



Talal Abu-Ghazaleh Digital University

# MBA in Artificial Intelligence

Based on the Completion of MOOC Courses





## MESSAGE FROM THE PRESIDENT

### Dear Prospective Student:

The Talal Abu-Ghazaleh Digital University (TAGDU) was organized as an education service provider to offer highly accredited online academic, language, and professional programs to all students wherever they may be. TAGDU is based on the belief that education is a human right and not a privilege to the few who can afford to travel to seek quality education abroad or to those who can afford to stay out of the workplace and attend local universities on a full time basis. Our mission is to make accredited educational programs accessible to everyone, everywhere.

We have taken advantage of the latest developments in digital information technology to bring quality education to your fingertips. We believe that the democratization of knowledge is a key to economic growth, social development, cultural enrichment, and political empowerment for the advantage of all who seek it.

In our attempt to offer an MBA degree to those who cannot afford a formal graduate education, we are providing a unique opportunity to students who complete on their own a set of required MOOC (Massive Open Online Courses) courses to obtain an MBA degree in Artificial Intelligence from TAGDU. The courses selected are equivalent to an MBA curriculum in Artificial Intelligence offered at major universities

Students in our program will benefit from being able to complete a comprehensive curriculum offered by elite universities and taught by highly qualified faculty and gain exposure to the various business disciplines and at the same time pay minimal fees.

We are looking forward to your participation in our program.

*Talal Abu-Ghazaleh*  
*President*

The Talal Abu-Ghazaleh Digital University (TAGDU) is offering students, who complete a set of recommended MOOC courses, the opportunity to earn an MBA degree in Artificial Intelligence.

### **The completion of this program will enable the candidates to:**

- Understand the various characteristics of artificial intelligence.
- Develop insight into the performance of an organization with respect to the various decisions made within the organization.
- Have confidence in transforming an organization into an innovative and modern company of the future.
- Lead major strategic decisions to improve the performance of an organization.
- Identify and evaluate new business models resulting from emerging technologies.

### **Eligibility**

The program is available to students who hold undergraduate degrees from universities recognized by TAGDU regardless of their undergraduate field of study. As such, no specific background in any of the business disciplines is required.

### **To apply for admission, the following minimum requirements must be met:**

1. Academic Requirements. The applicant must hold an undergraduate degree in any field of study from a university recognized by TAGDU.
2. English Language Requirement. Since all courses are delivered in English, applicants whose native language is not English must demonstrate proficiency in the English language through a minimum score of 79 out of 120 on the TOEFL or through a minimum score of 6.50 on the International English Testing System.

### **Application**

Applicants to TAGDU have to complete an online application and provide all the necessary required information (<https://registration.tag-du.com>).

### **Registration Process**

The TAGDU website will show the starting start dates of the various courses included in the curriculum. Students will register for the courses following the instructions that will be provided.

### **Sequence of Courses**

TAGDU students are advised to first complete the Basic Courses prior to taking the Concentration Courses.

## Competency Exam

Students enrolled in the TAGDU MOOC program are to provide a certificate of completion for each completed course from the course provider. Upon completion of the required curriculum, students will be required to take a competency exam that will test them on the basic elements of artificial intelligence.

## Fees

The total fees for obtaining an MBA from the Talal Abu-Ghazaleh Digital University are \$1,500 payable as follows:

- \$200 with the application to the program.
- \$1,300 upon the satisfactory completion of the Competency Exam and prior to awarding the MBA degree.

## Curriculum

The curriculum consists of 14 required courses as follows:

### Basic Courses

- Financial Accounting
- Managerial Accounting
- Organizational Behavior
- Managerial Economics
- Statistics for Managers
- Marketing Management

### Concentration Courses

- Programming
- Basic Artificial Intelligence
- Machine Learning
- Data Science
- Data Mining
- Regression and Classification
- Deep Learning
- Pattern Recognition
- Big Data Analytics

Students are allowed to substitute certain courses with other similar courses subject to the approval of TAGDU administration.

The descriptions of each of the required courses along with information related to the provider of each course are listed on the following pages.

To help students sign up for certain required courses (in situations where these courses may be over-subscribed), two options are provided. In these situations students are free to choose any of the alternatives.

## Course Descriptions

- **Introduction to Financial Accounting**

Master the technical skills needed to analyze financial statements and disclosures for use in financial analysis, and learn how accounting standards and managerial incentives affect the financial reporting process. By the end of this course, you'll be able to read the three most common financial statements: the income statement, balance sheet, and statement of cash flows.

**University offering the course:** University of Pennsylvania

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/wharton-accounting>

- **Managerial Accounting** [Choose from one of two options]

**Option1: Managerial Accounting Fundamentals**

This course will teach you the fundamentals of managerial accounting including how to navigate the financial and related information managers need to help them make decisions. You'll learn about cost behavior and cost allocation systems, how to conduct cost-volume-profit analysis, and how to determine if costs and benefits are relevant to your decisions.

