

Pimpri Chinchwad Education Trusts

Pimpri Chinchwad College of Engineering & Research Ravet

Civil Engineering Department

List of Labs

Sr No	Name of Lab			
1	Civil CAD Lab (201)			
2	Engineering Geology Lab (203)			
3	Surveying Lab (326)			
4	Testing of Material Lab (213)			
5	Geotechnical Engineering Lab (215)			
6	Fluid Mechanics Lab (217)			
7	Environmental Engineering Lab (223)			
8	Engineering Mechanics Lab (324)			
9	Transportation Lab (327)			
10	Project(Concept) Lab (204)			
11	Research And Innovation Lab(225)			
12	Drawing Hall(511)			

Additional facilities created for improving the quality of learning experience in laboratories

SR. NO	Facility Name
1	Outreach Programme Centre for Remote Sensing, Geoinformatics and GNSS
2	E-Learning Resources
3	Smart Classroom
4	Computer center
5	Digital library

6	Department library
7	Wifi
8	Projectors

Civil Engineering Laborites





Civil CAD Lab (201)

Fluid Mechanics Lab (217)





Testing of Material Lab (213)

Geotechnical Engineering Lab (215)





Environmental Engineering Lab (223)







Surveying Lab (326)



Transportation Lab (327)

Project(Concept) Lab (204)



Research And Innovation Lab(225)

Civil Engineering -Sthapatyawatika



ADDITIONAL FACILITY IN THE LABORATORIES

Sr. No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students' are expected to have enhanced learning	Releva nce to POs/PS Os
1	IIRS-ISRO- Outreach Program Centre	IIRS Outreach Programme focusses on strengthening the Academia and User Segments in Space Technology & Its Applications using Online Learning Platforms.	It helps in the Research Work in Remote Sensing field. Practical knowledge and better understanding of theoretical concepts.	Students familiarize with the usage of modern surveying techniques using RS and GIS.	In the domain of Remote Sensing, Geographic Information System, Hydrology, Agriculture, Forestry, Environmen tal Studies, Climatology, Photogram metry and Urban studies. It has a cutting edge technology like Drone	Pos- 4,5,7

2	Concept Room	Working models 1) Gantry Grinder Actual 1) Smart City 2) RMC 3) Safety Man Complete kit	3D models and its demonstration make it easy to understand and visualize which helps in developing thinking ability during drawing views of the objects. And it also helps in understanding principles through the working	These Models are kept in the Concept Room. Students can visit whenever they are free.	surveys, Latest software's and modeling techniques. In the domain of Civil Engineering .	Pos-5,9
3	HIT OFFICE Software	Construction management related ERP software	For understanding importance of ERP software which is used on Construction site for rate analysis, specification, tendering and budget.	This software is installed on all the computers through LAN students can use it any	To use modern tools used in construction industry.	Pos- 5,9,11

4	Crack Measuring Microscope	A high quality microscope designed for measuring crack widths in concrete members, masonry walls and other structures. The apparatus operates by an adjustable lamp unit and the image is focused by turning a knob. The eyepiece scale can be turned through 360° to align with the direction of the crack or pitch under examination.	To provide exposure towards digital Technology	time whenever free The instrument is kept in the Testing of material Lab. Students can use during lab hours or at any time whenever free	Structural Engineering	Pos-5,9
5	Infrared Moisture Meter	Single or continuous acquisition mode with automatic or manual saving.	To find moisture content of soil in very short time.	The instrument is kept in the Geotechnica I Engineering Lab.	Geotechnica l Engineering	Pos-5,9

6	Digital manometer	1)High Resolution to 0.001 inH2O, Low Range 0 to 1.999 inH2O, High Range 0 to 10.04 inH2O	To increase the exposure towards digital technology	use during lab hours or at any time whenever free The instrument is kept in the Fluid Mechanics lab. Students can use during lab hours or at any time whenever	Water	Pos-5,9
7	Digital Planimeter	Measurement functions area, length, segmental length and coordinates	To increase the exposure towards digital technology	free The instrument is kept in the Surveying lab lab. Students can use during lab hours or at any time whenever free	Surveying	Pos-5,9

8	Digital k-type thermometer and Digital/ electronics Inclinometer.	1) This digital k- type thermometer can be used for temperature measurements of asphalt, bitumen and concrete. It can be used both in the laboratory and on the road. 2) An inclinometer is a sensor used to measure the magnitude of the inclination angle or deformation of any structure	To provide exposure towards digital Technology	These instruments is kept in the Transportati on Engineering lab. Students can use during lab hours or at any time whenever free	Transportati on Engineering	Pos-5,9
9	Models related to Transportation Engineering	1) Models of Cross-section of National Highway. 2) Road Suspension Bridge	1)To clear theoretical concepts and imagine more precisely	These Models are kept in the Concept Room. Students can visit whenever they are free.any time whenever free	Transportati on Engineering	Pos-5

10	Carbon Dioxide Detector and Models Related To Environmental Engineering	Instrument- Carbon Dioxide Detector Models 1)Slow Sand Filter. 2)Trickling filter.	To clear theoretical concepts and imagine more precisely	These Models are kept in the respective lab or Civil central porch. Students can visit during lab hours or at any time whenever free.	Environmen tal Engineering	Pos-5,7
11	Models related to Structural Engineering	1)Plate Girder Bridge 2)Model of Joints of trusses 3)Model of King Post Truss Roof 4)Stone Arch Bridge	To clear theoretical concepts and imagine more precisely	These Models are kept in the Concept Room. Students can visit whenever they are free.	Structural Engineering	Pos-4,5
12	Models & 3-D Charts related to Engineering Geology	1)River in action model, 2)Fault and Folds model	To clear theoretical concepts and improve the imagination of geological features.	These Models and charts are kept in the geology lab. Students can visit during lab hours or	Knowledge of Engineering geology can provide geological and geotechnical	Pos-5

				at any time whenever free.	recommend ations, analysis, and design associated with human developmen t and various types of	
13	Models related to Dams and hydraulic structures	1)Dam Gate Opening Model 2)Model of Gravity dam	To clear theoretical concepts and imagine more precisely	These Models are kept in the Concept Room. Students can visit whenever they are free.	Water Resources and Hydrology	Pos- 5
14	Department Library	Journal of the Indian Society of Remote Sensing, Additional reference and text books Self Study Work Book. Total more than 135 books.	For quick reference of books and specimen copies in the department itself.	This books are kept in Department library students and faculties can use them whenever required.	Civil Engineering and Remote sensing field.	Pos- 1,2,3,4, 10.

15	LCD projector	Civil Cad Lab equipped with LCD projector and having LAN facility.	Where students can watch NPTEL video lectures and browse laboratory experiments through internet.	Can use during lab hours or at any time whenever free.	Civil Engineering .	Pos -5	
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