

Modeling Fluid Systems with Simscape

OEM: MathWorks • Duration: 1 Day (8 hrs) • Code: MW-MODELING-FLUID-SYSTEMS-WITH-SIMSCAPE

COURSE MODULES & TOPICS

Day 1 of 1

Hydromechanical Systems

- Hydraulic modeling in Simscape
- Data logging and visualization
- Hydromechanical components
- Fluid dynamics and properties

Hydraulic Actuation and Control

- Valves in Simscape Fluids
- Feedback control with Simulink
- Accumulator control
- Model hierarchy and solvers

Thermal Liquid Systems

- Thermal liquid blocks
- Elevation in tanks and pipes
- Thermal networks
- Heat exchangers
- Temperature control

Custom Model Case Studies

- Custom directional valve
- Empirical valve models
- Valve optimization
- Centrifugal pump parameterization
- Variable-efficiency motor