POST GRADUATE PROGRAM IN
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING: BUSINESS APPLICATIONS
Hundreds of online courses exist today. What many of them lack, however, is a commitment to helping you translate your knowledge into something tangible - the ability to excel and grow as an AI/ML professional.

To tackle this, the PGP-AIML has been designed to give you the academic rigour, learning support, and peer interaction of a full-time course with the flexibility of an online program.

The program uniquely combines a comprehensive curriculum, covering the most widely-used tools and techniques in the industry, with a hands-on learning approach. A structured learning journey keeps you on track throughout as you achieve your weekly learning milestones with your mentor and benefit from their rich professional experience.

Following a “learn by doing” pedagogy, the program offers you the opportunity to apply your skills and knowledge in real-time every week through interactive mentor-led practice sessions, quizzes, assignments, and hands-on projects. As you do so, you come to truly appreciate the nuances of data and build your portfolio in the process.

On a whole, the program empowers you with the skills, body of work, and job market insights you need to find the right career opportunities or lead AI and ML in your current organisation. All this comes with the credibility, global advantage, and academic leadership of McCombs School of Business at The University of Texas at Austin.

**About the Program**

- **Format**: Online (Recorded Video Lectures + Interactive Mentored Learning)
- **Duration**: 6 Months
- **Time Commitment**: 5-7 hours per week
- **Learning Support**: Dedicated Program Manager + Industry Mentor
- **Projects**: 8+ Projects
The UT Austin Advantage

Founded in 1883 and home to more than 51,000 students and 3,000 teaching faculty, the University of Texas at Austin is one of the leading public universities in the United States. The UT Austin name is globally recognised as a leader in the domains of science, business, technology, and social science.

With a proven track record of successes, cutting-edge research and teaching methods, you can be confident that you are learning from the best of the best.

Showcase Your Competence with a UT Austin Certificate

Key Facts about Artificial Intelligence and Machine Learning: Business Applications

- Between 2015 and 2018, the number of job postings with "AI" or "Machine Learning" increased by nearly 100%. Indeed, 2018
- AI was among the top 5 in-demand hard skills in 2019. LinkedIn, 2019
- The global machine learning market is expected to grow from USD 1.41 billion in 2017 to USD 8.81 billion by 2022. Research and Markets Report, 2017
- 86% of executives at fast-growing companies say AI is important to their company’s success. Cognizant Report, 2018
Who is the program for?

The program is for you if, you:

- Aspire to build a technical career in AI and Machine Learning.
- Like solving complex problems in a structured manner.
- Are comfortable in dealing with advanced algorithms.
- Have prior programming experience and want to learn Python.
- Want to build AI/ML solutions integrated into tech infrastructures.
- Wish to learn advanced AI, ML and Deep Learning techniques, and their applications.

Overall, the program will help you:

- Lead the implementation of AI in your current role or company.
- Transition to a tech career in AI and Machine Learning.

"AI and Machine Learning are not only hot topics of today, but will be essential for solving almost every problem in the (not so far) future. I would like to be part of finding new areas where AI and ML can help improve the lives of everyone." - Nargess Ghahremani Azghandi

"I have been leading a team of Data scientists to build predictive models and Text mining. I would like to refresh my Data science knowledge and upgrade with machine learning capabilities with modern ML languages and frameworks." - Ram

"As a Security architect, I would like to use AI and ML techniques to build efficient security tools and services that could benefit many domains in the industry." - Arun P
The Best of Industry and Academia

The program brings together the best academicians and industry experts to give you a practical understanding of core concepts. While varied in their experiences, they are all motivated by the common goal of inspiring a love for AI and Machine Learning in you.

Faculty Profiles

Dr. Kumar Muthuraman
Faculty Director, Center for Research and Analytics, McCombs School of Business, The University of Texas at Austin. H. Timothy (Tim) Harkins Centennial Professor. M.S & Ph.D., Stanford University.

