

(MATH 3720) Decision Analysis for Managers

Course Description

This course uses math and statistical concepts to develop students' ability to understand and apply deterministic and probabilistic models to business problems and solutions. In this course, students gain different perspectives on the decision-making process in business settings. The course covers key analytical and data mining methods applicable to business situations, such as new product launches, object screening and classification, market segmentation, fraud detection, employee retention, personalization, as well as pricing and sales promotions. Additionally, students learn how to recommend the most suitable modelling techniques based on technical output, business objectives, ethical concerns, and data governance issues.

Learning Objectives

By the end of this course, students will be able to:

- Apply the most relevant industry framework for identifying, framing, translating, and communicating business opportunities into data analytics solutions.
- Define the roles and responsibilities of teams managing analytical projects.
- Execute analytical and data mining techniques to solve specific business problems.
- Recommend the most suitable data mining techniques to address specific problems based on technical output and business objectives.
- Describe applications of big data and automation to improve customer experience.
- Explain the importance of the data governance role in achieving analytics success within a project.
- Identify the analytics and digital transformation challenges faced by businesses.

Grade Scheme: Letter Grade

Minimum Pass: 50%

Credit Weight: 3 Credits

Deliverables:

- Discussion Postings
- Team Assignments
- Exam

* Please note that this document is for marketing purposes and that the details of the course including grading, assessments and objectives may change or vary.

Grade	Grade Point Average (GPA)	Percentage
A+	4.3	90-100%
A	4.0	85-89%
A-	3.7	80-84%
B+	3.3	77-79%
B	3.0	73-76%
B-	2.7	70-72%
C+	2.3	65-69%
C	2.0	60-64%
C-	1.7	55-59%
D	1.3	50-54%
F	0.0	0-49%