Mathematics, Modeling and Data Analytics

Constructor University Bremen
Bachelor of Science

Program

A strong mathematical foundation

The interdisciplinary Mathematics program at Constructor University plays a pivotal role in bridging the theoretical beauty of mathematics with its vast applications in various domains. As a foundational subject, mathematics underpins science, engineering, economics, finance, and social sciences. The program acknowledges the ancient roots of mathematics while embracing the transformative impact of recent advances in Data Science.

Key features and advantages of the interdisciplinary Mathematics program include:

1. **Foundational Knowledge:** The program provides students with a strong foundation in mathematics, encompassing both theoretical understanding and practical applications.
2. **Interdisciplinary Approach:** Emphasizing an interdisciplinary approach, the program equips students with mathematical tools to formulate and analyze problems. Additionally, it provides context for modeling real-world problems and introduces algorithmic data-driven approaches for problem-solving.
3. **Versatile Applications:** Mathematics is showcased as a dynamic field with versatile applications in various disciplines. Students explore how mathematical principles contribute to advancements in science, engineering, economics, finance, and the social sciences.
4. **Contextual Problem-Solving:** The program encourages students to apply mathematical tools to real-world problems. This contextual problem-solving approach enhances their ability to tackle complex challenges using mathematical modeling and algorithmic approaches.
5. **Adaptability:** Recognizing the evolving nature of mathematics, the program prepares students to adapt to new challenges and developments, particularly in the realm of Data Science.
6. **Powerful Analytical Methods:** By instilling a strong mathematical foundation, the program provides students with powerful methods of analysis. This analytical prowess enables them to approach problem-solving with depth and precision.
7. **Source of Mathematical Questions:** The interdisciplinary nature of the program serves as a rich source of mathematical questions, encouraging students to explore and contribute to the ongoing developments in the field.

Overall, the Constructor University Mathematics program seeks to empower students with a comprehensive understanding of mathematics and its broad applications. By fostering both theoretical insights and practical problem-solving skills, the program prepares students for diverse career paths and contributions to mathematical advancements in various domains.

Key facts

Place: Contructor University, Bremen, Germany
Tuition: 10.000€ per semester + 4.250€ on-campus room and board (shared room, shared bathroom, full meal plan, per semester)
Fall intake 2025: Apply by June 1 (global) and July 15 (for applicants who do not need a visa). Start last week of August (orientation week), first week of September (classes)
Scholarships: All students are considered for an academic achievement scholarship based on their school grade point average (GPA). EU students are eligible for a minimum guaranteed scholarship of 4.000€.
Duration: 3 years full-time
Financing options: Each admitted candidate will receive an individual financial package.

CONSTRUCTOR UNIVERSITY

Contact

Consultant
Phone: 0421 200 4200
E-Mail: study@constructor.university
Or use the **contact form >**

Career

Career perspectives

The Mathematics, Modeling, and Data Analytics program at Constructor University opens up diverse career pathways for graduates, leveraging their strong foundation in mathematics and proficiency in modeling and data analytics. The program equips students with valuable skills that are applicable across various industries. Here are some of the promising career options for graduates:

1. **Actuarial Analysts in Insurance Companies:** Graduates can pursue roles in insurance companies, employing their mathematical skills for actuarial analysis and other analytical positions.
2. **Quantitative Finance and Financial Engineering:** Opportunities abound in quantitative finance and financial engineering, where a deep understanding of mathematical concepts is essential for roles in risk assessment, investment strategies, and financial modeling.
3. **Operations Researchers:** Graduates can contribute to organizations, businesses, and government agencies by solving complex organizational and strategic planning problems, including scheduling, distribution, resource allocation, facilities design, and forecasting.
4. **Information Technology Positions:** Mathematicians are sought after in information technology roles, particularly in areas such as information security and cryptography, where mathematical knowledge is crucial.
5. **Statisticians:** Employment opportunities exist in large organizations, research and development divisions, academia, and industry, where statisticians analyze data from surveys and experiments.
6. **Education:** Graduates can pursue careers in education, ranging from secondary school teachers to university professors, contributing to the development of future generations.
7. **Engineering Mathematics:** Opportunities span various engineering disciplines, including aerospace engineering, petroleum engineering, and other fields where engineering mathematics plays a critical role.
8. **Academic Careers:** Mathematicians can embark on academic careers, conducting research at research institutes or universities, contributing to advancements in the field.

The Constructor University Career Services Center (CSC) and the Alumni Office play pivotal roles in supporting students' career development. The CSC provides high-quality training and coaching in essential aspects such as CV creation, cover letter formulation, interview preparation, effective presentation, business etiquette, and employer research. Additionally, the Alumni Office assists students in establishing a global network, facilitating connections in academia, industry, and beyond. The combined support of the CSC and the Alumni Office enhances students' readiness to identify and pursue rewarding career opportunities after completing their studies at Constructor University.

Application

Undergraduate application information

Hereyou can find out about deadlines, the application process and requirements to apply for your Bachelor's program at Constructor University.

Financing

Investing in education is a significant commitment to your future, and at Constructor University, we are dedicated to transforming it into an affordable reality for students worldwide. To achieve this, we provide personalized financing options tailored to help cover tuition fees. These packages may include various forms of financial assistance, such as scholarships, grants, and tuition deferrals. The deferred tuition fees are only repaid once you have successfully entered the job market, allowing you to concentrate fully on your studies without immediate financial burden. We firmly believe that a Constructor University education serves as an ideal foundation for your future career, and we are delighted to invest in your success.