Course Title: AutoCAD - Advanced

Course Description:
This course is designed for students with basic to intermediate level CAD software experience who want to take their skill to the next level. Drawing exercises are used extensively to demonstrate use of advanced drawing tools and to provide the student with topic-specific drawings for hands-on experience. Topics include: 2D and 3D drawing, perspective and axonometric views, rendering, natural and artificial lighting, dynamic blocks, layouts and viewports, title blocks, plot styles, layout grids, and fixing problematic drawing files.

Course Prerequisite(s):
Completed AutoCAD Fundamentals course or other recent basic to intermediate level AutoCAD experience; familiarity with Windows XP or Windows 7-based programs.

Course Objectives:
Demonstrate advanced use of AutoCAD functionality. Learn to complete moderately challenging drawing tasks and use of advanced 2D and 3D drawing tools.

Certification Notes:

Next Class Possibilities:
Revit Architecture Essentials and Revit Architecture Advanced

Instructor Notes:

Textbook: REQUIRED
Mastering AutoCAD 2015 and AutoCAD LT 2015
by George Omura, Brian C. Benton
Publisher: Sybex; ISBN: 978-1118575048

Lesson Plan – by session

- Session 1:
  - Customizing the ribbon
  - Making custom toolbars and custom hotkeys
  - Manipulating layers and layer states
  - Using the Layer State Manager
  - Creating Layouts and Viewports
  - Locking and unlocking viewports
  - Activating and deactivating viewports
  - Creating non-rectangular viewports
  - Activating and deactivating viewports
- Selecting a plot scale
- Using plot styles
- Printing from model and paper space
- Printing to PDF

Session 2:
- 3D drawing and modeling
- Extrusions, sweeps, primitive shapes
- Perspective and axonometric views
- Artificial light and sunlight
- Using the View Cube and steering wheels
- Rendering views

Session 3:
- Layer states and Layer State Manager
- Split screen with viewports and tiled windows
- Creating title blocks
- Creating dynamic blocks
- Creating blocks with attributes
- Using the Enhanced Attribute Editor
- Using layout grids to compose sheets
- Using Purge and Audit tools
- Correcting corrupted or problematic CAD files