

# University of Hawai'i at Manoa School of Architecture

## Computer and Software Requirements and Information 09/06/07

### Introduction

To enable the integration of computer technology into all aspects of the curriculum, and as stated in the UHM Catalog, the School of Architecture (SoA) will require all students to have a computer for exclusive personal use. Starting in the spring 2008 semester, all students that need to complete ARCH 235+L and ARCH 431+L will be required to have the exclusive personal use of laptop/notebook computer. Note that the computers currently located in the Computer Lab are scheduled to be relocated, and will no longer be available for student use starting in the spring 2008 semester.

### SoA Network, Equipment, and Services

#### SoA Network

The School of Architecture provides student access to a 10/100 baseT network via wired and wireless connection. The SoA provides a wireless network set-up session at the beginning of each semester. Students wanting to use a wired network connection must purchase a network cable (available at the UHM Book Store or local computer store).

#### Printing and Plotting

The SoA provides printing and plotting services including:

- letter/tabloid size laser and inkjet printing
- large format color plotting
- large format scanning
- 3D printing
- CNC milling
- laser cutting
- Digital photography (use of lights and digital camera)
- slide/film scanning

Services are available in SoA Room 207 during the hours posted on the door. Prices for services are available in Room 207.

### Student Laptop Requirement

Each student registering for ARCH 235+L and/or ARCH 431+L Advanced Computer Applications in Architecture is required to have a laptop computer by the first day of class. A list of the hardware specifications and required software is shown below. Students are encouraged to seek all options for the purchase or lease of computer hardware and software (e.g., UHM Bookstore, computer stores, internet, etc.), and to consider warranty, customer service, extended warranty, or other service agreements provided by manufacturers. The SoA will not be able to provide troubleshooting, repairs, or advice concerning computer hardware and software problems for student owned equipment. The SoA will not be able to provide special interface support for non-Windows operating systems with SoA supplied printers or other peripheral devices.

Students are encouraged to take adequate precautions to guard against theft of their equipment. The SoA will not be responsible for theft of student owned equipment.

## Computer Costs and Financial Aid

The UHM Financial Aid Office allows students to request a budget adjustment for the “one-time” purchase of a computer up to \$1285. Normally, this increases student’s ability to borrow with student loans. Students should bring a copy of their computer purchase receipt or estimate for the cost and ask to speak with a financial aid counselor.

## Suggested Laptop Minimum Hardware Specifications

Operating System:	Windows Vista Business or XP Professional
CPU:	Intel 2.0 GHz Core 2 Duo Processor (performance enhanced is better)
Display:	12” WXGA with TrueLife
Video Card:	256 MB or more
Memory:	2 GB RAM or more
Hard Drive:	60 GB Hard Drive or more
CD-ROM:	8X DVD+/-RW Drive
Network Adaptor:	10/100 Network Card and built-in intel PRO/Wireless 802.11a/g
Security kit:	lock and cable
Battery:	High Capacity 8 Cell Lithium Ion Battery
Warranty Support:	3 year extended, next business day parts and labor on-site Response plus CompleteCare.

Note: An external back up hard drive of at least 40 GB is highly recommended.

## Recommended Software

- ArchiCAD
- Adobe InDesign
- 3D Rhinoceros 4.0
- Macromedia Dreamweaver
- Macromedia Flash
- Maya

**Required Software** (Note: Instructors of courses other than those listed below may require additional software in order to complete course requirements).

### **ARCH 235+L** Spring Semester 2008

- Microsoft Office 2007
- Adobe Photoshop
- AutoCAD Architecture
- SketchUp (standard)
- FormZ

### **ARCH 431+L** Fall Semester, 2008

- Microsoft Office 2007
- Adobe Photoshop
- AutoCAD Architecture
- 3D StudioMax
- Autodesk Revit 2008
- SketchUp (standard)

## Software Availability and Pricing

### 1. Virus Protection Software

The University provides students free McAfee software for download at <http://www.hawaii.edu/antivirus/>. All students must utilize this software program and update daily (adjust settings for automatic updates). All students must register with the UH Virus Alert List for notification for threats of medium/high risk.

2. Microsoft Office 2007 Standard (\$77.00 at UHM Bookstore. For other sources, check for current prices). This software bundle contains: Microsoft Word, Microsoft Excel, Microsoft PowerPoint, and Microsoft Outlook.

3. Adobe Creative Suite 3 Design Standard (\$199.00 at UH Bookstore. For other sources, check for current prices). This software bundle contains: Adobe Photoshop, Adobe Illustrator CS3, Adobe InDesign, Adobe Acrobat 8.0 Professional, and Version Cue (file management). *(Note: As an option, students may purchase Adobe Creative Suite 3 Design Premium (\$299.00 at UH Bookstore) adds Adobe Flash and Adobe Dreamweaver software programs.*

4. FormZ 6.5 (\$99 for 1 year license – available for purchase through the SoA) AutoDesSys, Inc, 2D drafting & 3D modeling for presentations, visualization, and animation.

