KAVIKULGURU INSTITUTE OF TECHNOLOGY AND SCIENCE, RAMTEK – 441 106, DIST. NAGPUR

List of Major Equipment/Facilities in each Laboratory/Workshop

Name of the Department**: CIVIL ENGINEERING DEPT.**

Sl.No.	Name of the Lab/workshop	Name of major equipment
1.	Fluid Mechanics Lab	Venturimeter, Orificemeter, Adajustable channel, Francis turbine, Centrifugal pump, Pelton wheel, Self priming pump, Jet pump apparatus, Bernaullis apparatus, Collecting tank, Basic hydrology system, Reciprocating pump
2.	Material Testing lab	Channel Type Compression Testing machine (2000KN), Vibrating Machine, Digital Weighing Balance(1000kg), Ultrasonic Concrete tester, Prestressing System, Tile Flexure Strength Testing Machine (capacity-200kg), Tile Abrasion Testing Machine, Briquettle Testing Machine, Automatic Compression Testing Machine, Load Measurement along with Load Cell, Profoscope, Concrete Test hammer (Proceq, Switzerland make)
3.	Structural Analysis lab	Beg's Defosmometer set, Two Flinged Arch Apparatus, Digital strain indicator, Maxwell's Reciprocal theorem apparatus, Truss apparatus, Three hinged Arch apparatus, Loading Frame, Dial gauges with magnetic base
4.	Surveying and Geomatics lab	Tilting Level With stand, Dumpy Level With Stand, Theodolite with Stand, Plane Tables with Stand, Prismatic Compass, Planet EarthGlobe-34cm, Mi.Automatic Level N420 (Wild Model), Ranging Rod, Digital Planimeter, Total Work Station
5.	Transportation Engg. lab	Two Pan Borrange balance, Ductility Testing Machine, Los Angeles Abrasion Testing M/C, Marshal stability Apparatus, CBR Apparatus Motorized, Deval Abrasion test apparatus, Digital Weighing Balance 200kg capacity, Digital Weighing Balance 20kg capacity, Thermostatic Heater 0-300^{0}C,
6.	Geotechnical Engg. Lab	Direct Shear Apparatus, Load Frame, CBR Apparatus, Compaction Test Apparatus, Permeability Apparatus, Swell Test Apparatus, Self-Compensative Pressure Apparatus, AIMIL Split Spoon Sampler with brass liner, AIMIL Compaction Mould, AIMIL Direct/Residual shear test apparatus, AIMIL Triaxial test apparatus
7.	Solid Mechanics	Brinell`s Hardness testing machine, Pendulum impact testing machine, Torsion testing machine, Universal testing machine, Tensometer

KAVIKULGURU INSTITUTE OF TECHNOLOGY AND SCIENCE, RAMTEK – 441 106, DIST. NAGPUR

List of Major Equipment/Facilities in each Laboratory/Workshop

Name of the Department: **CIVIL ENGINEERING DEPT.**

Sl.No.	Name of the Lab/workshop	Name of major equipment
8.	Computer Centre	P-IV 1.5 GHz256 MB DDR With Speaker, P-IV 1.8 GHz Systems with Hard Disk, P-IV 1.8 GHz Systems without Hard Disk, LCD Projector, Nec VT480, IBM Lenevo, Intel 946 chipset/2.8GHz/512MB RAM/160 GB HDD/17'' CRT monitor, P4(D) core system/160 GB HDD/ 1GB RAM/15" LCD(BenQ MAKE), P4 2.6 GHz/320 GB HDD/2GB RAM/LCD 18.5" LT(Acer), P4 2.8 GHz/500 GB HDD/2GB RAM/18.5 LCD ACER, HP 1005 MFP Printer, ESSI Make Fingered Print(Attendance), LCD projector Panasonic LX22LCD, P4 2.8 GHz/4GB RAM/340GBHDD/18.5" LCD Acer, UPS power Master 3 KVA with Batteries, STAAD SUITE with ETC, GATE Software, STURDDS 2008 (10 users)
9.	Structural Dynamics Lab	Horizontal Shake Table with Eccentric Cam with Control Unit, Experimental Models:- (12 nos.), Digital Static Strain Indicator (Single Channel), Dynamic Strain Indicator (Single Channel)
10.	Environmental Engg. lab	BOD Incubator, Hot air oven with circulating fan, Digital dissolve oxygen meter, Digital spectra photometer, Water analysis kit CK710, Digital balance, Water and soil analysis kit

