

## LAR505 Green Roofs and Vertical Gardens

Landscape Architecture MSc Programme – Compulsory course

Credit: 3      ECTS: 7,5



**Course Description:** This course lays the foundation for sustainable urban development on green roofs and vertical gardens. Topics are discussed, such as the design, installation and maintenance of green roofs and plant selection and irrigation systems for green roof systems. It also focuses on arranging plants, planting structures and creating green walls. This course aims to enable students to contribute to creating greener and sustainable urban environments within the framework of Sustainable Development Goals 15 and 11 by providing students with basic skills to create more environmentally friendly and livable urban areas.

**Course Outcomes:**

- Gain foundational knowledge in sustainable urban development, focusing on green roofs and vertical gardens.
- Learn green roofs' design, installation, and maintenance to create environmentally-friendly urban spaces.
- Develop expertise in selecting suitable plant species for green roof systems, considering climate and soil conditions.
- Acquire knowledge of irrigation techniques tailored for green roof installations to ensure plant health.
- Learn techniques for arranging plants and constructing green walls for aesthetically pleasing and functional green spaces.
- Contribute actively to Sustainable Development Goals.
- Apply theoretical knowledge through hands-on learning and practical exercises in urban development projects.
- Define the population in a given study and select an appropriate sampling method.
- Choose and employ suitable data collection tools for research.
- Select and apply data analysis methods in a given study.
- Understand and implement validity and reliability measures in research.
- Write academic research reports following scientific/academic writing norms and ethical principles.