

FOOD, AGRICULTURAL AND RESOURCE ECONOMICS (FARE)

Department of Food, Agricultural and Resource Economics, Ontario Agricultural College

The food and agriculture sector connects people with the world's natural resource base and is at the heart of many of the most pressing global issues. In this major, students will acquire the analytical and management skills needed to effectively deal with emerging issues and challenges related to food and agriculture, such as food poverty, food safety and insecurity, and sustainability. Building on an understanding of economic theory and applied methods in both the Canadian and world contexts, a variety of career opportunities arise in industry, government agencies and non-governmental organizations.

Beyond the core offering, the major provides the flexibility for students to pursue thematic areas of study, as well as an opportunity to take additional liberal arts courses. In addition, this major provides excellent background for those students planning to undertake graduate work in food, agricultural or resource economics and other fields of applied economics.

The principle aim of the Co-op program in Food, Agricultural and Resource Economics is to facilitate the transition of students from academic studies to a professional career by enhancing the integration of theory and practice.

The major is administered by the Department of Food, Agricultural and Resource Economics in the Ontario Agricultural College and students are urged to consult the faculty advisor.

Major Learning Outcomes

Upon completion of the program, students will be able to:

- Reflect critically on the complex challenges facing the agri-food sector in Canada and internationally and the implications of these challenges for agri-food policy and business decisions.
- Apply the concepts and analytical approaches of economics to the analysis of the agri-food sector and related policies in Canada and internationally.
- Identify all relevant stakeholders in the policy process and determine their needs and translate them in the framework of societal costs and benefits.
- Select and apply appropriate research methods to the analysis of agri-food markets and policies.
- Interpret the results of market and policy analysis and discuss the implications for policy and business decisions.
- Communicate effectively through written, visual and oral means with business, government and other stakeholders.
- Work independently and as part of a team to prioritize tasks and manage time while maintaining academic and professional integrity.

Co-op Learning Outcomes

Upon completion of the program, students will be able to:

- Reflect critically on the complex challenges facing the agri-food sector in Canada and internationally and the implications of these challenges for agri-food policy and business decisions.
- Apply the concepts and analytical approaches of economics to the analysis of the agri-food sector and related policies in Canada and internationally.
- Identify all relevant stakeholders in the policy process and determine their needs and translate them in the framework of societal costs and benefits.
- Select and apply appropriate research methods to the analysis of agri-food markets and policies.
- Interpret the results of market and policy analysis and discuss the implications for policy and business decisions.
- Communicate effectively through written, visual and oral means with business, government and other stakeholders.
- Work independently and as part of a team to prioritize tasks and manage time while maintaining academic and professional integrity.
- Analyze and solve economic policy and managerial problems relating to the agri-food sector in a real-world workplace setting.
- Work effectively in the real-world workplace setting and in a manner that maintains and promotes professional integrity.
- Reflect critically on the challenges associated with the real-world workplace and relate these challenges to course-based learning within the program as a whole.

Major Requirements (Honours)

This is a major within the degree: Bachelor of Arts (calendar.uoguelph.ca/undergraduate-calendar/degree-programs/bachelor-arts-ba/).

Credit Summary

(20.00 Total Credits)

Code	Title	Credits
Required core courses		9.50
Restricted electives (from lists)		2.00
Electives (must include 1.50 Humanities from two subject areas)		8.50
Total Credits		20

Recommended Program Sequence

Code	Title	Credits
Semester 1		
AGR*1110	Introduction to the Agri-Food Systems	1.00
ECON*1050	Introductory Microeconomics	0.50
0.50 electives		0.50
Select 0.50 credits from the following:		
MATH*1030	Business Mathematics	0.50
MATH*1080	Elements of Calculus I	0.50
MATH*1200	Calculus I	0.50
Semester 2		
ACCT*1220	Introductory Financial Accounting	0.50
ECON*1100	Introductory Macroeconomics	0.50
FARE*1300	Poverty, Food and Hunger	0.50
FARE*1400	Economics of the Agri-Food System	1.00
Semester 3		
ECON*2310	Intermediate Microeconomics	0.50
ECON*2740	Economic Statistics	0.50

1.50 electives or restricted electives 1.50

Semester 4

ECON*2410 Intermediate Macroeconomics 0.50

ECON*2770 Introductory Mathematical Economics 0.50

FARE*2410 Agri-food Markets and Policy 0.50

1.00 electives or restricted electives 1.00

Semester 5

ECON*3740 Introduction to Econometrics 0.50

FARE*2700 Survey of Natural Resource Economics 0.50

1.50 electives or restricted electives 1.50

Semester 6

FARE*3170 Cost-Benefit Analysis 0.50

2.00 electives or restricted electives 2.00

Semester 7

FARE*3030 The Firm and Markets 0.50

2.00 electives or restricted electives 2.00

Semester 8

FARE*4000 Agricultural and Food Policy 0.50

2.00 electives or restricted electives 2.00

Restricted Electives

A minimum of 2.00 credits from the following lists, regardless of area:

Code	Title	Credits
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Food and Agribusiness Management

