

ECONOMICS

The Department of Economics and Finance offers programs of study leading to the MA and PhD degrees in the following fields:

1. Econometrics (PhD)
2. Financial Economics (MA, PhD)
3. Resources, Environment and Energy (PhD)
4. Development and Growth (PhD)
5. Applied Microeconomics (PhD)

Administrative Staff

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Graduate Faculty

This list may include Regular Graduate Faculty, Associated Graduate Faculty and/or Graduate Faculty from other universities.

J. Atsu Amegashie

BA Ghana, MA Queen's, MA Dalhousie, PhD Simon Fraser - Professor

Graduate Faculty

Kurt Annen

Diploma (Lic. Rer. Pol.), PhD Fribourg (Switzerland) - Professor

Graduate Faculty

Laurent Cellarier

BA, MA Limoges (France); PhD Southern California - Associate Professor

Graduate Faculty

Talat Genc

BS, MA Bogazici, MA, MS, PhD Arizona - Professor

Graduate Faculty

Johanna Goertz

B.Sc. Bonn, MA, PhD Ohio State - Associate Professor and Chair

Graduate Faculty

Nikola Gradojevic

B.Sc., M.Sc. Eng Novi Sad, MA Essex and CEU, PhD British Columbia -

Professor

Graduate Faculty

Louise A. Grogan

B.Sc. School of Economics London, MA Catholique de Louvain, PhD

Amsterdam - Professor

Graduate Faculty

Michael J. Hoy

B.Math. Waterloo, PhD School of Economics London - Professor

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BA Trent, MA, PhD Toronto - Professor

Graduate Faculty

Rene Kirkegaard

BA, M.Sc., PhD Aarhus - Professor

Graduate Faculty

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BA Queen's, MA Victoria, PhD Simon Fraser - Associate Professor

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Graduate Faculty

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BA UC Irvine, MA Cornell, PhD Guelph - Assistant Professor

Graduate Faculty

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BA Cornell, MA, MPhil, PhD Yale - Professor

Graduate Faculty

Ross McKittrick

BA Queen's, MA, PhD British Columbia - Professor

Graduate Faculty

Miana Plesca

B.Sc. Technical Cluj (Romania); MA Georgetown (Washington, D.C.); PhD

Western - Professor

Graduate Faculty

Asha Sadanand

B.Sc., MA Alberta, PhD California Institute - Professor

Graduate Faculty

Thanasis Stengos

B.Sc., M.Sc. School of Economics London, PhD Queen's - Professor

Graduate Faculty

Yiguo Sun

B.Sc. Hebei Normal, M.Sc. Hebei Teacher's, MA Guelph, PhD Toronto -

Professor

Graduate Faculty

Francis Tapon

DES Paris, MBA Columbia, MA, PhD Duke - Professor

Graduate Faculty

Henry Thille

B.Comm. Saskatchewan, MA, PhD British Columbia - Associate Professor

Graduate Faculty

Ilias Tsiakas

BA Toronto, MA York, PhD Toronto - Professor

Graduate Faculty

MA Program

Admission Requirements

The university requires that students have the equivalent of an honours degree at the baccalaureate level.

Admission to the MA program requires that students have a solid background in economic theory and econometrics from a recognized undergraduate program. Normally, the Department requires a 'B+' average as a minimum.

Students whose background is not in economics but who are otherwise outstanding should consult the Department website (<https://www.uoguelph.ca/economics/>) for further information. Applicants whose background in economics is difficult to evaluate may be granted admission as a provisional graduate student for one semester. If, at the end of the semester, the Department is satisfied with the student's progress, it will recommend to the Assistant Vice-President (Graduate Studies) that the student be transferred to regular graduate student status.

Program offices should be consulted for admission deadlines.

Learning Outcomes

Upon successful completion of the Master of Arts in Economics program, graduates will have the capacity to:

1. Demonstrate an understanding of microeconomic and macroeconomic theory and econometrics through successful completion of core disciplinary courses.
2. Develop an ability to critically select models and information and apply them appropriately to a variety of economic areas.
3. Respond to a research question in economics through appropriate application of empirical and/or theoretical techniques.
4. Acquire and adopt formal professional skills and behaviours expected of a practicing economist.
5. Demonstrate an ability to communicate an economic argument effectively in writing.

Program Requirements

The MA program contains core courses in theory and quantitative methods.

