

Programme-specific Section of the Curriculum for the MSc Programme in

Agricultural Economics

at the Faculty of Science, University of Copenhagen 2014 (Rev. 2024)

Contents

1 Title, affiliation and language	2
2 Academic profile	2
2.1 Purpose	
2.2 General programme profile	
2.3 General structure of the programme	
2.4 Career opportunities	
3 Description of competence profiles	3
3.1 General profile in Agricultural Economics	
4 Admission requirements	4
4.1 Bachelor's degrees that automatically fulfil the academic requirements	
4.2 Other Bachelor's degrees	
4.3 Other applicants	
4.4 Language requirements	5
4.5 Supplementary subject elements	5
5 Prioritisation of applicants	6
6 Structure of the programme	
6.1 Programme components	
7 Exemptions	
8 Commencement etc.	
Appendix 1 The recommended academic progression	
Appendix 2 Interim arrangements	
1 General changes for students admitted in the academic year 2023/24	
2 General changes for students admitted in the academic year 2022/23	10
3 General changes for students admitted in the academic year 2021/22	10
4 General changes for students admitted in the academic year 2020/21	
Appendix 3 Description of objectives for the thesis	13

1 Title, affiliation and language

A shared section that applies to all BSc, part-time MSc and MSc Programmes at the Faculty of Science is linked to this programme-specific curriculum.

1.1 Title

The MSc Programme in Agricultural Economics leads to a Master of Science (MSc) in Agricultural Economics with the Danish title: *Cand.oecon.agro.* (candidatus/candidata oeconomiae agronomiae).

1.2 Affiliation

The programme is affiliated with the Study Board of Natural Resources, Environment and Animal Science, and the students can both elect, and be elected, to this study board.

1.3 Corps of external examiners

The following corps of external examiners is used for the central parts of the MSc Programme:

• Corps of External Examiners for Agricultural Science (jordbrugsvidenskab).

1.4 Language

The language of this MSc Programme is English.

2 Academic profile

2.1 Purpose

On the basis of economic, mathematical and statistical methodologies, the objective of the MSc programme in Agricultural Economics is to:

- Enhance the academic knowledge and skills of the student and strengthen the theoretical and methodological qualifications, competences and level of independence attained at bachelor level.
- Provide the student with the opportunity to study in depth the advanced academic aspects of disciplines and methods in the subject area(s), including training in academic work and methods, which further develop the student's ability and competences to work in a specialist professional capacity and take part in academic development work.
- Qualify the student for further studies, including PhD programmes.

2.2 General programme profile

The MSc programme in Agricultural Economics is focused on applied economic theory and methods within the agricultural sector in broad terms. These include:

- International Economics and Development which cover international trade, trade policy, public economics, economic growth, development economics and policy and the economics of globalization.
- Agribusiness and Food Economics which cover production economics, industrial economics and organisation, technology assessment, innovation and management as well as public economics and policy.
- Environmental and Natural Resource Economics which cover economic theory of environmental policies, economic valuation methods and theory of optimal extraction of natural resources over time.

• The programme offers a wide range of restricted elective course that enables students to create their own unique profile combining the economic specializations mentioned above.

Agricultural economics is the key subject area of the programme.

2.3 General structure of the programme

The MSc Programme is set at 120 ECTS.

There are no defined specialisations in this programme.

2.4 Career opportunities

The MSc Programme in Agricultural Economics qualifies students to become professionals within business functions and/or areas such as:

- A PhD programme
- Interest groups and industrial organisations.
- Consultancy and analytical work in a broad sense (banks, financial institutions, large companies, consultancy companies, and agricultural organisations etc.).
- Public administration (the EU, government, regions and municipalities).
- Research (private and public).
- Teaching (universities and business schools etc.).
- Management of own company.

3 Description of competence profiles

Students following the MSc Programme acquire the knowledge, skills and competences listed below. Students will also acquire other qualifications through elective subject elements and other study activities.

