

# MSM552 Business Data Analytics 商业数据分析

**Level:** 5

**Credit Units:** 5 Credit Units

**Language:** CHINESE

**Presentation Pattern:** EVERY JAN

## Synopsis:

This course presents data analytics as a key modern approach for decision making in business organisations. It examines the key aspects of Business Analytics based on Cross-Industry Process for Data Mining (CRISP-DM) framework. Students will learn to apply CRISP-DM by going through a series of projects involving data visualisation, association rule mining, clustering, predictive modelling and response modelling. By walking students through such projects, they will gain experience in turning data into important insights that may improve organizational performance.

本课程介绍数据分析作为商业组织决策制定的关键现代方法。它审视了基于跨行业数据挖掘流程 (CRISP-DM) 框架分析的关键方面。学生将通过一系列涉及数据可视化、关联规则挖掘、聚类、预测建模和响应建模的项目来学习应用 CRISP-DM。通过引导学生完成此类项目，他们将获得将数据转化为可以提高组织绩效的重要见解的经验。

## Topics:

- Introduction to Business Analytics 商业分析简介
- CRISP-DM--- An Overview CRISP-DM---概述
- Introduction to Data Visualisation 数据可视化简介
- Process and challenges in a Data Visualisation project 数据可视化项目的过程和挑战
- Association Rule Mining 关联规则挖掘
- Process and challenges in an Association Rule Mining project 关联规则挖掘项目的过程 和挑战
- Data Clustering 数据聚类
- Process and challenges in a Data Clustering project 数据聚类项目的过程和挑战
- Predictive Modelling 预测建模
- Process and challenges in a Predictive Modelling project 预测建模项目的过程和挑战
- Response Modelling 响应建模
- Process and challenges in a Response Modelling project 响应建模项目的过程和挑战

## Learning Outcome:

- Design analytics solutions using the CRISP-DM framework 使用 CRISP-DM 框架设计分析解决方案
- Appraise the suitability of analytics techniques in different contexts 评估分析技术在不同情况下的适用性
- Evaluate performance of analytics models 评估分析模型的性能
- Assess the quality of data for analytics 评估分析数据的质量
- Prepare data for mining and analysis 准备数据进行挖掘和分析
- Construct an analytics solution using application software 使用应用软件构建分析解决方案

## Assessment Strategies - Regular Semester (Evening Class):

| Components | Description | Weightage Allocation (%) |
|------------|-------------|--------------------------|
|------------|-------------|--------------------------|

|                               |                          |            |
|-------------------------------|--------------------------|------------|
| Overall Continuous Assessment | PRE-CLASS QUIZ 1         | 10         |
|                               | PARTICIPATION 1          | 15         |
|                               | GROUP BASED ASSIGNMENT 1 | 25         |
| Overall Examinable Components | ECA                      | 50         |
| <b>Total</b>                  |                          | <b>100</b> |

\*The information listed is subject to review and change.