



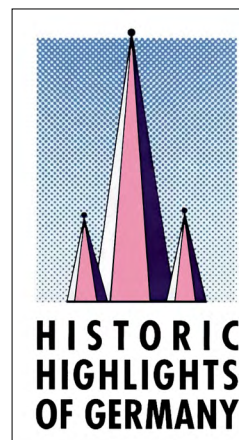
## Welcome to Osnabrück University!

Founded in 1974, Osnabrück University offers its 14.000 students an ideally sized education experience through numerous accredited undergraduate and graduate degree programs in the Humanities, Social Sciences, Natural Sciences, Business and Law. The university is committed to offering its students small course groups and lively interactions between professors and students – our International Summer Schools, for instance, seldom feature more than 20 students in class. Award-winning student services, a broad sports program, and an international atmosphere further enhance the academic experience at Osnabrück University.

Each July, Osnabrück University hosts students and professionals for its International Summer Schools. With a mixture of well-established programs and innovative courses, they represent a unique opportunity to experience student life at a renowned German university. As a participant, you will get to enjoy challenging academic classes, an exciting cultural program, introductory German language lessons as well as an innovative buddy program.

### Your Experience in Osnabrück

- Engage in Cutting-Edge Research
- Discover 800 years of German History
- Experience Well-Established Programs
- Appreciate Bustling Student Life
- Enjoy a Safe, Manageable and Affordable City
- Acquire a Unique Perspective through Local Buddies



Osnabrück is one of the 14 members of the »Historic Highlights of Germany« association

## Curious?

**For more information please visit our website or contact us:**

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## 2023 International Summer Schools in Germany

From Embedded Sensors to Data Science  
July 16 – August 5, 2023





## 2023 International Summer School on »From Embedded Sensors to Data Science« (ESDS), July 16 – August 5, 2023

This summer school provides an opportunity to experience the whole chain of data processing, from programming embedded sensor systems to subsequent data processing with state-of-the-art algorithms and technologies. Along the summer school, participants will apply machine learning algorithms to example applications, such as the identification of movement patterns based on smartwatch sensor data.

In the end, participants will be able to understand the typical pipeline from sensor data, over preprocessing, to machine learning.

Osnabrück University closely cooperates with local companies, some of which became global players by utilizing modern technologies. At the summer school, participants will gain an insight into two such companies: CLAAS is one of the market leaders in the production of agriculture machines and farming technology. The ROSEN group is a leader in automatic pipeline inspection systems, using smart sensors and data processing and to increase energy efficiency.

### Detailed Program

In the first week, participants will get an overview of the challenges in programming embedded systems. A modern smartwatch shall be programmed to collect physical data during the summer school.

In the second and third week, an overview of algorithms for preprocessing and data science will be given. These algorithms are then applied to the data collected along the summer school. The goal is to derive more advanced information from the data than related work. Parallel hardware architectures will be exploited to accelerate the processing.

The program is enriched with a cultural program and two excursions to industry partners, who share first-hand experience on applying data science for real-world applications.

### Where can I find more information?

For further information, including the application form, please visit our website.  
We look forward to hearing from you soon!

### Apply now!

Be part of Osnabrück University’s Summer School programs and take classes while experiencing Germany! We look forward to receiving your application until **April 15, 2023**.

### Eligibility

Advanced bachelor students, master students, and beginning PhD students, who have programming experience, are welcome to apply. Since all courses are taught in English, proficiency in English (B2 CEFR) is required. There is a selection procedure for applicants.

Participants must be 18 years or older.

### Scholarships available

A limited number of scholarships are available, funded by our industry partners. Those cover parts of the registration fees, depending on personal needs. You can apply for them by including a motivated request in the application.



### Program Fee

We aim to offer you a hassle-free experience. Except for your personal living expenses and travel costs, all essentials are included in the program fee. Specifically, the fee of **EUR 1,600** includes:

- All tuition (including all class materials)
- German language and culture classes
- Accommodation
- All cultural activities and excursions
- International Student ID
- Bus pass valid for public transportation in and around Osnabrück
- Free internet access through Osnabrück University’s networks
- Welcome package with information brochures, emergency information, and welcome gifts
- Pick-up service from the train station
- 24/7 assistance via cellphone

Please note that all students from Osnabrück University’s partners are eligible for a **discount of EUR 250!**

### Accommodation

Osnabrück University’s International Office will arrange for your accommodation in single rooms in a dormitory or carefully selected homestay.

### Cultural Program Highlights

As part of this summer school, you will

- be invited for welcome and farewell dinners
- explore Bremen’s maritime flair together with fellows from all over the world
- dive into Osnabrück’s medieval history during a guided tour by a nightwatchman
- gain knowledge of art and resistance during the Third Reich by visiting an exhibition in the Felix-Nussbaum-Haus
- search for the origins of Erich-Maria-Remarque’s »All quiet on the Western Front« in Osnabrück
- walk to Baltrum Island through the UNESCO world heritage site »Mudflats of the North Sea«
- gain first-hand experience about the nation’s history and current politics during an optional three-day excursion to Berlin (travel, public transportation, accommodation & breakfast, cultural program all included in the additional price of **EUR 300**).