



Data Science & Machine Learning in Python

Learn Data Science Online in 12 Weeks

Part-Time

class commitment

Career Focus

built into curriculum

Learn by Doing

real projects, real data

Over 5,000 alumni, hired by tech companies worldwide

Google

amazon



cisco



UBER

LinkedIn

*As of Feb 2018 alumni data

Overview

Take a deep dive into the fundamentals of data science and machine learning in Python over 12 weeks. You'll gain a comprehensive understanding of the entire data science process from end-to-end, including data prep, data analysis and visualization, as well as how to apply machine learning algorithms to various situations or tasks.

You'll walk away with a project portfolio showcasing your data science acumen as well as an understanding of one of the fastest growing job sectors out there.



Designed for the Real World



Learn By Doing

A practical, accelerated curriculum designed for you to fix real-work problems by building real Data Science projects and solutions. You'll tackle over 100 interview-style questions so that you're fully prepared for the job search.



Core Concepts, Real Data-Sets

In 12 weeks, you'll learn the principle concepts and technologies behind modern Data Science, and work on real data-sets and problems to put your learning into practice.



Hands-On Training

Learn modern Data Science through hands-on assignments, projects, and mentorship from your instructor. Lectures are always live. You also have to access to TAs.



End-to-End, Extensive Curriculum

We'll cover the full Data Science process and the technologies to do the job, from data prep with Python libraries, to data modeling in Scikit-Learn, to visualization and presentation.



Data Science Curriculum

Python & Machine Learning

WEEK 1

Python for Data Science

Learn the Python fundamentals needed for data science.

WEEK 2

Manipulating and Understanding Data

Learn how to load, clean, and manipulate data using the Python library Pandas. Additionally, you will learn the strengths and weaknesses of using Python to manipulate data.

WEEK 3

Foundations of Data Modeling

Build visualizations to not only understand your data, but also how to communicate results to stakeholders.

WEEK 4

Statistical Inference

Learn how to use Python to implement key statistical techniques and understand statistics better by experimenting with Python on real-world datasets. This week concludes with a project to showcase your knowledge.

WEEK 5

Intro to Machine Learning

What is machine learning and why should you use the Python library Scikit-Learn for Machine Learning. Topics include types of machine learning, how to format your data to be acceptable for an algorithm, and how to train an algorithm.

WEEK 6

Decision Trees & Random Forests

Learn about tree-based machine learning algorithms, how to tune them to maximize their performance, and the strengths and weaknesses of each algorithm. Additional topics include feature selection for machine learning, and comparing machine learning algorithms.

WEEK 7

Logistic Regression and Regularization

Learn about the logistic regression algorithm and get a visual understanding of how the algorithm works. Additional topics include: logistic regression for multiclass classification, L1 and L2 regularization, and hyperparameter tuning the algorithms learned so far.

WEEK 8

Clustering Algorithms

You'll learn about a host of clustering algorithms, how to tune them, and the strengths and weaknesses of each.



Data Science Curriculum

Python & Machine Learning

WEEK 9

Dimensionality Reduction

What is dimensionality reduction. How to use it for data visualization, speed up machine learning algorithms, and understand your data better. Algorithms covered include Principal Component Analysis (PCA).

WEEK 10

Gradient Boosting Machines

Learn what gradient boosting algorithms are, why they are so performant, and how to get started with Kaggle competitions.

WEEK 11

Using SQL with Python

Working with databases is an essential part of being a data analyst, data scientist, and data engineer. This unit will cover how SQL and Python work together.

WEEK 12

Intro to Deep Learning

Learn about why deep learning has transformed industries, various deep learning frameworks, and when to use deep learning techniques. Topics include recurrent neural networks (RNN) and Convolutional Neural Networks (CNN).

Technologies Covered

Technologies subject to change based on student needs and hiring factors



Google Colaboratory



Pandas



Python



Folium



NumPy



Matplotlib



Seaborn



LightGBM



Scikit Learn



XGBoost



SciPy



TensorFlow

The Dojo Difference

Our mission is to transform lives through learning. We don't require our students to have a traditional 4-yr degree because we know that there are many paths to success. If you are willing to buckle down and do the work, we are here to teach and support you.

	CODING DOJO	BRAINSTATION	GENERAL ASSEMBLY	THINKFUL	SPRINGBOARD
No admissions test	✓		✓		
No 4-year degree requirement	✓		✓	<i>Bachelor's required unless you have 2+ years' experience as a Data Analyst</i>	<i>Required for job guarantee</i>
No Python or programming experience required	✓				

How to Enroll



Complete Application



Create Platform Account



Enroll for Course

APPLY NOW

Financing Options

Not sure what is right for you? Visit our [Financing 101](#) page or schedule a call with an Admissions Advisor.

TALK TO US



Standard

2 Payments
50% of tuition due week 1
50% of tuition due midway



Monthly Plan

As low as \$340/month
30/60 month terms available

Financing provided by:

SKILLSfund