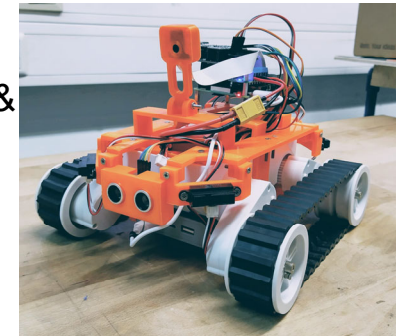


Stream D: Software for Robots

- Organizer: Uwe Jahn (FH Dortmund)
- Target Group: Embedded Systems, Computer Science, Information Technology & Electrical Engineering, Robotics => Master level or advanced Bachelor
- Short Description: Groups of max. 3 students will each work on a robotic demonstrator to implement self-defined use-cases applying newly learned features (e.g. ROS, CV, or navigation)
- Partners: **Smart Mechatronics** (www.smartmechatronics.de)
- Available Seats: 21
- Prerequisites: Advanced programming skills (C/ C++), Embedded & Control Systems
- Recognition of Credits:
 - **Elective** for Master Embedded Systems, Software for Robots (MOD-E13), practical part of the module (50%)
 - Optional for Master Digital Transformation: Mini Project in Scientific & Transversal Skills 1 & 2 or elective (via Ruhr Master School, see above)
 - Master Informatik: *Masterseminar* => 50% of the assignments (equals 3 ECTS), in combination with a homework about the workshop topic the module with 5 ECTS can be awarded.
 - Master Informationstechnik: *Projektarbeit 1 oder 2* => 50% of the assignments (equals 3 ECTS), in combination with a homework the module with 6 ECTS can be awarded (confirmation with Ingo Kunold).



Stream D: Software for Robots

Time	Monday	Tuesday	Wednesday	Thursday	Friday
09:00 - 11:00	Introduction to Robotics (Uwe Jahn) 1. Introduction to Robotics 2. Demonstrator Introduction 3. Architectures	ROS Talk by (Merlin Stampa) ROS Practice guided by (Merlin Stampa)	Navigation Talk by (Merlin Stampa)	Hacking...	Hacking... Optional: Final Talk: Our Implementation of the Demonstrator & other S4R Demonstrators (drones)
11:00 - 12:00	CONSENS Workshop (pt 1) by Smart Mechatronics (Guido Stollt/Felix Willich)	Computer Vision Talk (pt 1) by (Andreas Sutorma)	Navigation Practice guided by (Merlin Stampa)		
12:00 - 13:00	Lunch break	Lunch break	Lunch break	Lunch Break	Lunch Break
13:00 - 17:00	CONSENS Workshop (pt 2) by Smart Mechatronics (Guido Stollt/Felix Willich)	Computer Vision Talk (pt 2) by (Andreas Sutorma) Computer Vision Practice guided by (Andreas Sutorma)	Hacking...	Hacking...	Use-Case Presentation and Conclusion Optional: Student Homework Definition guided by (Uwe Jahn)
17:00 - 18:00	Work Environment Setup	Hacking...			

GEFÖRDERT VOM



¹ Meeting time: Monday at 8:30 a.m. Meeting point : lobby of A&O hostel

² Check slide 'Social events'

Contact person: M.Eng. Uwe Jahn