Cloud services 7.5 credits
M7024E

Molntjänster

Course syllabus admitted: Autumn 2023 Sp 1 - Present

DECISION DATE
2023-02-15

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Cloud services 7.5 credits M7024E

Molntjänster

Second cycle, M7024E

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Mobila system	Computer Technology

Main field of study

Computer Science and Engineering

Entry requirements

Knowledge in network programming corresponding to D7001D Network programming and distributed applications 7.5 credits.

Good knowledge in English equivalent to English 6.

Selection

The selection is based on 30-285 credits

Course Aim

After the course, the student

1.   will have acquired a scientific foundation in the area of Cloud services with proven experience of programming using relevant technologies and devices;
2.   will have the capacity to work in a team and collaborate;
3.   has learned to create, analyze and critically evaluate different technical solutions and gain insight into research and development by understanding the limitations and new possibilities that arise with it;
4.   has learned how to plan and use appropriate methods to undertake advanced programming tasks within predetermined parameters and show the ability to identify knowledge gaps and bridging these gaps by gaining new knowledge;
5.   has gained the ability to understand, interpret and present scientific publications in the area.

Contents

The Cloud Services course will focus on the following topics: Cloud services and applications, Cloud platforms, and Cloud orchestration. Cloud services and applications covers several application domains supported using Cloud computing. Further, it will focus on building services (e.g., Web services) for application deployment on Clouds. The Cloud platform topic will cover Big Data platforms and building applications using these platforms. Finally, this course will discuss Cloud orchestration services for efficient application deployment on Clouds.

Realization

Each course occasion´s language and form is stated and appear on the course page on Luleå University of Technology's website.

The education consists of lectures, programming and theoretical labs that will become part of project work that leads to a seminar presentation. This will involve deadlines and require written and verbal presentations. There will also be a written exam at the end of the course.

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Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Examination consists of a final written exam, mandatory programming assignments and presentation of theoretical assignments.

The aims of the course is examined as:

1. Final written exam, individual lab assignments and seminar;

2. Lab assignments carried out in groups;

3. Final written exam and lab assignments;

4. Lab assignments.

5. Seminar.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Laboratory-/project work	U G#	3	Mandatory	A16	
0002	Assignment report/seminar	U G#	1.5	Mandatory	A16	
0004	Take-home examination	G U 3 4 5	3	Mandatory	A17	

Last revised

by Robert Brännström 2023-02-15

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Syllabus established

by Jonny Johansson, HUL SRT 2016-02-15

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