

Degree Programme in Natural Resources and the Environment, Forestry (240 cr)

English translation, degree programme conducted in Swedish.

Degree: **YH-examen inom naturbruk**

Qualification title: **Skogsbruksingenjör (YH)**

Duration of studies: **4 years**

Study type: **Full-time** **D**

» [Generic competences](#)

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

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

Code	Name	Cr/year/total					
		1	2	3	4	5	Total
Gru	Core studies						60 cr
BE16PK	Professional Communication	15					15 cr
RB14IN01	• Introduction to Academic Studies <i>The student</i> - is familiar with his/her UAS and Campus - is aware of the gain of activating methods of learning - can reflect on his/her studies and future plans and is aware of his/her individual learning style - can plan and follow up his/her studies - can generate new knowledge and create personal learning environments and share knowledge with others - can reflect on life-long learning within the profession - can retrieve and critically view information	3					3 cr
YH10SV01	• Swedish <i>The student:</i> - can communicate coherently and in a professional manner both orally and in writing, in a work context - demonstrates appropriate knowledge of the process of academic writing and a correct use of references - can use different channels to retrieve information and compile reports according to the standard form and layout <i>Students with Finnish as prior educational language have to show such skills in the Swedish language as are in accordance with the Act on the Knowledge of Languages Required of Personnel in Public Bodies (424/2003). This means that these students must show satisfactory (grade 1, 2 or 3) or good (grade 4 or 5) skills in speaking and writing Swedish. Written and oral skills are assessed separately.</i>	3					3 cr
YH10FI01	• Finnish <i>The student:</i> - demonstrates ability to communicate in a natural and professional manner, in speaking as well as writing, in a work context, including customer service - demonstrates proficiency in the terminology of the field and is able to benefit from research and literature in his/her professional development - shows such skills in the Finnish language as are in accordance with the Act on the Knowledge of Languages Required of Personnel in Public Bodies (424/2003). This means that the student must show satisfactory (grade 1, 2 or 3) or good (grade 4 or 5) skills in speaking and writing Finnish. Written and oral skills are assessed separately.	3					3 cr
YH10EN01	• English <i>The student:</i> - shows the ability to communicate in a professional manner in a work context in speaking as well as writing - is familiar with essential terminology within his/her field and is able to benefit from professional literature - has a positive attitude to developing his/her receptive and productive language skills and is familiar with the relevant tools - is aware of cultural differences in international contexts	3					3 cr
NM14BP01	• Project in our line of business <i>The student</i> - can plan, implement and evaluate an industry-specific project - has basic insights into their own industry - can use tools in project planning and management - knows how teams are formed and developed - can work with others in groups and teams regardless of background - knows the project leader's role and tasks	3					3 cr
BE16SV	The forestry expert's toolbox	15					15 cr
UONB10IK01	• ICT <i>The student has a good command of:</i> - the IT services of the UAS and the utilities needed in work and studies in order to compile written assignments, analyse data and report projects - file handling - word processing programs used for creating and handling standard documents, official letters and reports - word processing programs used for creating and handling lengthy documents including e.g. a list of contents and a list of references - spreadsheet programs needed to handle calculations including formulae, functions and charts - presentation graphics programs used for making presentations	3					3 cr
NM13SI01	• Forest mensuration 1 <i>The student</i> - can measure trees, tree stocks and growth - can, with the help of tables, calculate volumes of individual trees and tree stocks - knows the definitions of different development classes and can identify these in the field	3					3 cr

