

# University of Hawai'i at Manoa School of Architecture

## Computer and Software Requirements and Information 07/01/09

### 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. All students that need to complete ARCH 235 and ARCH 533 will be required to have the exclusive personal use of laptop/notebook computer.

### 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 Digital Fabrication Services 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

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

### Student Laptop Requirement

Each student registering for ARCH 235 and/or ARCH 533 Advanced Design Communication II 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 (2008-09; allocation for 2009-10 being obtained). 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 64 bit or XP Professional 64 bit
CPU:	Intel 2.0 GHz Core 2 Duo Processor (performance enhanced is better)
Display:	12" WXGA with TrueLife
Video Card:	512 MB or more
Memory:	4 GB RAM or more
Hard Drive:	120 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/n
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 60 GB is highly recommended.

## Recommended Software

- Ecotect
- Macromedia Dreamweaver
- Macromedia Flash

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

### ARCH 235 Spring Semester

- Microsoft PowerPoint
- Adobe Acrobat Writer
- Adobe Photoshop
- Adobe InDesign
- AutoCAD Architecture
- SketchUp (standard)
- 3D Rhinoceros

### ARCH 533 Fall Semester

- Microsoft PowerPoint
- Adobe Acrobat Writer
- Adobe Photoshop
- Adobe InDesign or Adobe Illustrator
- Autodesk Revit (recommended)
- 3D Rhinoceros
- Maya

## 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 3/4 Design Standard (\$449.00 at UH Bookstore. For other sources, check for current prices). This software bundle contains: Adobe Photoshop, Adobe Illustrator CS3/4, Adobe InDesign, Adobe Acrobat 8/9 Professional, and Version Cue (file management). (Note: As an option, students may purchase Adobe Creative Suite 3/4 Design Premium (\$599.00 at UH Bookstore) adds Adobe Flash and Adobe Dreamweaver software programs.

4. AutoCAD Architecture 2009 (\$159.00 for 13 Months Term – available at UHM Bookstore. For other sources, check for current prices)

If you currently have AutoCAD 2004, 2005, 2006, 2007, 2008 or 2009 you can use these programs. Note: do not purchase AutoCAD LT, as this software has limited capabilities.

5. Maya 2009 Unlimited (\$399.00 – available at UHM Bookstore. For other sources, check for current prices)

6. AutoCAD Revit 2010 (Architectural Desktop (ADT) A 13 months free academic license which can be downloaded by students at no cost from <http://students7.autodesk.com/?nd=home&logout=1>.

7. 3D Rhinoceros 4.0 (\$175.25 – educational version available for purchase through the SoA).

8. Sketchup (standard)

Google Sketchup version 7 may be downloaded at no cost at <http://sketchup.google.com/download.html>. A professional upgrade is available online for a fee.

## 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 6/12/09. As configurations change frequently, check for current information.

### Dell Precision M4400

Operating System:	Genuine Windows Vista Business 64-bit SP1, with media
CPU:	Intel® Core™ 2 Duo P8400 (2.26GHz 3M L2 Cache, 1066MHz FSB)
Display:	15.4” UltraSharp WUXGA (1920x1200) RGB-LED TrueLiFE Display
Video Card:	NVIDIA® Quadro FX 1700M, 512MB
Memory:	4.0GB, DDR2-800 SDRAM, 2 DIMMS
Hard Drive:	128GB Dell Mobility Solid State Drive
CD-ROM:	8x DVD+/-RW w/Roxio and Cyberlink Power DVD
Network Adaptor:	Intel® 3945 802.11a/g Dual-band Mini-Card
FingerPrint Reader	Internal Swipe Fingerprint Reader
Webcam/Microphone	Integrated webcam with microphone
Primary Battery:	9 Cell Battery
Warranty Support:	3Yr ProSupport for End Users and 3 Year NBD Onsite Service 3Yr CompleteCare Accidental Damage Protection

(Approximately \$2,439.00 plus shipping and tax as of 6/12/09)

### Dell Precision M6400

Operating System:	Genuine Windows Vista Business 64-bit SP1, with media
CPU:	Intel® Core™ 2 Duo P8600 (2.4GHz) 3M L2 Cache, 1067MHz Dual Core
Display:	17 IN UltraSharp WXGA+ LCD Display
Video Card:	NVIDIA Quadro FX 3700M, 1.0GB Discrete
Memory:	8.0GB, DDR3-1066MHz SDRAM, 4 DIMMS
Hard Drive:	128GB Dell Mobility Solid State Drive

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 Battery  
FingerPrint Reader: Internal Swipe Fingerprint Reader  
Webcam/Microphone: Integrated webcam with microphone  
Warranty Support: 3Yr ProSupport for IT and 3 Year NBD Onsite Service  
3Yr CompleteCare Accidental Damage Protection

(Approximately \$3,736.00 plus shipping and tax as of 6/12/09)

