

Faculty of Civil Engineering
B.E. Environmental Engineering
(R 2017) Semester – III
CE8481 STRENGTH OF MATERIALS LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	UTM of minimum 400 KN capacity	1		
2.	Torsion testing machine	1		
3.	Izod impact testing machine	1		
4.	Hardness testing machine Rockwell, Vickers, Brinell (any 2)	1		
5.	Beam deflection test apparatus	1		
6.	Extensometer	1		
7.	Compressometer	1		
8.	Dial gauges	1		
9.	Le Chateliers apparatus	2		
10.	Vicats apparatus	2		
11.	Mortar cube moulds	10		

Faculty of Civil Engineering
B.E. Environmental Engineering
(R 2017) Semester – III
CE8361 SURVEYING LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Total Station	3		
2.	Theodolites	6		
3.	Dumpy level / Filling level	6		
4.	Pocket stereoscope	1		
5.	Ranging rods	6		
6.	Levelling staff	6		
7.	Cross staff	6		
8.	chains	6		
9.	Tapes	6		
10.	Arrows	6		
11.	Prismatic Compass	10		
12.	Surveyor compass	2		
13.	Survey grade or Hand held GPS	3		

Faculty of Civil Engineering
B.E. Environmental Engineering
(R 2017) Semester – IV
CE8461 HYDRAULIC ENGINEERING LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Rotometer	1		
2.	Venturimeter/Orifice meter	1		
3.	Bernoullis Experiment	1		
4.	Centrifugal Pump	1		
5.	Gear Pump	1		
6.	Submersible pump	1		
7.	Reciprocating Pump	1		
8.	Pelton Wheel turbine	1		
9.	Francis turbines/one set of kaplon turbine	1		
10.	equipment for determination of Metacentric height of floating bodies	1		
11.	determination of friction factor in pipes	1		
12.	determination of minor losses	1		

Faculty of Civil Engineering
B.E. Environmental Engineering
(R 2017) Semester – IV
EN8411 ENVIRONMENTAL CHEMISTRY AND MICROBIOLOGY LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	pH meter	2		
2.	UV visible spectro photo meter	1		
3.	Jartus apparatus meter	3		
4.	Hot Air Oven	1		
5.	Filter Papers (Whatman Make)	1		
6.	China dish	10		
7.	COD apparatus	2		
8.	BOD incubator	1		
9.	DO meter	1		
10.	Glasswares such as pipette, Burette	30		
11.	Incubator	1		
12.	Incubator Shaker	3		
13.	Microscopes	5		
14.	Micropipettes	3		
15.	Colony counter	1		
16.	Anaerobic jar	2		
17.	Laminar hood	1		
18.	Chemicals (1 lot)	1		
19.	Petty dishes	5		
20.	Innoculum loops	5		

21.	Glass slides	5		
22.	China dish	10		
23.	Staining Kit	5		
24.	Refrigerator	1		

Faculty of Civil Engineering
B.E. Environmental Engineering
(R 2017) Semester – V
EN8511 ENVIRONMENTAL ENGINEERING LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Oxygen analyzer	1		
2.	Spectrophotometer	1		
3.	Ion - selective electrode	1		
4.	Sodium Potassium Analyzer - Flame Photometer	1		
5.	Gas Chromatography	1		
6.	Atomic absorption spectroscopy (Ni, Zn, Pb)	2		
7.	Nephlo - turbiditymeter	1		
8.	BOD Analyser	1		
9.	COD Analyser	1		
10.	Jar Test Apparatus	1		

Faculty of Civil Engineering
B.E. Environmental Engineering
(R 2017) Semester – VI
EN8611 ENVIRONMENTAL INSTRUMENTATION LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Sampling devices for water, wastewater and soil	1		
2.	pH meter	3		
3.	DO meter	1		
4.	EC meter	2		
5.	UV - Visible spectrophotometer	1		
6.	HPLC	1		
7.	Flame Photometer	1		
8.	AAS	1		
9.	GC	1		
10.	Glasswares such as Pipette, Burette etc	30		

Faculty of Civil Engineering

B.E. Environmental Engineering

(R 2017) Semester – VII

EN8711 ENVIRONMENTAL STRUCTURAL DESIGN AND DRAWING USING CAD

Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Computer system of Pentium IV or equivalent	30		
2.	AUTOCAD	30		

Faculty of Civil Engineering
B.E. Environmental Engineering
(R 2017) Semester – VII
EN8712 INDUSTRIAL SAFETY LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Noise level meter	2		
2.	High volume sampler with impinger attachment facility	1		
3.	Lab scale fire extinguishers	1		
4.	Personal protective equipment	1		
5.	Gas analyser	1		