# MASTER'S DEGREE PROGRAM STATISTICS AND DATA SCIENCE.



Why are election predictions often accurate? How effective are vaccines? As a data scientist, you provide the foundation and the bottom line to be able to make fact-based, informed decisions.



# Statistics and Data Science.

The four-semester Master's degree program in Statistics and Data Science is offered entirely in English and addresses key areas of statistics and data science. Your studies include focusing on key theoretical approaches and, in cooperation with experts in other fields, you will learn how to apply academic theory to tackle and solve real-world issues.

The 21st century is rapidly becoming an age of information! Your data literacy skills and the ability to critically analyze data and information will be the key to modern society's future success. As a program graduate with a strong background in statistics, you will be highly sought after for a wide variety of job openings and positions in different fields.

#### YOUR BENEFITS

Unique opportunity to work on current cases.

Option to earn additional academic qualifications, such as the "EMOS: European Master in Official Statistics".

Advantages, such as a low student-to-faculty ratio, a more familiar environment and being able to easily contact classmates.



# Educational Objectives and Career Prospects.

# What You Will Learn

The program aims to educate students in the field of "data literacy". You will learn everything you need to know about

- Data Acquisition How do I access and retrieve specific data?
- Data Quantity/Data Quality What do I need to take into account when analyzing Big Data?
- Data Management How do I organize data more efficiently?
- Data Analysis What kind of information does the data provide and what kind of methods can I use?
- Data Processing Do I use the available software, or program the software myself?
- Communicating Findings How do I convey analytical findings in laymen's terms?

## **Career Prospects**

After successfully completing the Master's degree program in Statistics and Data Science, you can pursue a variety of professional careers. Companies and industries that need to collect, systematically manage, analyze, and present data on a large scale need your expertise! Digitalization is continuing to drive growth in this field forward – our graduates work for leading companies and institutions in the following areas:

- Industry
- Medicine
- Banks
- Official statistics offices, such as Statistics Austria, Statistics Upper Austria
- Conduct market and opinion research
- Trade and commerce
- Academia



CHRISTINA NEUWIRTH, MSc Graduate of the Master's program in Statistics and Data Science

The class sizes were small and for me, the smaller student-to-faculty ratio was a positive aspect. I felt like I had strong support during my studies.

# Master's Degree Program.

## **Recommended Study Plan**

As part of the Master's degree program amounting to a total of 120 ECTS credits, students must complete courses in the subject areas of data science, mathematical statistics, recent developments in statistics and data science, statistical methods, soft skills, and free electives.

Detailed information about the program structure and courses are available in the curriculum and in the course catalog at jku.at/ma-statistics.

#### **KEY FACTS**

**Degree** Master of Science (MSc)

**Duration** 4 semesters

ECTS 120 credits

**Language** English (Level B2)

Location Linz

**Program** Full-Time/Part-Time/ Half-Time

## **Admission Requirements**

In order to be accepted to the Master's degree program in Statistics and Data Science, you must meet the following admission requirements:

- Successful completion of the Bachelor's degree program in Statistics and Data Science at the JKU, or successful completion of a comparable Bachelor's degree program offered at another institution of higher education
- We also recommend a minimum B2 level of proficiency in English

## Advanced Degrees at the JKU

• PhD Program in Economics and Statistics

## **Main Areas of Focus**

- The program not only focuses on the study of statistics and data science, but also includes honing skills to work effectively with others in different fields and subject areas.
- Statistics: Focus on statistical concepts that include for example an in-depth study of biostatistics and experimental design; you can also earn the European EMOS certificate to boost your professional career and give yourself an international competitive edge.
- Data Science: Apply principles and context to Big Data analyses, for example, or to the way data quantity and quality interact.
- Cross-Disciplinary Focus: Hone your skills to not only be able to work effectively with experts in different fields, but to also create and apply solution-oriented methods.

# Academic Advising.

## The JKU in a Nutshell

Over 24,000 students are enrolled at the JKU, making it Upper Austria's largest institution for research and higher-level education. Students can choose from around 100 academic degree programs in law, business, economics, social sciences, art x science, engineering and natural sciences, computer sciences, education, digitalization and medicine. You benefit from a unique campus environment and a low student-to-faculty ratio.

#### **General Information**

# STUDENT INFORMATION AND ADVISING SERVICES (SIBS)

Bank Building P +43 732 2468 3450 studium@jku.at jku.at/sibs

#### ADMISSIONS OFFICE

Bank Building P +43 732 2468 2010 admission@jku.at jku.at/admission

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#### Social Media

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