
July 8, 2016

Notebook Computer requirements for students entering degrees in the Department of Information Technology & Management beginning Fall, 2016

Requirements: In order to ensure that you have an optimal learning experience while you are studying in the Department of Information Technology & Management (ITM) at Illinois Tech, the department has made it a requirement that students entering their studies in Fall of 2016 and later are required to have a notebook computer that meets a set of minimum requirements. If you already have a notebook PC, you probably already meet the requirements, but if you do not, please see the attached ITM Notebook PC Specifications for information to help you purchase a new system. In most cases there are recommended, minimum and optional/optimal specifications for each aspect of your computer. Despite the fact the 4 gigabytes of RAM memory is the minimum, we very strongly suggest that your system have 6 or even better yet 8 gigabytes of installed RAM.

Purchasing a New System: In order to assist you in purchasing a new system, our Dell University Account Manager, Angela Lex, has assembled a set of systems meeting our requirements. Information about the Dell purchasing portal and Angie's contact information is included in the second attachment following. She has pledged to me that she will meet or beat any price you find from Dell on these same products. Note that some systems are "minimum configuration" systems and we do not recommend purchasing a new system with 4GB of RAM memory. You certainly don't have to buy from Dell but this also provides you with a good basis for comparisons.

Upgrading an Existing System: If you already have a notebook PC that otherwise meets our specifications, the best thing to do to better support your studies at Illinois Tech is to ensure that you have the maximum possible amount of RAM memory installed. To see how much RAM is installed in your system and how much RAM it will support, you can make use of tools available at <http://www.crucial.com>. (We are not endorsing or suggesting that you purchase RAM from Crucial, but their tools are very helpful.) If your system will support 16 gigabytes of RAM, we very strongly suggest that you upgrade to this level. Replacing notebook RAM in SIMM cards is very simple and is well supported by online documentation.

Free software for ITM students is provided from several vendors through an OnTheHub online storefront provided by Kivuto Solutions Inc. This includes all software from Microsoft except Microsoft Office; software from VMware; and starting in September, software from IBM. You will receive your subscription to our OnTheHub web store two weeks into the fall term; additional information about this subscription can be found at http://blogs.iit.edu/itm_loopback/dreamspark/. Kivuto's IIT hub at <http://www.itm.iit.edu/OnTheHubIIT> has additional academic priced software for purchase. Please note that they are selling software we provide for free on our OnTheHub web store.

Microsoft Office for Free: Microsoft's Office 365 Education for Students is available for free to students who are enrolled at qualifying schools—and Illinois Tech is a qualifying school! This allows you to install the complete current version of Microsoft Office and Office Apps on up to 5 PCs or Macs and on other mobile devices, including Windows tablets and iPads. Go to <https://products.office.com/en-us/student/office-in-education> to subscribe. Also, this will give you an IIT OneDrive account with ONE TERABYTE of storage.

Autodesk: You can get Autocad, 3ds Max, complete design suites for building, product design and entertainment, and more at <http://www.autodesk.com/education/free-software/featured>.

Best Free and Open Source Software Source: <https://ninite.com/> allows you to select your software and creates a single installer which will install the correct version of the software for your system architecture and *not* install any crapware that might accompany the software. The School of Applied Technology uses Ninite Enterprise to provision systems for our computer labs.

For any questions, please contact the ITM Associate Chair Professor Ray Trygstad, 630.447.9009 / trygstad@iit.edu.

Information Technology & Management Notebook PC Specifications

While we do not currently require students enrolled in the Information Technology & Management (ITM) degree program prior to Fall 2016 to own a notebook computer, it will certainly enhance your student experience to have one. Students entering the department in Fall 2016 and later are required to own a notebook computer.

Standards below reflect specifications for notebook computers for use by ITM students; each category is broken down into recommended, minimum and, where applicable, optional specifications. Your system may run **any** operating system but must be able to run Microsoft Windows 7 Professional as the primary operating system or as a secondary (dual-boot) operating system or as a virtual machine using virtualization software. These are specifications you must meet if you are purchasing a notebook computer for use in our program. If you have questions about these specifications, please contact Ray Trygstad, trygstad@iit.edu or 630.447.9009.

