

TDT11 Digitalization in public sector

Autumn 2024



Course staff

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- Syed Sajid Hussain, same building
- Course web page:
- https://www.ntnu.no/wiki/display/tdt11/.



What is TDT11?

The course is for students who are interested in how public services in Norway and internationally are evolving into "digitally first" services, and how this affects our societies.

Students Assigned to Theory Modules

Students listed for each module, is number of students who have edited their within the last 8 months. The numbers are continually updated according to t

Click on the number in the student column to get a list of participants.

Code	Name	Students
TDT01	Arkitekturer for beregningssystemer	6
TDT02	Avanserte, distribuerte systemer	12
TDT03	Avanserte emner i visuell databehandling	3
TDT04	Avanserte bioinspirerte metoder	10
TDT05	Moderne maskinlæring i praksis	64
TDT06	Læringsteknologi	6
TDT07	Læringsanalyse	6
TDT08	Algoritmisk spillteori	4
TDT09	System- og sanntidsprogramvareinteraksjon med moderne maskinvare	7
	Digitalinaring i offentia golder	7
	Digitalisering i offentlig sektor Datamaskinell kreativitet	11
	Avansert tekstanalyse og språkforståelse	13
	Utvidet virkelighet (XR)	8
	Visuell Intelligens	28
	Virksomhetsarkitektur, Smarte byer og verdibaserte tjenester	2
	Parallelle miljø og numeriske metoder	10
	Forskning i data undervisning	3
	Samhandlingsteknologi og læring	6
	Digitalization in practice	11
	Klinisk prosess- og beslutningsstøtte	0
	Empiriske studier i IT	36
	Avanserte emner i programvareprosessforbedring	6
	Fra nettverk til kausale modeller innen kunstig intelligens	6
	Spilldesignteori	18
	Semantisk Web	2
	IT for bærekraftig utvikling	5
	Kunnskapsintensiv CBR	0
	Kvalitet av modeller og modelleringsspråk	0
	Utvikling av spill	30
Selection		328
Students:		174



Two examples of MSc theses

- A concept:
 - Digital nudge in the public sector

Heidi Lohne Brække and Ingrid Asklund Larssen

Digital Nudging in the Public Sector in Norway

Master's thesis in Informatics Supervisor: Babak A. Farshchian June 2021 A service:

Frida

Dusan Jakovic Gajaen Chandrasegaram

Chatbot as a Channel in Government Service Delivery

Findings from interviews with citizens, Skatteetaten and NAV

Master's thesis in Computer Science Supervisor: Babak A. Farshchian June 2021

Master's thesis

NTNU ind Technology cal Engineering

Master's thesis



Learning objectives

- Gaining knowledge about various digitalization cases and technologies in the public sector.
- Gaining knowledge about digitalization processes in the public sector, and how these can be different from the private sector.
- Gaining knowledge about concepts such as public value, open government, agile government.



Learning activities

- Choosing topic and developing conceptual framework:
 - Based on the chosen topic, search for and summarize main literature and distill main concepts within the topic.
- Research:
 - Based on the chosen topic, do relevant research (documents, interviews etc.) and document the results.
- Writing:
 - Write a 4-pages summary of your research and revise this based on peer review reports.
 - Write a peer review report for one other student.



Timeline (proposal)

- Choose topic through dialog: September 30 + followup presentation meeting October 18, 15:15.
- Draft of essay, max 4 pages: October 31.
- Peer review: Week 45, deadline November 8.
- Final essay, max 4 pages: November 20.
- Oral presentation: Date to be announced.



Assessment

Essay: 70%

• Peer review report: 15%

Oral presentation: 15%

For the essay:

- Clear description of the topic or case, why it is important, and how it relates to digitalization in public sector.
- Clear descriptions and definitions of central concepts, references to relevant research.
- Description of what research you have done and how.
- Own reflections, binding the above points together and pointing to findings, challenges, recommendations etc.
- For the presentation:
 - You present to the group of students in the course and some PhD students.
 - Maximum 15 minutes presentation of what you have done+ 5 minutes of questions.
 - Focus on clarity of objectives, questions, concepts.
 - Focus on clear line of argumentation, and clear flow in the presentation.
 - Present for a non-expert.



Topics can be

- A case study of an existing digital service, using a specific perspective such as public value or agile government.
- A case study of an existing digital technology, using a specific perspective such as public value or agile government.
- An essay on a concept, e.g. agile government, digital justice, digital public encounters.
- A literature study related to a relevant concept.