

Flatiron School Data Science Prework

This is a collection of resources for Flatiron students enrolling in the Full Time Data Science Immersive. The materials are meant for students who have already been admitted into the data science program.

The material provided is to get a head start on some of the topics you will see in the upcoming course. We will be devoting class time to the following topics.

Programming

- SQL
 - First work on [Khan Academy's SQL](#) course. Go through the sections SQL Basics, More Advanced SQL Queries, and Relational Queries in SQL
- Python
 - The beginning of the first module will cover OOP. This [Python OOP](#) is a good collection of videos to get started.
- Work on a sample project
 - At this point we suggest trying to build an object oriented programming project. For example, try to build tic tac toe using your knowledge of OOP.

Probability

The second module will focus on statistics and probability. Here are some good resources to get started.

- [Udacity's Course on Probability and Statistics](#), especially lessons 8 through 10 which covers probability, conditional probability, and Bayes rule.
- [OpenIntro Statistics](#) chapter 2 can provide more background on probability.

Linear Algebra

In the third module we will move into Machine Learning and cover linear algebra. We will spend class time on linear algebra. Here is a good resource to get started.

- [Udacity's Linear Algebra Refresher Course](#) lessons labeled Introduction and Vectors.
- [Essence of Linear Algebra Course](#) has a collection of short videos covering essential concepts.