11.10.2023

Curriculum at LAB University of Applied Sciences
2024-2025

Master of Engineering, Urban Sustainability 24K, online studies

Code	Name	1 y	2 y	ECTS total
TLTIYURS24KV-1001	**CORE COMPETENCE**			**50**
TLTIYURS24KV-1002	**Advanced Professional Studies**			**20**
TLTIYURS24KV-1003	**Urban environment**			**10**
TE00BB91	Urban and Communicative Development	5		5
LA00BO72	Managing Urban Change	5		5
TLTIYURS24KV-1004	**Environmental change and RDI**			**10**
TE00BB90	Climate change and its environmental impacts	5		5
TE00CG67	Research on Sustainable Communities	5		5
TLTIYURS24KV-1005	**Thesis**			**30**
YO00CF53	Thesis Planning	10		10
YO00CF54	Thesis Project and Reporting		20	20
TLTIYURS24KV-1006	**COMPLEMENTARY COMPETENCE**			**10**
TLTIYURS24KV-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

TLTIYURS24KV-1001 CORE COMPETENCE: 50 ECTS

TLTIYURS24KV-1002 Advanced Professional Studies: 20 ECTS

TLTIYURS24KV-1003 Urban environment: 10 ECTS

TE00BB91 Urban and Communicative Development: 5 ECTS

Learning outcomes
The student is able to
- analyze and discuss contemporary phenomenons 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 urban 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

TLTIYURS24KV-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

TLTIYURS24KV-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.

TLTIYURS24KV-1006 COMPLEMENTARY COMPETENCE: 10 ECTS

TLTIYURS24KV-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

Learning outcomes
The student is able to
- understand the main features about the history of the cities
- identify and define different values in urban built environment as well as means to preserve them
- understand important international treaties and national legislation protecting valuable environments as well as the meaning of international organisations in preservation
- present case examples to demonstrate the variability of built heritage and means to preserve it (for example town planning, local participation of civil society, renovation)

LA00BO74 Circular economy: 5 ECTS

Learning outcomes
The student
- is able to describe the main principles of circular economy and identifyies 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