System Requirements

This section lists the hardware, software and connectivity requirements to implement this course.

Hardware

Each student and teacher needs access to a computer workstation. The following table summarizes the hardware requirements for all courses in the ICT Essentials suite. Different needs for some courses are specified as necessary.

Note: The ICT Essentials hardware requirements are similar to the minimum system requirements for Microsoft Windows 11 implementation.

Hardware Specifications	Minimum Requirements
Processor	1 GHz 32-bit (x86) or 64-bit (x64) processor
Hard disk	16 GB available hard disk space (32-bit) or 20 GB available hard disk space (64-bit) for Windows 7 installation. 16 GB of additional space must be available for course applications and files.
RAM	1 GB RAM (32-bit) or 2 GB RAM (64-bit)
Network interface card (NIC)	Wireless, 10/100 Ethernet, or Gigabit Ethernet
Wireless router (AP)	Wireless-G, Wireless-N or Wireless-AC router with built-in 4-port Ethernet switch to connect wired network PCs and devices. Wireless NICs must support the wireless router (G, N or AC)
Sound card/speakers	Required
Video adapter	DirectX 9 graphics device with WDDM 1.0 driver
Network connectivity	Enough wireless nodes, hubs or switches to allow classroom computers to communicate and access the Internet.
Monitor	1024 x 768 screen resolution using a VGA, DVI or HDMI connector
Web camera (Webcam)	Any type of Web camera Some monitors include an internal Webcam USB Webcams are a good choice

Software

The ICT Essentials suite is intended to be mostly operating system-neutral and browser-independent.

Browsers

HTML5-compliant browsers are recommended for best performance of course resources and activities. HTML5-compliant browsers include:

- Google Chrome (any version).
- Mozilla Firefox (version 59 or higher).

- Microsoft Edge.

However, a selection of various current browser types and versions that are supported on the classroom's computer systems should provide satisfactory results.

Network

Each school's network is configured differently. You should test each activity to ensure the ports are open on the firewall before presenting the activity to the class. You may have to work with your network administrator to open the ports.

Required Software

Computers should have access to the following system-based applications for all courses in the ICT Essentials suite:

- Word-processing software*

- Spreadsheet software*

- Presentation software*

- Database software*

- Notepad++

- Editing software for graphics, such as:

  o Gimp (*www.gimp.org*)

  o Pixlr Editor (*http://apps.pixlr.com/editor/*)

- Scratch (https://scratch.mit.edu/) or SNAP! (https://snap.berkeley.edu/)

- Video editing software, such as Clipchamp (https://clipchamp.com/en/)

- Audio editing software, such as Audacity (*http://audacity.sourceforge.net/download/*)

- An e-mail account for each student

- Website hosting site (https://www.wix.com/) or hosted by school

* Our materials are based on Google and Microsoft applications.

Connectivity

Internet connectivity is required for all ICT Essentials courses. You will experience optimal performance with a dedicated Internet connection (for example, a cable/DSL modem or a T1 line).

ICT Essentials supplemental files

Each coursebook includes supplemental files that are referenced and used throughout the course. These resource files are provided online for each lesson.

You will need to create a directory for all resource files for the course. The default location is C:\ICT\[Course_Title]. To view or download the materials, go to ICT Online, click the link for each file and save to this directory. You can then create a shortcut to this directory on your Desktop. As you conduct the course labs, you can use this shortcut to quickly access your lab files.

Version 3.0