The MA requires the completion of a minimum of 4.0 course credits. Most one-semester courses have 0.5 course credits. With approval from the Department, up to 1 credit of the required 4 credits can be taken outside the Department of Economics and Finance. However, students may, with approval, take additional courses from other Departments provided that their program includes at least six course equivalents (3.0 credits) from the Department of Economics and Finance. The minimum duration of the program is 2 semesters of full-time study as a regular graduate student. There are two options to the MA in Economics:

- i. by course work, and
- ii. by course work and major research paper.

Course Work and Major Research Project

A minimum of 4.0 credits is required, including:

1. The Economics Core (1.5 credits):

Code	Title	Credits
ECON*6020	Macroeconomic Theory I	0.50
ECON*6500	Microeconomic Theory MA	0.50
ECON*6140	Econometrics I	0.50
or ECON*6180	Econometric Methods	

2. Three additional courses (1.5 credits)
3. ECON*6940 Research Project (1.00 credit)

Course Work

A minimum of 4.0 credits is required, including:

1. The Economics Core (1.5 credits):

Code	Title	Credits
ECON*6020	Macroeconomic Theory I	0.50
ECON*6500	Microeconomic Theory MA	0.50
ECON*6140	Econometrics I	0.50
or ECON*6180	Econometric Methods	

2. Five additional courses (2.5 credits). At least two courses must have substantial research components (50% or more of the total course grade).

Course Work and Major Research Project in the Field of Financial Economics

1. The Economics Core (1.5 credits):

Code	Title	Credits
ECON*6020	Macroeconomic Theory I	0.50
ECON*6500	Microeconomic Theory MA	0.50
ECON*6140	Econometrics I	0.50
or ECON*6180	Econometric Methods	

2. The Finance Core (1.5 credits):

Code	Title	Credits
FIN*6000	Asset Pricing	0.50
FIN*6200	Empirical Finance and Financial Econometrics	0.50
FIN*6300	Security Analysis and Portfolio Management	0.50

3. ECON*6940 Research Project (1.00 credit)

Course Work in the Field of Financial Economics

A minimum of 4.0 credits is required, including:

1. The Economics Core (1.5 credits):

Code	Title	Credits
ECON*6020	Macroeconomic Theory I	0.50
ECON*6500	Microeconomic Theory MA	0.50
ECON*6140	Econometrics I	0.50
or ECON*6180	Econometric Methods	

2. The Finance Core¹ (1.5 credits):

Code	Title	Credits
FIN*6000	Asset Pricing	0.50
FIN*6200	Empirical Finance and Financial Econometrics	0.50

FIN*6300	Security Analysis and Portfolio Management	0.50
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3. Two additional courses (1.0 credits). Students are encouraged to take:

Code	Title	Credits
FIN*6400	International Finance	0.50
ECON*6490	Money and Banking	0.50

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Note that all courses in the finance core have substantial research components (50% or more of the total course grade).

PhD Program

Admission Requirements

Applicants to the PhD program should have a master's degree in economics with a minimum average of 80% (A-) in their postgraduate studies. Applicants without a master's degree but with an outstanding record at the baccalaureate level, may be admitted initially to the MA program in economics. For students who achieve a superior record and show an aptitude for research, The Board of Graduate Studies, on the recommendation of the Department, may authorize transfer to the PhD program without requiring the student to complete a master's degree.

Learning Outcomes

1. Demonstrate mastery of microeconomic and macroeconomic theory through the formulation and analysis of a variety of economics models.
2. Obtain a deep understanding and proficiency in econometrics through the application of mathematical and statistical techniques.
3. Demonstrate mastery of an applied field within the discipline of economics by critically surveying the literature and articulating a problem.
4. Formulate, design, and analyze empirically and/or theoretically an original question in economics.
5. Recognize, adapt to, and engage with disciplinary norms by developing professional behaviours specific to an economic environment.
6. Demonstrate an ability to communicate complex economic arguments effectively both orally and in writing.

Program Requirements

The objective of the PhD program is to train individuals who already have a strong background in economics to become independent and skilled researchers, in preparation for a career in academia, government or the private sector. Course offerings cover a broad range of topics in theoretical and applied economics. PhD candidates may write a dissertation in any of the areas of expertise of the graduate faculty in the Department.

Graduates are expected to have demonstrated competence at an advanced level in the core areas of Microeconomic theory, Macroeconomic theory, and Econometrics, to have demonstrated competence at the cutting edge of knowledge in their area of specialization and advanced competence in at least one other area, and to have demonstrated mature scholarship, research and communication abilities.