| ITEM | RECOMMENDED | MINIMUM | OPTIONAL/OPTIMAL |
|---|---|----------------------------------|--|
| Processor | Intel Core i7 AMD A8 | Intel Core i3 H or U AMD A4 | Intel Core i7 HQ or MQ AMD A10 |
| ◆ You may not be able to run virtualization software adequately without VT or AMD-V technology. | | | |
| RAM Memory | 8GB or greater | 4GB | 8GB RAM is optimal to run Windows 7/10 & virtualization |
| ◆ You may not be able to run all necessary applications with only 512 MB of RAM. ◆ You may not be able to run virtualization software optimally with only 4 GB of RAM. ◆ 16GB or more of RAM is highly desirable. | | | |
| Operating System | Microsoft Windows 7, 8.1 or 10 Professional | Microsoft Windows 7 Professional | Linux or Solaris Macintosh OS/X Windows Server 2008/2012 |
| ◆ MacBooks must have BootCamp, Oracle VirtualBox, Parallels Desktop or Vmware Fusion installed allowing running of Microsoft operating systems. VirtualBox is available for free at http://www.virtualbox.org/ and is the recommended desktop virtualization solution in our program. ◆ Linux or Solaris notebooks must have Oracle VirtualBox, Xen, KVM, or VMware Workstation installed allowing running of Microsoft operating systems. VirtualBox is available for free at http://www.virtualbox.org/ and is the recommended desktop virtualization solution in our program. ◆ Microsoft, Linux & Solaris OS software is all available at no cost to all ITM students but you should purchase a system that will support Windows 7 Professional as a minimum standard. ◆ Ubuntu and Ubuntu variants Kubuntu, Linux Mint, and Pingu, as well as OpenSUSE are recommended Linux distributions. ◆ Windows Home versions will not support all software or OS functions you may need in our curriculum. | | | |
| Hard Drive | 500GB | 128GB | SSD - 256GB or 512GB |
| ◆ 120/128GB minimum suggested for dual boot with Windows and Linux/Solaris or for use with Windows Virtual PC or Hyper-V. | | | |
| Optical drive (May be external) | 24-48x CD-RW/DVD-RW | 24x CD-RW/DVD-R | Blu-Ray / Blu-Ray-R |
| Floppy drive | Neither required or expected | | 3.5 inch 1.44MB |
| Graphics card | 128MB or greater, 24-bit color | 64MB 24-bit color | |
| Display resolution | 1280x1024 XGA or greater | 1024x768 SVGA | |
| Wireless Network | IEEE 802.11g/n | IEEE 802.11g | 4G Wireless or IEEE 802.11ac |
| Network Port | 1000Base-T ethernet | 100Base-T ethernet | |
| ◆ Virtually all notebook PCs sold today include a gigabit (1000Base-T) ethernet port as standard items. | | | |
| Peripheral Port | 2 USB-3 / 1 USB-2 | 1 USB-2 | IEEE 1394 (FireWire) 3 USB-3 eSATA |
| Office Software | LibreOffice | LibreOffice | Microsoft Office 2007 or greater |
| ◆ LibreOffice is available for free at http://www.libreoffice.org/ . ◆ A free student subscription to Microsoft Office 365 which includes five full installations of Microsoft Office for Windows or OSX is available to IIT students at https://products.office.com/en-us/student/office-in-education | | | |
| Anti-Virus Software | including all current updates | | Optional on Mac/Linux |
| ◆ IIT provides a licensed version of McAfee VirusScan for use by for all students, faculty & staff; Microsoft Security Essentials—which is free from Microsoft—is also recommended. Windows 10 includes this by default. You may not operate any version of Microsoft Windows on IIT networks without installed anti-virus software. | | | |

Convertible or “2-in-1” systems such as the Microsoft Surface, Dell Inspiron, Lenovo Thinkpad Yoga or Lenovo Yoga, Acer Aspire, or Toshiba Satellite Radius that comply with these specifications are acceptable. Students should have a flash/thumb drive for lab use; 2GB minimum is recommended. See page 13 above for software available at no cost to ITM students.



ILLINOIS INSTITUTE OF TECHNOLOGY

Enjoy great perks and offers on Dell.

Members get the best perks and prices including up to 30% off select Dell PCs, tablets, electronics and accessories. Members also enjoy access to exclusive offers and presale events throughout the year.



XPS 8900, Dell 27 Gaming Monitor -S2716DG, Inspiron 13 7000 Series 2-in-1

Low monthly payments available with Dell Preferred Account.^A

Recommended Configurations at www.dell.com/IllinoisInstituteoftech

Member ID: US146052995, or email Angie_Lex@Dell.com

All orders are subject to approval and acceptance by Dell. Offers subject to change, not combinable with all other offers. Taxes, shipping, handling and other fees apply. Valid for U.S. Dell Member Purchase Program new purchases only. Offers shown are for consumer purchase only. Dell reserves the right to cancel orders arising from pricing or other errors. Price Match Guarantee: Generally, if you find a lower-price advertised on the internet for an identical electronic product or a similarly configured Dell, HP, Apple or Lenovo, computer; Dell will match that price. Call or Chat online with a Dell MPP Specialist and we'll walk you through the process. Learn more at Dell.com/pricematch. Inspiron and XPS are trademarks of Dell, Inc.

^A**DELL PREFERRED ACCOUNT (DPA)**: Offered to U.S. residents by WebBank, who determines qualifications for and terms of credit. Taxes, shipping, and other charges are extra and vary. Dell and the Dell logo are trademarks of Dell Inc.