#### **IBM/Lenovo ThinkPad T700**

Operating System: Genuine Windows Vista Business 64  
CPU: Intel Core 2 Duo T9600 (2.8GHz 1066MHz 6MBL2)  
Display: 17" WUXGA 400NIT TFT  
Video Card: NVIDIA Quadro FX 3700M 128-core CUDA Parallel Computing  
processor 1GB (dedicated)  
Memory: 4 GB PC3-8500 DDR3 SDRAM 1067MHz SODIMM Memory (2  
DIMM)  
Hard Drive: 128GB Solid State Drive, Serial ATA  
CD-ROM: DVD Recordable 8x Max Ultrabay Enhanced (Serial ATA)  
Network Adaptor: Intel PRO/Wireless 3945ABG  
Primary Battery: 9 cell Li-Ion Battery  
Warranty Support: 3 Year Depot Upgrade with 3 Year ThinkPad Protection

(Approximately \$3,483.00 plus shipping and tax as of 6/12/09)

#### **Sony VGN-SR390NAB**

Operating System: Microsoft Windows Vista Business  
CPU: Intel Core 2 Duo Processor T6400 / 2.0 GHz  
Display: 13.3" (XBRITE-ECO™)  
Video Card: ATI Mobility Radeon 3470  
Memory: 4 GB PC2-6400  
Hard Drive: 320 GB Hard Disk Drive  
CD-ROM: CD/DVD Read/Write  
Network Adaptor: Intel WiFi 5100AGN (802.11a/b/g/n)  
Primary Battery: Standard Capacity Lithium-ion Battery  
Warranty Support: 3 Year Onsite Service Plan plus Accidental Damage from Handling  
Protection

(Approximately \$1,739.99 plus shipping and tax as of 6/12/09)

#### **Dell Precision M4400**

Operating System: Genuine Windows Vista Business 64-bit SP1, with media  
CPU: Intel® Core™ 2 Quad QX9300 (2.53GHz 12M L2 Cache, 1066MHz  
FSB)  
Display: 15.4" UltraSharp WUXGA (1920x1200) RGB-LED TrueLife Display  
Video Card: NVIDIA® Quadro FX 1700M, 512MB  
Memory: 8.0GB, DDR2-800 SDRAM, 2 DIMMS  
Hard Drive: 128GB Dell Mobility Solid State Drive  
CD-ROM: 8x DVD+/-RW w/Roxio and Cyberlink Power DVD  
Network Adaptor: Intel® 3945 802.11a/g Dual-band Mini-Card  
FingerPrint Reader: Internal Swipe Fingerprint Reader  
Webcam/Microphone: Integrated webcam with microphone

Primary Battery: 9 Cell Battery  
Warranty Support: 3Yr ProSupport for End Users and 3 Year NBD Onsite Service  
3Yr CompleteCare Accidental Damage Protection

(Approximately \$3,523.00 plus shipping and tax as of 6/12/09)

**Dell Precision M6400**

Operating System: Genuine Windows Vista Business 64-bit SP1, with media  
CPU: Intel® Core™ 2 Quad QX9300 (2.53GHz) 12M L2 Cache, 1066MHz FSB  
Display: 17 IN UltraSharp WXGA+ LCD Display  
Video Card: NVIDIA Quadro FX 3700M, 1.0GB Discrete  
Memory: 8.0GB, DDR3-1066MHz SDRAM, 4 DIMMS  
Hard Drive: 128GB Dell Mobility Solid State Drive  
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  
FingerPrint Reader: Internal Swipe Fingerprint Reader  
Webcam/Mirophone: Integrated webcam with microphone  
Warranty Support: 3Yr ProSupport for IT and 3 Year NBD Onsite Service  
3Yr CompleteCare Accidental Damage Protection

(Approximately \$4,586.00 plus shipping and tax as of 6/12/09)

**IBM/Lenovo ThinkPad T700**

Operating System: Genuine Windows Vista Business 64  
CPU: Intel Core 2 Quad Core Extreme Processor QX9300 (2.53GHz 1066MHz 12MBL2)  
Display: 17" WUXGA 400NIT TFT  
Video Card: NVIDIA Quadro FX 3700M 128-core CUDA Parallel Computing processor 1GB (dedicated)  
Memory: 4 GB PC3-8500 DDR3 SDRAM 1067MHz SODIMM Memory (2 DIMM)  
Hard Drive: 128GB Solid State Drive, Serial ATA  
CD-ROM: DVD Recordable 8x Max Ultrabay Enhanced (Serial ATA)  
Network Adaptor: Intel PRO/Wireless 3945ABG  
Primary Battery: 9 cell Li-Ion Battery  
Warranty Support: 3 Year Depot Upgrade with 3 Year ThinkPad Protection

(Approximately \$4,558.00 plus shipping and tax as of 6/12/09)

**Sony VGN-Z691Y/X**

Operating System: Microsoft Windows Vista Ultimate  
CPU: Intel Core 2 Duo Processor T9600 / 2.66 GHz 6MB cache  
Display: 13.1" LCD  
Video Card: NVIDIA® GeForce® 9300  
Memory: 4 GB DDR3-SDRAM (2 GBx2)  
Hard Drive: 320 GB Hard Disk Drive  
CD-ROM: DVD+-R Double Layer / DVD+-RW Drive with Blu-ray Disc support  
Network Adaptor: Intel WiFi 5100 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 \$3,279.98 plus shipping and tax as of 6/312/09)