BUSINESS INTELLIGENCE AND DATA MINING

UNIVERSITY OF WOLLONGONG IN DUBAI

Learn how to use business intelligence and predictive analytics techniques to predict problems, improve your business outcomes, and gain a competitive edge

PROGRAM OVERVIEW

People spend 30% of their time and income on daily commutes. Public transportation agencies are challenged to find ways to increase convenience, improve the travel experience, and lower costs. Business analytics uses real-time data to anticipate and control congestions, helping traffic systems flow smoothly. In partnership with IBM's skills academy, the University of Wollongong in Dubai is offering the Business Intelligence and Data Mining training. This track enables professionals to learn the essential business analytics models to collect and analyze data efficiently. Through this training, attendees will gain knowledge and hands-on skills in topics such as predictive analytics models, data mining, data collection and integration, nodes, and statistical analysis, thus enabling them to use tools for market research and data mining in order to predict problems and improve outcomes.

Attendees will be awarded IBM's Blockchain Predictive Analytics Modeler Badge upon the successful completion of the training and exam.

WHAT THE PROGRAM COVERS

This program will allow participants to:

- Acquire knowledge and practical skills in the area of Business Intelligence and Predictive Analytics.
- Gain an in-depth understanding of Business Intelligence and Predictive Analytics concepts, including
- Use the user interface of modeler to create basic program streams
- Read a statistics data file into modeler and define data characteristics
- Review and explore data to look at data distributions and to identify data problems, including missing values
- Use the automated data prep node to further prepare data for modeling
- Use a partition node to create training and testing data subsets
- Obtain an IBM Digital Certification in Predictive Analytics Modeling.

KEY PROGRAM BENEFITS

Upon completing this training and receiving your IBM Mastery Badge as Predictive Analytics Modeler, you will be able to:

- Ensure that your business/organisation stays relevant by exploring the opportunities for Business Intelligence and Predictive analytics.
- Use modeler to read, review, analyse data.
- Apply business intelligence and predictive analytics techniques to real case studies.
- Become a certified Predictive Analytics Modeler.

WHO SHOULD TAKE THIS TRAINING?

Business Intelligence and predictive analytics offer tremendous opportunities for business growth, by uncovering hidden patterns and trends, predicting outcomes, retaining customers, improving market research, and injecting certainty and predictability in the decision making process. This course is ideal for senior managers, middle managers, entrepreneurs and business owners who have a keen interest in investing in and adopting business intelligence and predictive analytics. It is also aimed at those in more technical roles who would like to take on a leadership role in using predictive analytics and data mining for uncovering trends and generating insights that could give a competitive edge to their businesses.

WHAT YOU WILL LEARN

This training program consists of 40 hours of instructor-led training and self-paced readings. The instructor lead training combines traditional teaching components, with case studies, in-class discussions, and hands-on activities performed on virtual labs, to enable working knowledge and experience with Business Intelligence and its related tools.

LEARNING MODULES

The training consists of three main modules, offered over five days:

MODULE 1

ANALYTICS OVERVIEW

- Business Analytics Overview, Trends, Case Studies
- Understanding Business Intelligence and Analytics

MODULE 2

BUSINESS ANALYTICS FOUNDATIONS

Introduction to Data Mining CRISP-DM

MODULE 3

PREDICTIVE ANALYTICS MODELER

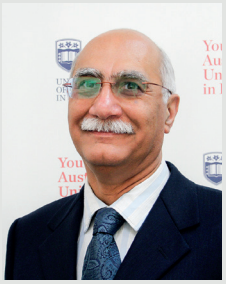
- Nodes and streams
- Initial data mining, storage and field measurement
- Understanding the data (valid and invalid values)
- Integrating data (methods, options, merging, and sampling)
- Deriving and reclassifying fields (CLEM)
- Looking for relationships (matrix, distribution, means, histogram, statistics and plot)
- Functions (conversion, string, and statistical)
- Data transformation
- Statistical, graphical and sample nodes
- Automated data mining and modelling
- Predictive models and customer segmentation

IBM OPEN BADGES

Predictive Analytics Modeler:

EXPLORER | MASTERY AWARD

PROFESSOR FARHAD OROUMCHIAN (INSTRUCTOR)



Professor Farhad Oroumchian is the Associate Dean (Education) in the Faculty of Engineering and Information Sciences. Prof Oroumchian has obtained a PhD from Syracuse University in New York. Prior to this, he received a Masters from Sharif University of Technology, Tehran and a Bachelor's degree from National University of Iran. Prof Oroumchian's research interest lies in Information Access, Machine Learning, Data Mining, and Artificial Intelligence. He has worked on applying data mining and AI modelling in areas such as security, intrusion detection, teaching and learning, and Social Networks. He has developed a tutoring system and an intelligent search engine that use human-like reasoning to interact with users. He is a member of several Centres of Excellence and Research groups and is a prominent researcher on Persian text processing and retrieval as well as multilingual search engines. Prof Oroumchian has over 100+ journal and conference publications. He has also worked as consultant in many countries consulting and developing database or intelligent systems.