

# Design with Python Virtual Camp

July 29, 2024 to August 2, 2024  
1:00 PM to 3:00 PM

## Daily Schedule

12:45PM - 1:00PM	Camp Virtual Room Opens
1:00PM - 1:05PM	Attendance
1:05PM - 2:00PM	Activity Time
2:00PM - 2:05PM	Break
2:05AM - 3:00PM	Activity Time
3:00PM - 3:05PM	Camp Virtual Room Closes



## Camp Agenda

### Session #1: Python Programming

Jul 29, 2024 | 1pm - 3pm EST

In this session, participants will be going through fundamental python skills, and practicing them with simple challenges, guided by experienced Python programmers. Participants can expect to use features such as libraries of functions and data importing.

### Session #2: Games Galore

Jul 30, 2024 | 1pm - 3pm EST

In this session, participants will put their skills to the test - recreating a popular but simple online game, and putting their own spin on it using an Engineering Design Process to work through the problem.

### Session #3: Cyber Safe

Jul 31, 2024 | 1pm - 3pm EST

Participants can expect to explore cybersecurity by looking at passwords and encryption. By better understanding how our data is constantly under attack by those who would seek to steal it, we can understand how to better use the various safety approaches to protect ourselves.

### Session #4: Image Analysts

Aug 1, 2024 | 1pm - 3pm EST

This session will focus on making use of image recognition tools in Python - enabling a whole range of incredible projects to be created. Participants will make use of pre-made libraries of images, and design a program that reacts to the images in a reliable manner.

### Session #5: Data Detectives

Aug 2, 2024 | 1pm - 3pm EST

The final session will focus on more advanced Python skills relating to data - including rapid collection of data from digital sources, and analysis with advanced libraries which can include machine learning.