KAVIKULGURU INSTITUTE OF TECHNOLOGY AND SCIENCE, RAMTEK – 441 106, DIST. NAGPUR

List of Major Equipment/Facilities in each Laboratory/Workshop

Name of the Department: **MECHANICAL ENGINEERING DEPARTMENT**

Sl.No.	Name of the Lab/workshop	Name of major equipment
1.	Material Testing Lab	Image Analysis System with Computer
2.	I year Workshop	Tools of Fitting section
3.	I year Workshop	Tools of Carpentary Section
4.	I year Workshop	Tools of Welding Section
5.	I year Workshop	Tools of Black Smithy Section
6.	Manufacturing Process Lab	Sphere Gap Assembly with water resister, Road Gap Assembly with water resister, High Voltage Insulation Tester 30kV, 30mA, 100kV Testing Transformer with Control Panel 50mA, GI wire caging
7.	Mechanical Measurement and Metrology	Profile Projector, Tool Makers Microscope, Floating Carriage Diameter Measuring Machine
8.	Dynamics of Machines Lab	Vibration Generator with Accelerometer, power amplifier and Tachometer, Balancing of Reciprocating masses
9.	Machine shop	Lathe machine and accessories (9 Nos.), Heavy duty Shimoga Lathe HD machine (1 No.), Surface Grinding Machine, Radial Drilling Machine, Padmini Student Lathe machine, Master slotting machine S-6" and Tilting Head, Master Heavy duty shaping machine stroke 18", Master Double column planning machine stroke 4 ft. ½", Semi automatic Lathe (PLC controller)
10.	Heat Power Lab	Engine Test set up with Engine indicator
11.	CAD/CAM lab	**LG My PC**, P4-2.66 GHz, Intel 915 Chipset, 512 MB DDR RAM, 1.44 MB, FDD, 80 GB HDD, 17" CRT Monitor, CD ROM (6 Nos.), **IBM Lenovo** Intel 945 chip set mother board, 2.8 GHz Dual Core with 4 MB Cache, 512 MB DDR2 RAM, 160 GB HDD 17" CRT Monitor, Combo drive (4 Nos.), **Intel 845** chipset BenA Intel P-Dual Core 2.2 GHz 8 MB Cache 1 GB DDR-2, RAM, 160 GB HDD, LG DVD writer 15.6" BenQ TFT LCD Monitor **Intel G31** Chipset Dual Core 2.6 GHz, 2 GB DDR-2 RAM, .320 GB HDD, HP DVC writer, 18.5" Acer TFT LCD Monitor (6 Nos.), **P-IV** G640, Acer Monitor, ECS H61H2-M2 motherboard with 3 MB Cache, 2.8 GHz Core 2 Duo500 GB HDD, 4 GB DDR 3 RAM, Key board, Optical Mouse, Acer 18.5" LCD Monitor (10 Nos.) Intel G41 Chipset Dual Core 2.8 GHz, 2 GB DDR 2 RAM, 320 GB HDD, LG DVC writer, 18.5" Acer TFT LCD Monitor (10 Nos.), CNC Turning Machine, CNC Milling Machine, 6 step Robotics, Modular Automation Production System (MAPS), Creo 1.0

KAVIKULGURU INSTITUTE OF TECHNOLOGY AND SCIENCE, RAMTEK – 441 106, DIST. NAGPUR

List of Major Equipment/Facilities in each Laboratory/Workshop

Name of the Department: **ELECTRONICS & COMMUNICATION ENGG**.

