CADD Laboratory

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About the Lab: _A Computer-Aided Design (CAD) lab is a dedicated space equipped with hardware and software for creating, modifying, and analyzing 2D and 3D designs using CAD software. These labs are essential for training students and professionals in fields like engineering, architecture, and product design, providing a controlled environment for developing and refining designs before they are physically manufactured._

About 20 desktop computers are available in the laboratory.

List of Software

1. GT STRUDL
2. STAAD software
3. STRAP software
4. Geo Media Fundamental
5. LARSA software
6. MAT LAB
7. NISA
8. Geo Media pack
9. ERDS Imaging
10. ANSYS software
11. PLAXIS
12. Geo STUDIO professional

List of Experiments:

• Study of NISA, create models, pre and post processing

• Study of NISA, create models, Beam, Space Frame problems

• Application of NISA, CAD based modeling, slab problems

• Application of NISA, plane stress problems, Shear wall problems

• Application of NISA, plane strain problems, 2D gravity dam problems

- Application of NISA, plane strain problems, Retaining wall problem
- Application of NISA, Gravity dam problems, Spillways problem
- Application of NISA, Earthen dam problems
- Application of NISA, Bridge problems
- Application of NISA, Water Tank (Circular) problem

ANSYS software

1. Creating Chimney model in ANSYS
2. Creating wind envelope model for chimney problem
3. Computational flow dynamics study for chimney problem
4. Plotting of wind pressure on windward and leeward side of the chimney and other structural responses

Nonlinear analysis problems