Economics

This section presents the requirements for programs in:

- **Economics B.Econ. Honours**
- **Economics B.Econ. Honours with Concentration**
- **Economics B. Econ. Honours with Concentrations**
- **Concentration in Computational Analysis**
- **Concentration in Development**
- **Concentration in Economic Data Science**
- **Concentration in Advanced Economic Analysis**
- **Concentration in Financial Economics**
- **Concentration in International Political Economy**
- **Concentration in Natural Resources, Environment, and Economy**
- **Concentration in Mathematics and Quantitative Economics**
- **Economics B.Econ. Combined Honours**
- **Economics B.A. Honours Combined**
- **Economics B.Econ.**
- **Specialization in International Economic Policy B.G.In.S. Honours**
- **Stream in International Economic Policy B.G.In.S.**
- **Minor in Economics**
- **Minor in Industrial Economics**
- **Post-Baccalaureate Diploma in Economics**

Program Requirements

Economics
B.Econ. Honours (20.0 credits)

A. Credits Included in the Major CGPA (10.5 credits)

1. 6.5 credits in:		6.5
ECON 1001 [0.5] & ECON 1002 [0.5]	Introduction to Microeconomics Introduction to Macroeconomics	
or FYSM 1003 [1.0]	Introduction to Economics	
ECON 1401 [0.5]	Elementary Mathematics for Economics I	
ECON 1402 [0.5]	Elementary Mathematics for Economics II	
ECON 2020 [0.5]	Intermediate Microeconomics I: Producers and Market Structure	
ECON 2102 [0.5]	Intermediate Macroeconomics I	
ECON 2210 [0.5]	Introductory Statistics for Economics	
ECON 2900 [0.5]	Professional Practice of Economics	
ECON 3020 [0.5]	Intermediate Microeconomics II: Consumers and General Equilibrium	
ECON 3102 [0.5]	Intermediate Macroeconomics II	
ECON 3210 [0.5]	Introductory Econometrics	
ECON 3900 [0.5]	Research Methods in Economics	
ECON 4905 [0.5]	Honours Capstone Seminar (see Note 1 below)	
2. 2.0 credits in ECON at the 3000 level or above		2.0
3. 2.0 credits in ECON at the 4000 level		2.0

B. Credits Not Included in the Major CGPA (9.5 credits)

4. 5.0 credits in electives not in ECON	5.0
5. 4.5 credits in free electives (May include ECON courses)	4.5
Total Credits	**20.0**

Note: ECON 4908 [1.0] Honours Essay may be written by students with Overall and Major CGPAs of 9.50 or higher. In cases where a grade of B- or higher is earned on this essay, it may replace the ECON 4905 requirement together with an ECON elective requirement. Qualified students who choose to pursue the Honours essay pathway must first complete an Honours essay prospectus to the satisfaction of both their advisor and the Undergraduate Supervisor. See The Honours Essay guidelines maintained by the Department for further details.

Economics
B.Econ. Honours
with Concentration (20.0 credits)

A. Credits Included in the Major CGPA (12.5 credits)

1. 6.5 credits in:		6.5
ECON 1001 [0.5] & ECON 1002 [0.5]	Introduction to Microeconomics Introduction to Macroeconomics	
or FYSM 1003 [1.0]	Introduction to Economics	
ECON 1401 [0.5]	Elementary Mathematics for Economics I	
ECON 1402 [0.5]	Elementary Mathematics for Economics II	
ECON 2020 [0.5]	Intermediate Microeconomics I: Producers and Market Structure	
ECON 2102 [0.5]	Intermediate Macroeconomics I	
ECON 2210 [0.5]	Introductory Statistics for Economics	
ECON 3020 [0.5]	Intermediate Microeconomics II: Consumers and General Equilibrium	
ECON 3102 [0.5]	Intermediate Macroeconomics II	
ECON 3210 [0.5]	Introductory Econometrics	
ECON 2900 [0.5]	Professional Practice of Economics	
ECON 3900 [0.5]	Research Methods in Economics	
ECON 4905 [0.5]	Honours Capstone Seminar (see Note 1 below)	
2. One of the concentrations described after the Economics B.Econ. Honours with Concentrations program below, also included in the Major CGPA		4.0
3. 1.0 credit in ECON at the 3000 level or above		1.0
4. 1.0 credit in ECON at the 4000 level		1.0

B. Credits Not Included in the Major CGPA (7.5 credits)

5. 4.0 credits in electives not in ECON	4.0
6. 3.5 credits in free electives.	3.5
Total Credits	**20.0**

Note:

An Honours essay, ECON 4908 [1.0], may be written by students with Overall and Major CGPAs of 9.50 or higher. In cases where a grade of B- or higher is earned on this essay, it may replace both the ECON 4905 requirement and a 0.5-credit 4000 level ECON elective requirement. Qualified students who choose to pursue the Honours

essay pathway must first complete an Honours essay prospectus to the satisfaction of both their advisor and the Undergraduate Supervisor. See The Honours Essay Guidelines maintained by the Department for further details.

