductivity of metal rod Critical heat flux apparatus Stefan Boltzmann Appratus Emissivity measurement Appratus forced convation Appratus Natural convection Appratus Pin fin Appratus Shell and tube heat exchanger as water to water type parallel flow/counter flow Appratus | NA | NO |
| MECHANICAL ENGINEERING | Workshop | swag block | NA | NO |
| MECHANICAL ENGINEERING | Manufacturing Process -2 | Electric Blower | NA | NO |
| MECHANICAL ENGINEERING | Theory of Machines | Motorise gyroscope appratus Governor appratus CAM analysis appratus Generation of gear tooth profile Epicyclic gear train appratus | NA | NO |
| MECHANICAL ENGINEERING | Industrial Drafting and Machine Design | Computers | NA | NO |
| ELECTRONICS & COMMUNICATION | ELECTRONICS WORKSHOP | Function Generator ING 2000 Power Supply C.R.O | NA | NO |
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| ELECTRONICS & COMMUNICATION | ADVANCE ELECTRONICS | 30 Mhz cro (4 nos)+function generator (4 no) +power supply (4 nos) multimeter Rishabh universal analog and digital trainer kit | NA | NO |
| ELECTRONICS & COMMUNICATION | COMMUNICATION LAB | 60 MHZ Digital Storage Oscillos DSB/SSB AM transmeter kit DSB/SSB AM receiver kit FM MOD/Demod kit | NA | NO |
| ELECTRONICS & COMMUNICATION | ICA LAB | CRO with FG General purpose traineer | NA | NO |
| ELECTRONICS & COMMUNICATION | ELECTRONICS MEASUREMENT & INSTRUMENTATIO N | LVDT Traineer Universal IC tester LCRQ bridge meter | NA | NO |
| ELECTRONICS & COMMUNICATION | DIGITAL ELECRONICS LAB | Digital Lab | NA | NO |
| ELECTRONICS & COMMUNICATION | ANTENNA AND WAVE PROPOGATION | ANTENNA KIT ST-2261 SCIENTECH MADE | NA | NO |
| ELECTRONICS & COMMUNICATION | AUDIO VEDIO LAB | colour tv trinner st2651, | NA | NO |
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| ELECTRONICS & COMMUNICATION | DIGITAL COMMUNICATION LAB | "(1)DELTA ,ADUPTIVE DELTA ,DELTA SIGMA MOD/DEMOD MAKE: SCIENTECH MODEL ST 2155 | NA | NO |
| | | " 2)DATA REFORMATING & CARRIER DEMOD / RX TRAINER MAKE : SCIENTECH MODEL ST 2157 DATA FORMATING & CARIER MOD MAKE : SCIENTECHX'TER TRAINER MODEL ST 2156 "TDM PCM RECEIVER TRAINER MAKE : SCIENTECH MODEL ST 2154" MUX/DEMUX /DECODER TRAINNER KIT ST 2503 PAM/PPM/PWM MOD/DEMOD TRAINNER KIT ST 2150 SAMPLING AND RECONSTRUCTION TRAINNER KIT TDM PULSE AMPLITUDE MOD/DEMOD TRAINER KIT ST 2152 TDM + CODE MODULAT | | |
| ELECTRONICS & COMMUNICATION | WIRELESS COMMUNICATION LAB | CDMA MOBILE COMMUNICATION TRAINNER KIT MOBILE TELEPHONE COMMUNICATION SYSTEM | NA | NO |
| ELECTRONICS & COMMUNICATION | EMBEDED SYSTEM LAB | EMBEDED LAB FOR ARM7 LPC2148 PLATFORM | NA | NO |
| ELECTRONICS & COMMUNICATION | DIGITAL SIGNAL PROCESSING LAB | "(1) ARCHITECHTURE AND DESIGN TUTOR FOR DSP ,DSP 6713 AND DSP 2812 STARTER KIT (2) TEXAS INST. CODE COMPOSER STUDIO" | NA | NO |
| ELECTRONICS & COMMUNICATION | SIMULATION LAB | PERSONAL COMPUTERS MATLAB LATEST VERSION (SOFTWARE) | NA | NO |
| COMPUTER ENGINEERING | WEB DESIGN | 60 COMPUTERS | NA | NO |
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| CIVIL ENGINEERING | ENVIRONMENTAL RESEARCH LAB | High Volume Sampler (RDS) (Envirotech-vayubodhan) High Volume Sampler, PM2.5 and PM10 (Yash,Baroda) Stack Monitoring Kit (Envirotech-vayubodhan) DR2800 Spectrophotometer (HACH, USA) HQ40D Dual Input Digital Multi Parameter with DO, pH/ORP & TDS/Conductivity Sensors(HACH,USA) DRB 200 COD/TOC Reactor (HACH,USA) BOD Incubator(EIE) Microbalance Thermo Microprocessor based Gas Chromatography Atomic Absorption Spectrophotometer High Volume Sampler, PM2.5 and PM10 (Yash,Baroda) PM 2.5 Samp | added during previous year High Volume Sampler, PM2.5 and PM10 (Yash, Baroda) Gas Standard mixture (3L) | | NO |