5. AutoCAD Architecture (\$199.00 – available for purchase through the SoA)

This software bundle contains: Autocad Architecture 2008, Revit Architecture 2008, VIZ 2008 (render software). If you currently have AutoCAD 2004, 2005, 2006, or 2007 you can use these programs. Note: do not purchase AutoCAD LT, as this software has limited capabilities.

6. 3D StudioMax or Maya Unlimited Super Pack which includes the combustion and cleaner programs (\$175.00 – available for purchase through the SoA). (Note: this is an educational version which is comparable to the full commercial version which retails for approximately \$5,000.00).

7. AutoCAD Revit 2008 (Architectural Desktop (ADT) will provide a free academic license which can be downloaded by students at no cost from <http://usa.autodesk.com/adsk/servlet/item?siteID=123112&id=9408083> ).

8. 3D Rhinoceros 4.0 (purchase for \$150 at [www.rhino3d.com](http://www.rhino3d.com) for a perpetual license. \$50.00 – educational version available for purchase through the SoA).

9. Sketchup (standard)

Google Sketchup version 6 may be downloaded at no cost at <http://sketchup.google.com/download.html>. A professional upgrade is available online for a fee.

10. ArchiCAD

Graphicsoft Corp. provides students with a free ArchiCAD academic license that can be upgraded as long as they are in the SoA (available through the SoA).

## APPENDIX 1 Laptop Configurations

Possible laptop configurations are given below. Note that the SoA does not specifically endorse any manufacturer or configuration. The following configurations are based on website information provided by the listed manufacturers as of 8/26/07. As configurations change frequently, check for current information.

### Dell Precision M90

Operating System:	Genuine Windows Vista Business 64-bit with media
CPU:	Intel® Core™ 2 Duo Processor T7200 (2.00GHz/667MHz/4MB)
Display:	17 inch Wide Screen WUXGA LCD Panel
Video Card:	NVIDIA® Quadro FX 2500M, 512MB (dedicated), OpenGL
Memory:	2 GB, DDR2-667 SDRAM, 2 DIMM
Hard Drive:	100 GB Hard Drive (7200RPM)
CD-ROM:	8/24/24/24X CDRW/DVD Combo Drive w/CyberLink PowerDVD™ Vista Business
Network Adaptor:	Intel® 3945 802.11a/g Dual-band Mini-Card
Warranty Support:	3Yr Parts + Onsite Labor (Next Business Day) + CompleteCare

(Approximately \$2,734.00 plus shipping and tax as of 8/30/07)

### Dell Precision M4300

Operating System:	Genuine Windows Vista® Business 64-bit, with Media
CPU:	Intel® Core™ 2 Duo T7300 (2.00GHz) 4M L2 Cache, 800MHz Dual Core
Display:	15.4 IN WIDE WUXGA+ Anti-Glare LCD Panel
Video Card:	NVIDIA Quadro FX 360M, 512MB Turbo Cache memory (256 dedicated)
Memory:	2.0GB, DDR2-667MHz SDRAM, 2 DIMMS
Hard Drive:	80GB Hard Drive, 9.5MM, 7200RPM
CD-ROM:	8X DVD+/-RW w/Roxio Creator™/Cyberlink PDVD
Network Adaptor:	Intel® 3945 802.11a/g Dual-band Mini-Card
Primary Battery:	9 Cell Primary Battery
Warranty Support:	3Yr NBD Plus (NBD onsite, Gold Support and CompleteCare)

(Approximately \$2,384.90 plus shipping and tax as of 8/30/07)

### IBM/Lenovo ThinkPad T61

Operating System:	Genuine Windows Vista Business 64
CPU:	Intel Core 2 Duo T7500 (2.2GHz 800MHz 4MBL2)
Display:	15.4" WSXGA+ TFT
Video Card:	NVIDIA Quadro FX 570M (256MB Open GL)
Memory:	2 GB PC2-5300 DDR2 SDRAM 667MHz SODIMM Memory (2 DIMM)
Hard Drive:	100GB Hard Disk Drive, 7200rpm
CD-ROM:	DVD Recordable 8x Max Dual Layer, Ultrabay Slim
Network Adaptor:	Intel PRO/Wireless 3945ABG
Primary Battery:	9 cell Li-Ion Battery
Warranty Support:	Express - 1 Yr Depot Warranty, 3 Year on Site Upgrade with 3 Year ThinkPad Protection

