

# CAD for Theatre Designers Round Up



These are all tools and are good at specific jobs. When you are choosing a piece of software, think about what you want to do and communicate with it.

Most Theatre Plans will be supplied as DWGs and Workshops will ask for DWGs of your Ground Plans/Sections and Technical Drawings.

You will need to share your drawings with the Production Manager, Lighting Designer and Workshops. None of these people will thank you for a huge file (usually caused by exporting a 3D model as a DWG).

Software	Description	Platform	Cost (as of 06/10/20)			
			One-off	Annual	Subscription	Educational Licence
AutoCAD LT (2D)	AutoCAD LT® is computer-aided design (CAD) software that architects, engineers, construction professionals and designers rely on to produce 2D drawings and documentation. Design, draft and document with 2D geometry. Access a comprehensive set of editing, design and annotation tool.	Win & Mac		£444	£54 per month	Free Educational Licence
AutoCAD (2D/3D)	AutoCAD® is computer-aided design (CAD) software that architects, engineers and construction professionals rely on to create precise 2D and 3D drawings. Draft and edit 2D geometry and 3D models with solids, surfaces and mesh objects. Annotate drawings with text, dimensions, leaders and tables	Win & Mac		£1,890	£234 per month	Free Educational Licence <a href="https://www.autodesk.co.uk/products/autocad/overview">https://www.autodesk.co.uk/products/autocad/overview</a>
Fusion 360 (3D)	Fusion 360 cloud-based 3D CAD/CAM software for students and educators. Get set up for career success with next-generation Autodesk Fusion 360. Unify design, engineering, and manufacturing into a single platform, available on MAC and PC.	Win & Mac		£438	£54	Free Educational Licence
Vectorworks Fundamentals (2D/3D)	[Vectorworks] basic design software package offers 2D/3D capabilities and an intuitive, easy-to-use modelling and documentation platform that works the way designers think.	Win & Mac	£2,130	£880*	£88 per month	Free Educational Licence <a href="https://www.vectorworks.net/en-GB/fundamentals">https://www.vectorworks.net/en-GB/fundamentals</a>
Vectorworks Spotlight (2D/3D)	Vectorworks Spotlight is the entertainment industry-leading software that's an all-in-one design, documentation and production solution. With an extensive suite of drawing, modelling, illustration and rendering tools, Spotlight lets you produce stunning 3D presentations. Create an immersive presentation experience with cutting-edge technology like virtual and augmented reality and rendered panoramas	Win & Mac	£2,445	£1476 inv VAT*	£147.60 inc VAT per month	*RECENT GRADUATE DISCOUNTS Get 40% off a professional Vectorworks licence with the Student2PRO program <a href="https://www.vectorworks.net/en-GB/spotlight">https://www.vectorworks.net/en-GB/spotlight</a>
SketchUp	SketchUp is a program used for a wide range of 3D modeling projects like architectural, interior design, landscape architecture, and video game design, to name a few of its uses. The program includes drawing layout functionality, surface rendering, and supports third-party plugins from the Extension Warehouse	Win & Mac	FREE (but should not be used for commercial work)			You can still download SketchUp 2017 for free <a href="https://help.sketchup.com/en/downloading-older-versions">https://help.sketchup.com/en/downloading-older-versions</a>
SketchUp Pro		Win & Mac		\$299		\$55 per year Educational Licence <a href="https://www.sketchup.com/plans-and-pricing/sketchup-pro">https://www.sketchup.com/plans-and-pricing/sketchup-pro</a>
TiurboCAD 2D	TurboCAD Mac Designer 2D is the perfect gateway for people who are new to using CAD software or those who only need to create two dimensional designs, plans, and drawings. It is small budget friendly, yet powerful enough to build big projects. If you need 3D capability, click here.	Win & Mac	\$70		Yes, options	<a href="https://www.turbocad.com">https://www.turbocad.com</a>
TiurboCAD 2D/3D	TurboCAD Mac Deluxe 2D/3D is a complete 2D/3D CAD solution that is extremely powerful, yet easy to use. Design with powerful 2D/3D drafting and ACIS® modeling tools. Quickly layout floor plans, diagrams, and illustrations. Our simple interface will speed up your workflow so that you can get more done in less time.	Win & Mac	\$200-\$700		Yes, options	
