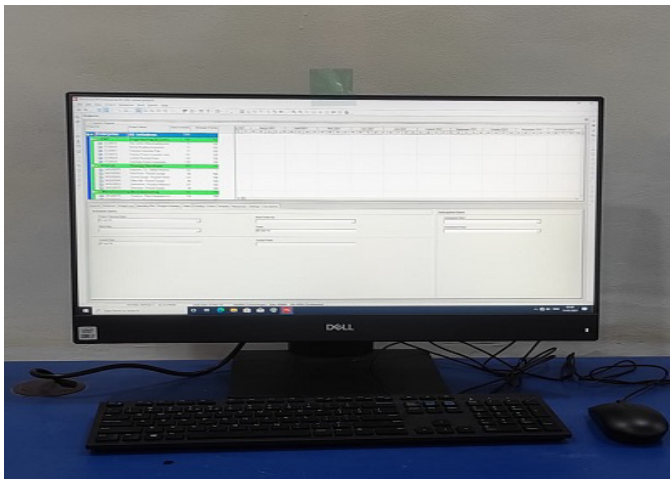
संगणना प्रयोगशाला

Computational Lab

Computational Lab Facilities



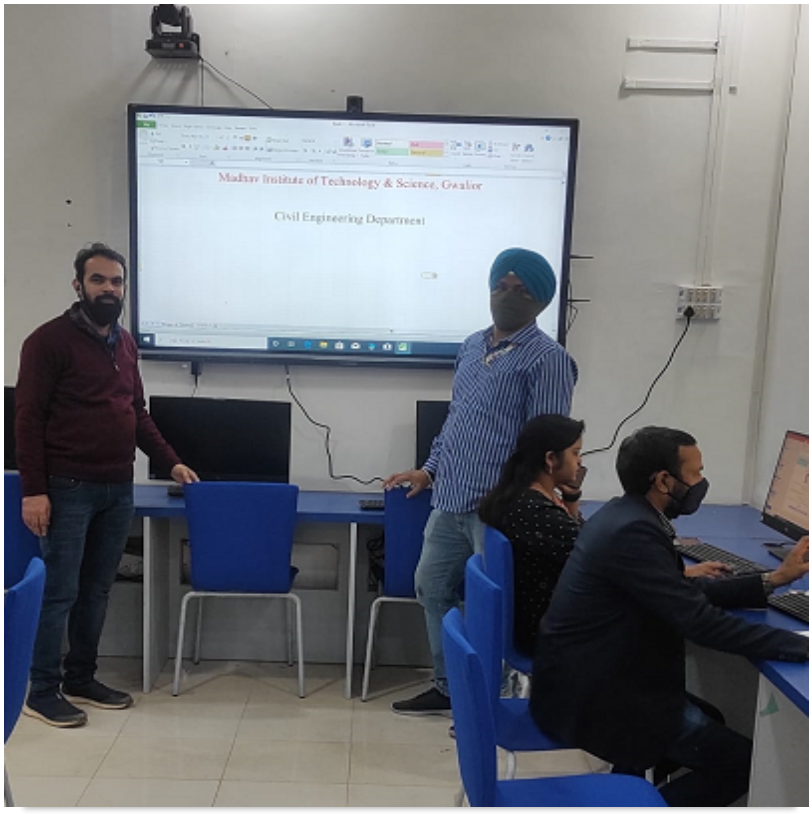
MATLAB

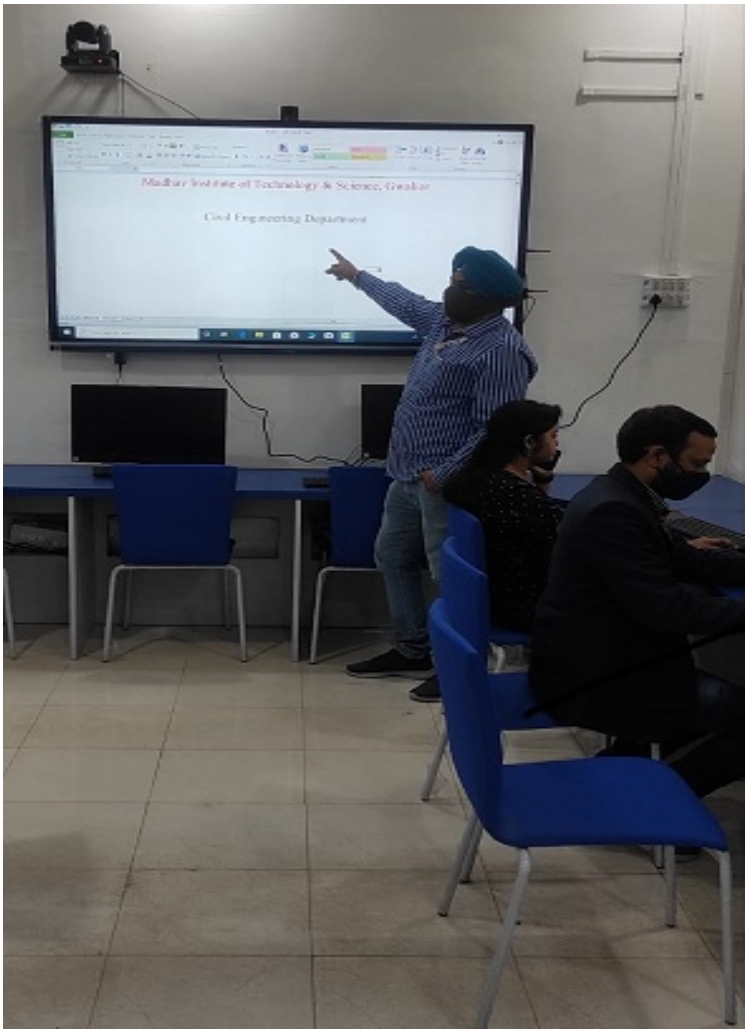
BIM 4D

SPSS

Python

Primavera





In Charge

Dr. M.K. TRIVEDI
(9131234733)

Technical Staff

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(9968270408)

Department Of Civil Engineering

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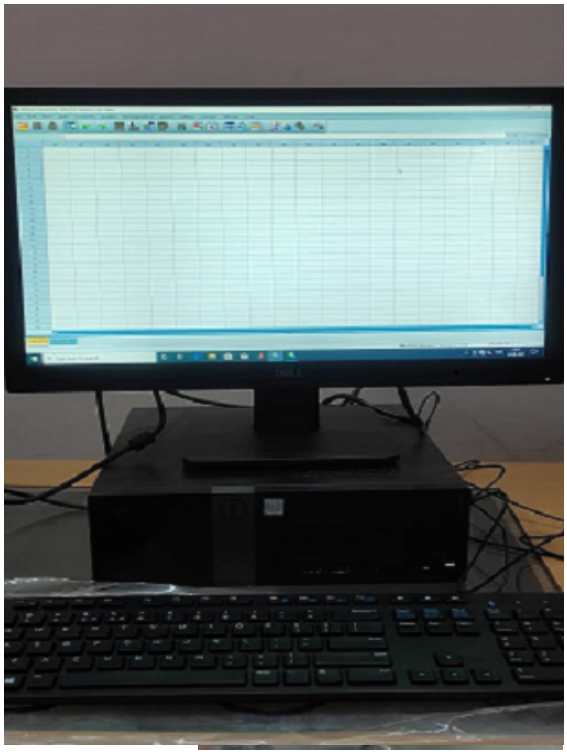
Computational Lab



DO's

1.Be on time, at the start of the lab period, there will be a short introduction to the experiment you will perform that day.
2.When you come in, go to your seat and wait for instructions.
3.Maintain silence and clean environment in the lab.

DON't

1.Do not try to run and operate any computer without permission and knowledge of the Lab Personnel.
2.Don't touch the screen - ever. Touching the screen with your fingers or objects like pencils can damage the monitor.
3.Do not eat or drink in the Lab at any time.

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Computational Lab

COURSE OUTCOMES

CO 1: Solving the large scale computational problems.
CO 2: Understanding the project management process on higher level.
CO 3: Analysis of building components in three dimensional.
CO 4: Statistical analysis of data.

LIST OF EXPERIMENTS:

1. Matrices in MATLAB
2. Fuzzy logic tool box in MATLAB
3. Optimization tool box in MATLAB
4. Artificial Neural Network in MATLAB
5. Basics of Programming in MATLAB
6. Foe-end, while-end and if-else loop in MATLAB
7. Genetic Algorithm in MATLAB
8. An application example of discrete time-cost trade using genetic algorithm in MATLAB
9. Basics of deep learning in MATLAB
10. Numerical Integration in MATLANB
11. Python Installation
12. Data cleaning in Python
13. Data presentation in Python
14. Regression analysis in Python
15. Statistical analysis in SPSS
16. Making of Enterprise Breakdown Structure in Primavera
17. Making of Work Breakdown Structure in Primavera
18. Project duration estimation using Primavera
19. Project cost control using Primavera
20. Project resource control using Primavera
21. Project monitoring and controlling using Primavera
22. Advance reporting using Primavera
23. Contract management using Primavera
24. Understanding the graphical user interface of BIM 4D
25. Project planning in BIM 4D