Economics
B. Econ. Honours
with Concentrations (20.0 credits)

A. Credits Included in the Major CGPA (14.5 credits)

1. 6.5 credits in:		6.5
ECON 1001 [0.5] & ECON 1002 [0.5]	Introduction to Microeconomics Introduction to Macroeconomics	
or FYSM 1003 [1.0]	Introduction to Economics	
ECON 1401 [0.5]	Elementary Mathematics for Economics I	
ECON 1402 [0.5]	Elementary Mathematics for Economics II	
ECON 2020 [0.5]	Intermediate Microeconomics I: Producers and Market Structure	
ECON 2102 [0.5]	Intermediate Macroeconomics I	
ECON 2210 [0.5]	Introductory Statistics for Economics	
ECON 2900 [0.5]	Professional Practice of Economics	
ECON 3020 [0.5]	Intermediate Microeconomics II: Consumers and General Equilibrium	
ECON 3102 [0.5]	Intermediate Macroeconomics II	
ECON 3210 [0.5]	Introductory Econometrics	
ECON 3900 [0.5]	Research Methods in Economics	
ECON 4905 [0.5]	Honours Capstone Seminar (see Note, below)	
2. Two of the concentrations described below, also included in the Major CGPA		8.0
B. Credits Not Included in the Major CGPA (5.5 credits)		
3. 3.0 credits in electives not in ECON		3.0
4. 2.5 credits in free electives (may include ECON courses)		2.5
Total Credits		**20.0**

Note: an Honours essay, ECON 4908 [1.0], may be written by students with Overall and Major CGPAs of 9.50 or higher. In cases where a grade of B- or higher is earned on this essay, it may replace both the ECON 4905 requirement and a 0.5 credit free elective requirement. Qualified students who choose to pursue the Honours essay pathway must first complete an Honours essay prospectus to the satisfaction of both their advisor and the Undergraduate Supervisor. See The Honours Essay Guidelines maintained by the Department for further details.

Concentration in Computational Analysis (4.0 credits)

2a. 1.0 credit in:		1.0
COMP 1005 [0.5]	Introduction to Computer Science I	
COMP 1006 [0.5]	Introduction to Computer Science II	
(See Note 1 below)		
2b. 2.0 credits in:		2.0

COMP 2401 [0.5]	Introduction to Systems Programming	
COMP 2402 [0.5]	Abstract Data Types and Algorithms	
COMP 1805 [0.5]	Discrete Structures I (see Note 2 below)	
COMP 2804 [0.5]	Discrete Structures II	
2c. 1.0 credit from:		1.0
COMP 2404 [0.5]	Introduction to Software Engineering	
COMP 3005 [0.5]	Database Management Systems	
COMP 4111 [0.5]	Data Management for Business Intelligence	
COMP 4003 [0.5]	Transaction Processing Systems	
COMP 3803 [0.5]	Introduction to Theory of Computation	
COMP 3804 [0.5]	Design and Analysis of Algorithms I	
COMP 3801 [0.5]	Algorithms for Modern Data Sets	
Total Credits		**4.0**

Notes:

1. For Item 2a of the Concentration in Computational Analysis, COMP 1405 may replace COMP 1005 and COMP 1406 may replace COMP 1006.
2. COMP 1805 in the Concentration in Computational Analysis is not required if precluded course MATH 1800 is required by another component of the student's program, such as the Concentration in Mathematics and Quantitative Economics, in which case an additional 0.5 credit in COMP is required from the list of electives in Item 2c.

