

# SLOG SOLUTIONS PRIVATE LIMITED TECHNOLOGY : ANSYS

## DURATION: MODULE 1 (4 WEEKS)

### ➤ INTRODUCTION

- ❖ About ANSYS
- ❖ ANSYS Basics
- ❖ Mechanics
- ❖ What is FEA?
- ❖ History Of FEM
- ❖ Need Of FEM
- ❖ Future Of FEM

### ➤ BASICS OF FEM

- ❖ FEM Procedure (Theoretical)
- ❖ Steps In FEM
- ❖ Theories Of Failure
- ❖ Different Types Of Analysis
- ❖ FEA Design Intent

### ➤ Getting Started with ANSYS

- ❖ ANSYS Workbench Environment
- ❖ Understanding GUI
- ❖ Manipulating Model
- ❖ Standard Toolbar
- ❖ ANSYS Toolbar
- ❖ File Types
- ❖ The Database & Files

### ➤ CAD MODELING USING ANSYS

- ❖ WorkPlane
- ❖ Co-ordinates System & Units
- ❖ Different Types Of Modeling
- ❖ Methods of Solid Modeling
- ❖ Component & Assembly Management

- ❖ Simulating Bolted Joint
- Simulating Leakage IMPORTING GEOMETRY FROM OTHER CAD PACKAGES

- ❖ Understanding Different Import Formats
- ❖ Working With IGES Files
- ❖ Geometry Cleanup For Meshing

### ➤ MESHING (BASIC)

- ❖ Introduction
- ❖ Classifications Of Elements
- ❖ Use Of Meshes
- ❖ Types Of Meshes

### ➤ MESHING (ADVANCE) & TECHNIQUE

- ❖ Mesh Generation
- ❖ Different Techniques Involved In Meshes
- ❖ Manual Meshing

### ➤ FINALIZING FE MODEL FOR ANALYSIS

- ❖ Element Quality Area
- ❖ Quality Check Is Mesh
- ❖ Material
- ❖ Conditions For Boundary

### ➤ ADVANCE BOUNDARY CONDITIONS

- ❖ Application Of Mass Elements
- ❖ Application Of Rigid Elements
- ❖
- ❖ Mesh Generation

### ➤ HANDLING PROJECTS

- ❖ Steps In FEA
- ❖ Integrative and Dead-end FEA

### ➤ PROJECT SKILLS

- ❖ Possible Errors
- ❖ Report Generator

### ➤ PROJECTS

- ❖ Power Transmissions Tower
- ❖ Bicycle Frame
- Any Many More--



SLOG SOLUTIONS PVT.LTD.  
HELPLINE 7456000240/7456000241  
[www.slogsolutions.com](http://www.slogsolutions.com)