

## Master of Science in Software Engineering

Course Group	ECTS	Course Code	Course name	Course type	ECTS	Pre-requisite
Required	18	SE501	Software Modelling and Analysis	required	6	
		CS504	Advanced Software Engineering	required	6	
		CS508	Database Management Systems	required	6	
Elective*	18	SE502	Electro-energy Software Engineering	elective	6	
		SE504	Fuzzy Logics and Neural Networks	elective	6	
		SE505	Intelligent CASE Technologies	elective	6	
		SE506	Object-oriented Programming	elective	6	
		SE507	Advanced Computer Architectures	elective	6	
		SE508	Software Automatics	elective	6	
		SE509	Software Engineering Standards	elective	6	
		SE510	Cost-Benefit Analysis IT	elective	6	
CS506	Advanced Operating Systems	elective	6			
Scientific Activity**	12			required	12	
Master Thesis	12		Master thesis	required	12	
<b>total</b>	<b>60</b>					
<b>Graduate Studies: summary of conditions for successful completion of studies</b>						
<b>Category</b>	<b>ECTS</b>	<b>Note:</b>				
Courses	36	The one-year study requires the completion of six courses, each valued with 6 ETCS, out of which 3 courses are mandatory and 3 elective. At least two elective courses have to be chosen from the pool of the Program Elective Courses while additional one course can be chosen from the Area Elective Courses. The Area Elective courses are all courses offered at FENS faculty with level 400 and higher. Scientific activity brings 12 ECTS credits and Master thesis brings 12 ECTS credits. For the successful completion of the master study, 60 ECTS is required.				
Scientific activity and Master Thesis	24	*Faculty Elective courses of level 500 and 600 can replace program elective with academic advisor's approval.  **Scientific activity assumes a research work that results in a publication such as a journal article published in a peer review journal (worth 12 ECTS) approved by the mentor, or paper at a conference proceedings (worth 6 ECTS) approved by the mentor and Program Council, or reports in a case of at least one month research visit at other research institution, or a project implemented in the industry. If scientific activity is chosen other than journal article/conference paper as defined above, then the mentor and Program Council value and assign credits to the submitted scientific activity.				
<b>Total</b>	<b>60</b>					