

**SPACE JAM 15 Prerequisites list, we hope all Scouts are prepared so every Merit Badge is a completed Merit Badge!**

**It is recommended that all Scouts at Space Jam have their Cyber Chip**

<http://usscouts.org/advance/cyberchip.asp>

Scouts need an email, that is not a school account, though some systems will require a school account to get the software. Scouts should be proficient with ZOOM. Practice using ZOOM with a family member (during COVID most schools had Zoom accounts for all the students, so Scouts probably know it will.

Scouts will need a computer (laptop) with a mic and video camera, mouse and internet connection.

**Credit for prerequisites only by written verification by adult leader.**

**Please** read the merit badge pamphlet for all merit badges you plan to take, though not required, this is advisable and highly valuable. Simply Google Search the “name of the merit badge” a space then “Pamphlet” several troops have them on the web, you might need to look for the list till you find the full thing. A few are sideways and you need to click the rotate icon to get them right. Use of merit badge worksheets is encouraged.

Below is a listing of all prerequisites (in alphabetically order; not listed, there is no pre req’s):

**Animation with Unity 3D** – download and install the Unity Personal, we will be using this in the class.

<https://store.unity.com/#plans-individual> its free get the student version (have your parents read the terms, as it calls for you to be 16, or the personal version. You need Unity installed for the badge.

**Art Merit Badge** – Supplies needed: 6 pieces of paper, Pen, #2 pencil, Paint program of some sort. Nice to have Set of markers, colored pencils, watercolors and brush, cup of water and paper towels, charcoal pencil, drawing paper.

**Chemistry** – 2 ltr Pop bottle with cap and an eye dropper

**Citizenship in the Nation** - Write a letter to your congressperson.

**Communications** – 5. Attend a public meeting: city council, school board, debate are good. 8. Plan and Serve as master of ceremonies.

**Digital Technology** - Have an up-to-date Cyberchip. Have access to a Gmail account (one you can log in to).

**Electronics** - sign up for a [www.tinkercad.com](http://www.tinkercad.com) account, it is free. Having a laptop with a 2nd monitor would be awesome but not needed.

**Genealogy** – With your parent, (this is optional) Download and install the MyHeritage free Family Tree Builder. Start your tree <https://www.myheritage.com/family-tree-builder/> A parent should be involved in this process. (You don’t have to do this, and you can do it manually).

**Graphic Arts** – We will be using two programs, please download them and watch a few tutorial videos to help speed things along. <https://www.gimp.org/downloads/> Gimp is a free tool to edit photos and create pixel art work (like Photoshop, but free. Click on the tutorial tab to start your learning).

<https://inkscape.org/release/inkscape-0.92.3/> Inkscape is vector drawing tool (like Illustrator, but free, Click on LEARN tab and then tutorials). You will need access to a Printer (The MB has you print 50 copies of your creation).

**Inventing** – We will be modeling an invention in Fusion 360 Computer Aided Design program.

<https://www.autodesk.com/products/fusion-360/personal> download and install the personal use (or you may have an educational use already – requires a school email address) we recommend the personal use version. Use your Gmail account email address. There is a pop-up that could block your download, just click on No Thanks... and you will be back to the download page.

**Movie Making** – Scout can use a cell phone for video making, they will need a cable to move videos from the phone to the computer. This can be done with a Google Account that syncs too. The video editor we will use is Davinci Resolve 18.6, it is a professional editor and available for free here:

<https://www.blackmagicdesign.com/products/davinciresolve> There is a download for Windows, Mac OS X and Linux. Note we are not using the beta 19 version. You could use Apple's video editor or any other, but we will be going over Davinci.

**Radio Merit Badge** – do #8, Find out about three career opportunities in radio. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, explain why this profession might interest you.

**Signs, Signals and Codes** -- Nautical Flags <https://sailingfortuitous.com/spell-things-with-flags/> Morse Code <https://justlearnmorsecode.com/> and <https://www.arrl.org/learning-morse-code> American Sign Language <https://www.handspeak.com/> a few resources for you class.

**Sculpture 3D printing** - Download and install Blender at <https://www.blender.org/download/>

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