

Welcome to Machine Learning Fundamentals!

Preview what you will learn in this first Machine Learning unit.

Hi! If you're completely new to data analysis, Python, or pandas, start with [ML/AI Engineering Foundations Skill Path](#) then join us here!

Welcome to the Machine Learning Fundamentals Unit! This unit will introduce you to what machine learning is, the data transformations needed to prepare your data for machine learning modeling, and a host of fundamental machine learning algorithms and feature engineering techniques.

Why did we build this?

Our world is increasingly reliant on algorithms powered by machine learning for decision-making. Knowing how machine learning algorithms work and how to implement them is empowering to anyone interested in Tech! If you're new to data science and have always wanted to delve deeper into machine learning, this skill path is for you. If you're already familiar with some of the following material but would like to systematically review them, this skill path is also for you as well! The prerequisite for this unit is familiarity with Python and specifically, the pandas and matplotlib libraries.

What will you learn?

- Supervised and Unsupervised Learning Basics
- Feature Engineering techniques
- Implementing Supervised Learning algorithms like Regressors, Classifiers and Trees
- Evaluating the performance of algorithms
- Implementing Unsupervised Learning algorithms such as PCA and K-Means

Who are my classmates?

Learning is social. Whatever you're working on, be sure to connect with the Codecademy community in the [forums](#). Remember to check in with the community regularly, including for things like asking for code reviews on your project work and providing code reviews to others in the [projects category](#), which can help to reinforce what you've learned.