

Autocad

Name:	AutoCAD Architecture
Produced:	Autodesk, USA
Operating system:	Windows
Native file type:	DWG
Description:	A 2D and 3D design and drafting application
Homepage:	AutoCAD
See also:	BIM
	Autodesk
	CAD
Link:	LEARN, The Catalogue
	Official Support Post a question to Media Centre
Introduction:	AutoCAD is probably the most popular and widely used of the CAD packages. Like other CAD programs it offers 2D drafting and 3D modelling functions.
Primary functions:	<p>AutoCAD is a large and deep program functionally. Basic 2D drafting, which is its primary use, in reality occupies only a small section of the functionality of the software overall. There is much to explore here. However, a good beginning lies in its primary functions:</p> <ol style="list-style-type: none"> 2D drafting (technical or measured drawing) is achieved quickly and accurately with AutoCAD. In this way it is comparable to ArchiCAD, Microstation, Revit and VectorWorks. However, the significant benefit of AutoCAD over ArchiCAD is its status as industry standard, extended BIM capabilities when combined with Revit, and simply its position inside the Autodesk suite which now occupies a fundamental position in industry. Some students begin their 2D drafting attempts with Illustrator. This is a waste of time. For all drafting go directly to the drafting software (AutoCAD, ArchCAD etc and, to some extent Rhino). The benefit of Illustrator lies in its ability to fine-tune (line-weight, colour) the drawing after its majority draft up in CAD. 2D designing and analysis of spatial arrangement in plan is particularly easy in AutoCAD. Solid form modelling. <p>Some secondary functions popular for AutoCAD include:</p> <ol style="list-style-type: none"> Tracing contours for site models Pattern making <p>In the new version of AutoCAD it will be possible to render using Mental Ray. Parametric functionality and mesh modelling will also be introduced, effectively allowing AutoCAD to make some claims on Rhino's territory.</p>
Primary outputs:	<p>AutoCAD's primary outputs include:</p> <ol style="list-style-type: none"> Measured drawings can be exported directly from AutoCAD using the plot function whereby scale and page size are specified. The drawing is then ready for post-production in Illustrator, printing or digital presentation. Laser-cutting (for model making)
Usability:	<p>AutoCAD is considered relatively easy to use. The graphic interface is agreeable to work in with a high level of customisation available (background colour etc). This is normally achieved through API (Application Programme Interface) which include AutoLISP, Visual LISP, VBA, ObjectARX and .NET.</p> <p>Scrolling, panning and other mouse functions are nice.</p> <p>AutoCAD has excellent interoperability with other Autodesk products (Maya, 3DS Max etc) and good interoperability with other non-Autodesk products. Moving 2D drawings into Illustrator is especially straight forward as the user can simply copy-paste between programs. AutoCAD's native filetype DWG is interoperable with all other vector based software.</p> <p>Drafting functions are especially intuitive however more advanced functions will require some research (try the Help function). Overall the program is fine to learn.</p> <p>AutoCAD operates using both a command line and a graphic menu meaning data can be inputted by the user in the method which they are most comfortable/productive. Usually it is agreed that line command allows AutoCAD to be operated faster.</p>

Le ar nin g su pp ort:	<p>AutoDesk offers manual for purchase from their site. However, the Library usually has these also, as does the Make Lab office. Alternatively, PDFs and DOCs of the manual can be found online. Try here and here.</p> <p>To get you underway Media Centre suggest the following tutorials:</p> <p>Getting Started Tutorials</p> <ul style="list-style-type: none"> • Tutorial 1: Getting Started with the Basics in AutoCAD 2011 • Tutorial 2: Drawing Setup in AutoCAD 2011 • Tutorial 3: Drawing Objects in AutoCAD 2011 • Tutorial 4: Precision Drawing in AutoCAD 2011 • Tutorial 5: Modify Object Properties and Layers in AutoCAD 2011 <p>Building 3D Models Tutorials</p> <ul style="list-style-type: none"> • Create Basic 3D Objects • Create 3D Objects from 2D Objects • Create a 3D Environment to Draw 3D Models • Control the Workplane <p>Feature Tutorials</p> <ul style="list-style-type: none"> • Design with Parametric Constraints in AutoCAD 2010 <p>You will also likely find interesting: Offical Forum</p>
Ad diti onal:	<p>Autodesk University</p>
Re fer en ce s:	
Ex ter nal lin ks:	
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