



## Introduction to Energy Data Science - IEDS

### COURSE

#### About the Course

This course focuses on the application of programming visualizations and data science solutions to the energy industry. By the end of this course, you will be able to develop energy-focused dashboards and visualizations using free open-source Python packages such as Numpy, Pandas, and Matplotlib.

#### Target Audience

Subject Matter Experts with programming experience in Python

#### You Will Learn

Software engineering skills, & interactive dashboard building using PyData software stack (NumPy, SciPy, Pandas, etc.) on petroleum data sets.

#### Course Content

- Why Open-Source Software?
- The Jupyter Project
- Basic Unix/Linux File System Commands
- git and Github
- Essential Python Review
- Functions
- Lists, Tuples, and Dictionaries
- Loops and Conditionals
- Classes and Object-Oriented Programming
- Intake
- NumPy
- SciPy
- Pandas
- matplotlib
- Bokeh
- Panel
- Machine Learning Overview
- Scikit-Learn

- Code Quality & Reproducibility
- Prelude to Advanced Topics

## Product Details

Categories: [Upstream](#)

Disciplines: [Data Management, Science and Analytics](#)

Levels: [Basic](#)

Product Type: [Course](#)

Formats Available: [In-Classroom](#)

Instructors: [John Foster](#) [Michael Pyrcz](#)