NM13NA01	<p>• Handlign of GPS and GIS The student:</p> <ul style="list-style-type: none"> - knows how to plan and realise gathering of position-specific information - is able to produce geographical information for the use of the natural resources sector - knows how to localize existing GIS information on the Internet and the databases of his/her own organization 	3					3 cr
NM13NA02	<p>• Handling of Data related to Natural Resources The student:</p> <ul style="list-style-type: none"> - knows how to arrange and process gathered data into information - is familiar with the methods related to the effective storage of large quantities of information - is able to use spreadsheet (e.g. Excel) in an effective and versatile manner for the storage, analysis and presentation of data - knows how to validate the correctness of data - knows how to choose and use statistically correct methods to meet various objectives 	3					3 cr
NM13NA03	<p>• Mathematics The student:</p> <ul style="list-style-type: none"> - understands that independent work, focusing and accuracy constitute the conditions for learning - understands that it is important to cooperate and to be sensitive for different angles of approach and to take them into consideration - knows how to solve mathematical problems - is able to apply the trigonometry of a right-angled triangle - is able to solve polynomial equations and interpret polynomial functions graphically - is able to represent and calculate by using arithmetic and geometric series - understands how scientific phenomena can be described by using mathematical functions and models - knows how to use basic logarithm rules in order to solve exponential equations - understands the reasons for using and the possibilities gained by using logarithm and exponential functions - is familiar with the concepts of limit, differential coefficient and integral and knows how to apply rules for simple functions 	3					3 cr
BE16SE	The ecology of forest management	12					12 cr
BE16SE01	<p>• Botany and Ecology The student</p> <ul style="list-style-type: none"> - knows how a plant is structured and how it works - knows fundamental physiological functions of plants, e.g. photosynthesis and respiration - understands the basics of plant systematics - knows the nature, ecology and most important processes in our most common ecosystems - understands the concept of ecosystem services - can account for the dynamics of natural and man-made ecosystems 	3					3 cr
NM13VÄ01	<p>• Pedology The student:</p> <ul style="list-style-type: none"> - know the most common types of soil in Finland and how they are formed - knows how the ice age affected the geology of the Nordic region - knows the effects the type of soil has on its properties - knows the cycle of nutrients - knows how water moves in the field - understands the functioning of field buffer capacities 	3					3 cr
NM13BK01	<p>• Forest site types and dendrology The student</p> <ul style="list-style-type: none"> - knows the forest type classification system - can identify plants in the forest type classification system - can identify the main domestic trees and bushes 	3					3 cr
NM13SK02	<p>• Forest damages and environmental consideration The student</p> <ul style="list-style-type: none"> - has knowledge of the most common types of forest damage - knows how forest damage is avoided and combated - can identify the most common types of forest pests - recognises important habitats according to the Forestry Act - recognises environments requiring special consideration according to nature conservation and certification requirements 	3					3 cr
BE16FE	Business administration		6				6 cr
BE16EF01	<p>• Accounting and financial management The student</p> <ul style="list-style-type: none"> - knows what is meant by good accounting ethics - can perform basic accounting and track the cash flow of natural resources - knows the requirements for tax accounting - is aware of the entrepreneur's obligations to report and pay VAT, employer contributions and statutory insurance - can evaluate the company's financial statements (balance sheet and income statement) and assess the need for changes in business strategy 		3				3 cr

	<ul style="list-style-type: none"> - knows the overall purpose of financial management - can perform and evaluate various cost and revenue analyses taking into account sustainability, profitability and efficiency - understands the importance of using key figures in evaluating a business - knows how to assess and take into account risks in a business - can make an appropriate budget for a business 							
BE16BEI01	• Marketing and Sales <i>Den studerande:</i> <ul style="list-style-type: none"> -förstår marknadsföringens betydelse vid skapandet av ett nätverk av kundrelationer -kan analysera marknaden (omvärldsanalys) och definiera en meningsfull strategi för marknadsföringen -förstår vilka möjligheter olika marknadsföringskanaler erbjuder -kan utvärdera marknadsföringsprocessen och anpassa den till en säljprofil och rätt kundgrupp -förstår hur man kan anpassa försäljningsprocessen till verksamheten -känner till hur man bestämmer rätt pris på varor och tjänster -känner till metoder för fakturering och kan utforma anbud, offerter och moms fakturor 			3				3 cr
BE16IL	Thesis Introduction			6				6 cr
BE16IL01	• Research methodology <i>The student:</i> <ul style="list-style-type: none"> - knows the fundamentals of the theory of science - is able to describe and apply relevant research methods - knows how to make a plan for a scientific thesis - knows how to document and communicate his/her research findings - knows how to search for information from various sources - knows how to compile information in accordance to established scientific practices - understands the objective of a degree thesis and the requirements placed on it 			3				3 cr
NM13UM02	• Statistics <i>The student:</i> <ul style="list-style-type: none"> - understands the need for statistics as a tool for analysing information - masters the most basic statistical concepts - understands the importance of a correct selection procedure in the collection of data - knows how to perform hypothesis testing - understands the importance of complying with the terms and conditions of statistical tests - has a good command of the most important statistical macros and functions of the spreadsheet program MS Excel and is familiar with the possibility of using real statistical software - knows how to interpret and present the results of an analysis 			3				3 cr
BE16EN	Entrepreneurship			6				6 cr
NM13NE05	• Start your own Company <i>The student:</i> <ul style="list-style-type: none"> - is aware of the possibilities for self-employment by starting his/her own business - is familiar with the financial support instruments available for starting a business - knows what applications and permits are required for the business - knows the main differences between various company forms - knows how to make a business plan based on a business idea - can assess different financial alternatives - is acquainted with business networks and support organizations within a certain market area - knows how to evaluate the market and competition situation in his/her own line of business 			3				3 cr
BE16EN01	• Leadership and labour legislation <i>The student</i> <ul style="list-style-type: none"> - knows what management skills are required to operate a growing entrepreneurial business - knows different leadership styles and can judge their own leadership profile - knows how personal leadership is evaluated and developed - can consider how goals, motivations and conflicts affect interaction in groups - understands employer's responsibilities and obligations - is familiar with primary labour legislation for domestic and foreign workers 			3				3 cr
Yrk	Professional studies							126 cr
BE16SM	Silviculture methodology	15						15 cr
NM13SK04	• Forest regeneration <i>The student</i> <ul style="list-style-type: none"> - can assess and explain regeneration needs - can choose correct regeneration methods taking into account biological, ecological and economic factors - knows the importance of soil treatment for wood production and can choose the correct soil treatment method - can plan, execute and lead forestry work - can assess the need for and plan aftercare - can apply forest laws and directives related to stock management - understands the genetic foundations, purposes, objects and methods of forest processing - understands functions linked to the production of refined materials and forest processing organisations, as well as understanding the impact of forestry processing on practical forest regeneration 	6						6 cr

