

# Curriculum 2023-2026 – Agricultural, Environmental and Resource economics Master program – 120 ECTS

\* Odd years

\*\*Even years

Tba = To be announced later

**Advanced Studies - AGERE-302** 80-110 ECTS (AGERE – Common studies, method studies and AGERE-310 or AGERE-320)

## AGERE - Common studies 35 ECTS

	ECTS	Year/Period
AGERE-001 Introduction to the Master program in Agricultural, Environmental and Resource economics	0	1/I
AGERE-030 Master's thesis	30	2/I-IV
AGERE-020 Master's thesis seminar	5	1-2/I-IV
VIIKM-001 Master's Maturity Test	0	2/I-IV

## Language studies (Choose at least one course)

	ECTS	Year/Period
KK-ENG501 Academic Writing 1, Principle and practice (CEFR C1)	2	1/I-II
KK-ENG502 Academic Writing 2, Process and Feedback (CEFR C1)	2	1-2/III
KK-ENG504 Advanced English: Feedback on Writing (CEFR C1)	1	1-2/I-IV
SUO-111 Basic language skills 1, Finnish	3	1-2
SUO-112 Basic language skills 2, Finnish	2	1-2
KK-RUO001 Swedish for beginners 1	3	1-2
Or min 1 ects other appropriate language courses		

## AGERE - Entrance studies (> 5 10-20 ECTS)

	ECTS	Year/Period
AGERE-009 Mathematics for economists III <ul style="list-style-type: none"> <li>Mandatory for all</li> </ul>	5	1/I
AGERE-012 Mathematics for economists IV <ul style="list-style-type: none"> <li>Mandatory for ERE, voluntary for AGE</li> </ul>	5	1/II
AGERE-010 Microeconomics for AGERE students <ul style="list-style-type: none"> <li>Mandatory for students who have <u>not</u> studied intermediate microeconomics in their earlier degree</li> </ul>	5	1/I
ECOM-G310 Microeconomics 1 or	5	1-2/I
Capstone: Microeconomic Policy (31E99906) <ul style="list-style-type: none"> <li>Mandatory for ERE, voluntary for AGE</li> </ul>	6	1/II***
AGERE-007 Applied econometrics <ul style="list-style-type: none"> <li>Mandatory for all</li> </ul>	5	1/II
FOR-017 R-basic course <ul style="list-style-type: none"> <li>Voluntary for all</li> </ul>	5	1/I****

\*\*\* How to enroll courses: <https://www.helsinki.fi/studies/courses>

\*\*\*\* Lectured in Finnish

## AGERE - Theories and methods ≥ 10-30 ECTS

In Agricultural economics choose at least 15 cr. In Environmental and resource economics choose at least 10 cr.

	ECTS	Year/Period
AGERE-002 Cost-Benefit Analysis	5	1-2/IV
AGERE-003 Economic valuation methods	5	1-2/II
AGERE-004 General Equilibrium Modeling	5	1-2/IV**
AGERE-005 Applied Linear Programming	5	1-2/III
AGERE-011 Socio-cultural valuation methods for Integrated Landscape Management	5	1-2/I
AGERE-013 Qualitative methods in Agricultural, Environmental and	5	1-2/I

Resource economics		
ECOM-G311 Microeconomics 2	5	1-2/II
ECOM-G314 Econometrics 1	5	1-2/II
ECOM-413 Applied Microeconometrics I (Aalto Uni: 31E00910)	5	1-2/I***
ECOM-414 Applied Microeconometrics II (Aalto Uni: 31E00920)	5	1-2/II***
FOR-108 Qualitative empirical research methods, approaches and research ethics	5	1-2/II
FOR-103 Survey methods in marketing and social sciences	5	1-2/III-IV
FOR-007 Statistical models: Basics in generalized linear models	5	1-2/III
FOR-008 Statistical Prediction and Sampling	5	1-2/IV**
FOR-009 Statistical Modelling with R	5	1-2/IV*
AGERE-A07 Changing theme course in Agricultural economics - Statistical Analysis with R	5	1-2/I*****
AGERE-014 Experimental methods in food, agricultural, environmental and resource economics	5	1-2/IV*

\*\*\*How to enroll courses: <https://www.helsinki.fi/studies/courses>

\*\*\*\*\*Course is organized only in the Academic year 2023-2024

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## Study track studies (Advanced studies chosen according to field of specialization and study right)

### AGERE-310 Agricultural Economics - 30 ECTS

(Choose at least one AGE-module and other courses or modules from study track studies, 15 EC

### AGERE-320 Environmental and resource economics - 45 ECTS

(Choose EREI and EREII and other courses or modules from study track studies, 15 ECTS)

