**ADA**
ADVANCED DATA
ANALYTICS IN BUSINESS

**Advanced Data Analytics
in Business (ADA)**
EACEA 598829-EPP-1-2018-1-RS-EPPKA2-CBHE-JP

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# Advanced Data Analytics in Business - Master Course

**Learning outcome:** *MSc Advanced Data Analytics in Business prepares graduates for a future of data driven and evidence-based decision making. They will learn how to apply the latest academic thinking and analytical and computing tools to facilitate make business decisions, from experienced university teaching staff, as well as visiting professors from European-class universities.*

*Although grounded in rigorous technical and quantitative training, our programme is also highly applied. Both core and electives are sector-focused, with a significant share of real-case business problems, giving the opportunity to students to tailor the programme to their interests.*

| Semester I | Status | Lectures | Practice | ECTS |
|---|---|---|---|---|
| 1. Programming for Business Applications 1 | Core subject | 30 | 30 | 6 |
| 2. Introduction to Machine Learning in Business | Core subject | 30 | 30 | 6 |
| 3. Optimization and Business Decision-Making | Core subject | 30 | 30 | 6 |
| 4. Elective 1 | | 30 | 30 | 6 |
| 5. Elective 2 | | 30 | 30 | 6 |

| List of Electives (Semester I) | Lectures | Practice | ECTS |
|---|---|---|---|
| 1. Research Design and Data Visualization Techniques | 30 | 30 | 6 |
| 2. Marketing Intelligence | 30 | 30 | 6 |
| 3. Mathematics and Statistics in Business Analysis | 30 | 30 | 6 |
| 4. Fundamentals of Accounting and Business Finance | 30 | 30 | 6 |

| Semester II | Status | Lectures | Practice | ECTS |
|---|---|---|---|---|
| 1. Time Series Forecasting | Core subject | 30 | 30 | 6 |
| 2. Applied Econometrics | Core subject | 30 | 30 | 6 |
| 3. Quantitative Finance | Core subject | 30 | 30 | 6 |
| 4. Elective 1 | | 30 | 30 | 6 |
| 5. Elective 2 | | 30 | 30 | 6 |

| List of Electives (Semester II) | Lectures | Practice | ECTS |
|---|---|---|---|
| 1. Programming for Business Applications 2 | 30 | 30 | 6 |
| 2. Advanced Big Data Analytics | 30 | 30 | 6 |
| 3. Online Business and Web Analytics | 30 | 30 | 6 |
| 4. Data Acquisition in Business Intelligence | 30 | 30 | 6 |
| 5. Academic writing | 30 | 30 | 6 |

| Semester III | IR hours | ECTS |
|---|---|---|
| 1. Internship | 100 | 10 |
| 2. Master Thesis | 200 | 20 |