**Matt’s Introductory Data Science Course With Python**

Unit #1 Python In Data Science

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| **Title** | **Source** | **Source Type** | **Completion** |
| Intermediate Python | datacamp.com | Online Course | complete |
| Introduction To Data Science In Python | datacamp.com | Online Course | complete |
| Summary Notes | | | complete |

Unit #2 Data Wrangling In Python

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| **Title** | **Source** | | **Source Type** | | **Completion** |
| ***Data Types*** | | | | |  |
| Python Data Types (Number to Dictionary) | | Data Science Reading Resources (favorites folder), Python Data Types | | Tutorial | complete |
| Datatypes for Data Science In Python | | datacamp.com | | Online Course | complete |
| Summary Notes | | | | | complete |
| ***Unit 2 Test 1: Using Python In Data Science (36 marks, 40 minutes)***  Introductory Machine Learning > Unit Tests > Unit 2 > Test 1 Using Python In Data Science > Unit 2 Test 1 | | | | | ***complete*** |
| ***Pandas*** | | | | |  |
| Pandas Foundations | datacamp.com | | Online Course | | complete |
| Python Data Analysis With NumPy And Pandas | Stackskills.com | | Online Course | | complete |
| Summary Notes On NumPy And Pandas | | | | | complete |
| Data Manipulation With Pandas | datacamp.com | | Online Course | | complete |
| Merging DataFrames With Pandas | datacamp.com | | Online Course | | complete |
| Manipulating DataFrames With Pandas | datacamp.com | | Online Course | | complete |
| Joining Data With Pandas | datacamp.com | | Online Course | | complete |
| Analyzing Police Activity With Pandas | datacamp.com | | Online Course | | complete |
| Streamlined Data Ingestion With Pandas | datacamp.com | | Online Course | | complete |

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| Summary Notes On Data Wrangling With Pandas | | | **8** |
| ***SQL*** | | |  |
| Introduction To SQL | datacamp.com | Online Course | complete |
| Summary Notes On SQL | | | 9 |
| **Unit 2 Test 2: Using Pandas and SQL In Data Science (37 marks 45 minutes)** | | | **complete** |

Unit #3 Statistical Methods For Data Science

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| **Title** | **Source** | **Source Type** |  |
| Frequentist vs Bayesian Debate | Data Science Reading Resources (favorite folder), Frequentist vs Bayesian Debate | Article | complete |
| Inferential Statistics Ib - frequentism | Github account | Springboard Course Assignment | complete |
| Inferential Statistics II - bootstrapping | Github account | Springboard Course Assignment | complete |
| Inferential Statistics III - Bayesian | Github account | Springboard Course Assignment | complete |
| Summary Notes | | | complete |
| Python Statistics Essential Training | LinkedIn | Online Course | complete |
| **Unit #3 Test (Total 80 marks, 80 minutes)**  *Part 1: 20 Multiple Choice Questions.* <https://rank.sanfoundry.com/data-science-practice-test-7/> (20 marks, 20 mins)  *Part 1: 20 Multiple Choice Questions.* <https://rank.sanfoundry.com/data-science-mock-test-7/> (20 marks, 20 mins)  *Desktop > Introductory Machine Learning > Unit Tests > Unit 3 > Unit 3 Test Written Response Section (40 marks, 40 mins)* | | | **complete** |

Unit #4 Introduction To Machine Learning

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| **Title** | **Source** | **Source Type** |  |
| Machine Learning For Everyone | datacamp.com | Online Course | complete |
| ***Linear Regression*** | | |  |
| Generalized Linear Models In Python | datacamp.com | Online Course | complete |
| Linear Regression For Machine Learning | Data Science Reading Resources (favorites folder), Linear Regression For Machine Learning | Article | complete |
| Boston Housing Dataset | Github account | Springboard Capstone Project #1 | complete |
| Linear Regression | Github account | Springboard Course Assignment | complete |
| Lab 4 Harvard Regression | Click on link in Linear Regression Springboard Course Assignment | Tutorial | complete |
| Summary Notes | | | 16 |
| **Unit 4 Quiz #1 On Linear Regression (19 marks, 30 minutes)** | | | **complete** |
| ***Logistic Regression*** | | |  |
| Logistic Regression | Github account | Springboard Course Assignment | complete |
| Understanding Logistic Regression | Data Science Reading Resources (favorites folder), (Tutorial) Understanding Logistic Regression | Tutorial | complete |
| **Unit 4 Quiz #2 On Logistic Regression (marks to be determined 60 minutes)** | | | **complete** |
| Introduction To Predictive Analytics In Python | datacamp.com | Online Course | complete |
| ***Classification*** | | |  |
| Linear Classifiers In Python | datacamp.com | Online Course | complete |
| Machine Learning With Tree Based Models In Python | datacamp.com | Online Course | complete |
| Classification And Regression Analysis With Decision Trees | Data Science Reading Resources (favorites folder), Classification And Regression Analysis With Decision Trees | Article | complete |
| Summary of Notes | | | complete |
| **Midterm (88 marks, 2 hours)** | | | **complete** |
| ***Unsupervised Learning*** | | |  |
| Unsupervised Learning In Python | datacamp.com | Online Course | complete |
| Cluster Analysis In Python | datacamp.com | Online Course | completed |
| Practicing Machine Learning Interview Questions In Python | datacamp.com | Online Course | completed |
| Data Clustering | Github account | Springboard Course Assignment | complete |
| Summary of Notes | | | 23 |

Unit #5 Applications Of Machine Learning

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| **Title** | | **Source** | | **Source Type** |  |
| Introduction To Natural Language Processing In Python | | datacamp.com | | Online Course | completed |
| Recommender Systems In Python Part I | | Data Science Reading Resources (favorites folder), Recommender Systems In Python Part I | | Article | 24 |
| Recommender Systems In Python Part II | | Data Science Reading Resources (favorites folder), Recommender Systems In Python Part II | | Article | 25 |
| Recommender Systems In Python Part III | | Data Science Reading Resources (favorites folder), Recommender Systems In Python Part III | | Article | 25 |
| Summary Notes | | | | | 25 |
| Introduction To Deep Learning In Python | datacamp.com | | Online Course | | 26 |
| Time Series Analysis In Python | datacamp.com | | Online Course | | 26 |
| Machine Learning For Time Series Data In Python | datacamp.com | | Online Course | | 29 |
| ARIMA Models In Python | datacamp.com | | Online Course | | 29 |
| **Final Exam (450 marks, hours to be determined)** | | | | |  |