# 2019-20 Computer Specifications School of Architecture-Oklahoma State University

The School of Architecture at OSU requires all architecture and architecture engineering majors entering 3rd year to purchase and operate a **laptop computer**. It is required to have a high-quality screen, wireless capability, and loaded with specific software. The following specifications are the **minimum** required hardware and software for the 2019-20 academic year.

Please note that certain computer and software developers/vendors offer packages at competitive prices. Compare prices, terms of use, and after-sale services before making any purchase.

## **Processor (CPU)**

8th Generation Intel<sup>®</sup> Core<sup>™</sup> i7-8750H (6-Core, 9MB Cache, up to 4.1GHz w/Turbo Boost) or 8th Generation Intel<sup>®</sup> Core<sup>™</sup> i9-8950HK (6-Core, 12MB Cache, Overclocking up to 5.0GHz) Rhino & Autodesk Revit software products will use multiple cores for many tasks, using up to 16 cores for complex operations.

## **Operating System**

Latest operating Windows 64bit.

## Memory (RAM)

Laptops - RAM absolute minimum of 32GB of DDR3 or DDR4 system memory is preferred for mobile devices. (Multitasking and large file size accommodations) ECC memory is not required.

Desktops (towers)- system memory can range from an absolute minimum of 32GB is recommended up to but not limited to 64gb of DDR3 or DDR4 memory. ECC memory is not required.

#### Display

15" resolution (1920 x 1080) Full HD or a larger size high quality monitor.

## **Hard Drive**

Highest affordable CPU storage and speed rating recommended with atleast 512 GB but one terabyte is highly reccomended.

Storage SSD is highly recommended with a minimum of 500GB. Laptops have the capability of dual storage. Example of memory distribution could be 500 gb SSD for the softwares and 500gb SSD or HDD for file storage. In general, 1 TB SSD for laptop devices is good as long as there is an isolated back-up system included. For desk towers, external hard drives or internal isolated hard drives, hard drive arrays may be used for desktops 1tb storage minimum.

## **Graphic Card**

A compatible **dedicated** graphic card with at least 4GB of video memory. Graphics processors passmark of 6000 points and 4 GB minimum of GDDR5 memory on laptops and **8GB + of GDDR5 memory is better**. More video ram means better graphic and virtual reality performance. Please review for compatibility. Call manufacturer or read online forums on the desired GPU and software compatibility. Examples:

NVIDIA® GeForce® GTX 1080 with 8GB GDDR5 or equivalent.

#### Network

Wireless Networking Setup ready (WiFi and Bluetooth 4.1)

## Accessories

Optical mouse High capacity USB memory stick Flatbed scanner (optional) CD / DVD Burner (optional) External Drive for back-ups with1tb min. Color inkjet printer Access to at least 500GB cloud based storage

#### **Required Softwares**

Microsoft Office\* (latest version) Autodesk Autocad\*\* (latest version) Autodesk Revit\*\* (latest version) 3ds Max\*\* (latest version) Rhino (latest version) Adobe Creative Suite-Design Standard (latest version)

**ONLY for AE Students:** RISA Software\* Anti virus/internet security\*\*\* (latest version). AE Students do not need Rhino or V-ray for Rhino.

\*Currently available at no charge for OSU students and Staff. \*\*May be downloaded at no charge from Autodesk with academic proof. \*\*\*Currently available at no charge