	ECTS	Year/Period
<b>AGE I Agricultural Markets and Policy</b>	15	
AGERE-A01 Price Analysis and Market Structure of the Agrifood Supply Chain	5	1/II
AGERE-A08 Agricultural and Food Policy Analysis	5	1-2/III*
AGERE-A03 International Agricultural Trade and Trade Theory	5	1-2/III**
<b>AGE II Production Economics and Farm Management</b>	15	
AGERE-A04 Risk Management in Agriculture	5	1-2/II
AGERE-A05 Production and Cost Theory	5	1-2/III
AGERE-A06 Theories and Applications in Strategic Management	5	1-2/IV
<b>AGE III Entrepreneurship</b>	15	
EKM-127 Sustainable entrepreneurship	5	1-2/III
AGERE-A09 Rural social entrepreneurship MOOC	1 - 5	1-2/III-IV
AGERE-A10 Sustainable financing	5	1-2/II
Other master level courses in entrepreneurship, marketing, co-operation studies or accounting	5-10	1-2
<b>ERE I Environmental Economics</b>	15	
AGERE-E01 Environmental Economics I: Theory	5	1/II
AGERE-E02 Environmental Economics II: Mechanisms	5	1/III
AGERE-E11 Solving environmental problems with data	5	1-2/IV
<b>ERE II Natural Resource Economics</b>	15	
AGERE-E08 Introduction to Dynamic Optimization .	5	1/III
AGERE-E09 Advanced Natural Resource Economics .	5	2/IV
AGERE-E06 Economics of Aquatic Resources: Numerical Models	5	2/I

Thematic alternative study module in Agricultural economics or in Environmental and Resource Economics 15 cr

You can include all the AGE and ERE Study track module courses in this Study module, if you have not already chosen them in the other Study track modules".

Alternative Study track module can also include exchange study courses, which have to be approved by study counselor before exchange period if these courses are included to study track studies. Helsinki Graduate School of Economics courses are also suitable for these alternative study modules.

AGERE-E12 International environmental agreements related to marine areas and resources	5	1-2/III**
AGERE-E14 Economics and governance of marine resources	5	1-2/II
AGERE-E07a Energiapolitiikka Suomessa	5	1-2/III****
AGERE-E07b Changing theme course in Environmental and Resource Economics	5	1-2/tba
FOR-285 Climate Change mitigation and adaption in forestry	5	1-2/III**

M.Sc. level courses offered by the Helsinki Graduate School of Economics (see <https://www.helsinki.fi/courses/>). Particularly relevant in the context of environmental & resource economics are the following courses (but also other courses offered can be chosen):

- Behavioral Economics (26037/62638)\*\*\*
- Development Economics I (31E15000) \*\*\*
- Development Economics II (31E16000) \*\*\*
- Economic Growth (ECOM-427)
- Experimental Economics (ECOM-448)
- Health Economics (ECOM-447)
- International Trade (31E00500)\*\*\*
- Markets and Industrial Organization (26044)\*\*\*
- Public Economics 1: Taxation Policy (ECOM-440)
- Public Economics 2: Expenditure Policies (ECOM-441)

\*\*\*How to enroll courses: <https://www.helsinki.fi/studies/courses>

\*\*\*\*Course is organized only in the Academic year 2023-2024

## Other studies

### Career orientation and professional skills training

(Choose at least 4 ECTS of AGERE-027 or AGERE-028)

	ECTS	Year/Period
AGERE-027 Career orientation/Internship	4-10	1-2/I-IV
AGERE-028 Career orientation/ Career-related project	1-10	1-2/I-IV

### Optional

VIKIM-002 Tutoring	2	1-2/I
VIKIM-005 Participation in Student Organization and University of Helsinki Administrative Bodies	2-5	1-2/I-IV
AGERE-E07c Changing theme course in Environmental and Resource Economics	5	tba

Studies which are freely chosen 8-28 ECTS

TOTAL	120	
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## Research Master track (jointly with Helsinki Graduate School of Economics)

Helsinki GSE Research Master's education equips students with the main tools of a professional economist. It represents state-of-the-art scientific knowledge of the field and prepares students to operate in most demanding expert positions in government, business, and research. The advanced and technically oriented nature of the program also serves as an excellent foundation for entry into a PhD program and other research-focused roles in the society.

For more information, see <https://www.helsinki.fi/programs/research-masters-program/>

AGERE - Common studies	35 ECTS
AGERE-009 and AGERE-012 (Math III & IV)	10 ECTS
Study track studies ERE / AGE	30 ECTS / 15 ECTS
Research Master courses (AGERE-306 in optional modules)	45 ECTS
-ECOM-R310 - ECOM-R315 (6 courses)	
-Choose 3 of the following: ECOM-R316 – ECOM – R321	
Total ERE / AGE	120 / 105 (+ internship + 10 ECTS AGERE studies)

If you choose Research Master track, then AGERE-306 substitutes Methods and Theories module. Contact education planning officer about the change.

**Agronomy degree/title** <https://guide.student.helsinki.fi/fi/artikkeli/tutkinnon-rakenne-ja-laajuus> (Select Study program -> MSc in Agricultural Sciences)

If necessary, the Steering group of the Master's program in Agricultural Sciences may, upon request, comment on whether the applicant meets the equivalence requirements for the title of agronomist given in point 2).