

CIVIL ENGINEERING DEPARTMENT
LIST OF LABORATORIES

Sr. No.	Name of the Laboratory/ Work
1.	Environmental Engineering Lab
2.	Transportation Engineering Lab
3.	Transportation System Planning Lab
4.	Intelligent Transport System Lab
5.	Traffic Stimulation Lab
6.	Urban Studio
7.	Urban Cartography Lab
8.	Urban Informatics Lab
9.	Surveying Lab
10.	Computer Laboratory (UG)
11.	Water Resources Engineering Lab
12.	Advanced Hydraulic Engineering Lab
13.	Computational Hydraulic Lab
14.	Geospatial Technology Lab

List of Equipments / Software in Environmental Engineering Lab

Sr. No.	ITEM
1	Platinum crucible capacity with purity of the platinum
2	Phase contrast Microscope
3	Jar test
4	i) Digital colony counter 3 digit ii) Autoclave Horizontal (cylindrical) 35x55cm iii) Filtration Assembly
5	LG Refrigerator GL-335 VM95 capacity-320litre.SNo. 101NRTH 19393, & 101NRPIS191408
6	Digital pH meter with Electrode
7	Digital Turbidity meter
8	Conductivity meter
9	Magnetic Stirrer
10	Remi Centrifuge
11	Atomic Absorption Spectrophotometer
12	Analytical Balance
13	Vacuum Pump
14	Orbital Shaker
15	Peristaltic Pump
16	TKN Analyzer
17	Electric gaseous With Accessories
19	Glass Distillation Unit
20	Electrical Conductivity Meter
21	pH Meter
22	Turbidity Meter
23	Hot Plate Magnetic Stirrer
24	Vortex Mixture
25	Wrist Shaker
26	Clamp
27	Digital Switch off Timer With Alarm
28	Portable Colorimeter
29	Test Tube
30	Cuvette
31	Centrifuge
32	Filter assembly with air compressor
33	Filter assembly s.s
34	SIDRA Intersection Software Licenses 7 Network 5 Users
35	Rotary drum reactor for B.Tech, M.Tech & Ph.D Students
36	Muffle furnace
37	Sound Level Meter
38	Rotary Drum Reactor for B.Tech, M.Tech & Ph.D students
39	Handheld VOC Meter
40	Water purification system for distillation

41	Distillation Assembly with Distillation app. Power supply All glass single Distillation Unit-sap 4 ltr
42	Online UPS Arrow 3 KVA 96 VDC OL IT.
43	Analytical Balance & Jar test (Simadzu)
44	Spectrophotometer (Thermo Fisher)
45	10 micron fine particulate sampler with accessories
46	2.5 micron fine particulate sampler with accessories
47	BOD Incubator (Cherish Scientific)
48	Software AEROMOD View ver 9.1 and CAL ROADS View Ver 6.2.5
49	SoundPLAN essential 3.0

List of Equipments/Software in Transportation Engineering Lab

Sr. No.	ITEM
1.	Marshall Stability Test Machine
2.	Marshall Mould Automatic compactor
3.	Ductility Test Apparatus
4.	Viscosity Test Apparatus
5.	Softening Point Apparatus
6.	Penetration Test Apparatus
7.	Bitumen Extractor
8.	Flash and Fire Point Test Apparatus
9.	Hot Water Bath
10.	Core Cutting Apparatus
11.	Skid Resistance Tester with Accelerated Polishing Machine
12.	Rolling Thin Film Oven
13.	Bump Indicator
14.	Benkelman Beam Deflection
15.	Light Weight Deflectometer
16.	Nuclear Density Gauge
17.	C.B.R. Test Machine
18.	Triaxial Test Machine
19.	Universal Automatic compactor
20.	Liquid Limit Test Apparatus
21.	Plastic Limit Test Apparatus
22.	Proctor Compaction Apparatus (Modified/Normal)
23.	Cyclic Loading Actuator System (mode of Load & Disp.)
24.	Mechanical Sieve Shaker with I.S. Sieves
25.	Sand Replacement Test Apparatus
26.	Direct Shear Test Apparatus
27.	Los Angeles Abrasion Test Apparatus
28.	Impact Test Apparatus
29.	Oven
30.	Compressive Strength Test Machine
31.	Permeability Test Apparatus
32.	Specific Gravity Test Apparatus

List of Equipments / Software in Traffic Engineering and Transportation Planning Lab

