

Teaching and learning experiences from the module of "Scalable processes in Built Environment"

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The main components of urban green are water, soil, and vegetation. These components form an interlinked system that exists throughout urban landscapes and land-use categories, and the system continuously adapts to the urban-specific changes. At the site scale, the designer modifies the system by soil specifications, introducing nature-based solutions, and using sustainable urban drainage solutions. However, at the city scale planning defines the base for the system when identifying ecological corridors, master plans for stormwater management, and strategies to manage impermeable surfaces. Students need to be able to see themselves as part of a multidisciplinary professional community that defines and manages urban green. Students gain the capacity to work in a genuinely multidisciplinary team but also emphasize their knowledge of urban green, ie vegetation-related processes, concepts, and stakeholders at different scales.

The Scalable Processes in Built Environment module (15 ECT) has been held at Häme University of Applied Sciences for three years. Processes refer to the cycles of water and nutrients, the succession of urban vegetation, and processes in soil. The module aims to provide students with an overview of the profession and its key concepts in the first year of bachelor's studies. The structure of the module builds on:

- The linkages between scales and the main components of urban green and built environment
- Professions, organizations, and documents related to previous

Teachers work as a team and students work only on one assignment. Based on the student feedback, the scalable processes may have been experienced challenging during the first year of studies, but the significance will unfold later during the studies. For teachers, a completely new approach to soil, water, and vegetation offer an opportunity to reformulate and challenge their core competencies and use their adaptive expertise.