3.1 General profile in Agricultural Economics

Graduates holding an MSc in Agricultural Economics have acquired the following:

Knowledge about:

- How to demonstrate general knowledge of economic issues, theories and methodologies within International Economics and Development, and/or Agribusiness and Food Economics, and/or Environmental and Natural Resource Economics.
- How to identify economic and statistical methods within the above disciplines.
- How to identify economic agents and the background for their actions.
- How to reformulate theories, principles and research findings to independently form hypotheses and theories.
- Different kinds of sustainability (economic, environmental, social).

Skills in/to:

- Pose questions that are characteristic of agricultural economics and produce several possible answers.
- Analyse issues within agricultural economics and the associated decision-making processes.
- Formulate and solve complex economic and food economic problems, using theoretical, analytical, statistical and/or descriptive approaches.
- Utilise and evaluate economic methodologies and evaluate the fundamental assumptions behind economic theories as well as their possibilities and limitations.
- Employ economic reasoning to explain economic claims.

- Work methodologically correct with both qualitative and quantitative analyses.
- Communicate own specialist knowledge clearly and precisely in writing and orally to various target groups.
- Select and use appropriate information and communications technology in all relevant work processes.
- Apply environmental and natural resource economics which cover economic theory of environmental policies, economic valuation methods and theory of optimal extraction of natural resources over time.
- Assess the (economic and/or environmental) effects of political instruments.
- Use appropriate digital tools where relevant, including data handling, digital investigations and methods, digital reflexion, understanding technology and digital scientific information searching.

Competences in/to:

- Take a critical and visionary approach to economic methodologies and the fundamental assumptions behind agricultural economics.
- Understanding, discussing and analyzing (the achievement of) the sustainable development goals, whilst acknowledging the interrelations between e.g. economic growth, international collaboration, climate change and various other environmental impacts of economic activity including, but not limited to, agricultural production.
- Assess the possibilities and limitations of the theories and their potential applications in various work-related contexts.
- Use relevant digital tools and perform data analysis
- Handle work and development situations that are complex, unpredictable and require new solution models in the private and public-sector labour markets both nationally and internationally.
- Transfer and apply theories and principles to new but related economic issues.
- Implement and carry out mono-disciplinary and interdisciplinary collaboration and assume professional responsibility.
- Assume independent responsibility for and evaluate own professional development and specialisation with a view to life-long learning.
- Work with others, discuss solutions and achieve consensus.

4 Admission requirements

4.1 Bachelor's degrees that automatically fulfil the academic requirements

Applicants with one of the following Bachelor's degrees automatically fulfil the academic requirements for admission to the MSc Programme in Agricultural Economics:

- Agricultural Economics/Environmental and Food Economics
 (jordbrugsøkonomi/miljø- og fødevareøkonomi) from University of Copenhagen
 (reserved access)
- Economics from University of Copenhagen, University of Southern Denmark or Aarhus University
- Mathematics-Economics (*matematik-økonomi*) from University of Copenhagen or Aarhus University
- Computer Science and Economics (datalogi-økonomi) from University of Copenhagen

4.2 Other Bachelor's degrees

Applicants with a Bachelor's degree, Professional Bachelor's degree or equivalent from

Danish or international universities other than those listed in 4.1 are qualified for admission to the MSc Programme in Agricultural Economics if the programme includes the following:

- Courses in economics corresponding to at least 37.5 ECTS, subject to the following distribution constraints:
 - o A minimum of 22.5 ECTS within micro economics
 - o A minimum of 7.5 ECTS within macro economics
- Courses in statistics corresponding to at least 7.5 ECTS
- Courses in econometrics corresponding to at least 7.5 ECTS
- Courses in mathematics corresponding to at least 7.5 ECTS

For informational purpose - Bachelor's degrees that have previously been assessed as qualifying meeting the specified ECTS

Applicants with a Bachelor's degree in Natural Resources with the specialisation in Environmental Economics from the University of Copenhagen are qualified for admission if the programme includes the following:

- 7.5 ECTS: LOJB10234U Samfundsøkonomi or NMAB20003U Makroøkonomi 1: Det korte sigt (MakØk1) or AØKB08002U Økonomiske principper B or NIFB13011U Makroøkonomi og konjunkturer or equivalent
- 7.5 ECTS: NIFB14006U International Economics or AØKA08021U International Economics (F) or other additional courses in economics

4.3 Other applicants

The Faculty may also admit applicants who, after an individual academic assessment, are assessed to possess educational qualifications equivalent to those required in Subclauses 4.1-4.