Sl.No.	Name of the Lab/workshop	Name of major equipment
1.	DSD and DSP lab	DSP Kit with Power Supply, VLSI Software with FPGA & CPLD trainer kit (Xilinx S/W), P IV Based Computer, MATLAB Software, VLSI Dev Kit with CD logic Analyser, LG My PC Pentium IV 2.66 GHz, Intel 915 chipset mobo, 256 MB DDR RAM, 40 GB HDD, 1.44 MB FDD, 15" CRT, 52XcdroM (LG make), Embedded System-SPJ PUNE, VLSI, DSP Xilinx S/W ISE Series, VLSI,CPLD trainer kit, DSP Kit-TMS320C5416 (1) & TMS320C6713 (2), LENOVA Dual Core Intel Processor Systems, MICROWIND software, LCD Projector (Seminar Hall), Pentium(R)-Dual Core Intel G31, 2.6 GHz, 320 GB HDD, 2GB RAM, Acer make TFT 18.5", Pentium(R)-CORE Intel G41,CPU E5500, 2.80 GHz, 500 GB HDD, 2Gb RAM, Acer make TFT Monitor, MATLAB R2010b V7.6 5 user, 8 toolboxes with simulink 2 user, Pentium(R)-CORE CPU E5500, 2.80 GHz, 250 GB HDD, 2BG RAM, Acer make TFT Monitor, DSD KIT - NEXYS-3, XUP VERTEX-5, BASYS-3E, NEXYS-2
2.	Microprocessor lab	Microprocessor Trainer KITS 8085 XPO,8086 XPO, CRO (20 MHz), Anshuman XPO-8051, Vimicro 8085, P-III Computer, 8085 Microprocessor kit
3.	Communication Engg. lab	Fiber Optic Lab Package, Adaptive Delta Modulation, Digital Communication Training Lab Kit, HAMEG make spectrum Analyser Expt Kit, Q.A.M..Modulation and Demodulation, F.D.M.Multiplexure & Demultiplexure, CRO (Scientific), Digital Oscilloscope, Generation and Detection of Direct sequence Spreed Spectrum Trainer
4.	Electronics Devices & Circuits lab	CROs, Function Generator, Digital Multimeters, Power Supply, PIII Computers
5.	T.V. Engineering lab	Digital Storage Oscilloscopes, Colour TV Trainers, Black & White TV Trainers, Over Head Projector, SERVO Voltage Stabilizer
6.	Computer Centre	PC-PIII-500 MHz Compyter System With 17' Colour monitor, A.C.with 4KVA Voltage Stabilizer, Comsim Software, UPS, LENOVA Dual Core Intel Processor, LCD Projector (ACER Make, Pentium(R)-Dual Core Intel G31, 2.6 GHz, 320 GB HDD, 2GB RAM, Acer make TFT 18.5", Pentium(R)-CORE Intel G41 CPU E5500, 2.80 GHz, 500 GB HDD, 2GB RAM, Acer make TFT Monitor, Xilinx Suit 14.1, LCD PROJECTOR HITACHI

KAVIKULGURU INSTITUTE OF TECHNOLOGY AND SCIENCE, RAMTEK – 441 106, DIST. NAGPUR

List of Major Equipment/Facilities in each Laboratory/Workshop

Name of the Department: **ELECTRONICS & COMMUNICATION ENGG.**

Sl.No.	Name of the Lab/workshop	Name of major equipment
7.	Analog Circuit Design Lab	CROs, Function Generators, Universal Electronic test System, P-III Celeron based Computer, Universal Electronics Toner kit, APLAB 20 MHz Dual Trace CRO, Robotkit-Firebird-V(IIT-B) with accessories
8.	Electronics Workshop	Photoresist Dip coating Machine, Ultra Violet System, CRO(Dual channel)20MHz, Power supply (Dual /Single), Linear cum Digital IC Tester, Photo-Shot Compact Camera, PCB Drilling Machine, PCB Design Layout Software, Tube Type Bubble Etching Machine
9.	Electronic System Design lab	CROs, Function Generators, Power Supply, Universal Elect. Trainer Kit, P-III Computer 500 MHz,
10.	Digital Electronics lab	Digital IC Tester, Digital IC Trainer kit, Project Board AET-27 Digital IC Trainar Kit.(Anshuman)
11.	RF and Microwave lab	Klystron Power Supply, Klystron Tube, Klystron Tube with mount, Frequency Meter, Isolator, Power Meter, Turn Table for Radiation pattern Measurement, Micro Tutor-85, Digital Storage Oscilloscope, CRO 60 MHz, Microstrip Trainer kit, Microstrip Antenna Trainer kit, Power Meter with Sensor, CROs
12.	Adv. Microprocessor and Microcontroller / Embedded System Lab	Model XPO kit 8086, SMPS, MODROBS PROJECT LAB VIEW Software and Embedded boards ARM7, CORTEX M3, Over Head Projector (OHP)