BricsCAD Classic (2D)	BricsCAD, the all-in-one CAD design solution in .dwg that answers all your needs: 2D drafting, 3D modeling, mechanical design, and BIM. The BricsCAD family of products brings an innovative, cost-effective and familiar multi-platform CAD solution to Windows, macOS, and Linux. BricsCAD is available as a permanent/perpetual license, subscription, for networked or stand-alone computers.	Win & Mac	\$845	\$410		<a href="https://www.bricsys.com/">https://www.bricsys.com/</a>
BricsCAD Pro (2D/3D)		Win & Mac	\$1105	\$640		
QCAD 2D	QCAD is a free, open source application for computer aided drafting (CAD) in two dimensions (2D). With QCAD you can create technical drawings such as plans for buildings, interiors, mechanical parts or schematics and diagrams. QCAD works on Windows, macOS and Linux. The source code of QCAD is released under the GPL version 3 (GPLv3), a popular Open Source license. QCAD was designed with modularity, extensibility and portability in mind. But what people notice most often about QCAD is its intuitive user interface. QCAD is an easy to use but powerful 2D CAD system for everyone. You don't need any CAD experience to get started with QCAD immediately.	Win & Mac	FREE			Institutional Licence available, unlimited Users <a href="https://www.qcad.org/en/">https://www.qcad.org/en/</a>
QCAD Pro			€33 + VAT			
DraftSight Standard 2D	DraftSight Standard is an easy-to-use 2D CAD drafting solution. Create, edit, save, view, print and mark up any kind of DWG file, with a familiar user interface that facilitates a quick transition from comparable CAD applications at an affordable price.	Win		£94.80		
DraftSight Premium	Create, edit, view and markup any kind of 2D and 3D DWG file with greater ease, speed and efficiency. Easily transition from AutoCAD® or similar CAD applications with a familiar user interface and commands. choose DraftSight Premium to experience an all-in-one, collaborative CAD solution to effortlessly go from 2D drafting to 3D modeling within the same environment, and to seamlessly connect to other solutions and services. DraftSight Premium includes all the features in DraftSight Professional, plus full 3D capabilities, 2D constraints and powerful integrations with other Dassault Systèmes and SOLIDWORKS® solutions, including SOLIDWORKS PDM and the 3DEXPERIENCE® platform that allow for easy collaboration and management of DWG file designs from first inspiration to final outcome.	Win		£479		<a href="https://www.draftsight.com">https://www.draftsight.com</a>
NanoCAD	nanoCAD Plus includes a full suite of basic and advanced tools for creating industry-standard DWG-compatible CAD files. nanoCAD Plus user interface and design principles are fairly the same as in the most of DWG-based CAD software. Any professional can start to use nanoCAD Plus easily.	Win		\$180-\$290		<a href="https://nanocad.com/products/plus/">https://nanocad.com/products/plus/</a>
CoralCAD (2D/3D)	The professional, affordable and simplified CAD software Experience a simplified CAD workflow using the professional, time-saving tools in CorelCAD™ 2020, available on Windows and macOS, at an affordable price. Collaboration is easy with full native .DWG file format support. Leverage the enhanced 2D drafting functionality, advanced 3D modeling tools, and .STL support to elevate design efficiency and optimize output.	Win & Mac		£800		<a href="https://www.coreldraw.com/en/product/corel-cad/">https://www.coreldraw.com/en/product/corel-cad/</a>
Adobe Illustrator 2D CAD Plug-in	CADtools is a complete technical illustration solution for Adobe Illustrator CS6, CC, CC 2014, CC 2015, CC 2017, and CC 2018. CADtools allows users to draw, edit, and dimension objects in scale within Illustrator, with 11 panels and 81 drawing, editing, dimensioning, construction, and labeling tools. The CADtools plugin mimics Illustrator's tool behavior for designers seeking a creative, easy-to-use alternative to complex CAD applications.	Win & Mac	\$379		\$19	<a href="https://www.hotdoor.com/cadtools/overview">https://www.hotdoor.com/cadtools/overview</a>