FARE*4220 Advanced Agribusiness Management 0.50

FARE*4240 Futures and Options Markets 0.50

FARE*4360 Marketing Research 0.50

FARE*4370 Food & Agri Marketing Management 0.50

MGMT*3320 Financial Management 0.50

Food Industry Economics and Management

FARE*3310 Operations Management 0.50

FARE*3320 Supply and Value Chain Management 0.50

FARE*4330 Advanced Operations Management In the Agri-Food Sector 0.50

FARE*4380 Agri-Food Retailing, Merchandising and Sales 0.50

FARE*4500 Decision Science 0.50

International Agricultural Development Economics

ECON*2650 Introductory Development Economics 0.50

FARE*3000 International Food Sector and Policy Analysis 0.50

FARE*3250 Food Security, Nutrition and International Development 0.50

Resource Economics

ECON*4930 Environmental Economics 0.50

FARE*4290 Land Economics 0.50

FARE*4310 Resource Economics 0.50

Experiential Learning

ENVS*3330 Flexible Environmental Internship 0.50

IAEF*3500 Experiential Education 0.50

UNIV*3140 Flexible Internship in Agri-Food 0.50

Notes: A student may obtain permission to substitute certain other courses for the ones listed if the substitute courses fit with the students' program. Approval from a departmental advisor is required. Unless taken to satisfy the requirements of another program, no student may receive credit in this program for more than one of the following statistics prerequisites ECON*2740 Economic Statistics, STAT*2040 Statistics I, STAT*2060 Statistics for Business Decisions, or STAT*2080 Introductory Applied Statistics I.

Co-op Requirements (Honours)

This is a major within the degree: Bachelor of Arts (calendar.uoguelph.ca/undergraduate-calendar/degree-programs/bachelor-arts-ba/).

The Co-op program in Food, Agricultural and Resource Economics is a five year program, including five work terms. Students must follow the academic work schedule as outlined below (also found on the Co-operative Education website: <https://www.recruitguelph.ca/cecs/>).

Academic and Co-op Work Term Schedule

Year	Fall	Winter	Summer
1	Academic Semester 1	Academic Semester 2	Off
2	Academic Semester 3, COOP*1100	Academic Semester 4	COOP*1000 Work Term I
3	COOP*2000 Work Term II	Academic Semester 5	COOP*3000 Work Term III
4	Academic Semester 6	COOP*4000 Work Term IV	COOP*5000 Work Term V
5	Academic Semester 7	Academic Semester 8	N/A

Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary

(22.50 Total Credits)

Code	Title	Credits
	Required Core Courses	9.50
	Restricted Electives (minimum 0.50 credits at the 4000 level)	2.00
	Free Electives	7.00
	Humanities (over at least two subject areas)	1.50
	Co-op Work Terms	2.50
Total Credits		22.5

Recommended Program Sequence

Code	Title	Credits
Semester 1 - Fall		
AGR*1110	Introduction to the Agri-Food Systems	1.00
ECON*1050	Introductory Microeconomics	0.50
	0.50 electives	0.50

Select 0.50 credits from the following:

MATH*1030	Business Mathematics	0.50
MATH*1080	Elements of Calculus I	0.50
MATH*1200	Calculus I	0.50
Semester 2 - Winter		
ACCT*1220	Introductory Financial Accounting	0.50
ECON*1100	Introductory Macroeconomics	0.50
FARE*1300	Poverty, Food and Hunger	0.50
FARE*1400	Economics of the Agri-Food System	1.00
Summer Semester		
No academic semester or work term		
Semester 3 - Fall		
COOP*1100	Introduction to Co-operative Education	0.00
ECON*2310	Intermediate Microeconomics	0.50
ECON*2740	Economic Statistics	0.50
FARE*2700	Survey of Natural Resource Economics	0.50
1.00 electives or restricted electives		1.00
Semester 4 - Winter		
ECON*2410	Intermediate Macroeconomics	0.50
ECON*2770	Introductory Mathematical Economics	0.50
FARE*2410	Agri-food Markets and Policy	0.50
1.00 electives or restricted electives		1.00
Summer Semester		
COOP*1000	Co-op Work Term I	0.50
Fall Semester		
COOP*2000	Co-op Work Term II	0.50
Semester 5 - Winter		
FARE*3170	Cost-Benefit Analysis	0.50
2.00 electives or restricted electives		2.00
Summer Semester		
COOP*3000	Co-op Work Term III	0.50
Semester 6 - Fall		
ECON*3740	Introduction to Econometrics	0.50
2.00 electives or restricted electives		2.00
Winter Semester		
COOP*4000	Co-op Work Term IV	0.50
Summer Semester		
COOP*5000	Co-op Work Term V	0.50
Semester 7 - Fall		
FARE*3030	The Firm and Markets	0.50
2.00 electives or restricted electives		2.00
Semester 8 - Winter		
FARE*4000	Agricultural and Food Policy	0.50
2.00 electives or restricted electives		2.00

Restricted Electives

A minimum of 2.00 credits from the following list, regardless of area:

Code	Title	Credits
Food and Agribusiness Management		
FARE*4220	Advanced Agribusiness Management	0.50
FARE*4240	Futures and Options Markets	0.50
FARE*4360	Marketing Research	0.50
FARE*4370	Food & Agri Marketing Management	0.50

MGMT*3320	Financial Management	0.50
Food Industry Economics and Management		
FARE*3310	Operations Management	0.50
FARE*3320	Supply and Value Chain Management	0.50
FARE*4330	Advanced Operations Management In the Agri-Food Sector	0.50
FARE*4380	Agri-Food Retailing, Merchandising and Sales	0.50
FARE*4500	Decision Science	0.50
International Agricultural Development Economics		
ECON*2650	Introductory Development Economics	0.50
FARE*3000	International Food Sector and Policy Analysis	0.50
FARE*3250	Food Security, Nutrition and International Development	0.50
Resource Economics		
ECON*4930	Environmental Economics	0.50
FARE*4290	Land Economics	0.50
FARE*4310	Resource Economics	0.50

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