



How to Install Python and vPython for Physics 140



Document Summary

In order to fully participate in the Physics 140 lab using your personal computer, you need to download and install the appropriate versions of the Python and vPython applications. These are:

PC	Python 2.7.5	vPython 6.05
Mac	Python 2.7.6	vPython 6.05

NOTE: If, after following these instructions, you need additional assistance installing the software please contact:
 CTS Computing & Technology Support (CaTS)
 2428 Randall Laboratory (450 Church Street)
 (734) 763-9756
cats-group@umich.edu

Step 1: Download the Applications

Download the Zipped Folder from CaTS

- 1) Navigate to:
<https://sharepoint.umich.edu/lisa/physics/physcomp/docs/Install%20Files/Physics%20140%20Python%20Installers.zip>
- 2) Save the file to the location of your choice and unzip.

Step 2: Install the Applications - PC

Install Python

- 1) Open the *Physics 140 Python Installers* folder.
- 2) Open the *PC Installers* folder.
- 3) Right-click the "1 – python-2.7.5.msi" file and select **Install as Administrator**.
- 4) Click **Yes** on the *User Account Control* window (if it appears – and provide credentials if asked).
- 5) In the *Python 2.7.5 Setup* window, select **Install for all users**, then click **Next**.
- 6) Click **Next** to select the default destination directory.

- 7) Click **Next** to select the default customizations. The installation will begin.
- 8) When the installation is complete, click **Finish**.

Install vPython

- 1) Right-click the "2 – Vpython-Win-32-Py2.7-6.05.exe" file and select **Run as Administrator**.
- 2) Click **Yes** on the *User Account Control* window (if it appears – and provide credentials if asked).
- 3) In the *Setup – VPython for Python 2.7* window, click **Next**.
- 4) Click **Next** to accept the default components.
- 5) Click **Next** to accept the creation of a desktop shortcut for VIDLE.
- 6) Click **Install**. The installation will begin.
- 7) When the installation is complete, click **Finish**.

Step 2: Install the Applications - Mac

Install Python

- 1) Open the *Physics 140 Python Installers* folder.
- 2) Open the *Mac Installers* folder.
- 3) Double-click the "1 – python-2.7.6-macosx10.6.dmg" file. A "Python 2.7.6" volume will mount on your desktop and open.
- 4) Double-click the "Python.mpkg" file.

NOTE: *If you see a message saying "Python.mpkg can't be opened because it is from an unidentified developer:"*

- 1) Click **OK** to close the message window.
- 2) Press **control**+click the "Python.mpkg" file.
- 3) Select **Open** from the resulting menu.
- 4) Click **Open**.

- 5) In the *Welcome to the Python Installer* window, click **Continue**.
- 6) In the *Important Information* window, click **Continue**.
- 7) In the *Software License Agreement* window, click **Continue**.
- 8) Click **Agree** to accept the license agreement on the resulting window.
- 9) Click **Install** to accept the default installation settings.
- 10) Provide administrative credentials and click **Install Software**. The software will install. Click **Close**.

Install vPython

- 1) In the *Mac Installers* window, double-click the "2 – Vpython-Mac-Py2.7-6.05.pkg" file.

NOTE: *If you see a message saying "2 – Vpython-Mac-Py2.7-6.05.pkg" can't be opened because it is from an unidentified developer:"*

- 1) Click **OK** to close the message window.
- 2) Press **control**+click the "2 – Vpython-Mac-Py2.7-6.05.pkg" file.
- 3) Select **Open** from the resulting menu.
- 4) Click **Open**.

- 2) In the *Welcome to the VPython-Mac-6.05-Py2.7 Installer* window, click **Continue**.
- 3) In the *Select a Destination* window, select the **Install for all users of this computer** option, then click **Continue**.
- 4) Click **Install** to accept the default installation settings.
- 5) Provide administrative credentials and click **Install Software**. The software will install. Click **Close**.

To Ensure Your Installation Was Successful

Test with VIDLE for VPython

- 1) Launch the VIDLE application.
- 2) Select **File > Open**.
- 3) Navigate to the *Test Files* folder found in the *Physics 140 Python Installers* folder.
- 4) Double-click on one of the test ".py" files.
- 5) Select **Run > Run Module**.
- 6) The script will run successfully, displaying a graphic / animated output.

NOTE: If the script does not run successfully, please contact CaTS technical support.

Important Things to Know About ISS Loan Laptops

Borrowing an ISS Loan Laptop

LSA Instructional Support Services (ISS) is making a number of laptops available in support of Physics 140. All appropriate software is installed. If you need to borrow one of these laptops, please contact Professor Riles at kriles@umich.edu and follow the instructions provided.

Important Things to Know

- 1) Any time an ISS Loan laptop is restarted or turned off, all user settings, work, and files are lost.
- 2) Closing the lid on an ISS Loan laptop turns the computer off.

NOTE: Again, do not turn off or restart the computer – or close the lid – or you will lose all your work.

- 3) All work should be saved to external media or backed up network storage (Like M+Box or Google Drive) regularly.
- 4) These laptops automatically connect to **MWireless** on startup.
- 5) Laptops are available for a maximum 24-hour per-checkout loan period.

NOTE: To contact LSA Instructional Support Services:

LSA Instructional Support Services – Loan Office
G353 Mason Hall
(734) 615-0100
lss-help@umich.edu