Dr. Abhinanda Sarkar

Dr. Amit Sethi

Dr. Dan Mitchell
Assistant Professor, McCombs School of Business Ph.D., The University of Texas at Austin.

Prof. Mukesh Rao
Consultant, Big Data & Machine Learning.

Dr. Sunil Kumar
GM - Engineering Innovation. Ph.D in Computer Science

Mentor Profiles

Evans Otalor
Data Science Consultant,
Sterling

Ram Thilak Prem Kumar
Data Scientist

Gokul Krishnaa
Machine Learning Developer

Diana Pholo
Data Scientist,
PREDICTIVE INSIGHTS

Amarjeet Sahoo
Lead-Data Sahoo Pricing & Promotional Strategy
JCPenney

Helge Reikerås
Data Scientist
OFFER ZEN

To access more mentor profiles and details on the mentored learning model, please get in touch with a Program Advisor at aiml.utaustin@mygreatlearning.com
Course Curriculum

**MODULE 1**

**Fundamentals of AIML**
Python is an essential programming language in the tool-kit of an AI & ML professional. In this course, you will learn the essentials of Python and its packages for data analysis and computing, including NumPy, SciPy, Pandas, Seaborn and Matplotlib.

**Sample Project 1:**
Perform exploratory data analysis to understand the popularity trends of movie genres and to figure out the patterns in movie viewership.

**MODULE 2**

**Supervised Learning**
The aim of Supervised Machine Learning is to build a model that makes predictions based on evidence in the presence of uncertainty. In this course, you will learn about Supervised Learning algorithms of Linear Regression and Logistic Regression.

**Sample Project 2:**
Build a model that will help to identify the customers of a bank who have a higher probability of purchasing a loan.

**MODULE 3**

**Ensemble Techniques**
Ensemble methods help to improve the predictive performance of Machine Learning models. In this course, you will learn about different

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**Key Learning Outcomes**

- Build your expertise in the most widely-used AI & ML tools and technologies.
- Acquire the ability to independently solve business problems using AI & ML.
- Master the skills needed to build machine learning and deep learning models.
- Develop know-how of the applications of AI in areas such as Computer Vision & NLP.
- Understand the possibilities and implications of AI in different industries.
- Build a substantial body of work and an industry-ready portfolio in AI & ML.
Ensemble methods that combine several Machine Learning techniques into one predictive model in order to decrease variance, bias or improve predictions.

Sample Project 3:
Build a model that will help the marketing team of a company to identify potential customers for a term deposit subscription.

Feature Engineering, Model Selection and Tuning
Model building is an iterative process. Employing Feature Engineering techniques along with a careful model selection exercise helps to improve the model. Further, tuning the model is an important step to arrive at the best possible result. This module talks about the steps and processes around the same.

Sample Project 4:
Perform Feature Engineering and Model Tuning on a model designed to predict the strength of construction material to enhance accuracy.

Unsupervised Learning
Unsupervised Learning finds hidden patterns or intrinsic structures in data. In this course, you will learn about commonly-used clustering techniques like K-Means Clustering and Hierarchical Clustering along with Dimension Reduction techniques like Principal Component Analysis.

Sample Project 5:
Identify different segments from a bank’s existing customer pool based on their spending patterns as well as past interactions with the bank.
Computer Vision
The module will reflect on the ability of a computer system to see and make sense of visuals using Convolution Neural Network. It will enable you to efficiently handle image data for the purpose of feeding into CNNs.

Sample Project 7:
Build a Convolutional Neural Network from scratch to classify images into their respective categories.

Natural Language Processing
This module talks about yet another interesting implementation of Neural Networks that revolves around equipping computers to understand human language. You will learn to understand sentiments from the texts.

Sample Project 8:
Detect sentiment from headlines/reviews using the different textual analysis techniques and sentiment analysis.

