

**Title:** Bachelor of Science (plus vocational training degree)

**Study duration:** 4 years

**Credit points:** 180 CP

Year of study	Module name	Place of study	Examination	Workload (Presence / Self study)	Credit points	
Year 1	Introduction to computer science (incl. conceptual modeling)	University	Portfolio	60 / 90	6	42
	Basics of software development	Vocational school	Portfolio	80 / 70	6	
	Mathematics I: Logic and proof methods	University	Exam	60 / 90	6	
	Basics of programming	University	Portfolio	50 / 100	6	
	Computer networks	Vocational school	Portfolio	80 / 70	6	
	Validation of practical experience I	Company	Practice validation work (ungraded) Presentation (ungraded) Practical report (ungraded)	50 / 250	12	
		University				
Year 2	Automata and formal languages	University	Exam	50 / 100	6	42
	Databases and information analysis	Vocational school	Portfolio	80 / 70	6	
	Mathematics II: Linear algebra and analysis	University	Exam	60 / 90	6	
	Algorithms and data structures	University	Exam	50 / 100	6	
	Software engineering I	Vocational school	Portfolio	80 / 70	6	
	Validation of practical experience II	Company	Practice validation work (70 %) Presentation (30 %) Practical report (ungraded)	50 / 250	12	
		University				

Year of study	Module name	Place of study	Examination	Workload (Presence / Self study)	Credit points	
Year 3	Computer organization, operating systems and virtualization	University	Combined module examination: Term paper (50 %) Presentation (50 %)	50 / 100	6	42
	Smart systems	Vocational school	Portfolio	80 / 70	6	
	Data protection and legal principles	University	Oral examination	50 / 100	6	
	Compulsory elective: Current Topics in Computer Science (AE, DP, SI, DV)	University	Project report	50 / 100	6	
	Software engineering II (AE+DP) or Computer networks II (SI+DV)	Vocational school	Portfolio	80 / 70	6	
	Validation of practical experience III	Company	Practice validation work (100 %) Presentation (ungraded) Practical report (ungraded)	50 / 250	12	
University						
Year 4	IT security	University	Project report	50 / 100	6	54
	Capstone project	University	Project report	50 / 100	6	
	Mathematics III: Probability theory and statistics	University	Exam	50 / 100	6	
	Machine learning	University	Combined module examination: Term paper (50 %) Presentation (50 %)	50 / 100	6	
	General elective subject	University	Depending on the module selected	50 / 100	6	
	Validation of practical experience IV	Company	Presentation	50 / 250	12	
		University				
	Bachelor thesis	Company	BA thesis	0 / 300	12	
University						