	<ul style="list-style-type: none"> - knows about seed classification as well as measures related to the acquisition of seeds - can compare different plant species and types, actions related to their cultivation and quality requirements - knows the laws, regulations, directives and regulations related to the production, trade and distribution of farmed material 						
NM13SK03	<p>• Stand Management</p> <p>The student</p> <ul style="list-style-type: none"> - can plan clearing - can calculate costs of clearing - knows how forest management measures affect the development of stock structures - understands how different types of thinning can be applied to stocks - can assess the need and required intensity for thinning - knows how the quality of thinning is assessed - can plan and perform pruning of trees - knows the main principles of forest fertilisation - knows different forms of support for stock management 	3					3 cr
NM13SK01	<p>• Brushing techniques</p> <p>The student</p> <ul style="list-style-type: none"> -can perform clearance using a forest clearing saw according to instructions and taking into account occupational safety regulations -can perform basic service on a forest clearing saw 	3					3 cr
NM13VA01	<p>• Felling Technique</p> <p>The student</p> <ul style="list-style-type: none"> - can perform motor-manual felling safely - can take into account various requirements when processing timber - can perform basic service on chainsaws - is familiar with how small-scale timber harvesting is planned and implemented 	3					3 cr
BE16SS	Silviculture in special areas		15				15 cr
BE16SS01	<p>• Silviculture on peatlands</p> <p>The student</p> <ul style="list-style-type: none"> - recognises the geological and ecological formation processes of peatlands - knows the classification grounds for natural peatlands - can take into account how drainage (dredging) affects a wetland ecosystem - can judge dredging possibilities in a peat field and plan the process - can apply water treatment measures when dredging - understands the changing nutrient conditions of peatlands - understands the sustainability dimensions of peatlands - can provide care for the use of peat sand 		6				6 cr
BE16SS02	<p>• Community Planning</p> <p>The student</p> <ul style="list-style-type: none"> - understands the need for land-use planning - knows the Finnish planning system - knows the reference framework for land-use planning legislation and participating organisations - knows the content of various plans (landscape, general, detailed) and their legal effects - can explain the planning process within a municipality 		3				3 cr
NM13SK09	<p>• Timber Production in Coastal Regions</p> <p>The student</p> <ul style="list-style-type: none"> - is aware of regional differences in forestry in different parts of Swedish-speaking Finland - knows the methods and conditions for the cultivation of broadleaf and mixed forests - can identify the most important foreign tree species and their production conditions - can provide pruning advice - knows how different kinds of forest fertilisation methods can be used to raise or secure growth in a stock - can combine the production of timber with the production of wood energy and understands the impact on the balance of nutrition - can follow-up forest management work 				3		3 cr
NM13BK02	<p>• Game preservation and multipurpose forestry</p> <p>The student</p> <ul style="list-style-type: none"> - knows different types of farming and understands their importance as part of nature conservation - knows different types of game care and hunting - knows the meaning of everyman's right and its national significance - can assess multi-purpose forestry management needs and plan management measures - considers issues of diversity and aesthetics associated with forestry management measures 		3				3 cr
BE16VK	Wood procurement		12				12 cr
NM13VA02	<p>• Timber Trade</p> <p>The student</p> <ul style="list-style-type: none"> - understands how the market for timber and wood fuel works 		3				3 cr

