

SYLLABUS

Service architecture 7.5 credits I0017N

Tjänstearkitektur

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2022-02-11**

Service architecture 7.5 credits I0017N

Tjänstarkitektur

First cycle, I0017N

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG *	Informatik	Informatics/Computer and Systems Sciences

Main field of study

Social Informatics

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and The course requires knowledge and abilities equal to the goals of the courses I0016N - Introduction to informatics and service design, I0006N - Design of IT, and I0001N - Organisational development through IT, or corresponding.

Selection

The selection is based on 1-165 credits.

Course Aim

After this course the student can:

- Describe and explain kernal concepts within service architecture
- Design and apply methods, techniques and standards to create a service architecture
- Analyse an organisations from a service perspective
- Develop service models that answer to identified needs
- Transform logic design into specifications

Contents

The course consist of three main parts. The first part is focused on understanding the basis of service architecture and how this perspective can be used to understand organisations as a collection of services and as well as how the architecture should be driven by the needs of the organisation. I the second part, an important part is to create models of services and to understand how these influence the organisation and its offerings. One important part of this course is to critically examine the developed service architecture and its potential effect on the organisation. The last part is focused on design and coordination of services based on needs in the organisations' environment. The course is focused on how strategy and technical development make new digital services as well as digital business possible.

Realization

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

During the course, the student works problem oriented and exploratory. The student builds knowledge through active participation in course activities as well as through theoretical and practical work. The student is trained to work both individual and in groups, and to report on their work in writing in a scientific report. In addition, the student work independently and active and should critically scrutinize and reflect on their work. The work is examined both orally and in writing. Tutoring takes place via lectures and discussion seminars. The course might be taught in english.

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. The course is examined through both assignments (4 credits), written exam (3 credits) and oral presentation (0.5 credits).

The assignments examine the student's ability to: use and adapt the methods, techniques and standards used to create a service architecture, to interact with the environment to identify its needs. The exam examines the student's ability to describe and explain core concepts in the field and to understand and transform information into specifications. In the oral presentation, the student's ability to orally present and discuss information, problems and solutions in dialogue with others is examined.

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
0002	Assignment reports	U G VG *	4	Mandatory	A14	
0003	Oral presentation	U G#	0.5	Mandatory	A14	
0004	Take-home examination	U G VG *	3	Mandatory	S17	

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Jonny Johansson, HUL SRT 2022-02-11

Syllabus established

by Director of Undergraduate Studies Bo Jonsson, Department of Business Administration, Technology and Social Sciences 2014-02-14