

# Recommender system for courses at Aalto University

## Problem Analysis

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*In cooperation with*



**Aalto  
Online  
Learning**

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# Introduction

*Why this document?*

- I am doing research on developing a recommender system for courses taught at Aalto University.
- This research is done in cooperation with Aalto Online Learning and funded by the Honours Programme in Information and Computer Science.
- Before going to solutions I wanted to analyse the problem, this is the result.
- This analysis is based on my own thoughts and discussions with students, graduates and teachers.
- I am sure this analysis is incomplete, so use it as a starting point.
- These results can be used for any purpose, as long as properly acknowledged to me.

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# Situation

How do students find courses?

Study Coordinator



Posters



Friends



Seniors



Other courses



Featured in  
Aalto news  
e.g. IMOB, UWAS



Studyguide



Search  
engine



Department



Newsletter



Chat groups



Study  
Platforms



Asking  
teachers



Guild



Aalto news  
Ayy  
Guild  
School  
Initiatives, e.g. UWAS, sustainability





WhatsApp  
Telegram  
Snapchat

MyCourses  
Oodi  
Into  
courses.aalto.fi  
Varjoopintopas.fi

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# Criteria

How do students select courses?

Content 	Language 	Student's degree programme 	Student's skills & knowledge 	Professor 	Student's interest 	Familiarity 
Difficulty 	Prerequisites 	Experience others 	Schedule 	Period 	Stage of studies 	Future career 
Social acceptance 	# ECTS 	Teaching methods 	Learning outcomes 	Department 	Negative recommendations 	Location 
Combination other courses 	Degree of freedom 	Perceived on degree certificate 				

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# Problems

*What are problems of the current course selection process?*

Hard to find  
unknown, fitting  
courses



Select courses  
based on limited  
information



Online :  
only search by  
title



Mainly information  
from network



Lack of external  
motivation to  
discover



Prerequisites  
unknown



No insight if  
courses fit in  
schedule



Unclear which  
courses accessible  
for who



Connection  
between courses  
unknown

