

Create your self-driving Lego car and stand out in the final challenge!

# Innovative Technologies in Automotive Engineering



Check out our website!



## Expect these Contents

Explore the fundamentals of automotive engineering, learn about mobile propulsion, and understand modern automotive technologies. You will discuss alternative vehicle propulsion systems, examine automated driving, and work on a case study. You even get to meet a student formula team. They present their work on self-built race cars with alternative propulsion systems to you.

- Study modern automotive technologies and longitudinal dynamics
- Understand how driving resistances and brake systems work
- Consider automated driving in its legal, social and economic context
- See how a student racing team builds their cars
- Succeed in a case study by building a self-driving miniature car

## Summer School

📅 August 11 - August 24, 2025  
(2 weeks)

💰 3,990 €

📍 On-campus

👥 Supporting Program

🎓 RWTH Certificate with 3 ECTS  
(approx. 75 hours)

🏠 Accommodation included

## Discover future-oriented and sustainable mobility

You will learn the fundamentals of mobile propulsion systems, including energy conversion principles of combustion engines, fuel cells, and electric machines, as well as their operational efficiency and control variables. Additionally, you will explore lithium-ion battery aging, test plan design, and its impact on applications.