	<ul style="list-style-type: none"> - knows laws and regulations governing the timber trade and can engage with key contractual issues - can explain the different stages of the timber trade - can conduct a tender process - understands the pricing of root forests as well as delivery costs and special timber - can set prices for timber and wood fuel 					
NM13VA03	<p>• Timber Logging</p> <p><i>The student</i></p> <ul style="list-style-type: none"> - can plan tree stamps based on terrain, buoyancy and water conservation - can take into account cultural monuments, archaeological remains, natural habitats and threatened species - can take into account certification criteria for timber and logging - knows the methods used to harvest timber and wood fuel - can plan and lead logging - knows how the harvesting of storm timber is carried out - can plan the storage of timber and wood fuel at remote transport hubs - understands the cost structure of logging - has experience of occupational safety and contractual matters - knows how salaries are calculated for forest workers and machine operators - is aware of different types of entrepreneurship related to logging - can carry out logging audits 	3				3 cr
NM13VA05	<p>• Timber Mensuration and Storage</p> <p><i>The student</i></p> <ul style="list-style-type: none"> - understands the importance of timber measurements as part of the procurement chain - knows the laws and regulations establishing the framework for measuring timber and wood fuel - knows methods used for measuring timber and wood fuel - can apply different methods for measuring timber and wood fuel - can store timber and wood fuel at different points of the procurement chain based on the property and freshness requirements for raw materials - can comply with the requirements of the Insect Protection Act concerning wood storage - knows methods used to extend the storage time of wood - knows the risks associated with timber and wood fuel storage - understands the importance of storage costs in the procurement chain 	3				3 cr
NM13VA04	<p>• Timber Transport and Logistics</p> <p><i>The student</i></p> <ul style="list-style-type: none"> - understands the importance of logistics for the entire procurement chain - understands the importance of infrastructure for the Finnish forest industry - has basic knowledge of road construction - can plan maintenance and refurbishment of forest roads - knows methods used for remote transport of timber and wood fuel - can organise the transport of timber and wood fuel - understands the importance of information systems in transport management - understands how route optimisation is used to achieve cost savings - knows the legislation and agreements that set out the framework for transport in the forest industry - knows how tariffs for commercial transport are calculated - knows how to arrange transport using barges and ships 	3				3 cr
BE16SI	Forest inventory	15				15 cr
NM13GI01	<p>• Map Skills</p> <p><i>The student</i></p> <ul style="list-style-type: none"> - can read and understand maps - can move around terrain and locate objects using maps - knows the geometric properties of maps - can combine map theory and practice - can assess their own physical and intellectual limitations and create a positive approach to self-development 	3				3 cr
NM13SI02	<p>• Forest mensuration 2</p> <p><i>The student</i></p> <ul style="list-style-type: none"> - can measure growths on individual trees and tree stocks - can perform growth calculations - can conduct a stock analysis - can interpret the results from a stock analysis - knows the advantages and disadvantages of different inventory methods - can plan and carry out a line inventory - can calculate inventory results - can perform measurements for forest skills courses - can perform measurements to determine the height site quality class 	3				3 cr
BE16SI01	<p>• Methods and Systems of Planning</p> <p><i>The student</i></p> <ul style="list-style-type: none"> - knows most common inventory methods suitable for natural resource inventory - can evaluate the accuracy of and control customised sampling designs for inventory methods - can utilise geographical data in the production of new information - understands the need for tactical and strategic planning of natural resources - understands the historical development and future possibilities of forest management - knows the most common methods for cost effective planning - has knowledge of methods for collecting and analysing geographical data - can explain how forest management can and should take into account the sustainability principles of forestry 	6				6 cr

