

# M.Sc. Business Intelligence & Data Science

## 1<sup>st</sup> Semester

### Data Management

- Introduction to Data Science & Business Intelligence
- Database Systems & Information Integration
- ERP Systems

### Computational Engineering

- IT Management
- Software Engineering
- Programming

### Quantitative Methods

- Linear Algebra & Numerical Mathematics
- Structure-detecting Methods
- Structure-validating Procedures

### Leadership Skills

- Corporate Governance & Business Ethics
- Negotiation, Communication & Executive Presentations
- Cross Cultural Leadership

### Digital Business Structures & Processes

- Theory of the Firm
- Digital Process Management
- Digital Value Networks & Business Models

## 2<sup>nd</sup> Semester

### Business Analytics

- Optimization Techniques
- Simulation & Forecasting Techniques
- Machine Learning & Artificial Intelligence Techniques

### Business Control

- IT-enabled Information Systems
- Decision Support Systems
- Management Information Systems

### Consulting

- Strategy & Market
- Innovation & Design Thinking
- Consulting Instruments

### Big Data Project

- Agile Project Management
- Scientific Methods
- Field Project

## 3<sup>rd</sup> Semester

### Study abroad

## 4<sup>th</sup> Semester

### Master's thesis

### » FAST TRACK

By opting for the Fast Track, you skip the semester abroad and reduce the duration of your internship. This enables you to complete your master's degree in three semesters with 90 ECTS. However, the Fast Track option does not offer the opportunity for an international double degree. For further details, please reach out to your study advisor.