Study programmes at UEF School of Forest Sciences

BSc Forest sciences /in Finnish)

MSc European Forestry (Erasmus Mundus)

MSc Wood Materials Science

MSc Forestry (CBU)

MSc Transatlantic Forestry

DSc Forests and Bioresources





Forest sciences in Finnish: BSc and MSc (MMK ja MMM)

Enrolment 2022, 48



Msc in forest sciences 120 op

Compulsory studies to all

- General and methodological studies (9-12 op)
- Language and communication studies (2 op)

Advanced studies for forest sciences

- Compulsory studies for all (54 op)
- Master thesis (40 op)
- Maturity examination

Specialising (alternative) studies (min. 28 op)

At least 2 entire modules

Optional studies (free choice)

- Other studies (24-27 op)
- Minor subject, if not accomplished in BSc studies



Modules

- Forest ecology and biodiversity 12-21 cu
- Forest soil ecology and management 10-26 cu
- Silviculture and forest biomass production 10-22 cu
- Forest health 15-18 cu
- Forest mensuration 13-16 cu
- Forest planning 13-16 cu
- Forest information technology 10cu
- Forest economics 10-16 cu
- Forest policy 10 cu
- Materials science 11 cu
- Wood procurement 18 cu
- Fibrous products and instrumentation 10 cu
- Forest bioenergy 12 cu
- Wood materials science and biorefining 10-20 cu



Wood Procurement Module as Example

Education bases on novel studies with students:

-Fuel Consumption, Greenhouse Gas Emissions, and Energy Efficiency of Wood-Harvesting Operations: A Case Study of Stora Enso in Finland

-Effects of EU's Emission Allowance Price on Wood Procurement Costs in Forest Industry

-The Optimum Wood Procurement Scenario and Its Dynamic Management for Integrated Energy and Material Production in Carbon-Neutral Forest Industry

- -Comparison of Energy Efficiency Indicators of Road Transportation for Modeling Environmental Sustainability in "Green" Circular Industry
- -Attitudes of Small and Medium-Sized Enterprises towards Energy Efficiency in Wood Procurement: A Case Study of Stora Enso in Finland
- -Environmental Efficiency of High Capacity Transport (HCT) in Industrial Roundwood Trucking
- -Utilization of Image, LiDAR and Gamma-Ray Information to Improve Environmental Sustainability of Cut-to-Length Wood Harvesting Operations in Peatlands: A Management Systems Perspective

Tarvitaan UUSIA kumppaneita toteuttamaan graduja ja tutkimuk-

sia

UEF// University of Eastern Finland

https://www.researchgate.net/profile/Teijo_Palander



MSc in European Forestry

MSc European Forestry (MSc EF) is a top class taught 2-year (120 ECTS) double-degree Erasmus Mundus Joint Master Degree Programme in the field of forest sciences

The aim of the MSc EF programme is to educate professionals who have a thorough understanding of sustainable forest bioeconomy as well as European business culture

AQAS



MSc Forestry (CBU FOR)

As a CBU FOR student you will gain expertise in renewable
natural resources – with a strong international focus



Transatlantic Forestry Master

As a TRANSFOR-M students will study modern <u>sustainable</u> <u>forestry and environmental</u> management approaches and gain multicultural perspectives on environmental, economic, and social issues



MSc Wood Materials Science

As our student, you will learn to master the physical and mechanical properties of wood in relation to its chemical composition and ultrastructure, and to understand how to select, modify and convert materials for various applications.

As our graduate you will find job opportunities as a technology specialist, researcher, and project manager in the development organisations and R&D departments of bio-based mechanical and chemical industry or energy cluster.





BIOTALOUDEN ERIKOISTUMISKOULUTUS 30 OP



BIOTALOUS YHTEISKUNNASSA 8 OP

Hiilitaloudesta biotalouteen 2 op

Biotalous verkostotaloutena 2 op

Biotalouden ennakointi ja innovaatiot 2 op

Muutoksen asiantuntijuus ja johtaminen biotaloudessa 2 op



BIOTALOUDEN PROSESSIT 12-22 OP

Biotalouden projekti 7 op



Osaamista suuntaavat opinnot:

Metsät, biotalous ja ilmasto 5 op (Itä-Suomen yliopisto) Biojalostus 5 op (Itä-Suomen yliopisto) Kiertotalous ja hiilijalanjälki 5 op (Savonia-amk) Biotalous ja energia 5 op (Karelia-amk)

OSAAMISTA TUKEVAT OPINNOT 0-10 OP

Opetus- ja kulttuuriministeriö









Thank you

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