KAVIKULGURU INSTITUTE OF TECHNOLOGY AND SCIENCE, RAMTEK – 441 106, DIST. NAGPUR

List of Major Equipment/Facilities in each Laboratory/Workshop

Name of the Department: **ELECTRICAL ENGG. DEPARTMENT**

Sl.No.	Name of the Lab/workshop	Name of major equipment
1.	High Voltage Engineering lab	Sphere Gap Assembly: 50/60 mm with water resistor & micrometer scale, Rod Gap Assembly: with water resistor & micrometer scale, High Voltage Insulation Tester:30kV,30mA, Corona Cage, 100 kV testing transformer with control panel 50mA
2.	Electrical Machines Lab	"ARWA" make 5 HP D.C. shunt motor coupled with 3 KVA 440 Volt 3 phase Alternator, ARWA" make 3 HP, 415 Volt synchronous motor coupled with 3 KVA 220 Volt dc shunt generator
3.	Control System Lab	Control engineering trainer (P/D Controller), BPL India make dual channel CRO, DC Motor Speed Control System, Digital Control System Microprocessor based, A.C.Servomoter Speed Torque
4.	Electrical Measurement and Instrumentation lab	Decade Capacitance Box, Decade Inductance Box, Direct Reading Potentiometer, DC Potentio Meter, Temperature measurement using thermocouple and thermister, Capacitive Type Pressure Gauge
5.	Electrical Machines lab	Motor generator set (3.7 KW D.C. motor coupled with 3.5 kVA single phase alternator), "BENLEC" make 5 HP D.C. compound motor coupled with 3 phase Alternate, "ARWA" make 5 HP D.C. shunt motor coupled with 3 KVA 440 Volt 3 phase Alternator, ARWA" make 3 HP, 415 Volt synchronous motor coupled with 3 KVA 220 Volt dc shunt generator
6.	Power Electronics lab	Aplab Make CRO, D.C. to D.C. Convertor, D.C. Shunt Motor, Dual Channel CROs, IGBT/MOSFET Inverter panel, Converter/Inverter panel(PE1), Digital Storage Oscilloscope, Cathode Ray Oscilloscope
7.	Network Analysis lab	Panel Cum Master Unit FCC, Digital Multimeters(MECO)
8.	Computer Centre	Acer Branded Systems 4GB/500GB/ 18.5 keyboard + mouse +DVD writer, CISCO SLM2024 24-port smart Managed switch, LCD Projector
9.	Switchgear and Protection lab	Panel for Differential Protection of Transformer, Relay Testing Kit, Electromagnetic IDMT O.C.Relay, Induction Type Directional O.C. Relay
10.	Electrical Engineering workshop	Coil Winding Machine With Counter (Manual),

KAVIKULGURU INSTITUTE OF TECHNOLOGY AND SCIENCE, RAMTEK – 441 106, DIST. NAGPUR

List of Major Equipment/Facilities in each Laboratory/Workshop

Name of the Department: **COMPUTER TECHNOLOGY DEPARTMENT**

Sl.No.	Name of the Lab/workshop	Name of major equipment
1.	Computer Lab (203)	Intel G31 Intel chipset 2 GB, Intel Dual core 2.6 GHz 2 GB DDR-2 RAM, ATX Cabinet 320 GB Sata HDD, 18.5 Acer TFT monitor, Logitech keyboard, mouse, HP DVD Writer **(1 No)**
		LG P4 2.66 GHz 17" colour monitor, 512 MB RAM, 80 GB HDD, 1.44 FDD, 52X CDWriter Optical Mouse, Keyboard **(**21 Nos.)
		Lenovo IBM P4 3.0 Dual , 512 MB RAM Combo Drive, 80 GM Sata HDD Keyboard, Optical Mouse 17' CRT Monitor (2 Nos.)
2.	Server room (206)	IBM Server X3400 (4 Nos.)
		Digital Server Pentium pro PRIORIS Xle 6200, 200 MHz, 32 MB RAM,1.44 MB FDD, 12xCDROM, 2 GB HDD, Ethernet card, Keyboard, Mouse,14 mono monitor (1 No.)
		IBM Power Server
		Desktop with i7 processor
		3COM Manageable switch (48 port)
		SWITCH 24 PORT HP A5120-24G EI 24 10/100/1000
		CISCO ROUTER
3.	Computer Lab (264)	Dell Vostro i3 9th generation 4 GB DD4 RAM/ 1 TB HDD / 19" LED Monitor/Keyboard /Mouse/DVD Writer (25 Nos.)
4.	Computer Lab (265)	Acer System Memory 2 GB, HDD 500 GB Sata,18.5" LCD monitor, Keyboard (5 Nos.)
		Intel CPU Pentium 2.80 GHz G41 Chipset Memory 2 GB RAM, Segate HDD 500 GB ,LG DVD Writer, Logitech Keyboard, Mouse, 18.5" TFT Monitor Acer (9 Nos.)
		Intel G31 Intel chipset, Intel Dual core 2.6 GHz 2 GB DDR-2 RAM, ATX Cabinet 320 GB Sata HDD, 18.5 " Acer TFT monitor, Logitech keyboard, mouse, HP DVD Writer (7 Nos.)
		Acer System Memory 4 GB, HDD 500 GB Sata 18.5" LCD monitor, Keyboard Mouse (14 Nos.)
		Acer System Memory 4 GB, HDD 500 GB Sata, 18.5" LCD monitor, Keyboard (7 Nos.)
5.	CTD faculty rooms	Lenovo IBM P4 2.8 Dual , 512 MB RAM , Combo Drive, 160 GB Sata HDD, Keyboard, Optical Mouse 17' CRT Monitor (3 Nos.)
6.	Others	Acer System Memory 4 GB, HDD 500 GB Sata 18.5" LCD monitor, Keyboard Mouse (10 Nos.)