Sr. No.	ITEM
1	Automatic Number plate recognition system
2	Sony High definition TV
3	Eight SONY handy-cams including 1 charger, 1 battery, 1 memory stick (64 GB) and carrying case
4	Speed Radar
5	Laser Distance Meter
6	Speed vision SV 2
7	EXIDE Industrial Battery EP 26-12
8	TIRTEL
9	Workstation HP Z820
10	Two-performance Box comprising of RBPA
11	10Hzt performance video box with four cameras
12	Wi-Fi sensors (Traffic characteristic measuring device)
13	NLOGIT Ver 5 Two licenses
14	IBM SPSS Statistics base 25.0
15	Statistica AGA ver 10.0 with Dara Miner ver 10.0
16	Trazer Suit
17	Cube Analyst Package
18	VISSIM 8.0

List of Equipments / Software in Urban Planning and Urban Cartography Lab

Sr. No.	ITEM
1	Personal Computer (11 Nos.)
2	Brother MFC-3520 A/3 Printer
3	Printer (EPSON)L455
4	Printer (HP)
5	UPS (Arrow 3 KVA 96 VDC OL IT)
6	AGIS- Desktop Basic-31 User-Labkit
7	City Engine Educational
8	AGIS DT Adv (GA + NA + PE + SE + SA + 3D)- 3 Users Educational
9	GPS (Trimble R1 GNSS receiver along with TerraFlex)
10	LCD DisplayWith TV Camera
11	OriginLab software to latest V2018 (5 License) And Neurosolutions infinity (2 Cores) (1 License)
12	Tablets Samsung S3 SM-T825 (10 Nos.)

List of Equipments / Software in UG ComputerLab

Sr. No.	ITEM
1	Software:- Autodesk (25 Nos)
2	Software:- Primavera (5 Nos)
3	Work station (24 Nos)
4	Computer (90 Nos)

List of Equipments / Software in WRE Lab

Sr. No.	ITEM
1	Wind Tunnel
2	Hele-shaw apparatus
3	Basic hydrology system/ Rainfall simulator
4	Double ring infiltrometer
5	Bernoullis Theoram Apparatus
6	Venturi/orrifice meter Apparatus
7	Pipe Friction Apparatus
8	Notch Apparatus
9	Rotameter calibration setup
10	Nozzlemeter Apparatus
11	Impact of jet Apparatus
12	Multi-purpose Flume
13	Metacentric Height Apparatus
14	Force Vortex Apparatus
15	Free Vortex Apparatus
16	Pitot static tube Apparatus
17	Pipe surge/Water Hammer Apparatus
18	Ground Flow/well Abstraction
19	Reynold's Apparatus
20	Electrical Analogy Apparatus
21	Orifice/Mouthpiece Apparatus
22	Bendmeter test rig
23	Cavitation demo. Hydraulic bench
24	Losses due to pipe fritting sudden enlargement & contraction
25	Pan Evaporator
26	Double Ring infiltrometer

List of Equipments / Software in Computational Hydraulic Lab

Sr. No.	ITEM
1	DELL PCs (34 Nos)
2	MIKE 11
3	MIKE FLOOD
4	MIKE 21 FM
5	MIKE HYRDO BASIN
6	MIKE SHE
7	GMS
8	ESRI ArcGIS
9	ERDAS IMAGINE
10	Bentley Water Gem
11	Bentley Storm CAD
12	Bentley Sewer Gem
13	Bentley Hammer
14	Auto CAD
15	Statistica
16	Ansys
17	MatLab
18	HEC-RAS
19	HEC-HMS
20	RiverCAD Professional
21	HEC-2

List of Equipments/ Software in AHL

Sr. No.	ITEM
1	Tilting flume
2	SCADA base water recirculation system
3	Acoustic Doppler Velocimetry
4	Laser Doppler Velocimetry
5	Bed Level Profiler

List of Equipments / Software in Geospatial TechnologyLab

Sr. No.	ITEM
1	Desktop Computer (P-4) system LX-INFINITI PRO HL 1075 (1 no.)
2	HP Document scanner A0 size model; HP Designjet T-4500 (1 no.)
3	Numeric make online UPS (5KVA) (1 no.)
4	HP workstations Desktop Computer (2 no.)
5	Intel Core Duo processor DELL PC (5 no.)
6	Magnescope (1 no.)
7	Simple light table (1 no.)
8	Binocular prismatic 6x30 in a sling leather case (1 no.)
9	Mirror stereoscope (4 no.)
10	Parallax bar for Mirror stereoscope (4 no.)
11	Pocket Stereoscope (4 no.)
12	HP A3 printer (1 no.)
13	Mercury Digital camera (1 no.)
14	i-Pen (Digital) (1 no.)
15	0.5 KVA UPS (Make: Genuine) (1 no.)
16	ERDAS Imagine Processing Software Version 8.7(1 License)
17	Arc GIS Master Lab Kit Version 9.0 (1 License)