

Program Overview

Target Group

- You are a national or international applicant
- You are passionate about a global engineering program combining mechanics, electronics, and computer systems.
- It is ideally suited for students who are excited about emerging technologies like robotics, automation, intelligent systems and digital transformation.
- You have a foundation in Mathematics and Physics and would like to study an interdisciplinary engineering program.

Degree

Bachelor of Engineering

Study Duration

7 semesters

Tuition / Semester Fees

Study fees of 1500€ per semester apply to non-EU students.

Beginning of Studies

Winter semester, beginning of October

Application Deadline

15th of March

Unique Features

- Close collaboration with local and international technology leading companies
- Supportive environment, medium class sizes and approachable lectures and staff
- Opportunities for international study and interdisciplinary projects
- Strong focus on digital tools and modern production methods
- Practical internship semester for real-world experience

Application/Admission



Step into the future with Aalen University of Applied Sciences!

With a lively student community and one of Germany's most attractive campuses, we offer more than 70 degree programs designed to enable students to become the specialists of tomorrow. Our hands-on approach bridges theory and practice, allowing you to apply what you learn in cutting-edge labs, workshops, or our Innovation Center as well as through many student-led initiatives. Through close cooperation with regional companies – including numerous world market leaders – students have the opportunity to network with local companies during their studies. Join us at Aalen University of Applied Sciences and unlock your potential for success!

Contact

Questions regarding visa, travel, bursaries

Contact our International Relations Office:
aaa@hs-aalen.de

Dean of Studies



Prof. Dr. Holger Schmidt

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Academic Program Manager



Piyali Bhattacharjee

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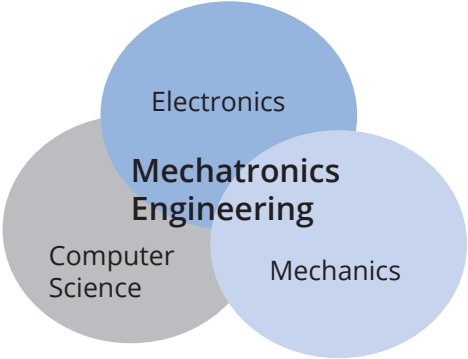


Mechatronics Engineering Bachelor of Engineering (B. Eng.)



www.hs-aalen.de/emc

Mechatronics Engineering



Mechatronic engineering is an interdisciplinary field that combines mechanical, electrical, computer, and control engineering to design and create smart systems and products. The key foundational subjects in this field include mathematics, electronics, computer science, mechanical, electrical and manufacturing engineering.

Our English-taught Mechatronics Engineering curriculum has been developed in collaboration with industry to ensure that students gain both theoretical knowledge and practical skills to be ready to excel in modern industry.

Overview

Semester		7	6	5	4	3	2	1	
		Main Studies	Main Studies	Practical Semester	Basic Studies	Basic Studies	Basic Studies	Basic Studies	
		Bachelor Thesis	Studium generale	Machine and deep learning	Control Engineering	Elective Module			
		Human-roboter-Interaction	Mechatronics Project	Elective Module	Elective Module	Elective Module	Elective Module		
		Practical Semester							
		System Dynamics	Product Design	Mechanical Design	Manufacturing Technology	Networks/ Distributed Systems	Process Automation & Control		
		Advanced Topics in Mathematics	Electrical drive Technology	Power Electronics	Sensors and Data Acquisition	Digital Technology	Embedded Control Systems		
		Mathematics 2	Electrical Engineering	Engineering Mechanics 2	German as a Foreign Language or Technical English 2	Computer Science 2	Physics		
		Mathematics 1	Materials Science	Engineering Mechanics 1	German as a Foreign Language or Technical English 1	Computer Science 1	3D-CAX		
		Further qualification opportunities ...							
		Master Systems Engineering							

What sets us apart



- Our course is structured to provide a comprehensive blend of theoretical knowledge and hands-on practical training including one practical semester, ensuring you are well-prepared for your future career.
- The curriculum emphasizes interactive learning, with expert guidance from Professors having an industrial background who ensure personalized support and guidance.
- You have access to lab facilities, including equipment e.g. actuators/sensors, system dynamics, CAD/CAM, production engineering, robotics, and medical technology and optical technologies. This helps you gain deep familiarity with industrial automation and its real-world applications.

After Graduation

As a graduate with a Bachelor of Engineering, you will be in demand at companies both national and international:

- Robotics and automation, plant and special machinery construction
- Climate-neutral production technology
- Energy, storage, charging, and environmental technology
- Packaging technology and filling systems
- Medical technology and the pharmaceutical industry
- Electromobility and automotive electronics
- IT, software development, and digital transformation
- Industrial design and simulation
- Smart production systems, machine learning, and AI

