

# GIS Level 1 Setup Instructions

Note: This activity uses online resources that may not be freely available to OCW users.  
Thank you for registering for GIS Level 1. Before the workshop, please do the following:

1. Download and install either ArcGIS Pro or QGIS
2. Install 7-zip if necessary
3. Download all workshop materials
4. Update and setup Zoom

## Download and install ArcGIS Pro or QGIS

**QGIS** is a free, open source software program that will work on any operating system and doesn't take up much space on your computer. While it has many of the same capabilities as ArcGIS Pro, there are some analyses you can't do in QGIS and it tends to have more bugs.

**ArcGIS Pro** is a commercial software from ESRI that we have a subscription for at MIT. **It only runs on Windows** and requires an account or a connection to the MIT license server to run. It includes a full suite of GIS tools, but may not run well if you have a slower computer.

If you are not sure which software to use, this website has a lot of additional information:

<https://gisgeography.com/qgis-arcgis-differences/>

**Note:** This workshop will NOT use ArcGIS Desktop/ArcMap, only ArcGIS Pro, the newest GIS software from ESRI.

## ArcGIS Pro installation

1. Create an ArcGIS Online (AGOL) account: <https://libguides.mit.edu/gis/webmap#s-lg-box-wrapper-5115587>
2. If you have not already downloaded Pro, log into your AGOL account. From your account page, click your name in the upper right and select My settings > Licenses and click download next to ArcGIS Pro.
3. After installing Pro, choose the Named User License type and select ArcGIS Online. You'll then see the same login screen that you used to create your account.

## QGIS Installation

Full instructions and links for installing QGIS for a number of different operating systems can be found here: <http://qgis.org/en/site/forusers/download.html>

Windows users should download **QGIS Standalone Installer**. (Mac users only have one option.)

Download QGIS 3.16 or higher. If you already have QGIS installed, we have tested the workshop exercises with versions 3.16 and higher so we recommend upgrading if you are using an older version.

## 7-zip installation

Workshop files (and most GIS data) are in zipped folders. Most Windows computers have the option to extract data by right clicking and most Macs will automatically extract data. Occasionally your computer may not have a built-in data extraction tool. In this case we recommend installing 7-zip:

<https://www.7-zip.org/>

## Workshop materials

Download all workshop materials.

Materials include the presentation, workshop exercises, take-home exercise, and all required data.

## Zoom setup

1. Make sure your Zoom app is up-to-date using these instructions. You may have difficulty completing exercises in breakout rooms if your Zoom is not updated:  
<https://support.zoom.us/hc/en-us/articles/201362233-Upgrade-update-to-the-latest-version>
2. If you have access to a second monitor (or a second “smart” device that can connect to a Zoom session) it may greatly improve your workshop experience and make it easier to follow the instructor and complete the exercises simultaneously. If not, it is still doable, for example, by organizing your screen in this way:  
[https://raw.githubusercontent.com/hbctraining/bioinformatics\\_online/master/guidelines/img/Screenshot%202020-03-23%2015.21.10.png](https://raw.githubusercontent.com/hbctraining/bioinformatics_online/master/guidelines/img/Screenshot%202020-03-23%2015.21.10.png)
3. We encourage participation during the session and kindly ask you to use your video, if possible.
4. Mute audio except when talking (Tip: you can temporarily unmute yourself by pressing and holding a space bar. When it is released, Zoom goes back to the mute mode).

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