

**Internship Opportunities
with the Robotics Lab
at Hochschule Bielefeld – University of Applied Sciences and Arts (HSBI), Ger-
many**

Open to: Advanced Bachelors students or Master's level students from the University of Alberta, MacEwan University, NAIT or Concordia University of Edmonton studying Electronics, Engineering, Applied Data Science

Application closing date: accepted on a rolling basis¹
Duration: from 3 months
Campus location: Bielefeld

HSBI works closely with industrial communities and businesses as well as social and cultural institutes in the region, with regards both to teaching and applied research. Its more than 10,000 students are enrolled in over 60 degree courses across three campuses in Bielefeld, Gütersloh and Minden. There are six faculties: Design and Art, Minden Campus (Architecture, Engineering, Computer Sciences), Engineering and Mathematics, Social Sciences, Business, and Health. HSBI has over 150 partnerships worldwide and is constantly expanding its international collaborations.

Students are welcome to apply for an internship of at least 3 and up to 6 months within the following research and development areas of the Robotics Lab: <https://www.hsbi.de/iium/studium/labore/laborbereich-physik-/labor-lasertechnik-und-optoelektronik/robotik> (Please note that the information on the website is only available in German. We recommend using an online translator.):

- Autonomous robots
- Industrial robotics
- Computation of complex sensor data
- Anomaly detection and prediction
- Digital image processing for robotics
- Application of Machine Learning within robotics
- Design, construction and programming of robot systems and robot components
- 3D printing

Working language will be English or German, if candidate knows German (but not necessarily required).

Requirements:

- Students should have an interest in programming robots and HW-components (such as cameras, motor controllers, micro-controllers etc.)
- Experiences in programming and documentation of SW
- Having experiences in programming with C, C++, Python or being able and willing to learn one of these programming languages
- Experiences with ROS would also be desirable
- Enjoyment of hands-on technical work, including building and assembling robotic systems
- Being able to work in teams

¹ Students who are eligible for the Youth Mobility Visa or who are an EU citizen should apply at least 3 months prior to the desired starting date. All other students should apply for an internship at least 5-6 months prior to the desired starting date.

Please submit the following documents in a single PDF file:

- Letter of motivation
(max. 1 page, please state the desired starting date, duration and whether the internship is mandatory)
- CV in tabular form
- A copy of your transcript of records

Funding opportunity:

A limited number of Erasmus+ grants is available offering financial support of €900–€1,150 per month and a €1,188 travel allowance. Typical duration is three months, but duration may vary depending on individual cases and the overall number of interns. Please note that funding is not guaranteed.

For further questions, please contact Felix Kraemer at felix.kraemer@hsbi.de.

To submit the application, please contact the International Office of your institution.

For more information, please visit:

HSBI: <https://www.hsbi.de/en>

International Office: <https://www.hsbi.de/en/international-office>

Alberta OWL Cooperation: <https://www.campus-owl.org/alberta.owl/>