Concentration in Development (4.0 credits)

2a. 3.0 credits in:		3.0
ECON 3508 [0.5]	Introduction to Economic Development	
ECON 3509 [0.5]	Development Planning and Project Evaluation	
ECON 4507 [0.5]	The Economics of Development	
ECON 4508 [0.5]	International Aspects of Economic Development	
PSCI 2102 [0.5]	Comparative Politics of the Global South	
PSCI 4104 [0.5]	Development in the Global South - Theory and Practice	
2b 1.0 credit from:		1.0
ECON 3220 [0.5]	Canadian Economic History	
ECON 3230 [0.5]	Selected Topics in Economic History	
ECON 3510 [0.5]	African Economic Development	
ECON 3808 [0.5]	The Economics of Transition	
ECON 3870 [0.5]	Comparative Economic Systems	
PSCI 4105 [0.5]	Selected Problems in Development in the Global South	
Total Credits		**4.0**

Concentration in Economic Data Science (4.0 credits)

2a. 1.5 credits in:		1.5
BUSI 1401 [0.5]	Foundations of Information Systems	
COMP 1005 [0.5]	Introduction to Computer Science I	
ECON 2708 [0.5]	Applied Data Analysis	
2b. 2.0 credits in:		2.0
ECON 4002 [0.5]	Statistical Analysis in Economics	
ECON 4706 [0.5]	Econometrics I	
ECON 4708 [0.5]	Economic Data Science - Analytics	
ECON 4709 [0.5]	Economic Data Science - Applications	
2c. 0.5 credit from:		0.5
BUSI 4408 [0.5]	Social Analytics	
ECON 3706 [0.5]	Applied Econometrics	
ECON 4109 [0.5]	Experimental Economics	
ECON 4707 [0.5]	Econometrics II	
ECON 4713 [0.5]	Time-Series Econometrics	
ECON 4880 [0.5]	Special Topics in Economics	
Total Credits		**4.0**

Concentration in Advanced Economic Analysis (4.0 credits)

2a. 3.0 credits in: Core Theory		3.0
ECON 3001 [0.5]	Mathematical Methods of Economics	
ECON 4001 [0.5]	Mathematical Analysis in Economics	
ECON 4002 [0.5]	Statistical Analysis in Economics	
ECON 4020 [0.5]	Advanced Microeconomic Theory	
ECON 4021 [0.5]	Advanced Macroeconomic Theory	
ECON 4706 [0.5]	Econometrics I	
2b. 1.0 credit in:		1.0
ECON at the 4000 level		
MATH at the 2000 level or above		
STAT at the 2000 level or above		
NOTES: Please be aware of the preclusions between MATH, STAT, and ECON courses.		
Total Credits		**4.0**

Concentration in Financial Economics (4.0 credits)

2a. 2.5 credits from:		2.5
BUSI 1003 [0.5]	Survey of Accounting	
or BUSI 1001 [0.5]	Principles of Financial Accounting	
or BUSI 1002 [0.5]	Management Accounting	
ECON 3050 [0.5]	Introduction to Financial Economics	
ECON 3607 [0.5]	Monetary and Financial Institutions	
ECON 4051 [0.5]	Financial Asset Pricing	
ECON 4052 [0.5]	Corporate Financial Economics	
or		
BUSI 1001 [0.5]	Principles of Financial Accounting	
BUSI 1002 [0.5]	Management Accounting	
BUSI 2501 [0.5]	Business Finance	
BUSI 3500 [0.5]	Applied Corporate Finance	
BUSI 3502 [0.5]	Investments	
(see Notes 1-3, below)		

2b. 1.5 credits from:		1.5
ECON 3602 [0.5]	International Monetary Problems	
or ECON 4602 [0.5]	International Monetary Theory and Policy	
ECON 3706 [0.5]	Applied Econometrics	
ECON 4030 [0.5]	Economics of Uncertainty and Information	
ECON 4053 [0.5]	Financial Market Modeling	
ECON 4057 [0.5]	Behavioural Financial Economics	
PSCI 4805 [0.5]	Global Money Rules	
BUSI 3512 [0.5]	Derivatives	
BUSI 4500 [0.5]	Advanced Corporate Finance	
BUSI 4502 [0.5]	Portfolio Management	
(See Note 4, below)		
Total Credits		**4.0**

Notes

1. For Item 2a of the Concentration in Financial Economics, students taking BUSI 1001 [0.5] must meet all required prerequisites for these courses as stated in the Undergraduate Calendar description at the time of registration.

2. As a prerequisite, BUSI 1002 [0.5] opens more options in BUSI courses at the 2000-level and above. It is recommended that students taking the sequence BUSI 1800 [0.5], BUSI 1001 [0.5] & BUSI 1002 [0.5], do so as early as possible.

