

Computer Requirements

Students who enroll in the Computer Aided Drafting and Design program are required to purchase a laptop computer with the following specifications.

Windows

| Specification | Minimum | Recommended |
|--|---|--|
| Operating System | Windows 10 | Windows 10 |
| Processor | Intel Core i5 2.4GHz or faster | Intel Core i7 3.2GHz or faster |
| RAM (Memory) | 8GB | 16GB or more |
| Hard Drive* | 250GB or more | 500GB or more |
| Graphics Card** Nvidia Quadro, AMD FirePro, or AMD Radeon Pro recommended | 2GB Dedicated Video RAM OpenGL 3.2 or better OpenCL 1.2 or better DirectX12 or better Microsoft Direct3D 10 or better | 4GB Dedicated Video RAM or more OpenGL 3.2 or better OpenCL 1.2 or better DirectX12 or better Microsoft Direct3D 11 or better |
| Monitor | 1920 x 1080 or better | 1920 x 1080 or better |

*Solid State Disk or SSD is highly recommended for best performance.

**On-Board Graphics such as Intel HD Graphics are not suitable to run CADD programs

Please confirm with your PC manufacturer or supplier on whether your individual configuration meets or exceeds these specifications. North Central Texas College will not evaluate or make recommendations on hardware outside of this specification.

[Minimum and Recommended Hardware Specifications \[PDF\]](#)

Apple Macintosh

- Intel® Core i5 as a minimum. Core i7 suggested. Intel Only.
- Mac OS X v10.8 or greater
- Windows 10 – *Separate retail purchase. Windows will need to be boot-camped onto Apple Macintosh
- 16GB of RAM minimum
- 500GB free hard disk space
- 1GB, OpenGL 3.2 and DirectX 11 compliant, Discrete Graphics Card as a minimum. 2GB suggested.

Required accessories

- Headset with microphone
- 6' Ethernet cable

Additional information

- AMD Processors may be used, but are not recommended by the college, and will not be supported by the College's Computer Services Department.
- Graphics Cards must support OpenGL 3.2 and DirectX 11 and have a minimum of 1GB of dedicated RAM. AMD or NVidia Graphics Cards are supported.
- Computer Aided Drafting and Design software run primarily on Windows. If you purchase an Apple Macintosh, you will need to purchase a supported retail copy of Microsoft Windows.
- Any existing hardware you own will need to meet the minimum specifications listed above. You may refer to our CADD software vendors for more information on Supported Hardware.
- [Mastercam](#)
- [PTC](#)
- [AUTODESK](#)
- [SolidWorks](#)

Students are free to buy any laptop that meets the above requirements. Here are some recommended websites:

NCTC Bookstore Computers – you can order one of these if it meets the requirements as stated.

<https://www.bkstr.com/nocentraltxcorinthstore/shop/electronics/computers-tablets/desktops-laptops>

Many manufacturers offer discount pricing.

- Apple: <https://www.apple.com/us-hed/shop>
- Dell: <http://www.dell.com/en-us/learn/purchaseprogram/university>
- Lenovo: <https://www3.lenovo.com/us/en/landingpage/students-and-teachers/>
- Microsoft: <https://www.microsoft.com/en-US/store/b/education>
- HP: <https://store.hp.com/us/en>