

**Curriculum at LAB University of Applied Sciences
2023-2024**

Master of Engineering, Urban Sustainability 23K, online studies

Code	Name	1 y	2 y	ECTS total
TLTIYURS23KV-1001 CORE COMPETENCE				50
TLTIYURS23KV-1002 Advanced Professional Studies				20
TLTIYURS23KV-1003 Urban environment				10
TE00BB91	Urban and Communicative Development	5		5
LA00BO72	Managing urban change	5		5
TLTIYURS23KV-1004 Environmental change and RDI				10
TE00BB90	Climate change and its environmental impacts	5		5
TE00CG67	Research on Sustainable Communities			0
TLTIYURS23KV-1005 Thesis				30
YO00CF53	Thesis Planning			0
YO00CF54	Thesis Project and Reporting			0
TLTIYURS23KV-1006 COMPLEMENTARY COMPETENCE				10
TLTIYURS23KV-1007 Elective studies				10
TE00BB93	GIS as a tool	5		5
LA00BO75	History and preservation of urban areas	5		5
LA00BO74	Circular economy	5		5
LA00BQ03	Responsible Business	5		5

TLTIYURS23KV-1001 CORE COMPETENCE: 50 ECTS

TLTIYURS23KV-1002 Advanced Professional Studies: 20 ECTS

TLTIYURS23KV-1003 Urban environment: 10 ECTS

TE00BB91 Urban and Communicative Development: 5 ECTS

Learning outcomes

The student is able to

- analyze and discuss contemporary phenomena like urbanization and urban sprawl, transitions in urban areas and collaboration of professionals and stakeholders
- evaluate recent development and planning processes, their management and arrangement of participation in the processes
- reflect environmental issues from the professional point of view

- develop applications from theoretical background into practical situations

LA00BO72 Managing urban change: 5 ECTS

Learning outcomes

The student is able to

- demonstrate the importance and influence of political and administrative systems to change management
- evaluate the context for change and design appropriate strategies to aid its management in practice
- demonstrate reflection on the emerging role of the urban professional as an 'agent of change' and their own personal development requirements

TLTIYURS23KV-1004 Environmental change and RDI: 10 ECTS

Courses included in the study module

GIS as a tool

Climate change and its environmental impacts

TE00BB90 Climate change and its environmental impacts: 5 ECTS

Learning outcomes

The student is able to

- survey the impacts of the EU on reduction of carbon emissions in the future and analyze their consequences
- describe current and future opportunities for climate change mitigation in urban settings
- search for information and scientific research results concerning climate change topics
- develop applications of mitigation in urban settings

TE00CG67 Research on Sustainable Communities: 5 ECTS

Learning outcomes

Student

- is able to describe the different characteristics of a sustainable society and learns to search for and critically evaluate related professional and scientific source material
- gets acquainted with the research and development methods applied in the subject area and practices their use
- understands the requirements of the content required for the thesis and prepares the research plan of the thesis

TLTIYURS23KV-1005 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.

TLTIYURS23KV-1006 COMPLEMENTARY COMPETENCE: 10 ECTS

TLTIYURS23KV-1007 Elective studies: 10 ECTS

TE00BB93 GIS as a tool: 5 ECTS

Learning outcomes

The student is able to

- seek information in GIS related topics and use the terms and concepts consistently
- explain principles behind production of GIS information and the role of satellite positioning in data collection
- seek connections using geographic information with a program connected to GIS use and production
- use and combine GIS-based information for different needs and situations
- evaluate on and discuss the development of his/her knowledge base and abilities to use GIS in working life

LA00BO75 History and preservation of urban areas: 5 ECTS

LA00BO74 Circular economy: 5 ECTS

Learning outcomes

The student

- is able to describe the main principles of circular economy and identifies the importance of resource efficiency as a part of the concept of circular economy
- is able to demonstrate the life cycle analysis and its principles
- is able to evaluate the environmental impacts of products and processes during their life cycle and develops opportunities to decrease them
- is able to analyse and identify means to improve material and energy efficiency in different environments and urban areas

LA00BQ03 Responsible Business: 5 ECTS

Learning outcomes

The student

- understands the role of economic, social and environmental responsibility as an integrated part of the corporate strategy and everyday business
- is able to evaluate and analyze environmental and social performance of companies
- is able to determine different standards, certificates and labels concerning CSR and their role in company communication
- is familiar with the basic idea of environmental management and knows how to use it in strategic decision making