

# Physics and Data Science

Constructor University Bremen  
Bachelor of Science



## Program

## Fundamental for our whole world

Physics, as a discipline, has played a pivotal role in shaping our understanding of the universe, providing the foundation for other natural sciences, various engineering disciplines, and modern technologies. Constructor University's Physics and Data Science major is a three-year BSc program designed to encompass the essential concepts of physics while integrating a strong focus on data science. The program aligns with guidelines set by the Konferenz der Fachbereiche der Physik (KFP) in Germany, the Institute of Physics (Britain) for BSc in Physics, and the topics required for the Graduate Record Examination (GRE) Physics test.

Key Features of the Physics and Data Science Major:

- 1. Comprehensive Physics Curriculum:** The program covers fundamental physics concepts, contributing to the understanding of space, time, and matter. It aligns with international standards set by reputable organizations.
- 2. Integration of Data Science:** The major incorporates a data science component, developed and taught in collaboration with the Computer Science faculty at Constructor University. This interdisciplinary approach equips students with skills relevant to modern technological challenges.
- 3. Continuous Optimization:** The program undergoes frequent optimization and fine-tuning based on feedback from students and instructors, as well as developments in research and teaching methodologies.
- 4. Relevance to Global Challenges:** Physics and Data Science are applied to address global challenges such as global warming, E-mobility, renewable energies, and emerging technologies like quantum computing.
- 5. International Network:** Students benefit from an international network of Physics alumni, fostering connections that can contribute to their academic and professional success.
- 6. Problem-Solving and Social Skills:** The program emphasizes the development of problem-solving and social skills, essential in an increasingly technology-driven society.
- 7. Success of Graduates:** The success of many graduates from Constructor University's Physics and Data Science program attests to the effectiveness of the education provided, preparing students for diverse roles in technology, research, and academia.

In summary, the Physics and Data Science major at Constructor University combines the foundational principles of physics with the contemporary application of data science. This interdisciplinary approach, coupled with ongoing program optimization and a focus on relevant global challenges, positions graduates for success in an evolving technological landscape. The program's commitment to fostering an international network and nurturing problem-solving and social skills further enhances the educational experience for students.

## Key facts

**Place:** Constructor University, Bremen, Germany

**Tuition:** 20.000€ per academic year (two semesters) +8.500€ on-campus room and board (single room, shared bathroom, full meal plan)

**Fall intake 2024:** 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

**CONSTRUCTOR**  
UNIVERSITY

## Contact

### Consultant

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Or use the [contact form](#) >

[Website](#) >

**Financing options:** Each admitted candidate will receive an individual financial package.

## Career

### Career Perspectives

A BSc in Physics and Data Science from Constructor University offers a versatile foundation for careers across various fields, ranging from basic research and engineering to life sciences, finance, and management. Graduates of this program possess a unique combination of scientific knowledge, data handling proficiency, problem-solving skills, and social skills, positioning them for success in our technology-driven society.

Key Aspects and Opportunities:

1. **Diverse Career Paths:** Graduates are equipped for careers in basic research, engineering, life sciences, finance, and management. The program's flexibility allows for a broad range of applications.
2. **Analytical Skills and Data Handling:** The program hones analytical skills, data handling capabilities, technical thinking, and an appreciation for complexity. Graduates are well-prepared for roles such as management consultants, patent attorneys, market analysts, and risk managers.
3. **Path to Graduate Studies:** Many BSc recipients pursue advanced degrees in Physics, Data Science, and other fields, especially for roles in research and development that often require postgraduate qualifications.
4. **International Network:** Constructor University provides an opportunity for students to build an international network, with peers hailing from over a hundred different nations. This global exposure enhances cultural competence and collaborative skills.
5. **Communication Skills:** The multidisciplinary nature of the undergraduate program fosters strong communication skills, crucial for physicists working in teams, interacting with non-physics professionals, and producing research papers and proposals.
6. **Career Support Services:** Constructor University's Career Services Center (CSC) offers comprehensive support, including training and coaching in CV creation, cover letter formulation, interview preparation, effective presenting, business etiquette, and employer research. This ensures that students are well-prepared to embark on successful careers.
7. **Alumni Network:** The Alumni Office facilitates the establishment of a long-lasting worldwide network. This network proves valuable when exploring job opportunities in academia, industry, and beyond.

In essence, the Constructor University BSc in Physics and Data Science not only imparts a strong academic foundation but also nurtures the practical and interpersonal skills necessary for thriving in diverse professional settings. Graduates emerge well-prepared for a multitude of career paths, supported by the university's commitment to providing holistic education and ongoing career development assistance.

## Application

### Undergraduate application information

**Here** you 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.

## Physik