

**S.D.M. COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD**

**DEPARTMENT OF CIVIL ENGINEERING**

**Infrastructure and Facilities**

1. Laboratories for UG program - 08

- Concrete Laboratory
- Geology Laboratory
- Basic Material Testing Laboratory
- Environmental Engineering Laboratory
- Geo-Technical Engineering Laboratory
- Fluid Mechanics Laboratory
- Survey Laboratory
- Transportation Engineering Laboratory

2. Laboratory for PG program – 01

- C.A.D Laboratory

3. Five UG class rooms, One Seminar Hall, Two PG class rooms, Faculty rooms, Store room.

## Equipment, Tools and Software

Sl. No.	Name of the Laboratory	Name of the Important equipment
1.	Concrete Laboratory	1.Compression Testing Machine (02Nos.) 2.Vibrating Table 3.Concrete Mixer 4.NDT Apparatus like Rebound Hammer and Pulse Velocity Meter 5. Fine Aggregate, Coarse Aggregate, Cement and Concrete Testing Equipment.
2.	Geology Laboratory	1.Compressive Model Igneous Intrusive & extrusive rocks axes of Symmetry 2.Planes of Symmetry -Six models 3.Streak Plates, Pocket Lens 4.Rock Specimens - Igneous Sedimentary & Metamorphic Trimmed to 10 cm x 7.5cm 5.Mohr's Scale of Hardness of Minerals ( 5 boxes) 6.Wooden Crystal Model 7.Agate Morter and Piston 8.Polishing Machine of 20cm Disc 9.Petrological microscope with accessories 10.Erdas Imagin 9.0 software 11.Anemometer 12.Current meter 13.Echo Sounder 14.Rock cutting and Polishing machines 15.Binocular 16.Microscope 17.Software viz. OPS GIS, PG Steamer, Sky Line and Leica Photogrammetry Suite.
3.	Basic Material Testing Laboratory	1.Universal Testing Machine (100T capacity) 2.Impact Testing Machine 3.Hardness Testing Machine.
4.	Environmental Engineering Laboratory	1.Spectro- photometer 2.B.O.D. Incubator 3.Flame Photometer 4.Medico Centrifuge 5.Digital pH. Meters, Electrode, etc., 6.Turbidity Meter 7.Refrigerator 8.Lab Soxhlet 9.Extraction Apparatus 10.Automatic Water Still 11.Conductivity meter 12.Lab Oven & Muffle furnace 13.Portable Water Analysis Kit 14. Jar Test Apparatus.
5.	Geo-Technical Engineering Laboratory	1.IS Sieves (all sizes) 2.Sieve Shaker Hand operated 3.Unconfined compression Tester 4.Triaxial Testing Machine with Electronic conversion kit 5.Relative Density Apparatus 6.Consolidation Apparatus 7.Direct Shear Apparatus 8.Laboratory Vane Shear Apparatus, 9.Autoclave consolidometer 10.Portable Swell 11.Pressure Apparatus

		<p>12.Three gang consolidation Apparatus  13.Field California Bearing Ratio test apparatus  14. Universal Automatic Compactor  15.Infra-red moisture meter  16.Lab Oven.</p>
6.	Fluid Mechanics Laboratory	<p>1.Notches 2.Venturimeter 3.Orifice meter, Orifice and Mouthpiece  4.Tilting flume apparatus  5.Wier apparatus 6.Reynolds Apparatus 7.Experimental setup for Bernoulli's theorem 8. Venturiflume  9.Frictional Loss Apparatus and Minor Loss Apparatus.</p>
7.	C.A.D. Laboratory	<p><u>Software:</u>  1.ACAD-14,  2.AUTO CIVIL – Version 7.0,  3.STAAD-III  4.Windows 98 SE  5.MS DOS 6.22 6.TURBO C++  7.MS OFFICE XP 8.NISA CIVIL - FEA 9.Geo Media Professional 5.1,  MF Works &amp; MS, Terrain Solutions,  10.Envi 3.6 image processing software 11.Architectural Desktop 2004 + 12.AutoCAD Map  13.SCAADS  14.STAAD Pro 15.IDRISI  16.Bentley Civil Engg. Modules  <u>Computer Systems:</u>  Lenovo i3 Desktops-18Nos. with 4GB, 500GBHDD, 2GB Graphics Card.</p>
8.	Survey Laboratory	<p>1.Total Station -6nos.  2.Prismatic Compass  3.Dumpy Level 4.Surveyors Compass  5.Theodolite &amp; Leveling Staff  6.Auto Levels 7.Electronic Theodolite.</p>
9.	Transportation Engineering Laboratory	<p>1.Set of Standard IS Sieves with Sieve Shaker  2.Los Angeles Abrasion testing machine  3.Ductility Testing machine  4.Redwood Viscometer  5.Length gauge &amp; Thickness Gauge  6.Standard Penetrometer, 7.Impact Testing Machine  8.Crushing Strength Test Accessories 9.Centrifuge extractor  10.Marshall Stability Apparatus 11.Benkelman beam  12.Bitumen Extractor 13.Roughometer.</p>