

Recommended Hardware – Starting January 2014

Haverford College computer hardware recommendations are updated twice annually, to coincide with the semi-annual replacement process, in June and December. The following desktop hardware baselines apply to computers due for replacement in this cycle and will be supported by IITS for a minimum of four years.

A Note on Choices for College-Issued Computers

IITS plans hardware replacements as part of a multi-year budget for computing equipment and related peripherals, taking into consideration the relative computing demands of the various staff and faculty positions at Haverford, and adjusting as appropriate. This principle of fairness relative to need drives the computing selections for positions requiring a college-issued computer. Typically hardware is selected with the expectation of a four-year life cycle and hardware specifications are adjusted to meet the demands of a position.

For most positions at Haverford the baseline Windows Performance Desktop specification meets or exceeds the four-year expectations for consistency, sustainability and reliability. Where IITS and the department agree that the requirements of a job in turn require a configuration other than the baseline Windows Performance Desktop specification, IITS will provide one of the other supported configurations shown below. In cases where (a) IITS and the department do not agree that an alternative configuration is required, (b) in cases where the cost of the required configuration exceeds available budgeted funds or (c) an additional computer is requested, departments may use discretionary or grant funds to cover the difference in cost.

Incremental improvements to college-issued computers or other computers that are purchased with departmental or grant funds are not eligible for the replacement cycle funding through IITS.

Computers not meeting the specifications below will not be supported by IITS.

Windows Systems Baselines

	Performance Desktop	Laptop – Desktop equivalent with Occasional Travel	Laptop - Frequent Travel
Additional Storage	SD Media card reader optional		
Audio System	Integrated ¹		
Battery	NA	6 hour life minimum	
Camera	All-in-one model only		Integrated
Form Factor	<ul style="list-style-type: none"> All-in-one Small form factor 	Laptop or tablet	
Hard Disk ²	180 GB Minimum 7200RPM SATA or Solid State Drive		
Memory Configuration ³	8.0 GB		

¹ Discrete audio subsystems are supported with demonstrated academic or business need.

² 320GB minimum is strongly recommended, however may not be cost effective when choosing solid state drives.

Monitor Size	22" Widescreen Min	14" to 15" Widescreen	
Operating System	Microsoft Windows 7 Enterprise 64-bit (college owned computers) Microsoft Windows 7 or Windows 8 (students or personally owned computers)		
Optical Media	DVD +/- R/RW suggested		
Planned Life Cycle⁴	4 years		
Processor⁵	Intel Core i7 or later		
Sustainability Standard	EPEAT Silver or better		
Video System	Integrated		
Warranty	Three years onsite	<ul style="list-style-type: none"> • Three years onsite • Accidental damage coverage if available 	
Weight	N/A	6 lbs	4 lbs
Wired Networking	Gigabit Ethernet built in or via adapter		
Wireless Connectivity	Bluetooth Wireless N		Bluetooth Wireless N Integrated Mobile 3G optional
Approvals	Standard issue for office deployments	Faculty or Administrative Director level certification of academic or business need required.	
Recommended Accessories	None	Docking station 22" external monitor Keyboard / Mouse Laptop Bag	Docking Station 22" external monitor Keyboard/Mouse Additional power adapter Spare battery Laptop Bag
Supported Product⁶ Applies to college purchases only. Personal purchases may be any brand meeting the above technical specs.	Lenovo M92z or later Lenovo M92p or later	Lenovo T440s Lenovo X series	Lenovo T420s Lenovo X series
Departmental Cost	Departments are responsible for the difference in cost between the baseline budget (allocated by position) for this replacement cycle and the cost of any advanced or special configurations on desktops, any laptop configurations and any accessories.		

³ Additional memory is supported up to the limits of the operating system and hardware.

⁴ Life cycle is intended as a guide. Longer or shorter term cycles may be used given demonstrated academic or business need.

⁵ For purposes of this specification period any clock speed for the class of processor stated is acceptable.

⁶ These items are the default choice of IITS, however there may be other models or manufacturers (Dell, HP, etc) used on a case-by-case basis given demonstrated academic or business need.

Apple Systems Baselines

	Performance Desktop	Laptop – Desktop equivalent with Occasional Travel	Laptop or Tablet - Frequent Travel
Additional Storage	Media card reader integrated (optional, when possible)		
Audio System	Integrated		
Battery	NA	Integrated	
Camera	Integrated		
Form Factor	All-in-one	Laptop	Laptop or Tablet
Hard Disk ⁷	SATA 1000GB 7200RPM	SATA 500 GB 7200RPM	256 GB Solid State Drive
Memory Configurator ⁸	8.0 GB		8 GB MB Air, 32GB iPad
Monitor Size	21.5" Widescreen	15" Widescreen Retina	13" Widescreen Retina
Operating System	Apple OS X 10.6 or higher		
Optical Media	DVD +/- R/RW		External Air SuperDrive
Planned Life Cycle ⁹	4 years (Excluding iPad) ¹⁰		
Processor ¹¹	Intel Core i7 (any speed)		Intel Core i7 (any speed) Apple A5 Processor
Sustainability Standard	EPEAT Silver or better		
Warranty ¹²	AppleCare 3 year coverage (note: Accidental Damage Protection is not available)		
Weight	N/A	6 lbs	2-3 lbs
Wired Networking	Gigabit Ethernet		USB Ethernet 10/100 Adapter (MacBook Air Only)
Wireless Connectivity	Bluetooth Wireless N		Bluetooth Wireless N Integrated Mobile 3G
Approvals	Faculty or Administrative Director level certification of academic or business need required.		
Recommended Accessories	Wired full size keyboard	VGA Adapter 22" external monitor Keyboard/Mouse Additional power adapter Laptop Bag	VGA Adapter
Supported Product ¹³	Apple iMac 27 Inch Apple Mac Pro	MacBook Pro	MacBook Air Apple iPad
Departmental Cost	<p>Departments are responsible for the difference in cost between the baseline budget (allocated by position) for this replacement cycle and the cost of any advanced or special configurations on desktops, any laptop configurations and any accessories. Please note, the fully outfitted MacBook Pro and Air with external monitor and all recommended accessories far exceeds the cost allocation for any position. Ordering this device will likely result in additional charge to your department.</p> <p>IITS does not support or fund the purchase of iPads as a primary system. These are intended as supplemental for those who travel extensively or have specific lightweight computing needs.</p> <p>The microprocessor in the iPad is not considered to be a four-year lifecycle processor as of the date this document is published.</p>		

⁷ Solid state hard drives are early in their broad deployment. The significantly higher cost far outweighs limited performance benefit.

⁸ Additional memory is supported up to the limits of the operating system and hardware.

⁹ Life cycle is intended as a guide. Longer or shorter term cycles may be used given demonstrated academic or business need.

¹⁰ Current iPad products ship with lower speed processors than typical desktops or laptops, which may not provide satisfactory performance for the increasing demands of software and operating systems beyond a two to three year life cycle.

¹¹ Any clock speed for the Core i7 is acceptable.

¹² IITS can provide on-site service for some Apple products.

¹³ The item listed is the default choice of IITS, however there may be other models used on a case-by-case basis given demonstrated academic or business need.