(Approximately \$1,829.50 plus shipping and tax as of 8/30/07)

**Sony VGN-FZ190**

Operating System: Microsoft Windows Vista Business  
CPU: Intel Core 2 Duo Processor T7500 / 2.2 GHz  
Display: 15.4" WXGA (XBRITEHiColor™) W/Camera  
Video Card: NVIDIA® GeForce® 8400M GT  
Memory: 2 GB DDR-SDRAM (DDR2-667MHz, 1 GBx2)  
Hard Drive: 120 GB Hard Disk Drive  
CD-ROM: SuperMulti (DVD+-R Double layer / DVD+-RW Drive)  
Network Adaptor: 802.11a/b/g/n with BT  
Primary Battery: Large Capacity Lithium-ion Battery (BPL8)  
Warranty Support: 3 Year Onsite Service Plan plus Accidental Damage from Handling Protection DSES3SLPA

(Approximately \$1,988.99 plus shipping and tax as of 8/30/07)

**Dell Precision M90**

Operating System: Genuine Windows Vista Business 64-bit with media  
CPU: Intel® Core™ 2 Duo Processor T7600  
(2.33GHz/667MHz/4MB)  
Display: 17 inch Wide Screen WUXGA LCD Panel  
Video Card: NVIDIA® Quadro FX 3500M, 512MB (dedicated),  
OpenGL  
Memory: 4 GB, DDR2-667 SDRAM, 2 DIMM  
Hard Drive: 160GB Hard Drive (7200RPM)  
CD-ROM: 8/24/24/24X CDRW/DVD Combo Drive w/CyberLink  
PowerDVD™ Vista Business  
Network Adaptor: Intel® 3945 802.11a/g Dual-band Mini-Card  
Warranty Support: 3Yr Parts + Onsite Labor (Next Business Day) +  
CompleteCare

(Approximately \$4,511.50 plus shipping and tax as of 8/30/07)

**Dell Precision M4300**

Operating System: Genuine Windows Vista Business 64-bit with media  
CPU: Intel® Core™ 2 Duo T7700 (2.40GHz) 4M L2 Cache,  
800MHz Dual Core  
Display: 15.4 IN WIDE WUXGA+ Anti-Glare LCD Panel  
Video Card: NVIDIA Quadro FX 360M, 512MB Turbo Cache memory  
(256 dedicated)  
Memory: 4.0GB, DDR2-667MHz SDRAM, 2 DIMMS  
Hard Drive: 160GB Hard Drive, 9.5MM, 7200RPM  
CD-ROM: 8X DVD+/-RW w/Roxio Creator™/Cyberlink PDVD™  
Network Adaptor: Intel® 3945 802.11a/g Dual-Band Mini Card  
Primary Battery: 9 Cell Primary Battery  
Warranty Support: 3Yr NBD Plus (NBD onsite, Gold Support and  
CompleteCare)

(Approximately \$3,464.90 plus shipping and tax as of 8/30/07)

**ThinkPad T61**

Operating System: Genuine Windows Vista Business 64  
CPU: Intel Core 2 Duo T7700 (2.4GHz 800MHz 4MBL2)[  
Display: 15.4" WSXGA+ TFT  
Video Card: NVIDIA Quadro FX 570M (256MB Open GL)  
Memory: 4 GB PC2-5300 DDR2 SDRAM 667MHz SODIMM Memory (2  
DIMM)  
Hard Drive: 100GB Hard Disk Drive, 7200rpm  
CD-ROM: DVD Recordable 8x Max Dual Layer, Ultrabay Slim  
Network Adaptor: Intel PRO/Wireless 3945ABG  
Primary Battery: 9 cell Li-Ion Battery  
Warranty Support: Express - 1 Yr Depot Warranty, 3 Year on Site Upgrade  
with 3 Year ThinkPad Protection  
(Approximately \$2,429.50 plus shipping and tax as of 8/30/07)

**Sony VGN-FZ190**

Operating System: Microsoft Windows Vista Business  
CPU: Intel Core 2 Duo Processor T7700 / 2.4 GHz  
Display: 15.4" WXGA (XBRITEHiColor™) W/Camera  
Video Card: NVIDIA® GeForce® 8400M GT  
Memory: 4 GB DDR-SDRAM (DDR2-667MHz, 2 GBx2)  
Hard Drive: 250 GB Hard Disk Drive  
CD-ROM: DVD+-R Double Layer / DVD+-RW Drive with Blu-ray Disc support  
Network Adaptor: 802.11a\b\g\n with BT  
Primary Battery: Large Capacity Lithium-ion Battery (BPL8)  
Warranty Support: 3 Year Onsite Service Plan plus Accidental Damage  
(Approximately \$3,468.99 plus shipping and tax as of 8/30/07)