

# EMBA-2426-126- Business Analytics

ECTS\*, CH & SDL\*\* Level/Semester, Status, Timing Name of lecturer(s) & Email Level 2 Gisele Hites Elective 20 ghites@gmail.com Between 09/04/2026 - 12/04/2026

### Description of the course

The future is uncertain. But a little data collection and a little data analysis can help a whole lot in managing the risks that the future holds in store for us. This course focuses on those quantitative methods that can concretely assist managers in making decisions under uncertainty. This is not a theoretical course. All quantitative methods are presented using concrete business scenarios and are implemented using tools available within the Excel environment. The objective is to equip managers with simple tools that they can easily implement to improve decision-making.

## Course units

- Spreadsheet modelling and analysis
- Monte Carlo simulation and risk analysis
- Linear optimization

## **Course Learning Outcomes (CLOs)**

- Use data-driven approaches to create predictive analytical models
- Develop, implement and analyse Monte Carlo simulation models
- Create and solve linear optimisation problems
- Create linear optimisation models for a variety of applications
- Use the following Excel tools to apply the methodologies mentioned above: Goal Seek, Regression, Risk Solver Platform, Scenario Manager, Solver, Trendline, XLMiner

0-20

**Evaluation scale** 

## Prerequisite (if any)

N/A

## Contribution to Programme Learning Objectives (PLOs)\*\*\*

- Learning Objective 1.1: Mastery
- Learning Objective 1.2: Not Covered
- Learning Objective 2.1: Not Covered
- Learning Objective 2.2: Introduction
- Learning Objective 3.1: Introduction
- Learning Objective 3.2: Not Covered

# Main Teaching methods used in the course

Interactive Lecture, In-class exercises, Group work, Individual project

# Contribution to the Environmental, social and governance (ESG)

Course Contribution to ESG: No

Contact Hours are dedicated to ESG: /

Contact Hours containing climate solutions for how organisations can reach net zero: / Description of contribution: /

Notice: The information available in the course outline is subject to change. Please keep yourself informed at all times by regularly checking Canvas.



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## Assessment methodology / Learners Use of Time and Load

## Assignment one : group assignment

- weight 50%
- workload estimated = 20 hours
- due 17 April 2026
- Guidelines: Class participation in case studies discussions will be assessed

## Assignment two: individual assignment

- weight 50%
- workload estimated = 30 hours
- due 25 April 2026
- Guidelines: You will take on the role of a consultant in business analytics and submit a report presenting the application of as many of the tools covered in class as relevant to your client's case. The paper be no more than 2000 words and should include proper referencing.

### Readings

All Harvard Business School cases must be read and thoroughly prepared Evans, J. (2019) Business Analytics (3rd ed.). Pearson.

#### Recommended

Wheelan, C. (2014). Naked Statistics: Stripping the Dread from the Data (1st ed.). W. W. Norton & Company.

## **Other Learning Materials**

- Getting Started in Google Analytics: https://www.coursera.org/projects/getting-started-in-google-analytics
- Analyze Website Visitors with Google Analytics Segments:

https://www.coursera.org/projects/analyze-visitors-google-analytics-segments

- Digging Deeper into Audience Reports in Google Analytics:
- https://www.coursera.org/projects/digging-deeper-into-audience-reports-in-google-analytics
- Custom Reports in Google Analytics: https://www.coursera.org/projects/custom-reports-in-google-analytics#outcomes

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