



# Futures Net

## About Futures Net

Futures Net is geared towards building capacity in the region around technology through a variety of workshops and bootcamps. Unlike other offerings in the industry, our trainings are short, hands-on, and personal. We enable you to solve real-world business problems in the shortest duration possible.

## Prerequisites

You should have interest in data science and data engineering and knowledge of at least one programming language. However, many of our attendees come to us with little to no programming experience. Our pre-bootcamp materials will get you where you need to be to hit the ground running. Please find the link to our resources here: <http://bit.ly/2RLFEys>

## Format

The course is 16 hours in total and includes theoretical background for various methods and hands-on practical exercises implemented in Python, with a final Zindi/Kaggle project.

The content includes an introduction to statistical techniques, regression, classification, clustering, text mining, manipulation, transformation and visualization of data,

We will focus on core Data Science concepts that highlight the importance of exploring data with code in order to extract understanding.

## Duration\*

4 days of in-person training.

## Course Outline

### Preparatory Material

- Introduction to Data Science
- Introduction to R Programming
- Introduction to Python Programming

### Fundamentals of Data Science

- Data Exploration and Visualization
- Introduction to Statistics
- Data Wrangling and Exploratory Data Analysis

### Classification Algorithms

- Introduction to Predictive Modeling
- Decision Tree Learning
- Logistic Regression
- Naïve Bayes

### Regression Algorithms

- Linear Regression
- Regularized Regression Models
- Hands-On Lab: Building a Regression Model

### Unsupervised Learning

- K-Means Clustering
- Hands-On Lab: Using K-Means Clustering

### Final Project(Going through a Kaggle Competition)

- Building a predictive model in Python