



# DATA MASTER OF SCIENCE

< MASTER THE FUTURE />

#### DATA INTEGRATION SPECIALIST GENERATIVE AI SPECIALIST DATA SCIENCE MANAGER BUSINESS DATA ANALYST

Beyond basic algorithms and analysis – master the art of deep learning and setting the stage for groundbreaking innovations and leadership in the data-driven future!

## Gain hands-on experience:

Our **project-based learning** concept with well known international companies will boost your career after graduation.

#### **CONTACT US**







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## MASTER EXPLAINED WHAT SKILLS YOU WILL GAIN

### HARD& SOFT SKILLS

#### **Statistical Analysis**

Be equipped with a strong foundation in statistical analysis and machine learning techniques.

#### **Problem Solving**

Design experiments to test hypotheses.

Develop a systematic and analytical approach to solve problems.

## Leadership & Collaboration

Communicate your ideas effectively, share insights, and collaborate to achieve common goals.

## Data Visualization & Communication

Convey complex knowledge and insights to non-technical stakeholders.



**Prof. Dr. Raad Bin Tareaf**Professor for Data Science

"In the current digital landscape, becoming proficient in Data Science is more than just a choice—it's essential. Our M.Sc. in Data Science curriculum equips students with the skills to transform complex big data into practical Al solutions, fostering innovation and elevating decision-making across diverse sectors."

## CHOOSE SPECIALIZATION

#### FROM DATA TO DECISIONS



## INFORMATION ANALYTICS

This specialization equips you with the skills to analyze and retrieve relevant information from large datasets. Through the courses you'll learn techniques for extracting, processing, and organizing information in a multilingual and data-rich environment—critical for building advanced search engines, recommendation systems, and data-driven decision—making tools.

ELECTIVE COURSES:

- INFORMATION RETRIEVAL
- INFORMATION RETRIVAL METHODS
- MULTILINGUAL INFORMATION RETRIEVAL

#### **BUSINESS ANALYTICS**

In this specialization, you'll develop expertise in data-driven business strategies across key areas such as marketing, finance, and human resources. The courses will provide the analytical tools needed to assess market trends, predict financial outcomes, and enhance workforce management.



- MARKETING ANALYTICS
- FINANCIAL ANALYTICS
- HR ANALYTICS





## HUMAN-COMPUTER INTERACTION AND NATURAL LANGUAGE PROCESSING

This specialization focuses on the interaction between humans and computers, emphasizing language processing techniques. The courses teach you to build and refine language models, enabling applications in virtual assistants, sentiment analysis, and machine translation.

ELECTIVE COURSES:

- LANGUAGE MODELING AND PROCESSING
- LANGUAGE RESOURCES AND PROCESSES
- LANGUAGE PROCESSING PRACTICES

## AFTER GRADUATION FUTURE JOB OPPORTUNITIES

These are two of many jobs you can strive for after graduating in our Master of Science in Data Science:

#### **SENIOR DATA SCIENTIST**

As a Data Scientist with a Master's degree, you'll take on more complex data challenges. Building on your advanced data analysis and machine learning skills, you'll tackle high-impact projects. Your role may include developing predictive models, conducting deep learning research, and solving intricate business problems with data-driven solutions.

or become a ...

CHIEF OF STAFF
IN BIG DATA OR
BUSINESS INTELLIGENCE





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## COURSE OF STUDIES

Semester 1	Semester 2	Semester 3	Semester 4
Data Science Operations	Data Science Applications	Data Science Innovations	Leadership and Innovation
Descriptive Analytics 5 ECTS	Predictive Analytics	Prescriptive Analytics 5 ECTS	Master Thesis Set-up
Parallel Computing	Cognitive Computing 5 ECTS	Disruptive Computing 5 ECTS	Master Thesis
Information Retrieval	Information Retrival Methods 5 ECTS	Multilingual Information Retrieval 5 ECTS	
Marketing Analytics	Financial Analytics 5 ECTS	HR Analytics	\
Language Modeling and Processing	Language Resources and Processes	Language Processing Practices	
Leadership Skills	Research Skills	Consulting Skills	
	International Summer School	Company/ Research Project	20 ECTS

#### \*Specializations:

- Information Analytics
- Business Analytics
- Human-Computer Interaction and Natural Language Processing

Core modules 🌎 Interdisciplinary modules

You will chose one area of specialization to make your academic and professional profile even more distinct.

