

SYLLABUS

STUDY YEAR 2018/2019

Master Programme in Computer Science and Engineering - specialization in Distributed Cloud Systems

**Enrollment semester Autumn
2017**

DATE

2016-10-13

REFERENCE NO.

12-15

DECISION MAKER

Director of Education and research

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Syllabus Study year 2018/2019	Master Programme in Computer Science and Engineering - specialization in Distributed Cloud	Autumn 2017	2016-10-13	12-15	2 (4)

Programme content and structure

The requirements for a Masters degree in Computer Science and Engineering, specialization in Distributed Cloud Systems (120 ECTS), comprise of: a Master thesis of 30 ECTS, two smaller projects of 15 ECTS each, and 60 ECTS of Computer Science and Engineering coursework at the advanced level.

The program's goal is to provide in depth knowledge in Computer Science and Engineering with specialization in distributed cloud systems. Application areas for these techniques can, e.g. be backend game programming, cloud based computation, pervasive computing/Internet of Things and scalable/distributed systems. The coursework primarily consists of advanced courses related to key research areas. The first year is mainly based on course work combined with a specialization project carried out during the second semester. The second year is dominated by a development project as well as a larger thesis work, complemented with two taught courses. The projects and thesis work are often carried out in cooperation with hi-tech ICT industry.

Teaching may be conducted from and towards several campus locations. For admission to the degree project course entry requirements specified in the Course Syllabus must be completed. Information regarding the application- and admission process is given and ensured by the responsible department.

Swedish for beginners is offered to overseas students. The course is not included in the degree, and is read in addition to the obligatory courses

Credits

120 credits

Degree

- Degree of Master of Science (120 credits) - Major; Computer Science and Engineering with specialisation Distributed Cloud Systems

Entry requirements

Bachelor's degree of at least 180 ECTS in Computer Science, Computer Engineering, Electrical/ Electronics Engineering or Information Technology or a closely related area. At least 22,5 ECTS mathematics and 15 ECTS programming at the university level has to be achieved. Knowledge of computer networking and operating systems is recommended.

Documented skills in English language.

Selection

The selection is based on 30-285 credits

Compulsory courses

Compulsory courses 120 credits

Course code	Course	Cr	Level	Comment
D7001D	Network programming and distributed applications	7.5	Master's level	
D7002D	Mobile networks and protocols	7.5	Master's level	
D7024E	Mobile and distributed computing systems	7.5	Master's level	
D7030E	Advanced wireless networks	7.5	Master's level	
D7032E	Software engineering	7.5	Master's level	
M7019E	Mobile applications	7.5	Master's level	
M7023E	Internet of Things	7.5	Master's level	
M7024E	Cloud services	7.5	Master's level	
M7025E	Project in distributed cloud systems	15	Master's level	
M7026E	Project in distributed cloud systems 2	15	Master's level	
X7003E	Master Thesis in Computer Science and Engineering, MSc in Technology	30	Master's level	

Course offered outside the obligatory courses - not compulsory - For non Scandinavian students

Course code	Course	Cr	Level	Comment
S0046P	Swedish for International Students 1	3	Bachelor's level	Selectable

Study schedule

Year of study 1 Enrollment semester Autumn 2017, Is offered in 2017/2018

Study-period	Course code	Course	Cr	Comment
1	D7001D	Network programming and distributed applications	7.5	
1	D7032E	Software engineering	7.5	
1	S0046P	Swedish for International Students 1	3	Selectable
2	M7023E	Internet of Things	7.5	
2	M7024E	Cloud services	7.5	
3	D7002D	Mobile networks and protocols	7.5	
3-4	M7025E	Project in distributed cloud systems	15	
4	M7019E	Mobile applications	7.5	

Year of study 2 Enrollment semester Autumn 2017, Is offered in 2018/2019

Study-period	Course code	Course	Cr	Comment
1	D7024E	Mobile and distributed computing systems	7.5	
1	D7030E	Advanced wireless networks	7.5	
2	M7026E	Project in distributed cloud systems 2	15	
3-4	X7003E	Master Thesis in Computer Science and Engineering, MSc in Technology	30	Entry requirements