

## Robotics and Intelligent Systems (180 CP)

		CHOICE / CORE / CAREER <span style="float: right;">3 x 45 = 135 CP</span>				CONSTRUCTOR Track <span style="float: right;">45 CP</span>	
3 <sup>rd</sup> Year CAREER	Bachelor Thesis / Seminar (research or industry) <span style="float: right;">m, 15 CP</span>			Summer Internship / Start-Up (after 2 <sup>nd</sup> year) <span style="float: right;">m, 15 CP</span>		Argumentation, Data Visualization and Communication** <span style="float: right;">m, 5 CP</span>	Agency, Leadership & Accountability OR Community Impact Project <span style="float: right;">me, 5 CP</span>
	Specialization I <span style="float: right;">me, 5 CP</span>	Specialization II <span style="float: right;">me, 5 CP</span>	Specialization III <span style="float: right;">me, 5 CP</span>				Linear Model and Matrices OR Complex Problem Solving <span style="float: right;">me, 5 CP</span>
2 <sup>nd</sup> Year CORE	Artificial Intelligence <span style="float: right;">m, 5 CP</span>	RIS Lab <span style="float: right;">me, 5 CP</span>	Automation <span style="float: right;">me, 5 CP</span>	Machine Learning <span style="float: right;">m, 5 CP</span>	RIS Project <span style="float: right;">m, 5 CP</span>	Numerical Methods OR Discrete Mathematics <span style="float: right;">me, 5 CP</span>	Causation / Correlation** <span style="float: right;">m, 2.5 CP</span>
	Robotics <span style="float: right;">m, 5 CP</span>		Embedded Systems <span style="float: right;">me, 5 CP</span>	Control Systems <span style="float: right;">me, 5 CP</span>	Computer Vision <span style="float: right;">me, 5 CP</span>	Probability and Random Processes <span style="float: right;">m, 5 CP</span>	Logic** <span style="float: right;">m, 2.5 CP</span>
1 <sup>st</sup> Year CHOICE	Mathematical and Physical Foundations of Robotics II <span style="float: right;">m, 7.5 CP</span>		Algorithms and Data Structures <span style="float: right;">m, 7.5 CP</span>	Digital Systems and Computer Architecture <span style="float: right;">m, 7.5 CP</span>		Elements of Calculus <span style="float: right;">me, 5 CP</span>	German / Humanities <span style="float: right;">me, 2.5 CP</span>
	Mathematical and Physical Foundations of Robotics I <span style="float: right;">m, 7.5 CP</span>		General Electrical Engineering I <span style="float: right;">m, 7.5 CP</span>	Programming in C and C++ <span style="float: right;">m, 7.5 CP</span>		Elements of Linear Algebra <span style="float: right;">me, 5 CP</span>	German / Humanities <span style="float: right;">me, 2.5 CP</span>

Minor Option in RIS (30 CP)

CP: Credit Points

m: mandatory

me: mandatory elective

Study abroad Option in 5<sup>th</sup> Semester (22.5 CP)

\*\*Different module perspectives available