

# B.Sc. Applied Data Science & Business Analytics

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

### Business Administration 1: Principles of Business Economics

- Introduction to Business Administration, Procurement & Production
- Marketing

### Business Administration 2: Financial Reporting

- Financial Accounting 1
- Financial Reporting & Business Taxation 1

### Mathematical Basics

- Business Mathematics
- Statistics 1

### Business English 1

- Business Correspondence

### 2nd Language

- German 1/French 1/Spanish 1/  
Italian 1

### Specialization modules

#### Core Competencies

- Introduction to Applied Data Science & Business Analytics
- Scientific Methods
- Calculation Software
- Rhetoric
- Project Management

#### Programming/Tools

- Introduction to Programming (R/Python)
- SPSS

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

### Business Administration 3: Managerial Accounting

- Investment & Financing
- Cost Accounting

### Economics 1: Principles of Economics

- Microeconomics
- Macroeconomics

### Applied Statistics

- Statistics 2
- Market Research

### Business English 2

- Moderation & Presentation

### 2nd Language

- German 2/French 2/Spanish 2/  
Italian 2

### Specialization modules

#### Analytics & Dynamics

- Predictions in Time
- Introduction to Panel Analytics

#### Applied Data Science 1

- Inferential Methods
- Multivariate Methods

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

### Business Administration 4: Human Resources & Organization Management

- Human Resource Management
- Organization

### Business Administration 5: Business Management

- Principles of Corporate Management
- Service Management

### Economics 2: Basics of Political Economy

- Economic Policy
- Corporate Social Responsibility

### Business English 3

- Negotiation

### 2nd Language

- German 3/French 3/Spanish 3/  
Italian 3

### Specialization modules

#### Market Analytics

- Applied B2C Analytics
- Applied B2B Analytics

#### Applied Data Science 2

- Introduction to Big Data
- Regression Models

## Study Abroad

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

### Field Project

- Field Project

### Business Research

- Simulation (R)
- Business Modeling

### E-Business

- E-Procurement
- Digital Process Management
- E-Commerce

### General Management

- Strategic Management
- Leadership & Motivation
- Crisis Management & Recapitalization

### 2nd Language

- German 4/French 4/Spanish 4/  
Italian 4

### » Please note:

German language courses are integrated into your studies if you do not have a B2 level. Otherwise you can choose between French, Spanish and Italian.

## 6<sup>th</sup> Semester

### Business Applications in DA/DS

- Product/Sales
- Traffic Analysis & Online Marketing
- IT

### Information Transfer

- Reporting & Data Visualization
- SQL Data Modeling
- Process Mining

### Consulting

- Consulting Instruments
- Management of Consulting Projects
- Consulting Project/Tender Pitch

### 2nd Language

- German 5/French 5/Spanish 5/  
Italian 5

### Bachelor's thesis