CURRICULUM B.ENG. ROBOTICS PART-TIME (72 MONTHS)

Semester	Modul	Kurscodes	Kursname	ECTS	
1. Semester 15 ECTS	Introduction to Robotics	DLBROIR01_E	Introduction to Robotics	5	E
	Introduction to Academic Work	DLBCSIAW01	Introduction to Academic Work	5	WB
	Mathematics: Linear Algebra	DLBDSMFLA01	Mathematics: Linear Algebra	5	E
2. Semester 15 ECTS	Scientific and technical fundamentals	DLBINGNAG01_E	Scientific and technical fundamentals	5	E
	Smart Factory I	DLBDSESF01	Smart Factory I	5	E
	Technical Drawing	DLBROTD01_E	Technical Drawing	5	E
3. Semester 15 ECTS	Production Engineering	DLBDSEAR01	Production Engineering	5	E
	Collaborative Work	DLBCSCW01	Collaborative Work	5	OA
	Mathematics: Analysis	DLBDSMFC01	Mathematics: Analysis	5	E
4. Semester 15 ECTS	Mechanics - Statics	DLBROMS01_E	Mechanics - Statics	5	E
	Electrical Engineering	DLBINGET01_E	Electrical Engineering	5	E
	Project: Design with CAD	DLBROPDCAD01_E	Project: Design with CAD	5	OPR
5. Semester 15 ECTS	Sensor Technology	DLBROST01_E	Sensor Technology	5	E
	Signals and Systems	DLBROSS01_E	Signals and Systems	5	E
	Requirements Engineering	IREN01_E	Requirements Engineering	5	E
6. Semester 15 ECTS	Mechanics - Kinematics and Dynamics	DLBROMKD01_E	Mechanics - Kinematics and Dynamics	5	E
	Intercultural and Ethical Decision-Making	DLBCSIDM01	Intercultural and Ethical Decision-Making	5	WACS
	Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	E
7. Semester 15 ECTS	Mechatronic Systems	DLBROMSY01_E	Mechatronic Systems	5	E
	Control Systems Engineering	DLBROCSE01_E	Control Systems Engineering	5	E
	Project: Modeling, Simulation and Control of Robots	DLBROPMSCR01_E	Project: Modeling, Simulation and Control of Robots	5	WAPR
8. Semester 15 ECTS	Introduction to the Internet of Things	DLBINGEIT01_E	Introduction to the Internet of Things	5	E
	Embedded Systems	DLBROES01_E	Embedded Systems	5	E
	Project: Robotics	DLBROPR01_E	Project: Robotics	5	OPR
9. Semester 15 ECTS	Seminar: Human-Robot Interaction	DLBROSHRI01_E	Seminar: Human-Robot Interaction	5	WARE
	Project: Applied Robotics with Robotic Platforms	DLBROPARRP01_E	Project: Applied Robotics with Robotic Platforms	5	OPR
	Seminar: Robots and Society	DLBROSRS01_E	Seminar: Robots and Society	5	WARE
10. Semester 15 ECTS	Safety of Industrial Plants and Machines	DLBROSIPM01_E	Safety of Industrial Plants and Machines	5	E
	ELECTIVE I		e.g. Industrial Robotics and Automation	10	
11. Semester 20 ECTS	ELECTIVE II		e.g. Service Robotics	10	
	ELECTIVE III		e.g. Introduction to Cognitive Robotics	10	
12. Semester 10 ECTS	Bachelorarbeit		Bachelor Thesis Colloquium	9 1	WABT PC
Total 180 ECTS	GOAL: In order to stay on schedule, you should finish modules of about 15 Credit Points per semester!				

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* All the modules that have been unlocked for the Online Exams can be found in CARE.

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E	Exam (monthly at study centres or anytime via the online exam*)
OA	Oral Assignment
OPR	Oral Project Report
P	Portfolio
PC	Presentation: Colloquium
WB	Workbook
WABT	Written Assessment: Bachelor Thesis
WACS	Written Assessment: Case Study
WAPR	Written Assessment: Project Report
WARE	Written Assessment: Research Essay
WAWA	Written Assessment: Written Assignment

** ELECTIVES
- Choose three modules

Elective Module I:
- Introduction to Cognitive Robotics
- Industrial Robotics and Automation
- Service Robotics

Elective Module II + III:
- AI Specialist
- Applied Sales
- Autonomous Driving
- Data Science and Deep Learning
- Foreign Language
- Industrial Robotics and Automation
- International Marketing and Branding
- Introduction to Cognitive Robotics
- IT project and architecture management
- IT Security
- Mobile Software Engineering
- Programming of Robotic Systems
- Python for Software Engineering
- Service Robotics
- Supply Chain Management

NOTE:
Every elective module can only be chosen once.