

1st Semester

Code	Course Name	Credits	ECTS
UFND 5500	Research Methods and Ethics	3 - 0 - 3	8
COMP 5600	Philosophy of Computing and Information	3 - 0 - 3	8
COMP xxxx	Elective Course	3 - 0 - 3	8
COMP xxxx	Elective Course	3 - 0 - 3	8
Total Credits			32

2nd Semester

Code	Course Name	Credits	ECTS
COMP xxxx	Elective Course	3 - 0 - 3	8
XXXX xxxx	Elective Course	3 - 0 - 3	8
XXXX xxxx	Elective Course	3 - 0 - 3	8
COMP 5690	Seminar	0	4
Total Credits			28

3rd Semester

Code	Course Name	Credits	ECTS
COMP 5699	Thesis	0	30
Total Credits			30

4th Semester

Code	Course Name	Credits	ECTS
COMP 5699	Thesis	0	30
Total Credits			30

5th Semester

Code	Course Name	Credits	ECTS
COMP 5699	Thesis	0	30
Total Credits			30

6th Semester

Code	Course Name	Credits	ECTS
COMP 5699	Thesis	0	30
Total Credits			30

7th Semester

Code	Course Name	Credits	ECTS
COMP 5699	Thesis	0	30
Total Credits			30

8th Semester

Code	Course Name	Credits	ECTS
COMP 5699	Thesis	0	30
Total Credits			30

Compulsory Courses

Code	Course Name	Credits	ECTS
COMP 5600	Philosophy of Computing and Information	3 - 0 - 3	8
UFND 5500	Research Methods and Ethics	3 - 0 - 3	8
COMP 5690	Seminar	0	4
COMP 5699	Thesis	0	30

Elective Courses

Code	Course Name	Credits	ECTS
COMP 5501	Advanced Database Systems	3 - 0 - 3	8
COMP 5502	Algorithm Analysis and Complexity Theory	3 - 0 - 3	8
COMP 5503	Spatial Semantic Web	3 - 0 - 3	8
COMP 5504	Cyber Security	3 - 0 - 3	8
COMP 5505	Advanced Computer Networks	3 - 0 - 3	8

COMP 5506	Advanced Information Theory	3 - 0 - 3	8
COMP 5508	Compiler Design	3 - 0 - 3	8
COMP 5509	Programming Paradigms	3 - 0 - 3	8
COMP 5518	Biometrics	3 - 0 - 3	8
COMP 5519	Advanced Operating Systems	3 - 0 - 3	8
COMP 5525	Natural Language Processing	3 - 0 - 3	8
COMP 5526	Evolutionary Computation	3 - 0 - 3	8
COMP 5528	Ontology Engineering	3 - 0 - 3	8
COMP 5529	Advanced Artificial Intelligence	3 - 0 - 3	8
COMP 5532	Logic Programming	3 - 0 - 3	8
COMP 5533	Data Mining	3 - 0 - 3	8
COMP 5534	Wireless Sensor and Ad-hoc Networks	3 - 0 - 3	8
COMP 5540	Spatial Decision Support Systems	3 - 0 - 3	8
COMP 5542	Data Integration	3 - 0 - 3	8
COMP 5543	Metaheuristic Optimization Algorithms	3 - 0 - 3	8
COMP 5544	Formal Methods		
COMP 5548	Advanced Network Security	3 - 0 - 3	8
COMP 5550	Computer Algebra	3 - 0 - 3	8
COMP 5551	Probability and Stochastic Processes for Engineers	3 - 0 - 3	8
COMP 5552	Computational Number Theory	3 - 0 - 3	8
COMP 5554	Cryptography	3 - 0 - 3	8
COMP 5556	Cyber Warfare	3 - 0 - 3	8
COMP 5570	Neural Networks for Biomedical Applications	3 - 0 - 3	8
COMP 5581	Computational Relativity I: Special Theory of Relativity	3 - 0 - 3	8
COMP 5584	Physically Based Modeling And Simulation	3 - 0 - 3	8
COMP 5585	Internet of Things	3 - 0 - 3	8
COMP 5602	Advanced Theory of Computation	3 - 0 - 3	8
COMP 5603	Advanced Algorithm Design	3 - 0 - 3	8
COMP 5611	Parallel Computer Architectures	3 - 0 - 3	8
COMP 5617	Advanced Parallel Programming	3 - 0 - 3	8
COMP 5627	Advanced Topics in Computer Graphics	3 - 0 - 3	8
COMP 5634	Functional Programming	3 - 0 - 3	8
COMP 5635	Computational Algebraic Number Theory	3 - 0 - 3	8
COMP 5638	Computer Forensics	3 - 0 - 3	8
COMP 5648	Machine Learning	3 - 0 - 3	8
COMP 5658	Modern Heuristics	3 - 0 - 3	8
COMP 5670	Advanced Topics in Computer Engineering	3 - 0 - 3	8
MATH 5539	Probability Theory and Stochastic Process	3 - 0 - 3	8
MATH 5540	Introductory Statistical Analysis & Data Mining	3 - 0 - 3	8

MATH 5541	Advanced Linear Algebra with Applications	3 - 0 - 3	8
MATH 5542	Optimization	3 - 0 - 3	8
MATH 5543	Numerical Methods	3 - 0 - 3	8
COMP 5691	Guided Research	0 - 0 - 0	4
COMP 5596	Emerging Topics in Computer Engineering	3 - 0 - 3	8
COMP 5500	Erasmus Student Placement	0	8