

**Curriculum at Lahti University of Applied Sciences  
2017-2018**

**Master's Degree Programme in Urban Sustainability 17**

Code	Name	1 y	ECTS total
<b>TEYKKY17-1000 CORE COMPETENCE</b>			<b>50</b>
<b>TEYKKY17-1001 Advanced Professional Studies</b>			<b>20</b>
<b>TEYKKY17-1004 Urban Environment</b>			<b>10</b>
TE00BC04	Climate Change and Its Environmental Impacts	5	5
TE00BC03	Urban Development and Interaction	5	5
<b>TEYKKY17-1005 Smart City Structures</b>			<b>10</b>
TE00BC06	GIS as a Tool	5	5
TE00BB92	Sustainable and Smart Cities		0
<b>TEYKKY17-1002 Thesis</b>			<b>30</b>
LA00BF06	Thesis	30	30
<b>TEYKKY17-1003 COMPLEMENTARY COMPETENCE</b>			<b>10</b>

**TEYKKY17-1000 CORE COMPETENCE: 50 ECTS**

**TEYKKY17-1001 Advanced Professional Studies: 20 ECTS**

**TEYKKY17-1004 Urban Environment: 10 ECTS**

**TE00BC04 Climate Change and Its Environmental Impacts: 5 ECTS**

**Learning outcomes**

The student is able to

- evaluate the effect of the EU objectives on reduction of carbon emissions in the future and to 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
- develop innovations and applications to mitigate the impacts of climate change in urban settings

**TE00BC03 Urban Development and Interaction: 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 on environmental issues from a professional point of view
- develop practical applications based on a theoretical background

## **TEYKKY17-1005 Smart City Structures: 10 ECTS**

### **TE00BC06 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

### **TE00BB92 Sustainable and Smart Cities: 5 ECTS**

#### **Learning outcomes**

The student is able to

- describe what sustainable and smart solutions mean in urban environments
- collect and evaluate information of environmental research and technologies adaptable in the future environments
- develop applications in the field to existing urban case studies

### **TEYKKY17-1002 Thesis: 30 ECTS**

### **LA00BF06 Thesis: 30 ECTS**

#### **Learning outcomes**

The 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

### **TEYKKY17-1003 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.