

# Informatics

Doctoral, academic studies

3 years, 180 ECTS points

Year	Semester	Code	Course	Contact hours	ECTS
1	W		Elective course 1	2+0+0	5
1	W		Elective course 2	2+0+0	5
1	W	ID211	Seminar 1	1+15+0	20
1	S		Elective course 3	2+0+0	5
1	S		Elective course 4	2+0+0	5
1	S	ID212	Seminar 2	1+15+0	20
2	W		Elective course 5	2+0+0	5
2	W		Elective course 6	2+0+0	5
2	W	ID213	Seminar 3	1+15+0	20
2	S		Elective course 7	2+0+0	5
2	S		Elective course 8	2+0+0	5
2	S	ID214	Seminar 4	1+15+0	20
3		ID311	Doctoral dissertation		60

Elective courses 1 – 8:

	Code	Course
Winter semester	ID011	System modeling
	ID012	Research methods
	ID021	Discrete mathematics
	ID022	Transitional systems
	ID101	Software evolution
	ID103	Component based development
	ID104	Software engineering in critical systems
	ID110	Computing network security
	ID111	Combinatorial and positional games
	ID112	Geometrical algorithms
	ID115	Operational research
	ID120	Aggregation functions
Summer semester	ID013	System development
	ID014	Advanced topics in software engineering
	ID023	Theory of algorithms
	ID102	Software validation and testing
	ID105	Databases
	ID107	Programming paradigms
	ID108	E-business and modeling
	ID109	Artificial intelligence
	ID113	Discrete probability structures
	ID114	Algebraic and co-algebraic models of computing processes
ID121	Triangular forms	