In this course, you will learn the basics of 3-D design using Creo Elements/Direct Modeling. You will discover Creo Elements/Direct's explicit approach to 3-D design and the fundamentals of working with workplanes and 2-D geometry. Using the intuitive interface, you will build and modify parts and assemblies. You will also be instructed on tips and best practices. After completing this course, you will have an understanding of the explicit modeling approach of Creo Elements/Direct Modeling and be able to design functional and manufacturable products using this tool.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.

Course Objectives

- Explore the explicit modeling approach of Creo Elements/Direct Modeling
- Create workplanes using various methods
- Create and modify 2-D geometry using the 2D CoPilot
- Create parts from 2-D geometry using Machine commands
- Modify parts with Blends, Chamfers, face modifications, and face booleans
- Leverage the embedded pictures in workplanes functionality to create 2-D sketches and 3-D models
- Utilize 2D Copilot extensions and shortcuts to create geometry and modify components
- Create and modify assemblies
- Utilize import functionality
- Customize the environment and user interface for Modeling
Prerequisites

• Must be able to interpret engineering drawings and have an understanding of drafting concepts
• Must have experience in the development of 2-D design using a CAD system
• Prior use of another 3-D CAD system is helpful, but not required

Audience

• This course is intended for designers, mechanical engineers, industrial engineers, illustrators, and tooling designers. People in related roles will also benefit from taking this course.
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