1. Python for Data Science: Fundamentals
   * Programming in Python
   * Variables and Data Types
   * Lists and For Loops
   * Conditional Statements
   * Dictionaries and Frequency Tables
   * Functions: Fundamentals
   * Functions: Intermediate
   * Project: Learn and Install Jupyter Notebook
   * Guided Project: Profitable App Profiles for the App Store and Google Play Markets
2. Python for Data Science: Intermediate
   * Cleaning and Preparing Data in Python
   * Python Data Analysis Basics
   * Object-Oriented Python
   * Working with Dates and Times in Python
   * Guided Project: Exploring Hacker News Posts
3. Pandas & NumPy Fundamentals
   * Introduction to NumPy
   * Boolean Indexing with NumPy
   * Introduction to pandas
   * Exploring Data with pandas: Fundamentals
   * Exploring Data with pandas: Intermediate
   * Data Cleaning Basics
   * Guided Project: Exploring Ebay Car Sales Data
4. Exploratory Data Visualization
   * Line Charts
   * Multiple plots
   * Bar Plots And Scatter Plots
   * Histograms And Box Plots
   * Guided Project: Visualizing Earnings Based On College Majors
5. Storytelling Through Data Visualization
   * Improving Plot Aesthetics
   * Color, Layout, and Annotations
   * Guided Project: Visualizing The Gender Gap In College Degrees
   * Conditional Plots
6. Data Cleaning and Analysis
   * Data Aggregation
   * Combining Data With Pandas
   * Transforming Data With Pandas
   * Working With Strings In Pandas
   * Working With Missing And Duplicate Data
   * Guided Project: Clean And Analyze Employee Exit Surveys
7. Data Cleaning in Python: Advanced
   * Regular Expression Basics
   * Advanced Regular Expressions
   * List Comprehensions and Lambda Functions
   * Working with Missing Data
8. Data Cleaning Project Walkthrough
   * Data Cleaning Walkthrough
   * Data Cleaning Walkthrough: Combining the Data
   * Data Cleaning Walkthrough: Analyzing and Visualizing the Data
   * Guided Project: Analyzing NYC High School Data
   * Challenge: Cleaning Data
   * Guided Project: Star Wars Survey
9. Elements of the Command Line
   * Introduction to the Command Line
   * The Filesystem
   * Modifying the Filesystem
   * Glob Patterns and Wildcards
   * Users and Permissions
10. Text Processing in the Command Line
    * Getting Help and Reading Documentation
    * File Inspection
    * Text Processing
    * Redirection and Pipelines
    * Standard Streams and File Descriptors
11. SQL Fundamentals
    * Introduction to SQL
    * Summary Statistics
    * Group Summary Statistics
    * Subqueries
    * Guided Project: Analyzing CIA Factbook Data Using SQL
12. Intermediate SQL for Data Analysis
    * Joining Data in SQL
    * Intermediate Joins in SQL
    * Building and Organizing Complex Queries
    * Guided Project: Answering Business Questions using SQL
    * Table Relations and Normalization
    * Querying SQLite from Python
13. APIs and Web Scraping in Python
    * Working with APIs
    * Intermediate APIs
    * Challenge: Working with the reddit API
    * Web Scraping
14. Data Analysis in Business
    * Fuzzy Language in Data Science
    * Communicating Results
    * Business Metrics
    * Guided Project: Popular Data Science Questions
15. Statistics: Fundamentals
    * Sampling
    * Variables in Statistics
    * Frequency Distributions
    * Visualizing Frequency Distributions
    * Comparing Frequency Distributions
    * Guided Project: Investigating Fandango Movie Ratings
16. Statistics Intermediate: Averages & Variability
    * The Mean
    * The Weighted Mean and the Median
    * The Mode
    * Measures of Variability
    * Z-scores
    * Guided Project: Finding the Best Markets to Advertise In
17. Probability Fundamentals
    * Estimating Probabilities
    * Probability Rules
    * Solving Complex Probability Problems
    * Permutations and Combinations
    * Guided Project: Mobile App for Lottery Addiction
18. Conditional Probability
    * Conditional Probability: Fundamentals
    * Conditional Probability: Intermediate
    * Bayes Theorem
    * The Naive Bayes Algorithm
    * Guided Project: Building a Spam Filter with Naive Bayes
19. Hypothesis Testing: Fundamentals
    * Significance Testing
    * Chi-squared tests
    * Multi category chi-squared tests
    * Guided Project: Winning Jeopardy
20. Machine Learning Fundamentals
    * Introduction to K-Nearest Neighbors
    * Evaluating Model Performance
    * Multivariate K-Nearest Neighbors
    * Hyperparameter Optimization
    * Cross Validation
    * Guided Project: Predicting Car Prices
21. Calculus for Machine Learning
    * Understanding Linear and Nonlinear Functions
    * Understanding Limits
    * Finding Extreme Points
22. Linear Algebra for Machine Learning
    * Linear Systems
    * Vectors
    * Matrix Algebra
    * Solution Sets
23. Linear Regression for Machine Learning
    * The Linear Regression Model
    * Feature Selection
    * Gradient Descent
    * Ordinary Least Squares
    * Processing And Transforming Features
    * Guided Project: Predicting House Sale Prices
24. Machine Learning in Python: Intermediate
    * Logistic regression
    * Introduction to evaluating binary classifiers
    * Multiclass classification
    * Overfitting
    * Clustering basics
    * K-means clustering
    * Guided Project: Predicting the stock market
25. Decision Trees
    * Introduction to Decision Trees
    * Building a Decision Tree
    * Applying Decision Trees
    * Introduction to Random Forests
    * Guided Project: Predicting Bike Rentals
26. Deep Learning: Fundamentals
    * Representing Neural Networks
    * Nonlinear Activation Functions
    * Hidden Layers
    * Guided Project: Building A Handwritten Digits Classifier
27. Machine Learning Project
    * Machine Learning Project Walkthrough: Data Cleaning
    * Machine Learning Project Walkthrough: Preparing the features
    * Machine Learning Project Walkthrough: Making Predictions
28. Kaggle Fundamentals
    * Getting Started with Kaggle
    * Feature Preparation, Selection and Engineering
    * Model Selection and Tuning
    * Guided Project: Creating a Kaggle Workflow
29. Functions: Advanced
    * Best Practices for Writing Functions
    * Context Managers
    * Introduction to Decorators
    * Decorators: Advanced
30. Command Line: Intermediate
    * Working with Programs
    * Command Line Python Scripting
    * Challenge: Working with the Command Line
    * Working with Jupyter console
    * Piping and redirecting output
    * Challenge: Data Munging Using The Command Line
    * Data Cleaning and Exploration Using Csvkit
31. Git & Version Control
    * Introduction to Git
    * Git Remotes
    * Git Branches
    * Merge Conflicts
    * Project: Git Installation and GitHub Integration
32. Spark & Map-Reduce
    * Introduction to Spark
    * Project: Spark Installation and Jupyter Notebook Integration
    * Transformations and Actions
    * Challenge: Transforming Hamlet into a Data Set
    * Spark DataFrames
    * Spark SQL