

University of Cambridge ICE Data Science Programme

Powered by Flatiron School

Module 1: Data Science Toolkit (80 Hours)

Unit	Lecture Dates	Name	Lecture Hours	Lab Hours	Total Clock Hours	Learning Outcomes
1	Week 1 27 Apr Week 2 4 May	Tools of the Trade	5	11	16	<ul style="list-style-type: none"> • Add, remove, and commit to Git • Use basic features of Anaconda • Install packages with pip • Navigate the file structure with Bash • Create and delete files with Bash • Using Jupyter Notebooks
2	Week 3 11 May Week 4 18 May	Getting Comfortable with Python	5	11	16	<ul style="list-style-type: none"> • Basic data types & structures • Function writing • Looping & Control Flow
3	Week 5 25 May Week 6 1 Jun Week 7 8 Jun	Working with Data like a Data Scientist	8	16	24	<ul style="list-style-type: none"> • Intro to Numpy & Pandas • Ingesting data • Filtering data • Cleaning data • Exporting data
4	Week 8 15 Jun	Data Visualization	3	5	8	<ul style="list-style-type: none"> • Using PyPlot and Seaborn to create beautiful visualizations of data
5	Week 9 22 Jun	Data Engineering	3	5	8	<ul style="list-style-type: none"> • Query a database with SQL • Writing clean code
6	Week 10 29 Jun	Summary Project	0	8	8	<ul style="list-style-type: none"> • The course converts the course into a simulated data science consultancy where students complete a paired project using real-world data • Students will clean and wrangle data, and visualize it to generate insight