The program requires the satisfactory completion of a minimum of 6 core courses covering theory and, econometrics, and 4 elective field courses. The 6 theory and econometrics courses are taken in the first year. The remaining 4 courses are normally taken in the student's second or third year and must be selected in consultation with the student's Advisory Committee. Students with an existing master's degree awarded by the Lang School of Business and Economics, who have already successfully completed some of the required courses as part of their graduate program, may have those course requirements waived with the permission of the Graduate Program Coordinator. In addition, students must complete a seminar course in the Fall and Winter semesters of their second and third year. Participation in the seminar course is encouraged in the fourth year. The following sequence of milestones represents the typical path through the PhD program.

Year I: Core Courses

Students must complete the following courses in preparation for the comprehensive examinations in economic theory:

Code	Title	Credits
Econometrics		
ECON*6140	Econometrics I	0.50
ECON*6160	Econometrics II	0.50
Theory		
ECON*6000	Microeconomic Theory I	0.50
ECON*6010	Microeconomic Theory II	0.50
ECON*6020	Macroeconomic Theory I	0.50
ECON*6040	Macroeconomic Theory II	0.50

The comprehensive examinations in economics theory are written at the end of Year 1.

Year II: Dissertation Proposal

After the theory comprehensive exams are passed, students must prepare a PhD proposal under the supervision of a faculty member. Proposals are presented to the Department at a symposium, and upon acceptance the Graduate Program Coordinator will notify the Assistant Vice-President (Graduate Studies) that the student has passed the "Qualifying Examination" requirement as set out by the Faculty of Graduate Studies. At this point, the student becomes a "candidate" for the PhD.

Students are also required to complete the ECON*6900 Doctoral Research Seminar in the Fall and Winter semesters.

Year III and IV: Thesis

Submission and defence of an acceptable thesis on a topic approved by the student's advisory committee completes the requirements for the PhD. The thesis is expected to be a significant and original contribution to knowledge in its field and must demonstrate scholarship and critical judgement on the part of the candidate.

Students are also required to complete ECON*6900 Doctoral Research Seminar in the Fall and Winter semesters of their third year and are encouraged to participate in their fourth year.

Collaborative Specializations

International Development Studies

The Department of Economics and Finance participates in the International Development Studies (IDS) collaborative specialization. Applicants for this collaborative specialization enter through one of the

participating departments; course selections are based, in part, on the applicant's primary discipline. Those faculty members in the Department of Economics and Finance whose research and teaching expertise includes aspects of international development studies may serve as advisors for these MA and PhD students. Please consult the International Development Studies (calendar.uoguelph.ca/graduate-calendar/collaborative-specializations/international-development-studies/) listing for a detailed description of the collaborative specialization including the special additional requirements for each of the participating departments.

Courses

ECON*6000 Microeconomic Theory I Unspecified [0.50]

A graduate course in microeconomics, intended for PhD students, presenting a rigorous treatment of the analysis of choices for consumers and producers with and without strategy and uncertainty, partial and general equilibrium, and the fundamental theorems of welfare economics.

Offering(s): Annually

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6010 Microeconomic Theory II Unspecified [0.50]

Advanced topics in modern microeconomics to include elements of game theory, information economics, economics of risk and uncertainty, the theory of incentives and others.

Offering(s): Annually

Prerequisite(s): ECON*6000 - Minimum grade 065.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6020 Macroeconomic Theory I Unspecified [0.50]

A first graduate course in macroeconomics, presenting a rigorous introduction to the tools and basic models of dynamic general equilibrium theory. The topics covered include economic growth and development, economic fluctuations, and monetary and fiscal policies.

Offering(s): Annually

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6040 Macroeconomic Theory II Unspecified [0.50]

This course considers the dynamics resulting from intertemporal optimization models. Foundations of unemployment theory. Approaches to business cycles. Models of long-run growth.

Offering(s): Annually

Prerequisite(s): ECON*6020

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6050 Introduction to Econometric Methods Unspecified [0.50]

Introduction to the specification, estimation and testing of economic models. Topics include the classical linear regression model, t tests, structure tests, specification error, the consequences of the violation of the classical assumptions, detection and correction of autocorrelation and heteroscedasticity.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6060 Mathematical Methods for Economics Fall Only [0.00]

This course is designed to provide students with the necessary mathematical tools to follow the contents of the core economics and econometrics courses in the MA program and successfully complete them. The material covered will include advanced topics in linear algebra, multivariate optimization techniques and comparative statics.

