



# **Data Mining**

## GENERAL INFORMATION

Duration: 8 Weeks

Total Hours: 120 hours

Venue: University of Bahrain

Fees: 240 BHD

Credits: 3 credits (B.Sc. in

Statistics and Data Science -

STAT481)

Level: Undergraduate

Language: English

Pre-requisite:

Background in mathematics,

statistics, and programming skills





Dr. Sawsan Hilal Dr. Sawsan Hilal holds a Ph.D. in statistics from Lancaster University and an M.Sc. in mathematics from the University of Bahrain. Her research focuses on Data Science and Financial Risk Management. She is the coordinator of the M.Sc. in Big Data Science and Analytics and won the VIWA 2018 "Distinguished Woman in Science – Statistics" award.

Micro-credential is a short, focused course designed to equip learners with specific skills and knowledge within a specialized area. It serves as a pathway to earning an equivalent certification for a core course, offering a flexible and targeted learning experience.

#### **COURSE OVERVIEW**

This is a credited microcredential course with an interactive learning experience delivered over two months with a total of 120 notional hours distributed between online lectures, physical practical sessions, self-learning, hands-on assignments and capstone project. This micro-credential is an intensive course that is designed to equip participants with a variety of data mining tools to extract insightful information from data that would guide future action using data-driven decisions. Then, participants who successfully complete the course will be eligible to a credit transfer.

#### **DELIVERY MODE**

The course will be delivered over two days per week, so that lectures and tutorials will be delivered online, while practical sessions will be delivered physically.

#### **ASSESSMENTS**

Online Quizzes: 30% Hands-On Assignments: 30% Capstone Project & Presentation: 40%

#### **TARGET AUDIENCE**

- Students and academics interested in data mining.
- Practitioners who want to enhance their skills in utilizing recent advances in technology for data handling.

#### **KEY TOPICS COVERED**

- Concepts and Techniques of Data Mining
- Data Preparation and Transformation
- Knowledge Representation
- Knowledge Discovery, Pattern Recognition, and Outlier Detection
- Algorithms of Data Mining
- Regression and Classification
- Clustering Techniques
- Capstone Project
  Presentation



### For further Information, please contact:

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