


Bachelor of Natural Resources, Sustainable Coastal Management (240 cr)

Degree: **YH-examen inom naturbruk**

Qualification title: **Miljöplanerare (YH), Bachelor of Natural Resources**

Duration of studies: **2 years**

Study type: **Full-time** 

The graduate

- has the basic knowledge of the principles of how an ecosystem functions and can identify and analyse the state of a coastal zone.
- Furthermore, s/he is able to propose how the state could be improved or managed sustainably.
- is able to identify the goods and services provided by an ecosystem.
- At the same time s/he is able to identify alternative ways of management that would support the balance between the society and the environment.
- is able to manage a coastal area in an integrated way, involving relevant stakeholders.
- is familiar with the conventions, policies and directives from the national and international environmental laws.
- has an understanding of how economic incentives and mechanisms can be used in ICZM.
- has an transdisciplinary approach in managing coastal zones.

» [Generic competences](#)

» [Language Information for Students with Swedish or Finnish as Prior Language of Instruction.](#)

Kontaktuppgifter: [Enheter](#) | [Utbildningsansvariga](#)

Code	Name	Cr/year/total					Total
		1	2	3	4	5	
Gru	Core studies At least 120 credits of Higher Education prior to the admission at YH Nove The core studies should have given the student the following competences: Study proficiency: -Ability to retrieve and critical exam information -Ability to write and present in a coherent way -Understand and solve problems -Social and communication skills A part from the competences the student should prove their interest/understanding in/of issues related to environmental or social or economic sustainable development.						120 cr
Yrk	Professional studies						75 cr
CM13CE	Coastal Ecology and Ecosystem Services The Student -understands the principles of ecology and that all ecosystems has an economical value -understands the interdependency of nature and society -knows the basics of coastal ecology	15					15 cr
CM13CE01	• Coastal Ecology I The Student -knows principles of community ecology as applied to brackish water habitats -can identify common species in the Baltic Sea -is familiar with marine environments -knows the basic methods for measuring important ecological parameters in the field and laboratory -knows how to carry out an ecological study and present the findings	6					6 cr
CM13CE02	• Coastal Ecology II The Student -can analyze and evaluate ecological studies and disseminate the results to decision makers and the public -can identify ecosystem services in the coastal area -understands the impacts of agriculture and forestry on the coastal ecosystems	6					6 cr
CM13CE03	• Fisheries Resource Management The Student -is familiar with fisheries management -knows different forms of aquaculture -knows environmental impacts of aquaculture and unsustainable fishery	3					3 cr
CM13SW	Sustainable Coastal and Water Management The Student - knows the concept of Integrated Coastal Zone Management - is familiar with Maritime Spatial Planning - understands the principles of monitoring of aquatic bodies	15					15 cr
CM13SW01	• Sustainable Coastal Management At the end of this course students should: • know how and why water bodies are monitored • know the different institutions that carry out water monitoring in Finland • get familiar with different methods to conduct monitoring of aquatic bodies • learn about national and European laws that rule the aquatic monitoring	6					6 cr
CM18SW01	• Monitoring of Aquatic Bodies I The Student - knows what type of pollutional load threatens our water bodies - knows how and why water bodies are monitored - is familiar with authorities and other actors conducting monitoring of aquatic bodies	3					3 cr
CM18SW02	• Monitoring of Aquatic Bodies II At the end of this course students should: • know the quality elements used to evaluate aquatic bodies • know which activities have an impact on the quality of surface waters • know the proper measures of management in order to lower the different types of impacts • be able to carry out methods used for evaluation of the state of surface waters and based on the results make an interpretation of the water quality	3					3 cr
CM13SW02	• Water and Sewage Management	3					3 cr