	- has knowledge of methods for mapping the objectives of forest owners and assess how they affect planning					
BE16SI02	• GIS Analysis <i>The student</i> - knows methods for data capture and data processing for GIS analyses - can analyse vector and raster based environmental data - can visualise geographical information efficiently and can utilise web-based methods to disseminate it	3				3 cr
BE16SP	Forestry planning		18			18 sp cr
NM13NF03	• Forest Plan <i>The student</i> - considers various sustainability objectives when planning natural resources management - uses available information and technology for cost-effective preparation of forestry plans - can take into account the objectives of forest owners and society as a whole to formulate a tactical-strategic forestry plan - understands the importance of the forestry plan as a support tool for advice and decision-making - can present and explain the content and usefulness of a plan		6			6 cr
BE16SP01	• Operative Planning Methods <i>The student:</i> - understands the timing and objectives of operational planning objectives and their relationship with economics, logistics and decision-making - has knowledge of planning methods for goal-orientated operational activities - recognises numerical optimisation methods - can formulate and solve linear optimisation problems - understands the importance of decision making for effective management of operations in forest organisations	3				3 cr
NM13LF02	• Property Law and real estate assessment <i>The student</i> - has knowledge of regulations governing real estate - understands legislation affecting real estate - knows the requirements for real estate businesses - has knowledge of registration authorities and excerpts - has knowledge of property registration - recognises different forms of ownership - has knowledge of individual road management - students of agrology can evaluate farm real estate and those of forestry engineering can evaluate forest real estate		3			3 cr
BE16SP02	• Business Project <i>The student</i> - can practically apply knowledge of marketing, sales and financial monitoring - has the skills to work in natural resource projects as a member and leader		3			3 cr
NM13NF01	• Forest Organizations <i>The student</i> - can explain how forests in Finland have historically been used - can describe the development of management, logging and transport methods - understands the connection between the emergence and development of the forest industry and how forests have been utilised at different times - is able to account for conditions of forest ownership historically and currently - understands the aims of different forest organizations - has knowledge of cooperation between different organisations and actors in the forest sector - knows forest policy in Finland and the EU	3				3 cr
BE16VS	Timber processing and forestry technics		12			12 cr
NM13TF02	• Mechanical Wood Processing <i>The student</i> - can account for the structure and characteristics of wood - can describe the main principles of manufacturing processes in the sawmill industry, the plywood industry and other related industries - understands the connection between the quality of the raw material and the end products - can describe drying methods for wood and understand their impact on the quality of sawed products - knows the most important wood alteration methods	3				3 cr
BE16VS01	• Chemical Wood Processing <i>The student</i> - understands the importance of chemistry in the forest industry - can explain how mechanical pulp is produced - can describe different methods of chemical cellulose production - understands the connection between the quality of the raw material and the quality of mechanical and chemical pulp - knows the main principles of the most common bleaching methods		3			3 cr

	<ul style="list-style-type: none"> - is aware of the main principles for the production of the most important varieties of paper and cardboard - understands the connection between the quality of the raw material and the characteristics of different types of paper - knows how care of the environment is taken into account in chemical timber processing - has knowledge of research and product development in the chemical timber processing industry 						
BE16VS02	<ul style="list-style-type: none"> • Forest Machinery I <i>Den studerande:</i> -känner till skogsmaskinernas grundläggande funktionsprinciper -förstår sambandet mellan marktryck och spårbildning -har grundkunskaper i teknik om skogsmaskiner och annan drivningsutrustning -kan framföra skogsmaskin i terräng 			3			3 cr
NM13VA08	<ul style="list-style-type: none"> • Forest Machinery II <i>The student</i> - has knowledge of the development of forest machinery - can calculate prices for forest machinery - can calculate the profitability of harvesters and forwarders - knows how data is sent to and from forest machinery - understands the connection between matrices, trunk profile and adaptation - knows which oil and fire fighting equipment should be available at a logging site - can choose appropriate hauling equipment based on the nature of the stock and the operation 			3			3 cr
BE16IV	International wood procurement			9			9 cr
NM13VA09	<ul style="list-style-type: none"> • International wood procurement <i>The student</i> - knows trends in the forest industry at a global level and how these affect the Nordic forestry industry - knows how a forestry sector has been established and functions in another country - has knowledge of a traceability system (CoC) 			3			3 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
BE16IV01	<ul style="list-style-type: none"> • International timber trade <i>Den studerande:</i> -känner till skogsindustrins betydelse såväl i ett nationellt som i ett globalt perspektiv -kan redogöra för skogsindustrins verksamhetsförutsättningar -känner till marknadsläget för olika skogsindustriprodukter -känner till import och exportbestämmelser för virke 			3			3 cr
BE16MN	Comprehensive natural resources management				12		12 cr
BE16MN01	<ul style="list-style-type: none"> • Landscape conservation <i>The student</i> - can evaluate ecological, aesthetic and economic values - can recognise a landscape's cultural values - can communicate with and recognises actors of the conservation and environmental sectors - can manage areas using landscape values (planning and maintenance) 		3				3 cr
NM13SK07	<ul style="list-style-type: none"> • Forest and Nature Conservation <i>The student</i> - can explain the background to and developments in forest conservation - can describe methods for safeguarding the diversity of nature in managed forests - can identify particularly important habitats according to forest law - can identify forest habitats protected by conservation law - can identify habitats protected by forest certification - can consider forest conservation in connection with management issues, planning of logging and renewal planning - can identify permanent archaeological remains in forests - can consider forest conservation in connection with the collection of wood fuel - can consider water protection needs in all action plans 			3			3 cr
BE16MN02	<ul style="list-style-type: none"> • Alternative forest management <i>The student</i> - can, based on wide-ranging expertise, assess the needs, possibilities and effects of different management methods - can plan alternative stock management programs and provide advice to forest owners 				3		3 cr

