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

June 22 - July 12, 2025 (3 weeks)

3,350 €

On-campus

Supporting Program

RWTH Certificate with 4 ECTS (approx. 100 hours)

Accommodation included

Discover future-oriented and sustainable mobility

If you are interested in seeing how future-oriented technologies are being implemented in practice, this course could be a great fit for you! In previous years, a highlight of the program was a visit to DAF Trucks N.V.'s headquarters, where they showcased their latest innovations and alternative propulsion systems.

RWTH International Academy gGmbH
www.academy.rwth-aachen.de/short-courses

INTERNATIONAL ACADEMY | RWTH AACHEN UNIVERSITY

Innovative Technologies in Automotive Engineering – Summer School*

TIME (CEST)	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08:00 - 08:30							
08:30 - 09:00							
09:00 - 09:30							
09:30 - 10:00		Pick up					
10:00 - 10:30							
10:30 - 11:00		Welcome Orientation	Internal combustion engine	Internal combustion engine		Visit of the Institute	
11:00 - 11:30							
11:30 - 12:00							
12:00 - 12:30							
12:30 - 13:00		Lunch Break			Company Visit	Lunch Break	
13:00 - 13:30							
13:30 - 14:00							
14:00 - 14:30	Individual arrival						Free time for excursions, sight-seeing and self-study
14:30 - 15:00		Get to know Aachen City Rally	Internal combustion engine	Internal combustion engine		Fuel cell	
15:00 - 15:30							
15:30 - 16:00							
16:00 - 16:30							
16:30 - 17:00							
17:00 - 17:30							
17:30 - 18:00							
18:00 - 18:30							
18:30 - 19:00							
19:00 - 19:30				Barbeque			
19:30 - 20:00							
20:00 - 20:30							
20:30 - 21:00							

Organizational and social event

Lecture, academic program

Academic supporting program (institute/company visit, scheduled self-study, group work, case study, project work)

***Exemplary Schedule** (Information presented is subject to change. Errors and omissions reserved)

Innovative Technologies in Automotive Engineering – Summer School*

TIME (CEST)	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08:00 - 08:30	Free time for excursions, sight-seeing and self-study			City Trip			Free time for excursions, sight-seeing and self-study
08:30 - 09:00							
09:00 - 09:30		Fuel cell	Team Sonnen-wagen – Student Association		Electrical machines	Electrical machines	
09:30 - 10:00							
10:00 - 10:30							
10:30 - 11:00							
11:00 - 11:30							
11:30 - 12:00							
12:00 - 12:30		Lunch Break			Lunch Break		
12:30 - 13:00							
13:00 - 13:30							
13:30 - 14:00		Group work	Fuel cell		Case Study: Fuel cell/ Electrical machines	Case Study: Fuel cell/ Electrical machines	
14:00 - 14:30							
14:30 - 15:00							
15:00 - 15:30			Group work				
15:30 - 16:00							
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20:00 - 20:30							
20:30 - 21:00							

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Innovative Technologies in Automotive Engineering – Summer School*

TIME (CEST)	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08:00 - 08:30	Free time for excursions, sight-seeing and self-study						Individual Departure
08:30 - 09:00							
09:00 - 09:30		Automotive Driving: Introduction	Automotive Driving: Case Study	Automotive Driving: Case Study	Automotive Driving: Case Study	Preparation for Exam	
09:30 - 10:00							
10:00 - 10:30							
10:30 - 11:00						Final Exam	
11:00 - 11:30							
11:30 - 12:00							
12:00 - 12:30		Lunch Break					
12:30 - 13:00							
13:00 - 13:30							
13:30 - 14:00		Automotive Driving: Case Study	Automotive Driving: Case Study	Hiking tour to the Border Tripoint	Final Presentation	Farewell Event	
14:00 - 14:30							
14:30 - 15:00							
15:00 - 15:30					Preparation for Final Exam		
15:30 - 16:00							
16:00 - 16:30							
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