4.4 Language requirements

Applicants must as a minimum document English language qualifications comparable to a Danish upper secondary school English B level or English proficiency corresponding to the tests and scores required. Accepted tests and required minimum scores are published online at www.science.ku.dk.

4.5 Supplementary subject elements

The qualifications of an applicant to the MSc programme are assessed exclusively on the basis of the qualifying Bachelor's degree. Supplementary subject elements passed between the completion of the Bachelor's programme and the admission to the MSc Programme cannot be included in the overall assessment.

However, students lacking the necessary credits in the field of Econometrics may be admitted on the condition that they pass the approved university level 7.5 ECTS Econometrics subject element (Introductions to Econometrics NIFB22001U), before the start date of the study programme.

Also, subject elements passed before the completion of the Bachelor's programme may be included in the overall assessment. This includes subject elements completed as continuing education as well as subject elements completed as part of a former higher education program. A maximum of 30 ECTS supplementary subject elements can be included in the overall assessment."

Subject elements passed before completing the BSc programme which are to form part of the MSc programme to which the student has a legal right of admission (§15-courses) cannot be included in the overall assessment.

5 Prioritisation of applicants

With a Bachelor's degree in Agricultural Economics/Environmental and Food Economics from University of Copenhagen the student is granted reserved access and guaranteed a place on the MSc Programme in Agricultural Economics if the student applies in time to begin the MSc Programme within three years of the completion of the Bachelor's degree.

If the number of qualified applicants to the programme exceeds the number of places available, applicants will be prioritised according to the following criteria:

• Total number of ECTS in relevant courses (micro economics, macroeconomics, international economics, agricultural economics, environmental- or resource economics, statistics, econometrics, mathematics).

6 Structure of the programme

The compulsory subject elements, restricted elective subject elements and the thesis constitute the central parts of the programme (Section 30 of the Ministerial Order on Bachelor and Master's Programmes (Candidatus) at Universities).

6.1 Programme components

The programme is set at 120 ECTS and consists of the following:

- Compulsory subject elements, 15 ECTS.
- Restricted elective subject elements, 60 ECTS.
- Elective subject elements, 15 ECTS.
- Thesis, 30 ECTS.

6.1.1 Compulsory subject elements

All of the following subject elements are to be covered (15 ECTS):			
Course code	Course title	Block	ECTS
LOJK10272U	Applied Econometrics	Block 1	7.5 ECTS
NIFK14003U	Incentives and Regulation	Block 3	7.5 ECTS

6.1.2 Restricted elective subject elements

60 ECTS are to be covered as subject elements from the following two lists:

1) 15 ECTS are to be covered as subject elements from the following list:			
Course code	Course code Course title		ECTS
NIFK14022U	Industrial Organization	Block 1	7.5 ECTS
NIFK14023U	Advanced International Trade	Block 1	7.5 ECTS
NIFK16005U	Advanced Development Economics	Block 2	7.5 ECTS
NIFK14001U	Microeconomic and Econometric Production Analysis	Block 2	7.5 ECTS
LOJK10229U	Natural Resource Economics	Block 2	7.5 ECTS
NIFK23003U	Market Design	Block 2	7.5 ECTS

