EXCELSIOR COLLEGE

7 Columbia Circle, Albany, NY 12203-5159
Phone: **518.608.8211** | Toll Free: **888.647.2388** | Fax: 518.464.8777
WWW.EXCELSIOR.EDU/CPD

CENTER FOR PROFESSIONAL DEVELOPMENT

AUTOCAD 2011 WITH AUTOCAD 3D

230 Hours/6 Months/Instructor-Facilitated
Course Code: **CPD032**

OVERVIEW

This program will give you the knowledge and hands-on practice you need to master the fundamentals of the 2D commands and 3D modeling tools in AutoCAD 2011—an essential design tool used in mechanical and civil engineering, architecture, and facilities planning and management. You'll begin with basic tools and then explore efficiency tools, complex objects, use of external reference and image files, advanced plotting, and customizations. In addition, you'll get a thorough grounding in the main features of AutoCAD's advanced 3D Modeling workspace. By the end of the program, you'll have the skills you need to prepare for the Autodesk AutoCAD 2011 Certified Associate exam. The program comes with a full student AutoCAD 2011 license and a quick reference guide, *AutoCAD 2011 Course Notes*.

OBJECTIVES

Upon completion of this program, you'll be able to:

- Understand the AutoCAD workspace and user interface
- Use basic drawing, editing, and viewing tools
- Draw with precision in AutoCAD
- Make changes in a drawing (selecting, moving, copying, rotating, scaling, mirroring, grips)
- Organize drawing objects on layers
- Get information in a drawing
- Use more advanced editing and construction techniques
- Insert reusable symbols (blocks)
- Use 3D viewing techniques
- Work with simple and composite solids
- Create complex solids and surfaces
- Modify objects in 3D space
- Create sections, camera perspectives, and animations.
- Convert 3D objects
- Create 2D drawings from 3D models
- Work with the User Coordinate System

MATERIALS INCLUDED

- *AutoCAD 2011 Course Notes*
- *AutoCAD 2011 student license*

OUTLINE

1. Getting Started With AutoCAD
2. Basic Drawing and Editing Commands
3. Drawing Precision in AutoCAD
4. Making Changes in Your Drawing
5. Organizing Your Drawing with Layers
6. Advanced Object Types
7. Getting Information From Your Drawing
8. Advanced Editing Commands
9. Inserting Blocks
10. Setting Up a Layout
11. Printing Your Drawing
12. Text
13. Hatching
14. Adding Dimensions
15. Working Effectively With AutoCAD
16. Accurate Positioning
17. Parametric Drawing
18. Working with Blocks
19. Creating Templates
20. Annotation Styles
21. Advanced Layouts
22. External References
23. Miscellaneous Optional Topics
24. Advanced Text Objects
25. Working With Tables
26. Dynamic Blocks
27. Attributes
28. Output and Publishing
29. Other Tools for Collaboration
30. Introduction to Sheet Sets
31. Publishing and Customizing Sheet Sets
32. Managing Layers
33. CAD Standards
34. System Setup
35. Introduction to Customization
36. Customizing the User Interface
37. Macros and Custom Routines

COMPUTER REQUIREMENTS

This program must be completed on a PC running Windows 7, Windows Vista (SP 1 or later), or Windows XP (SP 2 or later). You will also need Adobe Flash Player 8. A high speed Internet connection is recommended.

Hardware Requirements:

- 2 GB RAM
- 1.8 GB free disk space for software installation

- 1280x1024 true color video display adapter 128 MB or greater, Microsoft Direct3D-capable workstation-class graphics card
- 1024x768 display resolution with true color

INSTRUCTOR BIOS

Jennifer MacMillan holds a mechanical engineering degree from Dalhousie University, Nova Scotia, Canada. She's been teaching CAD for 15 years and is currently working in a position developing training curricula used by many CAD training companies. Jennifer has always enjoyed teaching and passing her knowledge and interest in CAD on to her students. She finds teaching online training programs rewarding and inspiring because they enable so many students to learn new skills that they can immediately use in their jobs.

Martha Hollowell is a Curriculum Developer specializing in AutoCAD. She writes and updates training courseware for Revit Architecture, AutoCAD Architecture, and AutoCAD, creating material that is used by trainers around the world. She has worked with Autodesk products since the early 1990s, starting with AutoCAD and adding AutoCAD Architecture and Revit as they came along. She worked in architecture for the Colonial Williamsburg Foundation as well as having her own private practice, and she has consulted with firms setting up AutoCAD in their offices. She has been an award-winning trainer and courseware writer for the last 16 years. She has a BS in Architecture from the University of Virginia and an MA in Cross-Cultural Studies from Fuller.