Build a robot with your teammates and win our contest!

Robotics & Communication Networks

Expect these Contents

In this Short Course, you get to program a robot education cell in a team and make your robot compete! Master the main areas of robotics: robotic systems, kinematics and dynamics. Study the history of information theory, understand challenges and focus on practical examples of solving problems in modern communication technology. Plus, you learn about mechatronics and how to change or add an element in order to ease innovation processes.

- Programm a robot education cell and its sensors with Java

- Come up with innovative changes to a real-life mechatronic systems by considering its fragmentation and functions

- Learn about the components and applications of robotic systems from industrial robots to lightweight robots

- See application examples of information theory and communication technology like power control in wireless networks

Quick Facts

📅 **2 weeks**

📋 **On-campus or blended**

🎖 **RWTH Certificate with 3 ECTS (approx. 75 hours)**

💳 **Price upon request**

👥 **Supporting Program**

🏠 **Accommodation included**

All programs can be customized with regards to duration, teaching format and content.

Blended Learning

This Short Course consists of two different phases. In the first stage, which will take place online, over a period of one week a preparatory unit will provide you with a range of theoretical contents to equip you with the necessary knowledge for the next part. In the second phase, you will travel to Germany to experience the practical part on campus for 2 weeks. This includes various visits to institutes and practical case studies based on the theory.

INTERNATIONAL ACADEMY | RWTH AACHEN UNIVERSITY

Robotics, Communication Networks Innovation (SEU)
Summer School 2026

TIME (CEST)	26 July **Sunday**	27 July **Monday**	28 July **Tuesday**	29 July **Wednesday**	30 July **Thursday**	31 July **Friday**	1 August **Saturday**
08:00 - 08:30							
08:30 - 09:00							
09:00 - 09:30			**Case Study** Robo Scope	**Case Study** Robo Scope	**Case Study** Robo Scope	**Case Study** Robo Scope	
09:30 - 10:00							
10:00 - 10:30							
10:30 - 11:00		**Pick up**					
11:00 - 11:30		**Welcome Orientation**					
11:30 - 12:00							
12:00 - 12:30		**Lunch Break**					
12:30 - 13:00							
13:00 - 13:30							
13:30 - 14:00		**Get to know Aachen City Rally**	**Case Study** Robo Scope	**Case Study** Robo Scope	**Case Study** Robo Scope	**Self-study**	Free time for excusions, sight-seeing and self-study
14:00 - 14:30	Collective arrival of participants						
14:30 - 15:00							
15:00 - 15:30							
15:30 - 16:00							
16:00 - 16:30							
16:30 - 17:00							
17:00 - 17:30					**Barbeque**		
17:30 - 18:00							
18:00 - 18:30							
18:30 - 19:00							
19:00 - 19:30							
19:30 - 20:00							
20:00 - 20:30							
20:30 - 21:00							
21:00 - 21:30							
21:30 - 22:00							

INTERNATIONAL ACADEMY | RWTH AACHEN UNIVERSITY

Robotics, Communication Networks Innovation (SEU)
Summer School 2026

TIME (CEST)	2 August **Sunday**	3 August **Monday**	4 August **Tuesday**	5 August **Wednesday**	6 August **Thursday**	7 August **Friday**	8 August **Saturday**
08:00 - 08:30							
08:30 - 09:00							
09:00 - 09:30		Introduction to Robotics IGMR		City Trip to Maastricht (The Netherlands)	Information Theory and Design of Wireless Communication Systems INDA		
09:30 - 10:00			Direct Kinematics IGMR				
10:00 - 10:30							
10:30 - 11:00		Visit of IGMR Institute				Final Exam	
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	Free time for excusions, sight-seeing and self-study	Mobile Robotics IGMR	Information Theory and Design of Wireless Communication Systems INDA		Information Theory and Design of Wireless Communication Systems INDA	Farewell	Collective departure of participants
14:00 - 14:30							
14:30 - 15:00							
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							
19:30 - 20:00							
20:00 - 20:30							
20:30 - 21:00							
21:00 - 21:30							
21:30 - 22:00							

Week: 2
Version: 04.03.2026