

Abaqus software training course



+ Preliminary introduction

- Introduction to Finite Element Method (FEM).
- Introduction to Abaqus software package such as Abaqus CAE, Abaqus standard, Abaqus explicit.
- Defining and analyzing steps in Abaqus software such as determination of the material model, element section properties, loads and boundary conditions.
- Introducing failure criteria such as maximum normal stress, Tresca and Von-mises.

+ Introducing different types of elements and their properties.

- Solid elements such as C3D8, C3D8R and C3D8I.
- Shell elements such as S4, S4R and STRI3.
- Beam elements such as B21, B22 and B32OS.

+ Meshing

- Presenting different methods of meshing such as structured method, sweep method and free meshing.
- Partitioning the model to improve the mesh.

+ Step-by-step approach for modeling and analyzing parts.

- Modeling and analyzing parts using solid elements.
- Modeling and analyzing parts using shell elements in a wide variety of loads and boundary conditions.
- Modeling and analyzing parts using beam elements and dynamic loading.

