



**Duration** 2 Days

**Prerequisites:**

- Some experience using SolidWorks.

**Course Outline**

The two-day training program provides an indepth session on the basics of fluid flow analysis, in addition to covering meshing concerns, modeling concerns, analysis, post-processing, available options and preferences.

The main topics covered include:

**Lesson 1: Basics of Fluid Flow**

- Fluid Flow Definitions
- Governing Equations
- Meshing principles
- Monitoring convergence

**Lesson 2: Running**

- Meshing concerns
- Modeling concerns
- Applying boundary conditions
- Post-processing (vectors, contours, iso-lines, particle tracking)
- Global data (mass/energy balance, bulk values, et cetera)
- Analysis Types
- Steady State
- Transient
- Conjugate heat transfer
- Open/closed systems

**Lesson 3: Flow Features**

- Compressible and incompressible
- Newtonian / non-Newtonian fluid
- Fan Curves
- Particle trajectories
- Supersonic flows
- Cavitation
- Relative humidity
- Conjugate heat transfer

**Lesson 4: Advanced Features within SolidWorks**

**Flow Simulation**

- Manual mesh control
- Manual convergence
- Export of results to SOLIDWORKS Simulation modulus (stress analysis)

*Please do not hesitate to contact us for registration and further information*

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