Please get in touch with a Program Advisor for a detailed module-wise breakdown of the course curriculum.

aiml.utaustin@mygreatlearning.com
Statistical Learning
Statistical Learning is a branch of applied statistics that deals with Machine Learning, emphasizing statistical models and assessment of uncertainty. This course on statistics will work as a foundation for the Artificial Intelligence and Machine Learning concepts learnt in this program.

Sample Project 9:
Deep dive deep into an insurance company data set to find valuable insights on customer profiles based on several statistical tests.

Recommendation Systems
A large number of companies use recommender systems, which are software that select products to recommend to individual customers. In this course, you will learn how to produce successful recommender systems that use past product purchase and satisfaction data to make high-quality personalized recommendations.

Sample Project 10:
Build your own recommendation system for products on an e-commerce website.

Model Deployment
In this module, we will be talking about the model deployment techniques and techniques around making your model scalable, robust and reproducible.
A Structured Learning Journey

View & Learn Recorded Content
Consume recorded video lectures by UT Austin faculty & industry experts over the week.

Engage in a Mentor Session
Clarify your doubts and practice on live data-sets with your mentor on the weekend.

Participate in Webinars by UT Austin
Get an insiders’ perspective into the industry through webinars with leading UT Austin faculty every month.

Complete a Hands-On Project
Work on a real-world problem to apply concepts and techniques learnt in the module.

Program Manager: Your Personal Guide

Your Program Manager is your single point of contact for all academic and non-academic queries. Whether you are stuck on a topic or get a sudden request for work travel, the Program Manager will hand-hold and guide you through all situations, leaving no query unanswered. They will also keep a track of your learning journey and will give you personalized feedback and required nudges to ensure your success.
When you are beginning afresh in a field, insights from someone on the inside can help you get a headstart. Apart from the immediate result of landing a job, career coaches work with you on the long haul – building your strengths, working on gaps, and developing a strategy to achieve your career goals.

**Advance Your Career with Comprehensive Career Support**

**Land your dream job with:**

- **1-on-1 Career Sessions**
  Interact personally with industry professionals to get valuable insights and guidance.

- **Resume & LinkedIn Profile Review**
  Present yourself in the best light through assets that truly showcase your strengths.

- **Interview Preparation**
  Get an insiders’ perspective to understand what recruiters look for.

- **e-Portfolio**
  Build an industry-ready portfolio to showcase your mastery of skills and tools.

**Our Alumni Work at:**

- Google
- BARCLAYS
- BOEING
- accenture
- IBM
- EY
- amazon.com
- Deloitte
- citigroup
- Microsoft
- Deutsche Bank
- nielsen
- PayPal
- Walmart

*and many more...*
Admissions Process

To be eligible, you should possess a bachelor’s or undergraduate degree with at least 50% aggregate marks or equivalent. Prior programming experience is preferred.

Application Form
Register by filling up the online application form. The program follows a rolling process, so we encourage you to apply early.

Shortlisting and Panel Review
A panel will review your application to determine your fit with the program. They will evaluate you on your academic performance, work experience, and motivation.

Interview / Screening
If shortlisted, you will go through a telephonic screening interview (This may be waived for candidates with strong profiles and experience).

Admissions Offer
After a final admissions committee review, you will receive an offer for a seat in the upcoming cohort of the program.

Program Fee

USD $3500

Please get in touch with a Program Advisor for flexible payment options.

Program Partner

The University of Texas at Austin is collaborating with Great Learning to deliver this program in Artificial Intelligence and Machine Learning: Business Applications to learners from around the world.

Great Learning is an ed-tech platform with a mission to enable career success for professionals in the digital economy. It offers industry-relevant programs across a wide set of domains, with over 1.1 Million+ Learners from 170+ countries.
Ready to Advance Your Career?

Speak to a Program Advisor
Have questions about the program or how it fits in with your career goals?

+1 512 647 2647

aiml.utaustin@mygreatlearning.com

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