

Lecture through MAT LAB Software

Faculty Name: Mrs. B. S. Meenakshi

Subject: Strength of Materials – I

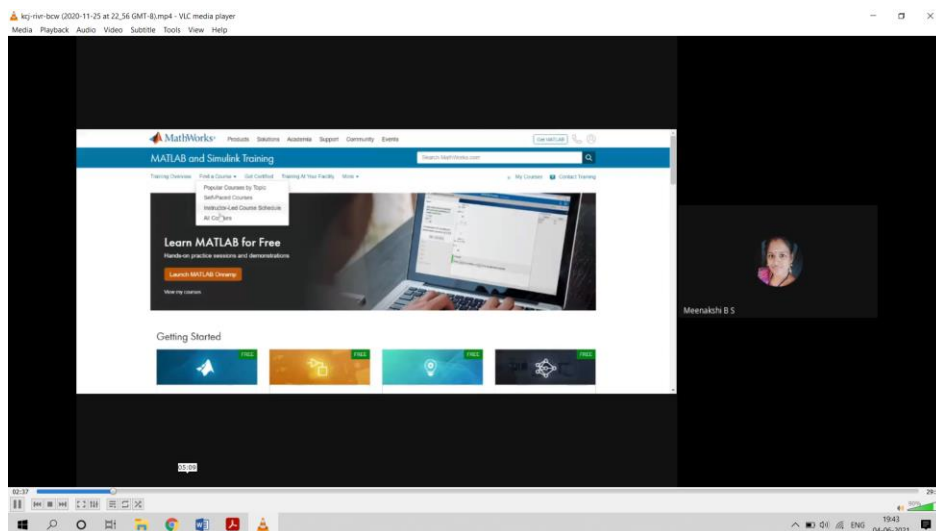
Academic Year: 2021 – 2022 (Even)

MAT LAB Software:

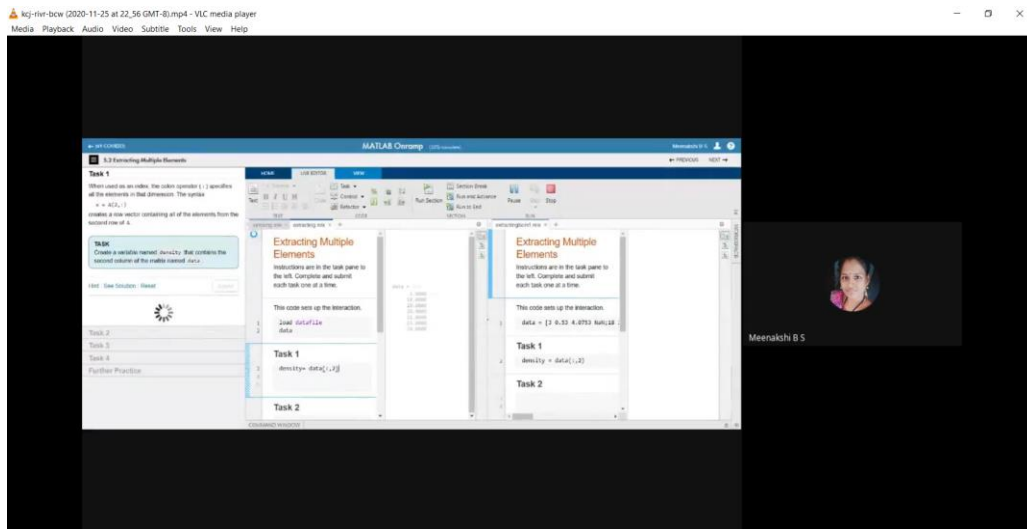
Civil engineering is a branch of engineering that is concerned with designing and constructing public amenities such as bridges, dams, roads, and other infrastructure projects. MATLAB allows civil engineers to create models and designs of the project they are about to undertake to make sure they are producing the best results.

- ❖ **Creating designs:** One way through which civil engineers use Matlab is to create designs for the expected infrastructures and facilities. When a model of the expected project is created prior to implementing the actual project, it helps reduce construction costs.
- ❖ **Writing code and performing numerical analysis:** Creating models in civil engineering requires complex coding and performing intricate mathematical analysis. With MATLAB, engineers can write effective code for their simulations with the help of Simulink software, plot variations, and work out complex matrix equations.

MAT LAB Usage:



Coding Through MAT LAB:



Outcome:

The developed MATLAB programs can also serve as an excellent and effective educational tool to provide the students with better understanding of the behaviour of structures under different loading conditions.

