

# KITCHEN AND BATH POST-DIPLOMA CERTIFICATE

## COMPUTER SYSTEM INFORMATION AND SOFTWARE LIST:

**A laptop computer is required during your studies in the Kitchen and Bath Design Post diploma Certificate. Here is a list of the software that will be used and the hardware needed to support it:**

**Basic requirements are as follows:**

### LAPTOP SPECIFICATIONS:

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- INTEL QUAD CORE CPU (I5 OR I7)
- 8GB RAM (16 GB RECOMMENDED)
- 13" 1080P SCREEN (15" RECOMMENDED)
- DEDICATED GRAPHICS CARD NVIDIA OR EQUIVALENT
- 256GB SOLID STATE HARD DRIVE (512GB RECOMMENDED)
- PORTABLE HARD DRIVE (FOR DATA BACKUP)
- WINDOWS 10
- 64-BIT
- USB PORT MIN 2
- 3 BUTTON SCROLL WHEEL MOUSE

\*\* EQUIVALENT SPECIFICATION IN AN APPLE MACBOOK PRO IS ACCEPTABLE

**In addition to the above here is a list of the software that will be used and the hardware needed to support it:**

- **Auto CAD 2014/2015/2016 (Students can use AUTO CAD LT) see link for student trials**  
<http://www.autodesk.com/education/free-software/autocad>
- **Sketch-up 2016**  
<http://www.sketchup.com/products/sketchup-make>
- **20-20 Design**  
<https://www.2020spaces.com/2020products/2020design/>
- **General internet access – built-in WiFi required (BVC has free WiFi access on campus)**
- **Microsoft office (Power Point, Excel, Word) Student version – Download from Microsoft directly.**  
<https://products.office.com/en-ca/academic/compare-office-365-education-plans>

## SYSTEM REQUIREMENTS:

### AUTO CAD: SYSTEM REQUIREMENTS FOR AUTOCAD 2019

Applies to AutoCAD 2019

For MAC users please follow this link: <https://knowledge.autodesk.com/support/autocad/troubleshooting/>

System requirements for AutoCAD 2019 including Specialized Toolsets	
<b>Operating System</b>	<ul style="list-style-type: none"><li>• Microsoft® Windows® 7 SP1 with Update <a href="#">KB4019990</a> (32-bit &amp; 64-bit)</li><li>• Microsoft Windows 8.1 with Update <a href="#">KB2919355</a> (32-bit &amp; 64-bit)</li><li>• Microsoft Windows 10 Anniversary Update (64-bit only) (version 1607 or higher)</li></ul>
<b>Processor</b>	<b>Basic:</b> 2.5–2.9 GHz processor <b>Recommended:</b> 3+ GHz processor
<b>Memory</b>	<b>Basic:</b> 8 GB <b>Recommended:</b> 16 GB
<b>Display Resolution</b>	<b>Conventional Displays:</b> 1920 x 1080 with True Color  <b>High Resolution &amp; 4K Displays:</b> Resolutions up to 3840 x 2160 supported on Windows 10, 64 bit systems (with capable display card)
<b>Display Card</b>	<b>Basic:</b> 1 GB GPU with 29 GB/s Bandwidth and DirectX 11 compliant <b>Recommended:</b> 4 GB GPU with 106 GB/s Bandwidth and DirectX 11 compliant
<b>Disk Space</b>	6.0 GB
<b>Browser</b>	Google Chrome™
<b>Network</b>	Deployment via Deployment Wizard.  The license server and all workstations that will run applications dependent on network licensing must run TCP/IP protocol.  Either Microsoft® or Novell TCP/IP protocol stacks are acceptable. Primary login on workstations may be Netware or Windows.  In addition to operating systems supported for the application, the license server will run on the Windows Server® 2016, Windows Server 2012, Windows Server 2012 R2, and Windows 2008 R2 Server editions.  Citrix® XenApp™ 7.6, Citrix® XenDesktop™ 7.6.
<b>Pointing Device</b>	MS-Mouse compliant
<b>.NET Framework</b>	.NET Framework Version 4.7

**Disclaimer:** The VMware application is network-based and performance of AutoCAD for VMware software products may vary with network performance. The software does not include the VMware application, nor does Autodesk

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provide direct support for issues with the VMware application. Users should contact VMware directly with questions related to procurement and operation of the VMware application.