3D Modeling and Rendering Programs						
Rhino	Rhino can create, edit, analyze, document, render, animate, and translate NURBS™ curves, surfaces, and solids, point clouds, and polygon meshes. There are no limits on complexity, degree, or size beyond those of your hardware.	Win & Mac	€ 995			€195 Educational Licence <a href="https://www.rhino3d.com">https://www.rhino3d.com</a>
Cinema 4D	Easy to learn and extremely powerful: Cinema 4D is the perfect package for all 3D artists who want to achieve breathtaking results fast and hassle-free. Beginners and seasoned professionals alike can take advantage of Cinema 4D's wide range of tools and features to quickly achieve stunning results. Cinema 4D's legendary reliability also makes it the perfect application for demanding, fast-paced 3D production.	Win & Mac	£3,300		From £55 per month	<a href="https://www.maxon.net/en-gb/products/cinema-4d/overview">https://www.maxon.net/en-gb/products/cinema-4d/overview</a>
3DS Max	3ds Max is a powerful 3D modeling and animation solution used by game developers, visual effects artists, and graphic designers to create massive worlds, stunning scenes, and engaging virtual reality (VR) experiences. Currently owned and developed by Autodesk	Win	£1,872		£234	<a href="https://www.autodesk.co.uk/products/3ds-max">https://www.autodesk.co.uk/products/3ds-max</a>
Solidworks	Intuitive 3D design and product development solutions from SOLIDWORKS® let you conceptualize, create, validate, communicate, manage, and transform your innovative ideas into great product designs	Win (Mac via Bootcamp)	?	?	?	£99 1 Year Student Licence, Windows only <a href="https://www.solidworks.com">https://www.solidworks.com</a>
Blender	Blender is the free and open source 3D creation suite. It supports the entirety of the 3D pipeline—modeling, rigging, animation, simulation, rendering, compositing and motion tracking, video editing and 2D animation pipeline. You need to use Freestyle to create 2D Line Drawings	Win & Mac	FREE (though the cost of plug-ins can make this more expensive)			<a href="https://www.blender.org">https://www.blender.org</a>
Maya	Autodesk Maya is 3D computer animation software with powerful modeling, rendering, simulation, texturing and animation tools for vfx artists, modellers and animators. Maya helps artists tell their story with one fast, creative toolset.	Win & Mac		£1,872	£234	<a href="https://www.autodesk.co.uk/products/maya">https://www.autodesk.co.uk/products/maya</a>
Houdini Indie	Houdini is a 3D animation software application developed by SideFX, based in Toronto. ... Its exclusive attention to procedural generation distinguishes it from other 3D computer graphics software. Houdini Indie makes all of Houdini's animation and VFX tools available under an indie license to animators and game makers who want to use Houdini during the incubation stage of their business. Revenue Under \$100K USD	Win & Mac		\$269		Houdini Apprentice is the Free version for Students <a href="https://www.sidefx.com/products/houdini/">https://www.sidefx.com/products/houdini/</a>
Houdini Apprentice	Houdini Apprentice is a free version of Houdini FX which can be used by students, artists and hobbyists to create personal non-commercial projects.		FREE (for personal non-commercial projects.)			<a href="https://www.sidefx.com/buy/">https://www.sidefx.com/buy/</a>
V-Ray	Next generation of rendering. With significant workflow optimizations & faster rendering, V-Ray Next is smarter, faster and more powerful than ever. V-Ray lets you create the highest quality renders possible – directly in programs inc. SketchUp, Rhino, Cinema4D, 3DS Max. Gives you the power to render anything and everything – from quick design models to your most detailed 3D scenes.	Win & Mac		Various Options		<a href="https://www.chaosgroup.com">https://www.chaosgroup.com</a>