02.12.2024

# Curriculum at LAB University of Applied Sciences 2025-2026

## **Technological Transformation Leadership 25S, online studies**

Code	Name	1 y	2 у	ECTS total
TLTIYTTL25SV-1004 Core competence				15
YT00DF21	Change Management and Knowledge Management	5		5
YT00DF22	Modern Technologies and Megatrends	5		5
YT00DF23	Process and Project Management	5		5
TLTIYTTL25SV-1002 Complementary competence			15	
TLTIYTTL25SV-1007 Organizational Transformation & Leadership			0	
YT00DF18	Emerging Technologies in Innovative Solutions	5		5
AT00DF51	Strategic Leadership and Innovation Management	5		5
YT00DF19	Agile Innovating of Digital Solutions	5		5
YT00DF20	Leading Digital Transformation	5		5
TLTIYTTL25SV-1006 From IoT to AI			15	
YT00DE59	IoT and Cloud Services	5		5
YT00DE60	Data Analyzis and Visualization	5		5
YT00DE61	Machine Learning and AI	5		5
TLTIYTTL25SV-1003 Thesis			30	
YO00CF53	Thesis Planning	10		10
YO00CF54	Thesis Project and Reporting		20	20

## TLTIYTTL25SV-1004 Core competence: 15 ECTS

#### YT00DF21 Change Management and Knowledge Management: 5 ECTS

#### Learning outcomes

The student is able to

- effectively analyze organizational knowledge to drive innovation and improve decision-making

- utilize change management frameworks and models

- develop skills to implement change initiatives, focusing on overcoming resistance and fostering a culture of agility

- implement strategies for effective communication, stakeholder engagement, and addressing resistance to change

## YT00DF22 Modern Technologies and Megatrends: 5 ECTS

Learning outcomes

The student is able to

- evaluate the influence of emerging technologies on their specific discipline and the broader society
- analyze key megatrends and their connections to technological development
- apply diverse technologies to address complex practical challenges

- develop informed perspectives on the future technological evolution and its potential implications

## YT00DF23 Process and Project Management: 5 ECTS

#### Learning outcomes

The student is able to

- apply project management methodologies and tools to plan, execute, and control projects effectively

- analyze processes to identify inefficiencies and develop strategies for improvement
- lead and manage project teams, fostering collaboration and motivating team members
- evaluate project performance

## TLTIYTTL25SV-1002 Complementary competence: 15 ECTS

## TLTIYTTL25SV-1007 Organizational Transformation & Leadership: 0 ECTS

## YT00DF18 Emerging Technologies in Innovative Solutions: 5 ECTS

#### Learning outcomes

The student is able to

- examine the role of emerging technologies in enabling innovation
- consider scalability in the design of technology-enabled innovations
- apply technology-enabled innovations in developing business models for better value creation
- evaluate the potential impacts of emerging technologies on business and society

## AT00DF51 Strategic Leadership and Innovation Management: 5 ECTS

#### Learning outcomes

The student is able to

- apply leadership theories in organizational contexts
- evaluate key leadership theories in planning innovation activities
- plan innovation management processes

## YT00DF19 Agile Innovating of Digital Solutions: 5 ECTS

#### Learning outcomes

The student is able to

- innovate solutions to meet business needs guided by strategy
- apply agility and Lean thinking in the development of digital solutions
- evaluate the added value generated by a digital solution

## YT00DF20 Leading Digital Transformation: 5 ECTS

#### Learning outcomes

The student is able to

- analyze the relationship between strategy and digital transformation
- evaluate the impact of digital transformation on people, technology, and business processes
- plan the process of digital transformation
- apply the principles of technological humanism in digital transformation

## TLTIYTTL25SV-1006 From IoT to AI: 15 ECTS

#### YT00DE59 IoT and Cloud Services: 5 ECTS

#### Learning outcomes

The student is able to

- manage data collection and employ standard protocols for data transfer to a cloud service
- implement a data storage solution leveraging virtualization and cloud-based services

- conduct comparative analysis of data processing, transfer, and storage alternatives within the context of a data pipeline implementation

## YT00DE60 Data Analyzis and Visualization: 5 ECTS

#### Learning outcomes

The student is able to

- apply mathematical methods in analyzing data and predicting phenomena
- utilize modern statistical tools to explore and interpret data
- visualize data to identify its properties, interpret the analysis and facilitate further processing

## YT00DE61 Machine Learning and AI: 5 ECTS

#### Learning outcomes

The student is able to

- apply ethically sustainable solutions of machine learning and artificial intelligence in the engineer's work

- analyze and evaluate the data pipeline, considering the needs of machine learning and artificial intelligence

- design machine learning and artificial intelligence solutions that meet the analyzed requirements

- manage the use of various data sources in the application of machine learning and artificial intelligence

## TLTIYTTL25SV-1003 Thesis: 30 ECTS

## YO00CF53 Thesis Planning: 10 ECTS

#### Learning outcomes

The student is able to

- describe the objectives and core contents of their thesis.

- plan and describe the stages of the thesis process.

- take into account the possible research permit and copyright issues.

## YO00CF54 Thesis Project and Reporting: 20 ECTS

#### Learning outcomes

The student is able to

- implement the thesis on the basis of an approved thesis plan.
- present the results or output of their thesis.

- report on their thesis in writing in accordance with the thesis guidelines of LAB University of Applied Sciences.

- as a maturity test, write a blog post, a press release or an article.