**University offering the course:** University of Virginia

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/uva-darden-managerial-accounting>

**Option2: Managerial Accounting: Cost Behaviors, Systems, and Analysis**

**University offering the course:** University of Illinois

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/accounting-for-managers>

- **Organizational Behavior**

Of course, we are not machines, and certainly not programmable. But through the study of organizational behavior, we can gain insights into what makes people tick within a work context. Increasing your understanding of your own behavior and that of your colleagues, teams and leaders, is an important first step to bringing positive change to how you and your organization work.

The objective of this course is to provide insight into four key areas in the domain of organizational behavior: Motivation, Leadership, Teamwork, Organizational culture.

**University offering the course:** University of Illinois

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/managing-people-iese>

- **Strategic Business Management – Microeconomics**

This course unites business strategy with the principles of microeconomics. It offers valuable a powerful toolbox together with cases and lessons of microeconomics principles frameworks in order to understand how managers behave and consider their role in the process of decision-making.

**University offering the course:** University of California, Irvine

**Platform:** Coursera

**Length of course:** 11 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/strategic-business-management-microeconomics>

- **Basic Data Descriptors, Statistical Distributions, and Application to Business Decisions**

This course presents an overview of the general principles and applications of statistics relevant to management. A major emphasis of this course will be the development of skills through practical problem solving.

**University offering the course:** Rice University

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/descriptive-statistics-statistical-distributions-business-application>



- **Strategic Management: Be Competitive**

This course focuses on the key principles behind the latest thinking in value co-creation, strategy and marketing, and teaches you how to apply them. By learning how to continuously plan, monitor, analyze and assess all that is necessary for an organization to meet its goals and objectives, you will be better prepared to take your organization forward in a viable strategic direction.

**University offering the course:** Macquarie University

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/strategic-management-be-competitive>

- **Marketing Essentials**

This business and management course will bridge the gap between information and real world experience. You will learn the theories of marketing through practice (examples and illustrations). This course will explain what marketing management is all about in the simplest of terms and lay the foundation to your pathway to excellence in the wonderful world of marketing.

**University offering the course:** University of Maryland & University System of Maryland

**Platform:** edX

**Length of course:** 7 weeks

**Start Date:** 15th of March or 4th of October

**Website or link access to the course:**

<https://www.edx.org/course/marketing-management>

- **Programming [Choose one of two options]**

Introduction to R and Python programming: data types, control flow, object-oriented programming, I/O and file processing, linkage to databases, and graphical user interface-driven applications. Examples include text processing, simple graphics creation and image manipulation, HTML and web programming.

**Option 1: 1- R Programming**

In this course you will learn how to program in R and how to use R for effective data analysis. You will learn how to install and configure software necessary for a statistical programming environment and describe generic programming language concepts as they are implemented in a high-level statistical language.

The course covers practical issues in statistical computing which includes programming in R, reading data into R, accessing R packages, writing R functions, debugging, profiling R code, and organizing and commenting R code. Topics in statistical data analysis will provide working examples.

**University offering the course:** Johns Hopkins University

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/r-programming>

### **Option2: 2- Python Basics**

This course introduces the basics of Python 3, including conditional execution and iteration as control structures, and strings and lists as data structures. You'll program an on-screen Turtle to draw pretty pictures. You'll also learn to draw reference diagrams as a way to reason about program executions, which will help to build up your debugging skills.

**University offering the course:** University of Michigan

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/python-basics>

- **Introduction to Artificial Intelligence (AI)**

In this course you will learn what Artificial Intelligence (AI) is, explore use cases and applications of AI, and understand AI concepts and terms like machine learning, deep learning and neural networks. You will be exposed to various issues and concerns surrounding AI such as ethics and bias, & jobs, and get advice from experts about learning and starting a career in AI. You will also demonstrate AI in action with a mini project.

**University offering the course:** IBM

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/introduction-to-ai>



- **Machine Learning** [Choose one of two options]

**Option1: Introduction to Machine Learning**

This course will provide you a foundational understanding of machine learning models (logistic regression, multilayer perceptrons, convolutional neural networks, natural language processing, etc.) as well as demonstrate how these models can solve complex problems in a variety of industries, from medical diagnostics to image recognition to text prediction. In addition, we have designed practice exercises that will give you hands-on experience implementing these data science models on data sets. These practice exercises will teach you how to implement machine learning algorithms with PyTorch, open source libraries used by leading tech companies in the machine learning field (e.g., Google, NVIDIA, CocaCola, eBay, Snapchat, Uber and many more).

