

Big Data, Business Intelligence

Data-driven insight for strategic and competitive decision-making



PROGRAMME
Master 1

SEMESTER
Semester 1

CREDITS
3 ECTS

CONTACT HOURS
15 hours - Lectures

Course Description

This course examines how organizations use data, Business Intelligence and Competitive Intelligence to improve performance, anticipate market developments and support strategic decisions.

Students are introduced to the business principles of analytics and Artificial Intelligence. Teaching is grounded in contemporary business cases and in the professional experience of the instructor in data, intelligence and decision-support projects. Current issues in data quality, governance, ethics and responsible AI are integrated throughout the module.

Learning Outcomes

- Explain how data creates business value and competitive advantage.
- Identify and evaluate relevant internal and external data sources.
- Apply the principles of Business Intelligence and Competitive Intelligence to managerial questions.
- Distinguish descriptive, diagnostic, predictive and prescriptive analytics.
- Recognize the main business uses and limitations of advanced analytics.
- Convert evidence into clear, defensible and actionable recommendations.
- Assess data governance, privacy, ethics and responsible-AI considerations.

Indicative Content

1. **Data as a strategic asset:** data-driven organizations, sources, value creation, quality and governance.
2. **Business Intelligence:** decision support, KPIs, dashboards, analytics and data storytelling.
3. **Competitive Intelligence:** environmental scanning, competitor analysis, market intelligence, and early-warning signals.
4. **AI for business:** Advanced analytics, use cases, limits and human judgement.
5. **Responsible practice:** privacy, security, bias, explainability, ethics and regulation.
6. **Applied cases:** analysis of real managerial situations informed by the instructor's professional practice.

Teaching & Learning Approach

Interactive lectures combine conceptual frameworks, practitioner insights, short case discussions and applied analysis. The emphasis is on managerial interpretation and strategic judgement rather than technical software training.

Assessment

Written examination
or
Applied business deliverable