| Chemical | Chemistry lab | oven, ph meter, spectro-photo meter, weighing balance pH Meter Spectrophotometer Digital Weighing Balance Hot Air Oven Distillation Unit Hot Plate | distillation unit | | NO |
| Electrical Engineering | High Voltage | High voltage insulation tester Electrolytic Tank | NA | | NO |
| Chemical Engg | OC & UP | Melting Point Apparatus | Melting Po | oint Apparatus | NO |
| Chemical Engg | P & IC | Conductivity Meter | Conductiv | ity Meter | NO |
| Chemical Engg | CPI – I & II | Heating Mantle | Heating M | antle | NO |
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| Chemical Engg | PHT | 1. Composite wall apparatus 2. Thermal conductivity of insulating Powder 3. Thermal conductivity of Metal Rod 4. Stephan Boltzmann apparatus 5. Emissivity measurement apparatus 6. Forced Convection apparatus 7. Natural Convection apparatus 8. Shell & Tube Heat exchanger as water to water type. | 1. Composite wall apparatus 2. Thermal conductivity of insulating Powder 3. Thermal conductivity of Metal Rod 4. Stephan Boltzmann apparatus 5. Emissivity measurement apparatus 6. Forced Convection apparatus 7. Natural Convection apparatus 8. Shell & Tube Heat exchanger as water to water type. | | NO |
| Chemical Engg | IPC | PC-PL Based Multi process control system Trainer with SCADA software & Noiseless air compressor Air purge bubbler system for level measurement. | PC-PL Based Multi process control system Trainer with SCADA software & Noiseless air compressor Air purge bubbler system for level measurement. | | YES |
| Chemical Engg | МО | 1. Jaw Crusher 2. Roll Crusher 3. Cyclone Separator, 4. Plate & Frame filter press, 5. Forth flotation cell, 6. Air Composer | 1. Jaw Crusher 2. Roll Crusher 3. Cyclone Separator, 4. Plate & Frame filter press, 5. Forth flotation cell, 6. Air Composer | | NO |
| Chemical Engg | MT | Fluidized bed dryer vapour liquid equilibrium setup with refractometer Experimental water cooling tower, Sieve plate distillation column | 1. Fluidized bed dryer 2. vapour liquid equilibrium setup with refractometer 3. Experimental water cooling tower, 4. Sieve plate distillation column | | NO |
| Chemical Engg | PRPC | 1.Condradson Apparatus 2. say Bolt viscometer 3. Smoke point apparatus 4. Pensky Marin Apparatus 5. Cloud And Pour Point apparatus | 1.Condradson Apparatus 2. say Bolt viscometer 3. Smoke point apparatus 4. Pensky Marin Apparatus 5. Cloud And Pour Point apparatus | | NO |
| computer engineering | Artificial Intelligence | 36 Computer Systems 1 UPS with Batteries Networking Devices (Switches, IO Ports, LAN Cables) | NA NA | | NO |
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| chemical engineering | CRE | 1. RTD in CSTR 2 RTD in laminar flow reactor 3 RTD IN PMFR 4 HELICAL COIL REACTOR 5 PFR AND CSTR IN SERIES 6. THREE CSTR IN SERIES 7 Laminar flow reactor 8 single tube isothermal packed bed reactor | na | YES |
| Applied Science and humanity | Physics | Measurement of the distance using ultrasonic sensor MELDE'S Experiment Transverse and Logitudinal Modes Frequency of AC supply using SONOMETER method Acoustic grating method set up for measurement of velocity of ultrasonic wave in liquids Study of Damp Harmonic Motion To determine Young's modulus of elasticity of the material of a given wire To determine the unknown frequency of the tunning fork To find out the velocity and compressibility of liquid using ultrasonic interferometer To m | NA | YES |
| MECHANICAL ENGINEERING | ENGINEERING THERMODYNAMIC | WATER TO WATER HEAT-PUMP | WATER TO WATER HEAT-PUMP | YES |
| | S | BOMB CALORIMETER | BOMB CALORIMETER | |

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