	<p><i>The Student</i> -knows important principles for managing the optimum use of water resources -knows the basics of prevention, management and treatment of sewage -can suggest suitable sewage management solutions in different settings</p>						
CM16ME	<p>Management of Environmental Impact <i>The Student</i> - is familiar with how to identify and manage environmental impact.</p>	6	6				12 cr
CM16ME01	<p>• Environmental Impact Assessment <i>The Student</i> -understands the importance of assessing the long term environmental consequences of planning and construction -knows the EIA process in Finland and EU -is familiar with different methods of assessing environmental consequences of a product, a service or an activity</p>	3					3 cr
CM16ME02	<p>• Waste Management <i>The Student</i> • Knows the different management and treatment methods of waste. • Understands the hierarchy of waste management and the importance of wise resource usage and closing of the loop • Is familiar with circular economy</p>	3					3 cr
CM13SE01	<p>• Management Systems <i>The Student</i> -has basic knowledge of environmental and quality management systems and their purpose and benefits -knows the ISO standards and how they are structured -knows environment, health and safety procedures in companies</p>		3				3 cr
CM16ME03	<p>• Conservation Biology <i>The Student:</i> • Is familiar with the theory and practice of conservation of biodiversity, biological aspects of conservation, and systematic conservation planning • Understands ecological principles and human dimensions of the conservation of biological diversity • Is familiar with Natura 2000 and other conservation schemes</p>		3				3 cr
CM16GP	<p>GIS and planning <i>The Student</i> -Can use GIS as a tool to make sustainable plans of terrestrial and marine areas.</p>	9	3				12 cr
CM16GP01	<p>• Maritime Spatial Planning <i>The Student</i> • understands the EU Governance and marine planning policy and legislation • is able to work with stakeholders and participative methods • can define interactions and analyze pressures between human activity and the ecosystem • Knows the planning process and has executed a marine planning exercise</p>	3					3 cr
CM13IG02	<p>• Geographic Information Systems <i>The Student</i> -is able to handle geographic data in a GIS program -knows how to capture data using the Global Navigation Satellite System (GNSS) -can analyze geographical environmental data using different data sources and methods -can effectively visualize geographic information for different purposes</p>	3					3 cr
CM13IG03	<p>• GIS Project <i>The student</i> -can apply GIS for environmental planning</p>	3					3 cr
CM16GP02	<p>• Management of Urban Development <i>The Student</i> • understands the importance of well-functioning urban infrastructure • has an understanding of the socio-technical nature of infrastructure systems and the links between urban infrastructure, urban development and economy • understands the main challenges that the urban areas are facing and is aware of the existing tools to tackle these challenges</p>		3				3 cr
CM16LR	<p>Outreach and Research <i>The Student</i> - Knows the basics of project and career management as well as leadership - Is able to complete their thesis in a successful manner</p>	9					9 cr
CM13PR01	<p>• Statistics <i>The Student</i></p>	3					3 cr

	<ul style="list-style-type: none"> -understands the benefits, relevance and reasons for using statistics in environmental sciences as a problem solving tool -understands and knows the usefulness of probability in decision making -knows how to present descriptive statistical data -understands and can perform basic statistical tests -knows how to interpret statistical reports and know how to run basic statistical tests -knows how to plan studies in a statistically proper and sound way avoiding common pitfalls 						
CM18LR02	<ul style="list-style-type: none"> • Environmental Outreach <i>The student</i> • Has prepared a plan for his/her career that enables wise choices during their studies and career • Can write a scientific text and knows how to communicate the research outcomes to all kinds of audiences • Understands good ethical conduct in research and understands the importance of avoiding plagiarism 	3					3 cr
IZ10TM07	<ul style="list-style-type: none"> • Research Methodology <i>The Student</i> -Is familiar with different scientific theories -Can describe and apply relevant research methods -Can plan a scientific study and is able to analyze and communicate research findings 	3					3 cr
CM16BI	<ul style="list-style-type: none"> • Bioeconomy and International Issues <i>The student:</i> -Knows the relevant aspects of international forestry and agriculture and international development with in the two fields - Understands how Bioeconomy can be used to develop a greener economy in an innovative manner 		12				12 cr
CM16BI01	<ul style="list-style-type: none"> • International Forestry <i>The Student</i> • Can describe the circumstances for forestry in different countries • Can describe the principles of plantation forestry • Is aware of different forms of forest ownership • Is aware of the challenges of sustainability in a global perspective related to forestry • Is familiar with international wood trade and raw material flows 		3				3 cr
CM16BI02	<ul style="list-style-type: none"> • International Agriculture <i>The Student</i> • Is familiar with development models in agriculture like Agroforestry and model farms • Is aware of the challenges of sustainability in a global perspective related to agriculture and climate change • Is familiar with international Agribusiness and food production and trade • Is knowledgeable in international agreements and trade barriers and their effect on agriculture 		3				3 cr
CM16BI04	<ul style="list-style-type: none"> • Bioeconomy Innovation <i>Bioeconomy Innovation</i> <i>The Student</i> • Knows the principles for developing sustainable innovation in a responsible manner • Understands the concept of Bioeconomy and how it relates to the forestry, agriculture and other Bioeconomy sectors • Is knowledgeable of working with innovation in a sustainable manner • Is familiar with the main companies in Finland working with Bioeconomy 		6				6 cr
Pra	Practical training						30 cr
	<ul style="list-style-type: none"> • Practical training <i>The practical training provides students the opportunity to earn academic credit for relevant knowledge outside the University. The aim of the training is to acquire hands-on experience in real life work in national and international Coastal Management and Sustainable Development settings. The practical training permits students to integrate in-class experiences with experiential knowledge, gain in-field job experience and expand their professional skills. We highly recommend students to conduct their practical training abroad to enlarge their social network and experience.</i> 	12	18				30 cr
EXA	<ul style="list-style-type: none"> • Thesis <i>The student will be able to prove his/her ability to:</i> - critically evaluate information - work systematically within a given theme or in a project - to plan and independently write thesis or a project report - to present and critically evaluate thesis 						15 cr