

Constructor Practice Science Labs

Hardware Requirements Documentation

To deliver a high-quality, immersive learning experience, Constructor Practice Science Labs requires devices that meet the following minimum and recommended hardware specifications across VR, PC, and tablet platforms.

1. VR Requirements

Supported VR Headsets

- Meta Quest 3
- Meta Quest 3S
- HTC Vive Focus 3
- HTC Vive XR Elite

Minimum VR Requirements

- VR headset with motion controllers
- Stable Wi-Fi connection (20 Mbps or higher recommended)
- Device updated to latest supported firmware

2. PC Requirements

Minimum Component Specifications

- Operating System: Windows 11 64-bit or newer / macOS 64-bit
- CPU: Intel Core i3, 8th gen+, AMD Ryzen 3, 1st gen+
- Memory (RAM): 8GB or more
- Minimum Graphics Card: NVIDIA GeForce GTX 1050 (3GB) / AMD Radeon RX 480 or greater

Recommended Component Specifications

- CPU: Intel Core i5, 12th gen+ / AMD Ryzen 5, 3rd gen+ or greater
- Graphics Card: NVIDIA GeForce GTX 1060 (3GB) / AMD Radeon RX 480 or greater
- Memory: 16GB RAM recommended for optimal performance

Additional Notes:

- Dedicated GPU strongly recommended.
- Latest GPU drivers required.
- Wired internet connection recommended for best stability.

3. Tablet Requirements

iPad Compatibility

- iPad 9th Generation or newer
- iPad Pro 11+, iPad Pro M1+ (2021+)
- iPadOS 17 or newer recommended for best performance

Android Tablet Compatibility

- Snapdragon 855 processor (or equivalent)
- Snapdragon 8 Gen 1+ (recommended)
- Android 12 or later
- GPU must support OpenGL ES 3.0 or later

General Performance Recommendations

- Use updated operating systems and firmware
- Ensure stable internet connection (minimum 20 Mbps recommended)
- Close background applications during experiments
- Use recommended hardware for multi-user or high-complexity simulations

Troubleshooting

Login and access issues

- Ensure you select the correct platform version for your device.
- Verify your internet connection before starting and confirm with your IT department that the website is not blocked for security reasons.

For the best experience, please check the following:

- Confirm your device meets the minimum requirements listed above.
- Use a stable internet connection.
- Close other applications running in the background.
- Make sure your browser or device software is up to date.
- Clear your browser cookies and cache.
- Restart your device if needed.

Browser compatibility

- The platform is fully supported on standard web browsers (Chrome, Edge, Safari) across PCs, laptops, and tablets.

Low-bandwidth scenarios

- The platform works on slower connections, though performance may be affected. For best results, close other bandwidth-heavy applications or use a wired connection. Contact IT or your Constructor Tech representative if issues continue.