Offering(s): Annually

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6090 Game Theory Unspecified [0.50]

This course introduces the student to game theory, which is an important tool for modelling economic situations with multi-person interaction.

Economic applications such as oligopoly, bargaining, auctions, and public goods provision will be discussed. Broader applications to voting games, candidate strategy, war games, and parlour games will also be briefly discussed. Students need to be very familiar with optimization and single person decision-making.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6100 Experimental Economics Unspecified [0.50]

This course examines the use of the experimental methodology in economics. We will study how experiments have been used to test theories in many subfields within economics. In the process, students will learn how to construct and run economics experiments and analyze experimental data.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6110 Mathematical Economics Unspecified [0.50]

This course introduces students to the mathematical techniques used in advanced economic analysis. Topics covered in any year: analysis of dynamic economic models and optimization in dynamic economic models.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6140 Econometrics I Unspecified [0.50]

Topics include a review of the classical linear regression model, applications of generalized least squares, maximum likelihood methods and various statistical test procedures.

Offering(s): Annually

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6160 Econometrics II Unspecified [0.50]

Topics include general method of moments as a method of estimation and inference, instrumental variables, nonlinear estimation and simultaneous equations. Also, more specialized topics such as limited-dependent-variable models and time series methods may be covered.

Prerequisite(s): ECON*6140

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6170 Topics in Econometrics Unspecified [0.50]

This is an advanced econometrics topics course that covers the area of non-parametric and semiparametric estimation and testing of econometrics models, including time series and panel data semiparametric models.

Offering(s): Annually

Prerequisite(s): ECON*6160

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6180 Econometric Methods Unspecified [0.50]

This course follows ECON*6050. It covers estimation by instrumental variables, estimations of simultaneous systems, asymptotic distribution theory, maximum likelihood estimation, binary choice and limited dependent variable models, and issues in time series analysis.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6200 Economic History Unspecified [0.50]

This course considers topics in economic history which vary from year to year. The emphasis will be usually on late-19th or 20th century topics and often involves a world emphasis. Student presentations and papers form a large part of the course.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6300 International Trade Theory Unspecified [0.50]

This course provides a rigorous treatment of both positive and normative aspects of trade theory through extensive use of general equilibrium models under varying assumptions. Topics may also include barriers to trade, international factor movements, growth and development, and strategic trade policy.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6350 Economic Development Unspecified [0.50]

This course examines economic development from an international perspective: theories, history, policies and prospects.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6370 Economic Development in Historical Perspective Unspecified [0.50]

This course will examine the experience of economic development focusing on the emergence of the Third World. Topics for discussion will vary from year to year; they may include the impact of trade expansion during the eighteenth and nineteenth centuries, the role of manufacturing as a leading sector, statist vs. the new classical approaches to government policy, and others.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6400 Public Finance Unspecified [0.50]

This course surveys the normative theory of the public sector. Topics may include public expenditure theory, tax theory, cost benefit analysis and fiscal federalism.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6490 Money and Banking Unspecified [0.50]

This course studies monetary economies using overlapping generations models, MIU models and CIA models. More specifically, we will study major issues in money and banking, such as the role of money and banks, the cost of inflation, and the optimal monetary policies.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6500 Microeconomic Theory MA Unspecified [0.50]

A first graduate course in microeconomics, intended for Master students, presenting a rigorous treatment of the analysis of choices in markets and organizations. It covers consumer theory, general equilibrium, uncertainty, game theory, and information economics.

Offering(s): Annually

Restriction(s): Restricted to Economics MA students.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6600 Labour Economics Unspecified [0.50]

Major themes in labour market theory including static and dynamic labour demand and supply, migration and wage structures and dynamics, unemployment, migration and the role of social programs.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6700 Industrial and Market Organization Unspecified [0.50]

The major topics of industrial organization are analyzed from both a game theoretic perspective and from a Structure-Conduct-Performance perspective. Typical topics include: oligopoly theory, determinants of industrial structure, Coase theorem, market entry, advertising, research and development, product differentiation, and price discrimination.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6750 Managerial Economics Unspecified [0.50]

The course introduces students to the latest developments in the economic analysis of the inside workings and organization of firms. The course tries to explain the diversity of economic organizations, and more generally why economic activity is sometimes carried out through firms and sometimes through markets. For graduate students outside the Department of Economics and Finance.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6770 Financial Management Unspecified [0.50]