KAVIKULGURU INSTITUTE OF TECHNOLOGY AND SCIENCE, RAMTEK – 441 106, DIST. NAGPUR

List of Major Equipment/Facilities in each Laboratory/Workshop

Name of the Department: **INFORMATION TECHNOLOGY DEPARTMENT**

Sl.No.	Name of the Lab/workshop	Name of major equipment
1.	CCC Lab	Computer-Intel 945 Chipset, Gigabyte Motherboard, Intel Dual Core P-IV 2.2. GHz, 1GB RAM, DDR2, 160GB HDD, 15" LCD Monitor (60 Nos.)
.		Computer-Intel 945 Chipset, G31 Gigabyte Motherboard, Intel Dual Core 2.6 GHz, 2GB RAM, DDR2, 320GB HDD, 18.5" LCD Monitor (6 Nos.)
		Computer-Intel 945 Chipset, G41 Gigabyte Motherboard, Intel Dual Core 2.8 GHz, 2GB RAM, DDR2, 500GB HDD, 18.5" LCD Monitor (25 Nos.)
		IBM Computer-Intel 946 Chipset Motherboard, Intel Dual Core P-IV 3.0 GHz, 1GB RAM, DDR2, 80GB HDD, 17" CRT Monitor (2 Nos.)
		Computer-Intel 945 Chipset, G41 Gigabyte Motherboard, Intel Dual Core 2.8 GHz, 2GB RAM, DDR2, 500GB HDD, 18.5" LCD Monitor (10 Nos.)
		Computer-Intel 945 Chipset, G31 Gigabyte Motherboard, Intel Dual Core 2.6 GHz, 2GB RAM, DDR2, 320GB HDD, 18.5" LCD Monitor (8 Nos.)
		Acer Branded-Intel 945 Chipset, Intel Core2Duo 2.88 GHz, 4GB RAM, DDR2, 500GB HDD, 18.5" LED Monitor (10 Nos.)
		IBM Computer-Intel 946 Chipset Motherboard, Intel Dual Core P-IV 3.0 GHz, 1GB RAM, DDR2, 80GB HDD, 17" CRT Monitor (35 Nos.)
		IBM Computer-Intel 946 Chipset Motherboard, Intel Dual Core P-IV 3.0 GHz, 1GB RAM, DDR2, 80GB HDD, 17" CRT Monitor (14 Nos.)
2.	Microprocessor lab	Regulated DC power supply

KAVIKULGURU INSTITUTE OF TECHNOLOGY AND SCIENCE, RAMTEK – 441 106, DIST. NAGPUR

List of Major Equipment/Facilities in each Laboratory/Workshop

Name of the Department: **ENGG. SCIENCES & HUMANITIES DEPARTMENT**

Sl.No.	Name of the Lab/workshop	Name of major equipment
1.	Advanced Engg. Materials	Hall effect apparatus and Digital Gauss meter (5 Nos.)
		D.C. Power Supplies(0-15V,Digital) (27 Nos.)
		CRO Single Trace (12 Nos.)
		CRO Double Trace Scientific make (3 Nos.)
		Function generators & Audio Oscillators (18 Nos.)
		Plank Constant Apparatus (5 Nos.)
2.	Applied Physics Lab	Spectrometer
		Travelling Microscope (13 Nos.)
		Helium-Neon Laser &its accesories
		He-Ne Laser with Power supply
		Newton's Ring Micrscope