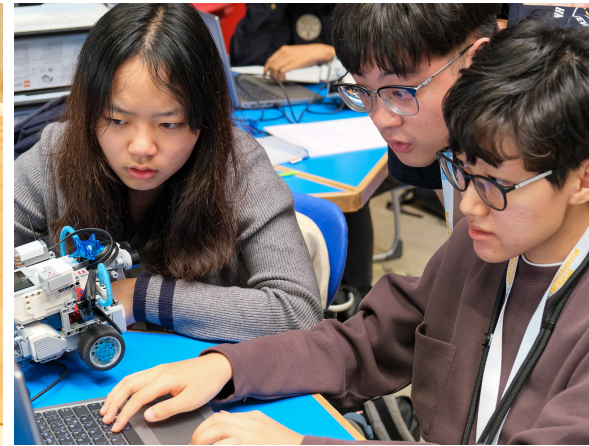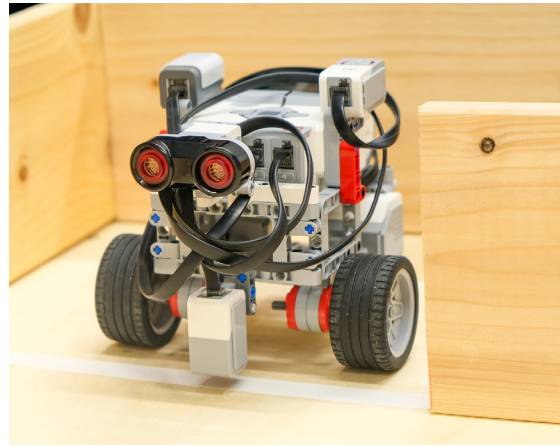Build a robot with your teammates and win our contest!

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.

Robotics, Communication Networks Innovation (SEU) - 2025

TIME (CEST)	03 August Sunday	04 August Monday	5 August Tuesday	6 August Wednesday	7 August Thursday	8 August Friday	9 August Saturday
08:00 - 08:30	Collective arrival of participants						Free time for excusions, sight-seeing and self-study
08:30 - 09:00							
09:00 - 09:30			Case Study Robo Scope	Case Study Robo Scope	Case Study Robo Scope	Project Work Robo Scope	
09:30 - 10:00							
10:00 - 10:30		Pick up & breakfast					
10:30 - 11:00						Case Study Robo Scope	
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	
14:00 - 14:30							
14:30 - 15:00							
15:00 - 15:30				Project Work Robo Scope			
15:30 - 16:00							
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20:30 - 21:00							
21:00 - 21:30							
21:30 - 22:00							

INTERNATIONAL ACADEMY | RWTH AACHEN UNIVERSITY

Robotics, Communication Networks Innovation (SEU) - 2025

TIME (CEST)	10 August **Sunday**	11 August **Monday**	12 August **Tuesday**	13 August **Wednesday**	14 August **Thursday**	15 August **Friday**	16 August **Saturday**
08:00 - 08:30							
08:30 - 09:00							
09:00 - 09:30		IGMR	IGMR	INDA	City Trip to Maastricht (The Netherlands)	Project Work Robo Scope	Individual departure of participants
09:30 - 10:00	Free time for excusions, sight-seeing and self-study						
10:00 - 10:30							
10:30 - 11:00						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		IGMR	INDA	INDA		Farewell	
14:00 - 14:30							
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