**University offering the course:** Duke University

**Platform:** Coursera

**Length of course:** 6 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/machine-learning-duke>

**Option2: Machine Learning**

This course provides a broad introduction to machine learning, datamining, and statistical pattern recognition. Topics include: (i) Supervised learning (parametric/non-parametric algorithms, support vector machines, kernels, neural networks). (ii) Unsupervised learning (clustering, dimensionality reduction, recommender systems, deep learning). (iii) Best practices in machine learning (bias/variance theory; innovation process in machine learning and AI). The course will also draw from numerous case studies and applications, so that you'll also learn how to apply learning algorithms to building smart robots (perception, control), text understanding (web search, anti-spam), computer vision, medical informatics, audio, database mining, and other areas.

**University offering the course:** Stanford University

**Platform:** Coursera

**Length of course:** 11 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/machine-learning>

- **Data Science Ethics**

Explore the ethics of big data collection and sharing, and consider the importance of data privacy in our society today.

This course will develop your knowledge of data ethics as you explore the questions around the ethics of big data and AI.

**University offering the course:** University of Michigan

**Platform:** Future Learn

**Length of course:** 6 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.futurelearn.com/courses/data-science-ethics>

- **Predictive Analytics and Data Mining**

This course introduces students to the science of business analytics while casting a keen eye toward the artful use of numbers found in the digital space. The goal is to provide businesses and managers with the foundation needed to apply data analytics to real-world challenges they confront daily in their professional lives. Students will learn to identify the ideal analytic tool for their specific needs; understand valid and reliable ways to collect, analyze, and visualize data; and utilize data in decision making for their agencies, organizations or clients.

**University offering the course:** University of Illinois

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/predictive-analytics-data-mining>

- **Regression and Classification [Choose one of two options]**

**Option 1: Linear Regression and Modeling**

This course introduces simple and multiple linear regression models. These models allow you to assess the relationship between variables in a data set and a continuous response variable. Is there a relationship between the physical attractiveness of a professor and their student evaluation scores? Can we predict the test score for a child based on certain characteristics of his or her mother? In this course, you will learn the fundamental theory behind linear regression and, through data examples, learn to fit, examine, and utilize regression models to examine relationships between multiple variables, using the free statistical software R and RStudio.

**University offering the course:** Duke University

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/linear-regression-model>

### **Option2: Machine Learning Fundamentals**

In this class, you will learn about the most effective machine learning techniques, and gain practice implementing them and getting them to work for yourself. More importantly, you'll learn about not only the theoretical underpinnings of learning, but also gain the practical know-how needed to quickly and powerfully apply these techniques to new problems.

**University offering the course:** Duke University

**Platform:** edX

**Length of course:** 10 weeks

**Start Date:** 18th of January or 20th of April

**Website or link access to the course:**

<https://www.edx.org/course/machine-learning-fundamentals-2>

- **Introduction to Deep Learning**

Linear models and stochastic optimization methods, theoretical foundations of the neural networks, convolutional neural network architectures, deep neural network, building blocks of deep learning for image input. Examples will include the use of TensorFlow and Keras for the creation of neural networks for image and video classification, and for natural language processing.

**University offering the course:** National Research University - Higher School of Economics

**Platform:** Coursera

**Length of course:** 6 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/intro-to-deep-learning>

- **Pattern Recognition** [Choose one of two options]

### **Option1: Computational Thinking for Problem Solving**

In this course, you will learn about the pillars of computational thinking, how computer scientists develop and analyze algorithms, and how solutions can be realized on a computer using the Python programming language. By the end of the course, you will be able to develop an algorithm and express it to the computer by writing a simple Python program.

**University offering the course:** University of Pennsylvania

**Platform:** Coursera

**Length of course:** 4 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/computational-thinking-problem-solving>

### **Option2: Improving your statistical inferences**

This course aims to help you to draw better statistical inferences from empirical research. First, we will discuss how to correctly interpret p-values, effect sizes, confidence intervals, Bayes Factors, and likelihood ratios, and how these statistics answer different questions you might be interested in. Then, you will learn how to design experiments where the false positive rate is controlled, and how to decide upon the sample size for your study, for example in order to achieve high statistical power. Subsequently, you will learn how to interpret evidence in the scientific literature given widespread publication bias, for example by learning about p-curve analysis. Finally, we will talk about how to do philosophy of science, theory construction, and cumulative science, including how to perform replication studies, why and how to pre-register your experiment, and how to share your results following Open Science principles.

**University offering the course:** Eindhoven University of Technology

**Platform:** Coursera

**Length of course:** 8 weeks

**Start Date:** at any time.

**Website or link access to the course:**

<https://www.coursera.org/learn/statistical-inferences>

- **Big Data Analytics**

In this course, you will develop your knowledge of big data analytics and enhance your programming and mathematical skills. You will learn to use essential analytic tools such as Apache Spark and R.

**University offering the course:** University of Adelaide

**Platform:** edX

**Length of course:** 10 weeks

**Start Date:** 1st of March.

**Website or link access to the course:**

<https://www.edx.org/course/big-data-analytics-2>

## Where do you go for additional information?

For additional information, you may consult our affiliate:

[info@tagiuni.com](mailto:info@tagiuni.com)

TAG-DU Program Manager

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