

Late Shri. Vishnu Waman Thakur Charitable Trust's

## **VIVA Institute of Technology**

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## **Department of Mechanical Engineering**

Topic Name:	Bridge Course - ANSYS (Engineering Simulation)
Name of the Guest Speaker:	Faculty, Department of Mechanical Engineering
Designation:	Assistant Professor
Organization/Institution:	Viva Institute of Technology
Date:	January 2nd to January 6th, 2018

## Programme Summary/Details:

The Department of Mechanical Engineering at VIVA Institute of Technology conducted a bridge course on ANSYS (Engineering Simulation) from January 2nd to January 6th, 2018. The course aimed to provide students with the necessary knowledge and skills in utilizing ANSYS for engineering analysis and simulation. The syllabus covered various modules, including solid modeling, meshing, boundary conditions and solvers, tips and tricks, and ANSYS Workbench.

The solid modeling module provided an overview of solid modeling operations and importing 3D models. The meshing module explored different techniques and controls for mesh generation. In the boundary conditions and solvers module, students learned about applying different types of loads and solving multiple load steps. The tips and tricks module introduced useful tools and features in ANSYS, such as the toolbar and APDL. Finally, the ANSYS Workbench module familiarized students with the graphical user interface and various analysis types.

Throughout the course, students worked on applying analysis techniques, selecting suitable meshing methods, and interpreting simulation results. By the end of the course, students were expected to demonstrate their abilities in solving engineering problems, performing convergence tests, utilizing tricks and tips for efficient problem-solving, and interpreting simulation outcomes effectively.

Overall, the bridge course on ANSYS at VIVA Institute of Technology equipped students with the necessary skills to apply ANSYS in real-world engineering scenarios. It provided a solid foundation for utilizing ANSYS for engineering simulation and analysis, enhancing their problem-solving capabilities in the field of mechanical engineering.