



AutoCAD<sup>®</sup> Self-paced Learning Modules  
**AutoCAD 2D Advanced**  
Module Contents  
Contents and Learning Outcomes

**Module Introduction 1 - Using the AutoCAD Modules**

**Module Introduction 2 - Configuring Your AutoCAD Software**

**Module 1 - File Extensions**

1. List and describe the common file types and extensions used in AutoCAD.
2. Set Windows Explorer to list and display detailed file names including their extensions.
3. Describe and explain how backup and locked drawing files are used.

**Module 2 - Profiles and Search Paths**

4. List AutoCAD's drawing file formats.
5. Describe and list the names of AutoCAD default template files and set their folder location in AutoCAD.
6. Describe and create a profile in AutoCAD.
7. Describe a search path and how it is used by AutoCAD..

**Module 3 - System Variables**

8. List and describe the five value storage types used to store values for system variables.
9. List and describe the three possible locations where the values for system variables are saved.
10. Describe and apply the SETVAR and HELP commands to find descriptions, the current setting and set the value for system variables.

**Module 4 - Command Aliases**

11. Describe AutoCAD's command search, the ASCII table, command aliases and how Notepad is used in AutoCAD.
12. Edit the acad.pgp file to change and add command aliases. Use the REINT command to reload the pgp file into ram memory after it has been edited and saved.

**Module 5 - Script Files**

13. Describe script files and explain how they are used in AutoCAD.
14. Write script files and run them in AutoCAD using the SCRIPT command.

**Module 6 - Competency Test No. 1**

15. Within a 3 hour time limit, complete a written exam.

**Module 7 - Dynamic Input**

16. Describe dynamic input and apply it using pointer input, dynamic prompts and dimensional input to construct objects without the use of the command line window.

**Module 8 - Grips**

17. Describe grips and define a base grip, a hot grip, a warn grip, a cold grip and grip mode.
18. Use grip mode to move, mirror, rotate, scale and stretch objects.

**Module 9 - Dynamic Blocks - Part 1**

19. Describe dynamic blocks, parameters and actions.
20. Create dynamic blocks using the Block Editor applying parameters and actions for those parameters.
21. Insert the dynamic blocks that you created into a AutoCAD drawing and manipulate the size, alignment and location of the blocks using the parameters and actions that were programmed into the block

**Module 10 - Dynamic Blocks - Part 2**

22. Create dynamic blocks by applying parameter sets.
23. Create dynamic blocks using lookup actions and visible state.

**Module 11 - Competency Test No. 2**

24. Within a 1 hour time limit, complete a written exam.

**Module 12 - Advanced Layers**

25. Describe, create and restore layer states.
26. Describe, create and edit property and group layer filters.

**Module 13 - Attributes**

27. Describe attributes and explain how they are defined and edited in a block.
28. Apply the ATTDEF and ATTEDIT commands to define and edit attributes assigned to blocks in a drawing.

**Module 14 - Tables - Part 1**

29. Describe a table and apply the commands TABLE and TABLESTYLE to create tables in a drawing. Manipulate the tables size, location, properties and cells. .

**Module 15 - Data Extraction****2008-2009 Only**

30. Describe data extraction and how it used.
31. Using the command DATAEXTRACTION, extract attribute data from a drawing and insert it into a table on a drawing.

**Module 16 - Competency Test No. 3**

32. Within a 1 hour time limit, complete a written exam.

**Module 17 - Workspaces**

33. Describe workspaces and explain how they are used.

34. Create custom workspaces and modify them as required.

**Module 18 - Customizing Toolbars**

35. Create customized toolbars that include flyouts using predefined commands and macros.

**Module 19 - Customizing Pull-down Menus**

36. Create and edit pull-down menus complete with submenus using predefined command and macros.

**Module 20 - Macros**

37. Describe keyboard shortcuts and temporary override keys.

38. Create shortcut keys to execute commands.

39. Describe a macro and the special characters used to write them.

40. Add macros to shortcut keys, pull down menus and toolbar menus.

**Module 21 - Competency Test No. 4**

41. Within a 1 hour time limit, complete a written exam.

**Module 22 - Ribbons and Dashboard Windows  
2008-2009 Only**

42. Describe ribbon and dashboard windows and explain how they are used by the AutoCAD user.

43. Create and edit ribbon and dashboard windows using predefined command and macros.

**Module 23 - Tool Palettes**

44. Describe tool palettes and explain how they are used by the AutoCAD operator.

45. Create new tabs on the Tool Palettes window that contains commands, geometry, blocks and hatch patterns

**Module 24 - Fields**

46. Describe drawing properties and explain how they are used in an AutoCAD drawing.

47. Describe fields and explain how they are used in an AutoCAD drawing.

48. Create and edit fields in a drawing.

**Module 25 - Tables - Part 2**  
**2008-2009 Only**

- 49. Describe AutoFill and explain how formulas are used in a table.
- 50. Apply AutoFill by inserting numbers and dates into a table.
- 51. Enter formulas in a table to add, average, count and use basic math functions.

**Module 26 - Competency Test No. 5**

- 52. Within a 1 hour time limit, complete a written exam.

**Module 27 - Annotation - Part 1**

- 53. Describe drawing annotations, draw order, revision clouds and wipeouts.
- 54. Apply the necessary commands to change the draw order of objects in the drawing.
- 55. Apply the REVLOUD and WIPEOUT command to draw revision clouds and wipeouts.

**Module 28 - Advanced Layouts**

- 56. Describe and apply advanced layouts features.

**Module 29 - Annotation - Part 2**  
**2008-2009 Only**

- 57. Describe an annotation object and its annotative property.
- 58. Describe how to scale annotations and how they work in paper and model space.
- 59. Set the annotative scale(s) of annotation objects so that they appear correct in both the viewport and in model space.

**Module 30 - Creating Drawing Templates**

- 60. Create template drawings complete with layouts and settings for both english and metric sizes

**Module 31 - Competency Test No. 6**

- 61. Within a 1 hour time limit, complete a written exam.