

Course	Green Building in Northern Europe, 3 ECTS credits
Year and period	B.Sc., 29 July–2 August 2019
Teacher(s)	Kirsi Taivalantti, M.Sc. (Tech.), M.Sc. (Soc.), Saimaa UAS Visiting lecturers in different fields
Person(s) in Charge	Kirsi Taivalantti, Saimaa UAS
Additional Information	Understanding different aspects of green built environment challenges in cold and changeable climate.
Aims	<p>The aim of the course is to understand different aspects of green built environment challenges in cold and changeable climate.</p> <p>By the end of the course, students</p> <ul style="list-style-type: none"> - understand different aspects of green built environment - understand challenges in cold and changeable climate - have learned about examples of architectural, structural, HVAC-technological and infrastructural solutions.
Content	<p>Basics of built environment</p> <ul style="list-style-type: none"> - buildings - infrastructure <p>Technical challenges of climate</p> <ul style="list-style-type: none"> - energy-efficiency of buildings - wearing of structures - ground frost <p>Economical challenges in green building</p> <p>Examples of green solutions</p> <ul style="list-style-type: none"> - architectural - structural - infrastructure - HVAC-solutions
Modes of Study	Interactive contact teaching including students' case studies and presentations and discussion of case studies
Evaluation	<p>Final grade 0-5:</p> <p>1 = Student remembers and understands the basic concepts built environment. Student is able to name some examples of green solutions.</p>

	<p>3 = Student remembers and understands the basic concepts built environment. Student is able to develop and present case study about an example.</p> <p>5 = Student understands the holistic view of built environment and challenges of green buildings. Student is able to present a case study with a discussive manner, concerning technological, economic and environmental aspects.</p>
Study Materials	PowerPoint presentations, www-sites, research articles of the subject.
Prerequisites	The course is suitable for students with basic technical knowledge. Advanced knowhow of construction and civil engineering is not required.