Why choose Saarland University?

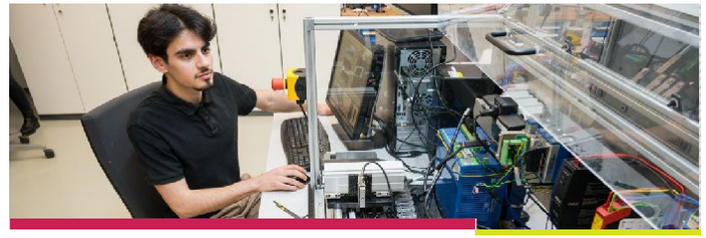
- Excellent student support throughout the programme
- Opportunities to finance your studies through student research or teaching assistantships
- Study abroad options, international partnerships and double-degree programmes
- Campus university in a woodland setting close to the city centre
- Saarbrücken – a vibrant student city close to France and Luxembourg
- Strong links to regional businesses and industry

And after graduating?

There are opportunities everywhere...

With a Master's degree in Systems Engineering, you'll be equipped to launch your career in a wide range of industries. From innovative local start-ups to globally active companies, there is no shortage of jobs for engineers with a broad skill set and cross-disciplinary expertise.
Industry 4.0, the energy transition, digitalization, and medical technology are just a few of the sectors looking for experts like you.

From idea ... to product ... to system



Doctorate in Systems Engineering

After completing your Master's, you'll also have the opportunity to join one of our research groups as a doctoral research student. Work at the forefront of innovation, collaborate across disciplines, and gain the skills and expertise to launch the next stage of your career.

Contact and further information:

Programme coordinator:
Carine Klap
Tel.: +49 681 302-4946
studium-se@uni-saarland.de

Get in touch with students already on the programme via the engineering department's student organization
ing@fs.uni-saarland.de

www.se.uni-saarland.de

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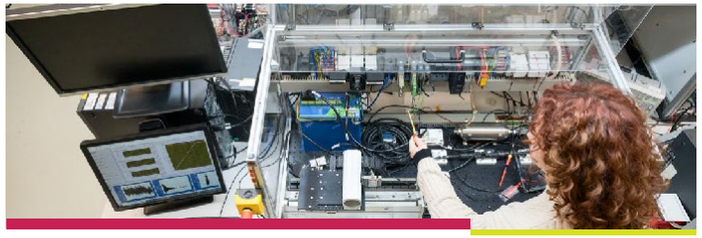
Engineering sciences at Saarland University

SYSTEMS ENGINEERING

UNIVERSITÄT DES SAARLANDES

Systems Engineering Master of Science



Master’s degree programme Systems Engineering

If you hold a Bachelor’s degree in systems engineering or a related field – such as mechanical engineering, electrical engineering, mechatronics or microsystems technology – and are looking to advance your skills in an innovative field, our M.Sc. programme in Systems Engineering is for you!

Key facts:

- Mode of study: full-time or part-time
- Standard period of study: 4 semesters
- Application deadline:
  - Winter semester: 1 September
  - Summer semester: 1 March
- Language of instruction: German/English
- ECTS credits: 120

Programme structure

The Master’s programme offers a range of specializations that are taught in German as well as ‘Information & Communication Systems’ and ‘Robotic Systems’, which are conducted entirely in English. Applicants must provide proof of the required language proficiency when they apply. The M.Sc. programme concludes with a six-month thesis project and an accompanying Master's seminar.

The future is in your hands!

Specializations

Production Systems

... covers modern manufacturing methods and production processes.

Systems Design

... focuses on efficient product development – from the initial concept to the market-ready product.

Sensor-Actuator Systems

... deals with complex systems that ‘feel’, ‘think’ and ‘act’, often making use of multifunctional materials.

Integrated systems

... great for generalists, with an emphasis on holistic systems thinking.

Sustainable engineering

... teaches the knowledge and skills needed to integrate technology with sustainability.

Information & Communication Systems

... builds on electrical engineering fundamentals to implement systems for signal processing and signal transmission.

Robotic Systems

... explores conventional industrial robotics as well as AI-driven robots and soft robotics to tackle emerging challenges.

Systems Engineering: Where ideas become impact

Key research areas

- Artificial muscles and intelligent soft robotic systems
- Patient monitoring and the simulation of bone fracture healing
- Lasers in materials processing
- Full-scale production of hydrogen technologies
- Smart production systems and (collaborative) industrial robotics
- Sustainable and intelligent energy systems
- Sustainable product development geared to the circular economy
- Multimodal sensor systems for sustainability and health
- Optimization of technical systems
- Control theory
- Efficient electric motors
- High-speed electronics
- Theory and numerical simulation of electromagnetic fields

Design tomorrow – by engineering it today!