

PV-Elite Design Training

COURSE CONTENT

GET IN TOUCH

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About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

PV-Elite Design Training by Multisoft Systems is a comprehensive program tailored for mechanical and process engineers aiming to specialize in the design and analysis of pressure vessels and heat exchangers. This industry-focused course provides in-depth knowledge of the PV-Elite software, a widely used tool for accurate modeling, stress analysis, and code compliance based on international standards such as ASME Section VIII, Divisions 1 and 2.



Module 1: Introduction to PV Elite & CodeCalc

- ✓ PV Elite Interface & Features
- ✓ Creating a Pressure Vessel in PV Elite
- ✓ CodeCalc Interface & Features
- ✓ Configuration Editor
- ✓ Creating/ Editing Units
- ✓ Exercise 1.1 Custom Unit File
- ✓ Creating/ Editing Materials
- ✓ Exercise 1.2 Custom Materials

Module 2: Pressure Vessel Analysis in PV Elite

- ✓ General Vessel Design & Analysis
- ✓ Exercise 2.1 Vertical Vessel with ASME VIII div 1
- ✓ PD 5500 versus ASME VIII-1 Projects
- ✓ Exercise 2.2 Horizontal Vessel with PD5500
- ✓ Exercise 2.3 Converting a vessel from 1 code to another

Module 3: Heat Exchangers in PV Elite

- ✓ Introduction to Heat Exchangers
- ✓ ASME VIII Heat Exchangers
- ✓ Creating a Heat Exchanger in PV Elite
- ✓ Exercise 3.1 Fixed Tubesheet Heat Exchanger
- ✓ Exercise 3.2 Floating Tubesheet Heat Exchanger
- ✓ Exercise 3.3 U-Tube Bundle Heat Exchanger

Module 4: Flange Analysis in PV Elite

- ✓ Modelling Flanges in PV Elite
- ✓ PEQ Method for Standard Flanges
- ✓ Flanges in CodeCalc



- ✓ Exercise 4.1 Flanges in CodeCalc
- ✓ Exercise 4.2 Model with Flanges
- ✓ Taylor-Forge Analysis
- ✓ EN1591 Analysis
- ✓ Exercise 4.3 EN flange analysis

Module 5: Nozzle Analysis Options in PV Elite

- ✓ Area Replacement Rules for Nozzles
- ✓ Nozzle Analysis using WRC Guidelines
- ✓ Designing Nozzles in CodeCalc
- ✓ Exercise 5.1 Nozzles in CodeCalc
- ✓ Exercise 5.2 Evaluating external loads in CodeCalc
- ✓ Designing Nozzles in PV Elite
- ✓ Exercise 5.3 Nozzles in PVElite
- ✓ Analysing Nozzle Pairs
- ✓ Exercise 5.4 NozzlePairs in PV Elite

Module 6: Introduction to Saddles, Lugs, Legs, & Jacketed Vessels in PV Elite

- ✓ Saddles in PV Elite
- ✓ Exercise 8.1 Saddled Vessel
- ✓ Lugs in PV Elite
- ✓ Legs in PV Elite
- ✓ Half-Pipe Jackets in PV Elite
- ✓ Exercise 8.2 Jacketed Vessel

Module 7: Miscellaneous Features in PV Elite & Reporting

- ✓ Non-Circular Vessels in PV Elite
- ✓ Weld Seams and Fatigue



- ✓ Miscellaneous Utilities
- ✓ Visualisation Features
- ✓ Reporting in PV Elite
- ✓ Exercise 9.1 Customising Reports
- ✓ Common Warnings