

# Robotics and Intelligent Systems (RIS) BSc

Matriculation Fall 2020

Program-Specific Modules							Jacobs Track Modules (General Education)						
	Type	Assessment	Period	Status <sup>1</sup>	Sem.	CP		Type	Assessment	Period	Status <sup>1</sup>	Sem.	CP
<b>Year 1 - CHOICE</b>							<b>45</b>						
<i>Take the mandatory CHOICE modules listed below</i>													
<b>CH-220 Module: Introduction to Robotics and Intelligent Systems (default minor)</b>							<b>15</b>						
CH-220-A	Lecture	Written examination	Examination period		m	2	7.5	<b>Unit: Methods / Skills</b>					
CH-220-B	Lab	Written examination	Examination period					<b>10</b>					
<b>CH-231 Module: Algorithms and Data Structures</b>							<b>15</b>						
CH-231-A	Lecture	Written examination	Examination period		m	2	7.5	<b>Module: Calculus and Elements of Linear Algebra I</b>					
<b>CH-230 Module: Programming in C and C++ (default minor)</b>							<b>15</b>						
CH-230-A	Lecture	Written examination	Examination period		m	1	7.5	<b>10</b>					
CH-230-B	Tutorial	Practical assignments	During the semester					<b>Module: Calculus and Elements of Linear Algebra II</b>					
<b>Unit: CHOICE (own selection)</b>							<b>5</b>						
<i>Take three further CHOICE modules from those offered for all other study programs.<sup>2</sup></i>							<b>1/2</b>						
<b>Year 2 - CORE</b>							<b>45</b>						
<i>Take all CORE modules listed below or replace mandatory elective ("me") modules with suitable CORE modules from other study program</i>													
<b>CO-540 Module: Robotics</b>							<b>15</b>						
CO-540-A	Lecture	Written examination	Examination period		m	3	5	<b>Unit: Methods / Skills</b>					
CO-541	Lecture	Written examination	Examination period		m	4	5	<b>10</b>					
CO-542	Lab	Lab Report	During the semester		me	3-4	5	<b>Module: Probability and Random Processes</b>					
CO-542-A	Lab	Lab Report	During the semester					<b>5</b>					
CO-542-B	Lab	Lab Report	During the semester					<b>Module: Numerical Methods<sup>3</sup></b>					
<b>Unit: Automation and Control</b>							<b>15</b>						
CO-543	Lecture	Written examination	Examination period		m	4	5	<b>5</b>					
CO-544	Lecture/Lab	Project	During the semester		me	3	5	<b>Module: Discrete Mathematics</b>					
CO-545	Lecture	Written examination	Examination period		m	4	5	<b>5</b>					
CO-545-A	Lecture	Written examination	Examination period					<b>Module: Language 1</b>					
<b>Unit: Intelligent Systems</b>							<b>15</b>						
CO-546	Lecture/Lab	Written examination	Examination period		m	3	5	<b>5</b>					
CO-546-A	Lecture/Lab	Written examination	Examination period					<b>Module: Language 2</b>					
CO-547	Lecture	Written examination	Examination period		m	4	5	<b>5</b>					
CO-547-A	Lecture	Written examination	Examination period					<b>Module: Language 3</b>					
CO-548	Project/Lab	Report / Presentation	During the semester		m	4	5	<b>5</b>					
CO-548-A	Project/Lab	Report / Presentation	During the semester					<b>Module: Language 4</b>					
<b>Year 3 - CAREER</b>							<b>45</b>						
<b>CA-INT-900 Module: Summer Internship</b>							<b>15</b>						
CA-INT-900-0	Internship	Report/Business Plan and	During the 5 <sup>th</sup> Semester		m	4/5	15	<b>Unit: Big Questions</b>					
CA-RIS-800	Seminar	Thesis and Presentation	During the semester		m	6	15	<b>10</b>					
CA-RIS-800-T	Seminar	Thesis and Presentation	During the semester					<b>Module: Big Questions</b>					
CA-RIS-800-S	Seminar	Thesis and Presentation	During the semester					<b>5/6</b>					
<b>Unit: Specialization RIS</b>							<b>15</b>						
<i>Take a total of 15 CP of specialization modules</i>													
CA-S-RIS-801	Lecture/Lab	Oral examination	Examination period		me	6	5	<b>Take a total of 10 CP of Big Questions modules with each 2.5 or 5 CP</b>					
CS-S-RIS-802	Lecture	Written examination	Examination period		me	5	5	<b>5</b>					
CS-S-RIS-803	Lecture	Written examination	Examination period		me	6	5	<b>Unit: Community Impact Project</b>					
CA-S-xxx	Various	Various	Various		me	5/6	5	<b>5</b>					
<b>Total CP</b>							<b>180</b>						

<sup>1</sup> Status (m = mandatory, me = mandatory elective)

<sup>2</sup> For a full listing of all CHOICE / CORE / CAREER / Jacobs Track modules please consult the CampusNet online catalogue and /or the study program handbooks.

<sup>3</sup> For details please see the program handbook