

## Undergraduate UPD Student Laptop Recommendations

For the 2020–21 academic year, the Urban Planning and Policy Development Program strongly recommends that all students have a personal laptop computer powerful enough to support the demanding computational and video requirements necessary for coursework as well as adequate storage to accommodate new software releases. All students will use statistical analysis software (R or Stata), spreadsheets (Microsoft Excel), word processing and email software. Most students will use geographic information system software (ArcGIS, QGIS), and those interested in urban design will use additional specialized tools that require significant memory and computing power (Rhino, Grasshopper, Sketchup, Autodesk Suite, Adobe Acrobat Creative Suite, VRAY for Rhino 6, Sketchbook Pro).

The Bloustein School provides and maintains two high-end computer labs for classes and is moving steadily toward a mobile computing environment. *Given the uncertainty regarding access to these facilities during the current COVID-19 pandemic, we advise students to ensure that their personal laptop is capable of running all software required for their chosen course of study.*

Due to difficulties with AutoCAD and GIS software on the Mac OS system, Urban Planning and Design majors are encouraged to purchase a Windows PC. Laptops running the Microsoft Windows operating system are compatible with all of the software students are likely to use in the program. Although *we highly recommend the use of a Windows based computer*, it is feasible to use a laptop running the Apple Macintosh operating system. This will require the use of Bootcamp to install Microsoft Windows for running ArcGIS, which is used extensively, and possibly for other programs. This will also require a Windows license and additional hard drive space.

Any questions related to these hardware or software requirements should be sent to [help@ejb.rutgers.edu](mailto:help@ejb.rutgers.edu).

### Minimum Windows Laptop Specifications

Intel i7 or i9 processor

Windows 10 x64

16 GB of RAM

512 GB SSD hard drive

Discrete/dedicated graphics card with 2GB Video Memory (Nvidia Quadro or AMD Radeon Pro graphics cards with 4GB Video memory recommended)

Screen Resolution 1080p (4K recommended)

Webcam

Touchscreen highly recommended for urban design

Mouse needed for GIS

Three-year warranty recommended

Theft and damage insurance recommended

Total estimated cost: \$1500.

### Minimum Mac Laptop Specifications

Macbook Pro with an Intel i7 or i9 processor

macOS Sierra or newer

16GB of RAM

512 GB SSD hard drive with at least 50GB of free space for Bootcamp

discrete/dedicated graphics card

Apple care recommended

Microsoft Windows License for Bootcamp (license not needed for initial installation)

Total estimated cost: \$2500

### Accessories

\*USB thumb drive (32 GB)

\*USB storage hard drive/backup (500 GB–1 TB)

\*Backup battery for extended mobile work sessions

Headset

\*these items are not required for remote learning

### Software

Most of the software packages used in the program are freely available under student licensing from manufacturers, trial licenses, open source initiatives, and through licenses provided by the Bloustein School. However, some software packages may need to be purchased by students. Incoming students should receive communications about what software is available for the upcoming school year at least 30 days in advance of the start of the fall semester. Please contact [help@ejb.rutgers.edu](mailto:help@ejb.rutgers.edu) if you plan on purchasing any software prior to receiving such communications. Some packages that may need to be purchased include:

Stata/IC \$94 per year

Sketchup Pro: \$55 per year

Adobe Creative Cloud: \$20 per month

Rhino: \$195 one-time purchase

V-Ray for Rhino (Students) \$99 per year