

## Procedural Sound Design for User Interfaces

Procedurell ljuddesign för användargränssnitt  
6 credits

Programme course

TNM113

Valid from: 2025 Spring semester

<b>Determined by</b>	<b>Main field of study</b>	
Board of Studies for Computer Science and Media Technology	Media Technology and Engineering	
<b>Date determined</b>	<b>Course level</b>	<b>Progressive specialisation</b>
2024-08-28	Second cycle	A1N
<b>Revised by</b>	<b>Disciplinary domain</b>	
	Technology	
<b>Revision date</b>	<b>Subject group</b>	
	Media Production	
<b>Offered first time</b>	<b>Offered for the last time</b>	
Spring semester		
<b>Department</b>	<b>Replaced by</b>	
Institutionen för teknik och naturvetenskap		

## Course offered for

- Master of Science in Media Technology and Engineering

## Prerequisites

Basic knowledge from courses in user interface, visualization, and programming, as well as basic sound technology and signal processing.

## Intended learning outcomes

After completing the course, the student should be able to:

- be able to give a detailed account of how sound should be used in interaction design and in relation to visualization based on sonification and communication theories.
- apply contemporary theories of sonification and interaction design to analyze and evaluate sounds in user interfaces, visualization and games.
- create and implement procedural sound design to effectively convey a message / impression

## Course content

The course aims to provide students with knowledge about sound as a form of communication, the principles of using sound in interaction design and methods for designing and creating procedural sound. Briefly, the course content is: Sound and communication theory, sound design, game sound, sonification, sound technology, and methods for procedural sound.

## Teaching and working methods

Lectures, practical exercises, seminars, project work in pairs and oral presentation

## Examination

LAB1	Laboratory work	3 credits	U, 3, 4, 5
UPG1	Project assignment	3 credits	U, 3, 4, 5

Grades for examination modules are decided in accordance with the assessment criteria presented at the start of the course.

## Grades

Four-grade scale, LiU, U, 3, 4, 5

## Other information

### About teaching and examination language

The teaching language is presented in the Overview tab for each course. The examination language relates to the teaching language as follows:

- If teaching language is “Swedish”, the course as a whole could be given in Swedish, or partly in English. Examination language is Swedish, but parts of the examination can be in English.
- If teaching language is “English”, the course as a whole is taught in English. Examination language is English.
- If teaching language is “Swedish/English”, the course as a whole will be taught in English if students without prior knowledge of the Swedish language participate. Examination language is Swedish or English depending on teaching language.

### Other

The course is conducted in such a way that there are equal opportunities with regard to sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

The planning and implementation of a course should correspond to the course syllabus. The course evaluation should therefore be conducted with the course syllabus as a starting point.

The course is campus-based at the location specified for the course, unless otherwise stated under “Teaching and working methods”. Please note, in a campus-based course occasional remote sessions could be included.