The Internet Testing Systems (ITS) web-based architecture is the platform for the ABEM 2020 Online In-training Examination and relies on the operating system and web browser components for system configuration. ITS systems are compatible with Windows and Mac operating systems as well as with iPads. You will find varying degrees of compatibility with other browsers and operating systems, depending on the features you have enabled and the software version being used. ITS and ABEM highly encourage your institution’s technology staff to determine the compatibility, specific to your program, before committing to participate in the online pilot; see the minimum versions chart below:

The minimum requirements for Windows and Mac have changed as follows:

- Windows 7 and Internet Explorer 9.0 or higher is required. The latest version of Windows products can be downloaded from the [Microsoft Download Center](http://www.microsoft.com/en-us/download).
- Mac: Mac OS X 10.10 or higher with Safari 8 or higher is required. The latest version of Mac products can be downloaded from the [Mac Support](http://www.apple.com/mac/support) site.
- iPad: iPad 2 or higher running iOS 9 or later is required.

Note: Factors, such as, processor speed, amount of RAM, monitor display settings, and Internet connection speed can alter the user experience, but will not affect the functionality of the ITS architecture or systems.

**Additional Information:** This section details configuration information which will not affect the ITS architecture or systems but must be considered while designing your test(s).

**Internet Connection:** Performance is typically driven by the size of the graphics or media in the test. For best results, candidates and testing locations should use a broadband connection.

**Wireless Connections:** If candidates are using a wireless network (Wi-Fi) for testing, they should consult their local technical administrator to ensure their network adheres to best practices for wireless network design. **The number of devices per access point should be less than the vendor's recommendation.** In addition, we recommend wireless access points with 802.11n capability using WPA2 encryption with a 100BASE-T uplink to the local area network. To reduce wireless network bottlenecks, use access points with 802.11n simultaneous dual-band (2.4GHz and 5GHz) with Gigabit uplink to the local area network. Nearby and "rogue" wireless networks, specifically those from mobile hotspot devices and smartphone tethering, will impact test performance.

**Processor Speed and RAM:** The system's processor speed and available memory have minimal impact on the actual appearance of the test, though, in terms of performance, items may take slightly longer to display with slower processors or machines with lower amounts of RAM.

**Monitor Resolution:** Tests can be delivered at any resolution. However, most tests are designed for resolutions of 1024x768 or better. For graphic intensive tests, it may be advantageous to require 1024x768 resolution or higher. Most computers support this resolution, with the exception of netbooks and 7-inch tablets, which typically have a resolution of 1024x600.

**Monitor Color Depth:** The color depth refers to the number of colors that can be displayed simultaneously. Statistically, 97% of the users on our web sites have 16-bit color or greater; 8-bit color support is supported on 100% of the machines but may cause problems with graphics with complex shading.

**Technical Assistance:** 800-514-8494.