An area of specialization consists of a stream of electives stretching from semesters 1 to 3 (see above).

In semester1, you will chose introductory electives of two streams to see what works best for you. At the end of the first semester, you will finally decide on your area of specialization.

#### Period of study

4 semesters, 2 years



## THIS IS XU

#### **REAL PROJECTS**



Our **project-based learning** concept with **well known international companies** will boost your career after graduation.

Watch video













These electives provide a **tailored learning experience** that equips you with the **knowledge and skills** needed to excel **in your chosen fields**. It's about **unlocking your full potential** and shaping a brighter future.

Our **XU Career Service** will guide you to find **internships**, **student jobs** and to enhance **your career opportunities** after graduation.



#### **FUNDING OPTIONS**



More information We offer a bunch of possibilities to fund your study program in collaboration with our partners. Enjoy the full learning experience without any financial burden.

## STUDY IN POTSDAM NEARBY BERLIN

Enjoy the **metropolitan region of Berlin and the pristine city of Potsdam** and discover our campus at the area of Studio Babelsberg.

**BEST IN CLASS** 

Discover our campus with the **latest tech equipment** for the best learning experience in the world of digitalization.

At XU University you're not just a number, you'll be part of the XU family!

More information







### **STUDY FEES**

## For enrolments in Summer Term 2025 and Winter Term 2025/26 only!

Fees for EU students	monthly	Year	Full Program Fee
B.Sc. Digital Business and Sustainability	€ 625	€ 7.500	€ 22.500
B.Sc. Data Science and Al	€ 708	€ 8.496	€ 25.488
B.Sc. Industry 4.0 Management	€ 708	€ 8.496	€ 25.488
M.A. in Digital Transformation and Sustainability	€ 625	€ 7.500	€ 7.500
M.Sc. Data Science	€ 708	€ 8.496	€ 16.992
M.Sc. Industry 4.0	€ 708	€ 8.496	€ 16.992
Internat. MBA (60 ects)	€ 667	€ 8.004	€ 8.004
Internat. MBA (90 ects)	€ 667	€ 8.004	€ 12.006
Special Fees for Non-EU students (only semester-wise payment option)	Semester	Year	Full Program Fee
B.Sc. Digital Business and Sustainability	€ 3.750	€ 7.500	€ 22.500
B.Sc. Data Science and Al	€ 4.248	€ 8.496	€ 25.488
B.Sc. Industry 4.0 Management	€ 4.248	€ 8.496	€ 25.488
M.A. in Digital Transformation and Sustainability	€ 3.750	€ 7.500	€ 7.500
M.Sc. Data Science	€ 4.248	€ 8.496	€ 16.992
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M.Sc. Industry 4.0	€ 4.248	€ 8.496	€ 16.992
M.Sc. Industry 4.0 Internat. MBA (60 ects)	€ 4.248 € 4.002	€ 8.496 € 8.004	€ 16.992 € 8.004
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Regular Fees for Non–EU students (only semester–wise payment option)	Semester	Year	Full Program Fee
B.Sc. Digital Business and Sustainability	€ 5.500	€ 11.000	€ 33.000
B.Sc. Data Science and Al	€ 6.000	€ 12.000	€ 36.000
B.Sc. Industry 4.0 Management	€ 6.000	€ 12.000	€ 36.000
M.A. in Digital Transformation and Sustainability	€ 6.000	€ 12.000	€ 12.000
M.Sc. Data Science	€ 6.000	€ 12.000	€ 24.000
M.Sc. Industry 4.0	€ 6.000	€ 12.000	€ 24.000
Internat. MBA (60 ects)	€ 7.800	€ 15.600	€ 15.600
Internat. MBA (90 ects)	€ 7.800	€ 15.600	€ 23.400

€ 650	single payment
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	may increase depending on negotiations with VBB
€ 750	single payment
payment	
€ 1.500	single payment
€ 300	single payment
	may increase depending on negotiations with VBB
€ 750	single payment
	per semester € 750  payment € 1.500 € 300 € 250* per semester

<sup>\*</sup>Fees may vary, depending on negotiations with VBB