## MINIMUM REQUIREMENTS 20-20 DESIGN

### System Recommendations for Version 11.9 and above

These system requirements are unique to 2020 Design v11.9. For previous version system requirements, please contact support at [support@2020spaces.com](mailto:support@2020spaces.com)

#### ACTIVELY SUPPORTED OPERATING SYSTEMS

**PC Operating Systems (64 bit):** Windows 10, Windows 8/8.1, Windows 7

**MAC:** Apple Macintosh using Bootcamp

#### MINIMUM HARDWARE SPECIFICATIONS

**Processor:** 2.0 GHz Quad Core CPU

**System Memory:** 4 GB RAM

**Disk Space:** 10 GB free disk space for installation

**Graphics Card:** NVIDIA GeForce 8800/ATI Radeon HD 2600 (512MB minimum) or better\*

**Optical Drive:** A DVD-ROM is required to install 2020 Design and catalogs when Internet access is not available

**Security Device:** If you're using the physical license key (dongle), you will need a free USB port.

#### RECOMMENDED HARDWARE SPECIFICATIONS

**Processor:** Intel Core i7 or AMD equivalent

**System Memory:** 8 GB RAM

**Disk Space:** 10 GB free disk space for installation

**Graphics Card:** NVIDIA GeForce GTX 750 or ATI Radeon HD 6950 or better\*

**Optical Drive:** A DVD-ROM is required to install 2020 Design and catalogs when Internet access is not available.

**Security Device:** If you're using the physical license key (dongle), you will need a free USB port.

#### ADDITIONAL REQUIREMENTS:

- 2-button scrollmouse
- High speed internet connection for updates
- Purchasing a computer with a solid-state drive will make the entire designing experience more enjoyable.
- Running 2020 Design in a virtual environment such as VMware or Parallels will impact rendering performance.
- We strongly recommend a dedicated graphics card by either NVIDIA, ATI or AMD. Please avoid systems that only have integrated graphics, such as Intel HD Graphics or AMD APUs.
- If an Oculus Rift system is used to view 360 panoramic renderings, please refer to their **recommended** hardware specs at <https://www.oculus.com/rift/>

\*To validate whether your (selected or existing) graphics card is supported, please [refer to the RedwayED supported GPU list](#) for a detailed list of recommended graphics cards.

<https://help.sketchup.com/en/article/36208>

## **Window 10**

### • **Software**

- An internet connection is required to install and authorize SketchUp and to use some of the features.
- Microsoft® Internet Explorer 9.0 or higher.
- SketchUp Pro requires .NET Framework version 4.5.2. For more information about the .NET framework, click [here](#).

SketchUp requires a 64-bit version of Windows. Also, to install SketchUp, Windows 8.1 must be current with Windows Update.

Boot Camp, VMWare, and Parallels are not supported environments.

### • **Recommended hardware**

- 2+ GHz processor
- 8+ GB RAM
- 700MB of available hard-disk space
- 3D class video card with 1GB of memory or higher and supports hardware acceleration. Please ensure that the video card driver supports OpenGL version 3.0 or higher and is [up to date](#).
- SketchUp Checkup <https://help.sketchup.com/en/article/3000318>
- 3-button, scroll-wheel mouse.

### • **Minimum hardware**

- 1 GHz processor
- 4GB RAM
- 16GB of total hard-disk space
- 500MB of free hard-disk space
- 3D-class video card with 512MB of memory or higher and supports hardware acceleration. Please ensure that the video card driver supports OpenGL version 3.0 or higher and is [up to date](#)

## **Mac OS 10.13+ (High Sierra, 10.12+ (sierra and OSX 10.11+ (El Capitan)**

### • **Software**

- QuickTime 5.0 and web browser for multimedia tutorials.
- Safari

Boot Camp, VMWare, and Parallels are not supported environments.

### • **Recommended hardware**

- 2.1+ GHz Intel™ processor
- 8GB RAM
- 700MB of available hard-disk space

Alert: Please be aware, SketchUp is unable to support case sensitive hard drives with our installation. If you use a case sensitive hard drive you'll experience crashes at launch which cannot be resolved.

- 3D-class video card with 1GB of memory or higher and supports hardware acceleration. Please ensure that the video card driver supports [OpenGL version 3.0](#) or higher and is [up to date](#).
- 3-button, scroll-wheel mouse
- An internet connection is required to authorize SketchUp and to use some of the features.

### • **Minimum hardware**

- 2.1+ GHz Intel™ processor
- 4GB RAM
- 500MB of available hard-disk space.
- 3D-class video card with 512MB of memory or higher and supports hardware acceleration. Please ensure that the video card driver supports [OpenGL version 3.0](#) or higher and [up to date](#).
- 3-button, scroll-wheel mouse.