



# System Requirements for Virtual Classes

Updated 5/11/2020

See also: [Software List for Virtual Classes](#) (includes installation instructions)

After signing up your child for one of Empow's virtual classes, it is highly advised to install the appropriate software or create an account for the class. Each class description will contain one or more of the following tools, and all classes require Zoom.

Please take careful note of which operating systems (OSes) are required for the software that your child will be using in classes they are registered in. In most cases a computer is required rather than a tablet.

## Zoom:

Supported OSes: Windows XP+, Mac OS 10.7+, Linux, ChromeOS

Supported Tablets: iPad 2 or later with iPadOS 13+, Android 4.0+ with 1Ghz processor or better

Required: **Microphone**

Recommended: **Headphones**

Recommended: **Webcam**

Install AND Account creation required

<https://zoom.us/download>

## EV3 Programming:

OS requirements: Windows Vista or later, or Mac OS 10.6 - 10.14 --- **DOES NOT WORK IN OS 10.15 Catalina**

Other requirements: Dual core processor - 2.0 Ghz or higher, 2GB of RAM, 2GB of hard drive space.

Install required.

<https://www.lego.com/en-us/themes/mindstorms/downloads>

Scroll down the page to find the download for either Mac or Windows.

## Flowlab:

Recommended Browsers: Chrome, Firefox, Safari  
No install required.

## HUE Animation

PC requirements: Windows 10, 8, 7 or XP and graphics drivers with OpenGL 2.0 support  
Mac requirements: OS X 10.5 (Leopard) to macOS 10.14 (Mojave). **DOES NOT WORK IN OS 10.15 Catalina**  
Memory requirements: 512MB RAM (1GB recommended)

## Minecraft: Java Edition

Minimum Requirements:

- CPU: Intel Core i3-3210 3.2 GHz / AMD A8-7600 APU 3.1 GHz or equivalent
- RAM: 4GB
- GPU (Integrated): Intel HD Graphics 4000 (Ivy Bridge) or AMD Radeon R5 series (Kaveri line) with OpenGL 4.4\*
- GPU (Discrete): Nvidia GeForce 400 Series or AMD Radeon HD 7000 series with OpenGL 4.4
- HDD: At least 1GB for game core, maps and other files
- OS:
  - - Windows: Windows 7 and up
  - - macOS: Any 64-bit OS X using 10.9 Maverick or newer
  - - Linux: Any modern 64-bit distributions from 2014 onwards
- Internet connectivity is required for downloading Minecraft files, afterwards offline play is possible.

Recommended Requirements:

- CPU: Intel Core i5-4690 3.5GHz / AMD A10-7800 APU 3.5 GHz or equivalent
- RAM: 8GB

- GPU: GeForce 700 Series or AMD Radeon Rx 200 Series (excluding integrated chipsets) with OpenGL 4.5
- HDD: 4GB (SSD is recommended)
- OS (recommended 64-bit):
  - - Windows: Windows 10
  - - macOS: macOS 10.12 Sierra
  - - Linux: Any modern distributions from 2014 onward.

## Python:

IDLE Supported OSes : Windows 7+, Mac OS 10.7 or later, Linux

PyCharm Supported OSes: Windows XP+, Mac OS 10.8+, Linux

Install required for IDLE and PyCharm

<https://www.python.org/downloads/>

<https://www.jetbrains.com/pycharm/>

## Scratch:

Supported Browsers: Chrome, Edge, Firefox, Safari, Chrome for Mobile, Safari for Mobile

Supported OSes (offline): Windows 10, Mac OS 10.13 or later, ChromeOS, iOS, Android

Install OR Account creation required

<https://scratch.mit.edu/>, iPad App store or Google Play store

## Sculptris:

Highly Recommended Specs: 64-Bit Windows Vista+ or Mac OS 1.10 - 10.14 --- **DOES NOT WORK IN OS 10.15 Catalina**, Intel i5+ CPU or AMD equivalent, 6+ GB RAM, 8 GB free hard drive space, graphics card must support OpenGL 3.3+ (most cards since 2008 will work)

Install required

<https://pixologic.com/sculptris/>

## Stykz:

Windows Requirements: Windows Vista+, 2GHz+ processor, 2GB+ RAM

Mac Requirements: Mac OS 1.4.2 - 10.14 — **DOES NOT WORK IN OS 10.15 Catalina**, 2GHz+ processor, 2GB+ RAM

Install Required

<https://www.sty kz.net/downloads/>

Note: unlisted hardware requirements indicate software is expected to run on any hardware with the correct browser or OS.

## TinkerCAD:

Recommended Browsers: Chrome, Firefox

Recommended OS: Windows 7+, Mac OS 10.6+, ChromeOS

Computer must support WebGL (can test at <https://get.webgl.org/>)

Account creation required

<https://www.tinkercad.com/>

## Virtual Robotics Toolkit:

Recommended OS: Windows 7 or later, or Mac OS 10.9 (Mavericks) or later.

Minimal requirements: 4GB of RAM, Integrated Graphics card, Intel or AMD processor

Ideal requirements: 8GB of RAM (for good performance), Dedicated Graphics card, Intel i7 processor

## Wick Editor:

Recommended Browsers: Chrome, Firefox

Recommended OS: Windows 7+, Mac OS 10.6+, ChromeOS

No install or account creation required.

Access at <https://www.wickeditor.com/>