NM13NF04	<p>• Production Strategies The student</p> <ul style="list-style-type: none"> - understands national and regional objectives and guidelines for nature conservation - can perform comprehensive production strategy calculations for optimising forest property results - knows how socio-economic goals can be taken into account in planning - can evaluate how business sustainability requirements should be taken into account in the preparation of tactical and strategic action plans - can account for the added value of planning in effective natural resources management 				6		3 cr
BE16GE	Green economy				15		15 cr
BE16GE01	<p>• Bioeconomy Project The student</p> <ul style="list-style-type: none"> - understands the concept of bioeconomics and its importance in Finland - is aware of the potential of natural resources to replace non-renewable products in the transition from linear to circular economics - knows the potential of natural resources in the production and sale of goods, services and experiences - knows the concepts of quality management and quality certification - in smaller project groups, is responsible for planning, implementing, evaluating and reporting seminars under the theme "Current issues in bioeconomics" - has deepened their knowledge within an area of bioeconomics of their choice - can broaden their knowledge of the theme through literature studies - can carry out an investigation/survey in their chosen subject area in smaller project groups, preferably in cooperation with the business community in the region in question - can compile a written report - can present project results to different audiences 			6		6 cr	
NM13TT05	<p>• Bioenergy The student:</p> <ul style="list-style-type: none"> - is familiar with different ways to arrange energy technology taking alternative systems and locally produced energy into account - knows how to make economic calculations in order to determine the profitability of energy-saving measures, production and the use of renewable energy - knows how to assess the effects of different energy forms on carbon dioxide emissions 				3		3 cr
NM13SK06	<p>• Economics of Timber Production The student</p> <ul style="list-style-type: none"> - has an understanding of the forest as capital property - knows methods for comparing forest management measures and the profitability of an investment - understands the economic premises of forestry guidelines - understands the difference between production and return - can determine the economically optimal cycle time of a forest - knows methods of cost calculation - can, with cost estimates, assess the profitability of acquiring various forest assets 				3		3 cr
NM13SK10	<p>• Forest taxation and forest regeneration The student</p> <ul style="list-style-type: none"> - can draw up a tax declaration for a forest property and can dispense forest taxation advice - knows compensation principles for damage caused by protected game - can take into account different avenues of forest management support 				3		3 cr
Val	Elective studies						9 cr
Pra	<p>Internship The student</p> <ul style="list-style-type: none"> - has familiarised themselves with the working life and requirements of an industry - has learned to apply knowledge from their studies and has gained new insights into working life - connects persons and organizations active in the field of natural resources management 						30 cr
EXA	<p>Thesis The thesis is part of the student's personal proficiency profile. The student obtains an in-depth professional qualification by carrying out investigations or research work within their field of study. An individual written matriculation test is conducted which demonstrates familiarity with the subject area of the thesis and the language proficiency of the student.</p> <p>The student</p> <ul style="list-style-type: none"> - can apply theoretical models to practical issues - can create a system of tripartite collaboration where students, the university of higher education and industry organisations together develop products, systems or create new knowledge - can, in a structured manner, report results in the implementation of a research plan - can, in a structured manner, at a seminar, present and explain the formulation and purpose of the thesis work, present and explain material and method selection, and present, analyse and discuss results. 						15 cr