












Note: Make sure you have two other important checklists: Part B: Software Checklist and Part C: Learning Platforms Checklist


This computer hardware technology and Internet connectivity checklist is for students. It is to help you get ready for digital learning. This checklist focuses on hardware and Internet connections that can manage the demands and expectations of learning with multiple digital technologies and diverse learning platforms.



*Smartphones are **not** recommended for digital or online learning! They limit access, engagement, and full participation in many learning experiences. Smartphones are best used as a secondary device for communication and notifications when away from your computer. Use a laptop or a desktop computer.*

#	Description	✓
1	<p>Desktop Computer or Laptop</p> <p>  PC: Recent versions of Windows 10 Operating System (No Chromebooks or Surface Go with “S” mode – they do not allow for ease in installing NIC apps or software) OR Mac: macOS (e.g., Big Sur 11.0) with the following specifics:</p> <ul style="list-style-type: none"> 12 – 16 GB RAM or higher to enable high-speed multi-tasking 250 GB SSD HD (so you have approx. 200 GB free space left after installation of software and operating system) to store documents, videos, pictures etc. PC: Intel i5 processor or higher (e.g., i7) to allow programs functionality and features - quad core or greater is preferred Mac: MacBook, MacBook Pro, iMac, Mac mini (Reference) CPUs with low clock speed may have lower video quality network cable connection (directly or via an adapter) OR wi-fi adapter (built in laptops or external on desktops) with proximity to a wi-fi modem 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2	<p>Bandwidth Requirements</p> <p> Courses coded as: NIC DLS (Digital Learning Scheduled) or NIC DLU (Digital Learning Unscheduled) will often involve 25+ students sharing video, screen sharing, and video/audio via a web/video conferencing platform called BlueJeans.</p> <p>You will need at least 5 Mbps of bandwidth speed – but often you will need far more bandwidth depending on what your digital class activities may require! Recommend: wired connection or a strong wireless (Wi-Fi) Internet connection. Your Wi-Fi connection should be using home access points or free Wi-Fi connection points to not incur any data plan charges.</p> <p>TO DO: Check your connectivity strength by performing a speed test at: https://www.speedtest.net/ with a ping under 40 ms and a download speed of at least 5 Mbps or significantly better (e.g., 100 + Mbps).</p> <p>Ensure you have good bandwidth for all your learning needs! (Reference)</p>	<input type="checkbox"/> <input type="checkbox"/>

	<p><i>Tip: Limit household bandwidth use by turning off other activities competing for Internet use at the same times as video conferencing calls such as: streaming videos, downloading of files, online gaming, and other video conferencing calls.</i></p>	
3	<p>USB Keyboard</p>  <p><i>Note: if not part of laptop – a separate keyboard provides greater ease for typing, navigating programs etc.</i></p>	<input type="checkbox"/>
4	<p>USB Mouse</p>  <p><i>Note: if not already part of a laptop – a separate USB mouse provides greater ease in navigation, moving around the page faster etc.</i></p>	<input type="checkbox"/>
5	<p>USB Speakers</p>  <p><i>Note: if not already part of a laptop – a set of USB speakers allow for audio and video from videos, websites, learning resources etc.</i></p> <p>However, we strongly recommend a USB headset with integrated microphone for any BlueJeans courses and classes – for significantly improved audio quality over separate speakers and a microphone.</p>	<input type="checkbox"/>
6	<p>USB Microphone</p>  <p><i>Note: if not already part of laptop or web cam, a separate USB microphone allows for creation of videos, audio clips and successful participate in BlueJeans classes and meetings</i></p> <p>OR</p> <p>USB Headset with Integrated Microphone</p>  <p>This combination is recommended for “DLS” (NIC Digital Learning Scheduled) courses making high use of BlueJeans web conferencing platform, regardless if using a laptop or desktop computer. A USB headset with microphone will provide the best sound quality. See website with recommendations from BlueJeans.</p> <p><i>Note: The mics used with ear buds often do not work well as you can hear ‘scraping’ noises when the mic rubs on clothing. This results in distracting noises for others on the video conferencing call.</i></p>	<input type="checkbox"/>
7	<p>USB Web Camera</p>  <p>Note: if not already part of laptop – to allow for creation of videos, been seen on BlueJeans calls and other group and class learning experiences along with more flexibility in placing camera in another location for optimal video.</p> <ul style="list-style-type: none"> Almost all negative (integrated) webcams are compatible with BlueJeans External cameras that have been tested with BlueJeans are as follows: Logitech C920, C930e etc. and Microsoft LifeCam series (Reference) 	<input type="checkbox"/>
8	<p>Optional: Printer</p>  <p>For printing documents, tests, and handouts etc.</p>	<input type="checkbox"/>
9	<p>Optional: Second Monitor</p>  <p>For ease in working on documents when on video conference calls, working on multiple projects and activities etc.</p>	<input type="checkbox"/>

10	Optional: Stylus and Tablet or Interactive Pen  For science and math notations, ease in writing formulas, etc. Suggestion: https://www.wacom.com/en-us/products/pen-tablets/wacom-intuos	<input type="checkbox"/>
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