

**Curriculum at LAB University of Applied Sciences
2020-2021**

Master of Engineering, Urban Sustainability, Lahti

Code	Name	1 y	ECTS total
YURS20SLTI-1001 CORE COMPETENCE			50
YURS20SLTI-1002 Advanced Professional Studies			20
YURS20SLTI-1003 Urban environment			10
TE00BB91	Urban and Communicative Development	5	5
LA00BO72	Managing urban change	5	5
YURS20SLTI-1004 Environmental awareness and technical skills			10
TE00BB93	GIS as a tool	5	5
TE00BB90	Climate change and its environmental impacts	5	5
YURS20SLTI-1005 Thesis			30
LA00BF36	Thesis	30	30
YURS20SLTI-1006 COMPLEMENTARY COMPETENCE			10

YURS20SLTI-1001 CORE COMPETENCE: 50 ECTS

YURS20SLTI-1002 Advanced Professional Studies: 20 ECTS

YURS20SLTI-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

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

YURS20SLTI-1004 Environmental awareness and technical skills: 10 ECTS

Courses included in the study module

GIS as a tool

Climate change and its environmental impacts

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

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

YURS20SLTI-1005 Thesis: 30 ECTS

LA00BF36 Thesis: 30 ECTS

Learning outcomes

A student is able to

- generate new knowledge and renew ways of working combining competencies from various sectors
- manage research, development and innovation projects and apply research and development methods
- utilise the research data in operational management and development
- critically analyse, reflect on and combine different approaches to operational development

YURS20SLTI-1006 COMPLEMENTARY COMPETENCE: 10 ECTS

Courses included in the study module

You can find Complementary competence courses from separate "Complementary competence courses taught in English, Master's Degree, 17S-" Curriculum.

In addition, you can choose Professional Core Competence courses of other Master's Degree Programmes as Complementary competence courses.