2) 45 ECTS are to be covered as subject elements from the following list:			
Course code	Course title	Block	ECTS
NIFK14022U	Industrial Organization	Block 1	7.5 ECTS
NIFK14023U	Advanced International Trade	Block 1	7.5 ECTS
NIFK14031U	Behavioural and Experimental Economics	Block 1	7.5 ECTS
NIFK14026U	Entrepreneurship and Innovation	Block 1	7.5 ECTS
NIFK14001U	Microeconomic and Econometric Production Analysis	Block 2	7.5 ECTS
NIFK16005U	Advanced Development Economics	Block 2	7.5 ECTS
LOJK10229U	Natural Resource Economics	Block 2	7.5 ECTS
NIFK23007U	Applied Trade and Climate Policy Models	Block 2	7.5 ECTS
NIFK16001U	Economic Efficiency and Benchmarking	Block 2	7.5 ECTS
LOJK10248U	Economic Valuation Methods and Cost-Benefit Analysis	Block 3	7.5 ECTS
NIFK14032U	Business Development and Innovation	Block 3	7.5 ECTS
NIFK13003U	Applied Environmental and Natural Resource	Block 4	7.5 ECTS
	Economics		
LOJK10255U	Agricultural and Food Policy	Block 4	7.5 ECTS
LOJK10292U	Agricultural Value Chains in Developing Countries	Block 4	7.5 ECTS
NIFK15003U	Applied Economics of Consumption	Block 4	7.5 ECTS
NIFK23009U	Impact Evaluation	Block 4	7.5 ECTS
NIFK24000U	Data Management and Analysis Using R	Block 5	7.5 ECTS
	Project in Practise	Block 1-5	15 ECTS

6.1.3 Elective subject elements

15 ECTS are to be covered as elective subject elements.

- All subject elements at MSc level may be included as elective subject elements in the MSc Programme.
- BSc subject elements corresponding to 15 ECTS may be included in the MSc Programme.
- Projects. See 6.1.4 Projects.

6.1.4 Projects

- Projects outside the course scope may be included in the elective section of the programme with up to 15 ECTS. The regulations are described in Appendix 5 to the shared section of the curriculum.
- Project in practice may be included in the elective or restricted elective section of the
 programme with 15 ECTS. Projects in practice may not exceed 15 ECTS in total of
 the programme. Project in practice may be written as a combination of the restricted
 elective and elective section of the programme. The regulations are described in
 Appendix 4 to the shared section of the curriculum.
- Thesis preparation projects may be included in the elective section of the programme with up to 15 ECTS. The regulations are described in Appendix 6 to the shared section of the curriculum.
- Projects outside the course scope, Projects in practice and Thesis preparation projects may not exceed 30 ECTS of the programme.

6.1.5 *Thesis*

The MSc Programme in Agricultural Economics includes a thesis corresponding to 30 ECTS, as described in Appendix 2 to the shared curriculum. The thesis must be written within the academic scope of the programme.

6.1.6 Academic mobility

The curriculum makes it possible to follow subject elements outside the Faculty of Science.

For students admitted in September the academic mobility in the MSc Programme in Agricultural Economics is placed in block 1+2 of the 2nd year.

For students admitted in February the academic mobility in the MSc Programme in Agricultural Economics is placed in block 3+4 of the 2nd year.

Academic mobility requires that the student follows the rules and regulations regarding preapproval and credit transfer.

In addition, the student has the possibility to arrange similar academic mobility in other parts of the programme.

7 Exemptions

In exceptional circumstances, the study board may grant exemptions from the rules in the curriculum specified solely by the Faculty of Science.

8 Commencement etc.

8.1 Validity

This subject specific section of the curriculum applies to all students enrolled on the programme – see however Appendix 2.

8.2 Transfer

Students enrolled on previous curricula may be transferred to the new one as per the applicable transfer regulations or according to an individual credit transfer by the study board.

8.3 Amendment

The curriculum may be amended once a year so that any changes come into effect at the beginning of the academic year. Amendments must be proposed by the study board and approved by the Dean.

Notification about amendments that tighten the admission requirements for the programme will be published online at www.science.ku.dk one year before they come into effect.

If amendments are made to this curriculum, an interim arrangement may be added if necessary to allow students to complete their MSc Programme according to the amended curriculum.

Appendix 1 The recommended academic progression

The table illustrates the recommended academic progression. The student is allowed to plan an alternative progression within the applicable rules.

