TEXAS McCombs
The University of Texas at Austin
McCombs School of Business

**Post Graduate Program**
**Artificial Intelligence and Machine Learning: Business Applications**
Delivery Schedule - January '2022

Great Learning
POWER AHEAD

**Cohort Launch - 15 Jan 2022**

| Structured Courses | | | | | | |
|---|---|---|---|---|---|---|
| | **#** | **Course** | **Topics** | **Content Release Date** | **Assessment Deadline** | **Mentored Learning Session Weekend** |
| **Foundations** | 0 | **Prework** | Programming Fundamentals, Python Introduction, Basic Stats | *Available on enrollment* | - | 15-Jan |
| | 1 | **Fundamentals of AIML** | Python Fundamentals | *Available on enrollment* | | 22-Jan |
| | | | Python for Data Science | 13-Jan | 30-Jan | 29-Jan |
| | | | Data Visualization and EDA | 20-Jan | 6-Feb | 5-Feb |
| | | | **Project 1** | 20-Jan | 11-Feb | 12-Feb |
| **Machine Learning Courses** | 2 | **Supervised Learning: Regression** | Linear Regression | 10-Feb | 20-Feb | 19-Feb |
| | | | Data Preprocessing | 17-Feb | 27-Feb | 26-Feb |
| | | | **Project 2** | 17-Feb | 4-Mar | 5-Mar |
| | 3 | **SUL: Classification** | Logistic | 3-Mar | 13-Mar | 12-Mar |
| | | | Decision Tree + GridSearch | 10-Mar | 20-Mar | 19-Mar |
| | | | **Project 3** | 10-Mar | 25-Mar | 26-Mar |
| | | | **Hackathon*** | 25-Mar | 27-Mar | NA |
| | 4 | **Ensemble Techniques** | Ensemble Techniques (Bagging & Random Forest) | 24-Mar | 3-Apr | 2-Apr |
| | | | *Easter Break* | | | |
| | | | Boosting | 31-Mar | 17-Apr | 16-Apr |
| | | | **Project 4** | 31-Mar | 22-Apr | 23-Apr |
| | | | **Hackathon*** | 8-Apr | 10-Apr | NA |
| | 5 | **Model Tuning** | Regularization | 21-Apr | 1-May | 30-Apr |
| | | | Feature Engineering & Handling Imbalanced Data | 28-Apr | 8-May | 7-May |
| | | | **Project 5** | 28-Apr | 13-May | 14-May |
| | 6 | **Unsupervised Learning** | K means Clustering | 12-May | 22-May | 21-May |
| | | | Hierarchical Clustering + PCA | 19-May | 29-May | 28-May |
| | | | **Project 6** | 19-May | 3-Jun | 4-Jun |
| **Deep Learning** | **7** | **Introduction to Neural Networks** | Pre-work for Deep Learning | 2-Jun | *Learning Break* | |
| | | | Intro to ANN, Tensorflow and Keras | 9-Jun | 19-Jun | 18-Jun |
| | | | **Hackathon*** | 17-Jun | 19-Jun | NA |
| | | | *Independence Day Break* | | | |
| | | | Building Blocks of ANN | 16-Jun | 3-Jul | 2-Jul |
| | | | **Project 7** | 16-Jun | 8-Jul | 9-Jul |
| | **8** | **Introduction to Computer Vision** | Intro to CNN - Working with Images | 7-Jul | 17-Jul | 16-Jul |
| | | | Introduction to CNNs | 14-Jul | 24-Jul | 23-Jul |
| | | | **Project 8** | 14-Jul | 29-Jul | 30-Jul |
| | **9** | **Introduction to Natural Language Processing** | Intro to NLP- Working with Text Data | 28-Jul | 7-Aug | 6-Aug |
| | | | Sentiment Analysis | 4-Aug | 14-Aug | 13-Aug |
| | | | **Project 9** | 4-Aug | 19-Aug | 20-Aug |
| **Self-paced Courses** | | | | | | |
| | **10** | **Statistical Learning** | Inferential Statistics | *Available on enrollment* | - | - |
| | | | Hypothesis Testing | *Available on enrollment* | - | - |
| | | | **Practice Project** | *Available on enrollment* | - | - |
| | **11** | **Recommendation Systems** | Intro to RecoSys, Market Basket Analysis, Popularity Based and Content Based Reco Sys | *Post module 9* | - | - |
| | | | Collaborative Filtering, SVD Approach, Hybrid Reco Sys | *Post module 9* | - | - |
| | | | **Practice Project** | *Post module 9* | - | - |
| | **12** | **Model Deployment** | Model Deployment, Serialization, Real Time Productionalization, Kubernetes, Docker | *Post module 9* | - | - |
| | | | | *Post module 9* | - | - |

NOTES >>

1 This schedule might change in the future as and when the design of the program is improved upon.
2 The assessment deadlines here mean the end of the day. The exact time will vary for different time zones.
3 Assessment here could mean either a quiz or a project.
4 Hackathons are optional, non graded and fun learning competitions.