This course examines the implications of financing decisions made by firms in a world of uncertainty. Topics such as capital budgeting, capital structure, dividend policy, market efficiency and capital asset pricing will be analyzed from the perspective of corporate finance and portfolio management theory.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6800 Environmental Economics Unspecified [0.50]

A topics course concerning the interrelationships between economic activities and the state of the natural environment. Topics may include: pollution and economic growth; energy use and environmental quality; international trade and pollution; policies for controlling pollution; techniques for assessing the benefits of environmental improvement.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6810 Economic Theory of Natural Resources Use Unspecified [0.50]

This course examines economic models of the use of non-renewable resources to analyze issues such as resource conservation, sustainable development, taxation of resource rents, and price determination in resource markets.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6900 Doctoral Research Seminar Fall and Winter [0.25]

This is a seminar course for PhD students. Students will discuss papers on the research frontier that have recently been published in top journals. Students will also present their own work.

Offering(s): Annually

Restriction(s): Restricted to Economics PhD students.

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6930 Reading Course Unspecified [0.50]

In some circumstances, students may arrange to take a reading course under the direction of a faculty member.

Offering(s): Annually

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6940 Research Project Unspecified [1.00]

All students who choose the research project option in the MA program will register in this course. Research projects are written under the direct supervision of a faculty member. Normally, research projects are completed within one or two semesters. Students must make a presentation of their work and a copy of the final report must be submitted to the Department before the final grade is submitted to the Office of Graduate and Postdoctoral Studies.

Offering(s): Annually

Department(s): Department of Economics and Finance

Location(s): Guelph

ECON*6960 Special Topics in Economics Unspecified [0.50]

This course provides opportunities for graduate students to study topics in economics that are not covered in other graduate-level economics courses. This course is offered when there are both available faculty and sufficient interest among students.

Prerequisite(s): ECON*6010, ECON*6040, ECON*6160

Department(s): Department of Economics and Finance

FIN*6000 Asset Pricing Unspecified [0.50]

This course examines the theory, application and real-world evidence of how financial markets work. Students examine stock, bond and currency markets, valuation of stocks and bonds and the performance of popular portfolios based on size, value and momentum. Students learn to build optimal portfolios through dynamic asset allocation, examine the risk-return relation in stocks, bonds and currencies.

Offering(s): Annually

Equate(s): ECON*6380

Department(s): Department of Economics and Finance

Location(s): Guelph

FIN*6100 Corporate Finance Unspecified [0.50]

This course provides students with an opportunity to evaluate and analyze corporate financial decision-making. Students examine complex issues related to corporate governance, capital budgeting, capital cost, capital structure, dividend policy, IPOs, and mergers and acquisitions.

Department(s): Department of Economics and Finance

Location(s): Guelph

FIN*6200 Empirical Finance and Financial Econometrics Winter Only [0.50]

This course examines empirical research in finance, involving the integration of financial theory, financial econometrics, and data analysis. Students conduct empirical research in finance by applying econometric theories, programming analyses in various statistical software, interpreting data to generate insights and communicating findings in writing and oral presentations.

Offering(s): Annually

Prerequisite(s): ECON*6140

Equate(s): ECON*6390

Department(s): Department of Economics and Finance

Location(s): Guelph

FIN*6300 Security Analysis and Portfolio Management Unspecified [0.50]

This course provides students with the opportunity to analyze companies in the context of how they construct equity portfolios and examine the valuation of firms and the calculation of companies' intrinsic value. Students explore the role and activities of equity security analysis in highly competitive markets.

Offering(s): Annually

Equate(s): ECON*6820

Department(s): Department of Economics and Finance

Location(s): Guelph

FIN*6400 International Finance Unspecified [0.50]

This course provides students with the international finance knowledge required to manage financial assets in a global environment. Students examine foreign exchange forecasting and risk management using various techniques, including derivative instruments. Students discuss articles and cases related to capital flows in international markets, financing trade flows and open economy macroeconomic models.

Equate(s): ECON*6320

Department(s): Department of Economics and Finance

Location(s): Guelph

FIN*6800 Special Topics in Finance Unspecified [0.50]

This course provides opportunities for graduate students to study topics in finance that are not covered in other graduate-level finance courses. The course is offered when there are both available faculty and sufficient interest among students.

Department(s): Department of Economics and Finance

Location(s): Guelph