Table for students admitted to the programme in September (summer):

Table – MSc Programme in Agricultural Economics

	Block 1	Block 2	Block 3	Block 4
1st	Applied Econometrics	Restricted elective	Incentives and Regulation	Restricted elective
year			Restricted elective	Restricted elective
2nd	Restricted elective	Restricted elective	Th	ocis
year			1111	C313

Table for students admitted to the programme in February (winter):

Table - MSc Programme in Agricultural Economics*

	Block 3	Block 4	Block 1	Block 2
1st	Incentives and Regulation	Restricted elective	Applied Econometrics	Restricted elective
year	Restricted elective	Restricted elective	Restricted elective	Restricted elective
2nd	Restricted elective Restricted elective		Th	ocis
year	Elective	Elective	Thesis	

^{*}This table is only relevant for students who begin the MSc Programme in February (block 3)

Appendix 2 Interim arrangements

The Shared Section that applies to all BSc, part-time MSc and MSc Programmes at the Faculty of Science applies to all students.

The interim arrangements below only consist of parts where the current curriculum differs from the rules and regulations that were previously valid. Therefore, if information about relevant rules and regulations are missing, it can be found in the curriculum above.

1 General changes for students admitted in the academic year 2023/24

Students admitted to the MSc Programme in the academic year 2023/24 must finish the programme as listed in the curriculum above with the following exceptions.

Restricted elective subject elements

	45 ECTS are to be covered as subject elements from the following list:			
	Restricted elective subject elements offered in this curriculum (list 2) (see above)			
NIFK19006U Managing and Analyzing Data in Social Discontinued* 7.5 ECTS			7.5 ECTS	
		Science		

^{*} See discontinued courses below.

2 General changes for students admitted in the academic year 2022/23

Students admitted to the MSc Programme in the academic year 2022/23 must finish the programme as listed in the curriculum above with the following exceptions.

Restricted elective subject elements

45 ECTS are to be covered as subject elements from the following list:				
Restricted elective	subject elements offered in this curriculum (li	st 2) (see above)		
NIFK16007U	NIFK16007U Computational Methods for Policy Discontinued* 7.5 ECTS			
	Analysis in AgriFood Markets			
NIFK14025U	Contracts and Cooperatives Discontinued* 7.5 ECTS			
NIFK19006U	Managing and Analyzing Data in Social Discontinued* 7.5 ECTS		7.5 ECTS	
	Science			

^{*} See discontinued courses below.

3 General changes for students admitted in the academic year 2021/22

Students admitted to the MSc Programme in the academic year 2021/22 must finish the programme as listed in the curriculum above with the following exceptions.

Restricted elective subject elements

45 ECTS are to be covered as subject elements from the following list:					
Restricted elective	subject elements offered in this curriculum (li	st 2) (see above)			
NIFK16007U	Computational Methods for Policy	Discontinued*	7.5 ECTS		
	Analysis in AgriFood Markets				
NIFK14025U	Contracts and Cooperatives Discontinued* 7.5 ECTS				
NIFK19006U	Managing and Analyzing Data in Social Discontinued* 7.5 ECTS		7.5 ECTS		
	Science				

^{*} See discontinued courses below.

Projects

• Projects outside the course scope may be included in the elective section of the programme with up to 15 ECTS. The regulations are described in Appendix 5 to the shared section of the curriculum.

- Project in practice may be included in the elective or restricted elective section of the programme with 15 ECTS. Projects in practice may not exceed 15 ECTS in total of the programme. Project in practice may be written as a combination of the restricted elective and elective section of the programme. The regulations are described in Appendix 4 to the shared section of the curriculum.
- Thesis preparation projects may be included in the elective section of the programme with up to 15 ECTS. The regulations are described in Appendix 6 to the shared section of the curriculum.
- Projects outside the course scope, Projects in practice and Thesis preparation projects may not exceed 45 ECTS of the programme.

4 General changes for students admitted in the academic year 2020/21

Students admitted to the MSc Programme in the academic year 2020/21 must finish the programme as listed in the curriculum above with the following exceptions.

Restricted elective subject elements

restricted elective subject elements					
45 ECTS are to be	45 ECTS are to be covered as subject elements from the following list:				
Restricted elective	subject elements offered in this curriculum (li	st 2) (see above)			
NIFK16007U	Computational Methods for Policy Discontinued* 7.5 F		7.5 ECTS		
	Analysis in AgriFood Markets				
NIFK14025U	14025U Contracts and Cooperatives Discontinued* 7.5		7.5 ECTS		
NIFK19006U	Managing and Analyzing Data in Social	Discontinued*	7.5 ECTS		
	Science				

^{*} See discontinued courses below.

Projects

- Projects outside the course scope may be included in the elective section of the programme with up to 15 ECTS. The regulations are described in Appendix 5 to the shared section of the curriculum.
- Project in practice may be included in the elective or restricted elective section of the programme with 15 ECTS. Projects in practice may not exceed 15 ECTS in total of the programme. Project in practice may be written as a combination of the restricted elective and elective section of the programme. The regulations are described in Appendix 4 to the shared section of the curriculum.
- Thesis preparation projects may be included in the elective section of the programme with up to 15 ECTS. The regulations are described in Appendix 6 to the shared section of the curriculum.
- Projects outside the course scope, Projects in practice and Thesis preparation projects may not exceed 45 ECTS of the programme.

5 Discontinued courses

Course code	Course title	ECTS	Interim arrangement
NIFK16007U	Computational	7.5	The course was restricted elective in the
	Methods for Policy		academic year 2022/23 and earlier.
	Analysis in AgriFood Markets		Offered for the last time: 2022/23
			The course is identical to NIFK23007U
			Applied Trade and Climate Policy Models.
NIFK14025U	Contracts and Cooperatives	7.5	The course was restricted elective in the academic year 2022/23 and earlier.
			Offered for the last time: 2022/23
			Last exam if applicable (cf. SCIENCE's
			Teaching and exam rules): 2023/24
NIFK19006U	Managing and	7.5	The course was restricted elective in the
	Analyzing Data in		academic year 2023/24 and earlier.
	Social Science		Offered for the last time: 2023/24
			The course is identical to NIFK24000U
			Data Management and Analysis Using R.

Appendix 3 Description of objectives for the thesis

Overall aim of the thesis:

The thesis should document competencies in working independently with scientific theories and methods within a chosen subject area in (agricultural) economics, related to courses or other elements of the programme.

After completing the thesis, the student should have:

Knowledge about:

- Scientific and/or societal problems within the study programme's subject areas.
- A suitable combination of theory and state-of-the-art methods and models based on international research within the field of (agricultural) economics, that is relevant for use in the work with the specific problem formulation.

Skills in/to:

- Identify and define a relevant research question.
- Apply and critically evaluate theories/methodologies, including their applicability and limitations within the given subject area.
- Assess the extent to which the production and interpretation of findings/material depend on the theory/methodology chosen and the delimitations chosen.
- Discuss academic issues arising from the thesis with fellow economists as well as with non-expert laymen.
- Describe research questions, methods, analysis and conclusions in an academic way, both orally and in writing.
- Communicate conclusions in a clear and academic manner in relation to the problem formulation and, more generally, considering the topic and the subject area.
- Reflect on the academic and social significance, if any, of the thesis findings.
- Identify areas for further research based on the thesis findings.

Competences in/to:

- Solving potentially complex, problems in a scientific and possibly interdisciplinary work context where unforeseen situations may arise and require new solutions.
- Independently initiating and performing academic investigations within the context of a problem related to (agricultural) economics.
- Taking responsibility for own learning and scientific specialisation.

If the thesis includes empirical analysis, the student will also be able to:

- If relevant, substantiate the idea of conducting experimental work/producing own data in order to shed light on the topic as formulated in the problem formulation.
- Plan appropriate data management as well as collecting, storing, handling and securing data.
- Identify and assess the usefulness of data sources found in relation to the issue in question.
- Use appropriate (digital) tools to analyze data within the relevant academic analysis methods and present findings objectively and in a concise manner.
- Assess the credibility of own findings based on relevant data processing.