3. For Item 2a of the Concentration in Financial Economics, BUSI 1004 [0.5] may replace BUSI 1001 [0.5], and BUSI 1005 [0.5] may replace BUSI 1002 [0.5].

4. For Item 2b of the Concentration in Financial Economics, students planning to take BUSI 4500 [0.5] and BUSI 4502 [0.5] must meet all required prerequisites for these courses as stated in the Undergraduate Calendar description at the time of registration.

Concentration in International Political Economy (4.0 credits)

2a. 2.0 credits in:		2.0
ECON 4601 [0.5]	International Trade Theory and Policy	
ECON 4602 [0.5]	International Monetary Theory and Policy	
PSCI 2602 [0.5]	International Relations: Global Political Economy	
PSCI 4603 [0.5]	Analysis of International Political Economy	
2b. 1.0 credit from:		1.0
ECON 3807 [0.5]	European Economic Integration	
or PSCI 3207 [0.5]	Politics of the European Union	
PSCI 3204 [0.5]	Politics of Latin America	
or PSCI 3205 [0.5]	Mexican Politics	
PSCI 3600 [0.5]	International Institutions	
PSCI 3703 [0.5]	Governing in the Global Economy	
PSCI 3802 [0.5]	Globalization and Human Rights	
or ANTH 3027 [0.5]	Studies in Globalization and Human Rights	
or SOCI 3027 [0.5]	Globalization and Human Rights	

2c. 1.0 credit from:		1.0
ECON 4508 [0.5]	International Aspects of Economic Development	
PSCI 4207 [0.5]	Globalization, Adjustment and Democracy in Africa	
PSCI 4500 [0.5]	Gender and Globalization	
PSCI 4604 [0.5]	Selected Problems in International Political Economy	
PSCI 4805 [0.5]	Global Money Rules	
Total Credits		**4.0**

Concentration in Natural Resources, Environment, and Economy (4.0 credits)

2a. 3.0 credits in:		3.0
ECON 3803 [0.5]	The Economics of Natural Resources	
ECON 3804 [0.5]	Environmental Economics	
GEOG 2200 [0.5]	Global Connections	
GEOG 2300 [0.5]	Space, Place and Culture	
GEOG 3022 [0.5]	Environmental and Natural Resources	
PSCI 3801 [0.5]	Environmental Politics	
2b. 0.5 credit from:		0.5
ECON 4407 [0.5]	Project Evaluation	
GEOG 4004 [0.5]	Environmental Impact Assessment	
TSES 4001 [0.5]	Technology and Society: Risk	
2c. 0.5 credit from:		0.5
GEOG 3209 [0.5]	Sustainability and Environment in the South	
GEOG 4022 [0.5]	Seminar in People, Resources and Environmental Change	
PSCI 4808 [0.5]	Global Environmental Politics	
TSES 3002 [0.5]	Energy and Sustainability	
Total Credits		**4.0**

Concentration in Mathematics and Quantitative Economics (4.0 credits)

2a. 1.5 credits in:		1.5
MATH 1800 [0.5]	Introduction to Mathematical Reasoning	
MATH 2052 [0.5]	Calculus and Introductory Analysis II	
MATH 2152 [0.5]	Introductory Algebra II	
(See Notes 1-4, below)		
2b. 1.0 credit from:		1.0
MATH 2000 [1.0]	Multivariable Calculus and Fundamentals of Analysis	
(See Note 5, below)		
2c. 1.0 credit from:		1.0
MATH 2108 [0.5]	Abstract Algebra I	
MATH 2404 [0.5]	Ordinary Differential Equations I	
or MATH 2454 [0.5]	Ordinary Differential Equations (Honours)	
MATH 3001 [0.5]	Real Analysis I (Honours)	
MATH 3007 [0.5]	Functions of a Complex Variable	
or MATH 3057 [0.5]	Functions of a Complex Variable (Honours)	
MATH 3107 [0.5]	Linear Algebra III	
MATH 3705 [0.5]	Mathematical Methods I	
MATH 3800 [0.5]	Mathematical Modeling and Computational Methods	
or MATH 3806 [0	Numerical Analysis (Honours)	
(See Note 6, below)		
2d. 0.5 credit from:		0.5
ECON 4004 [0.5]	Operations Research: Linear Programming Models	
or MATH 3801 [0.5]	Linear Programming	
ECON 4005 [0.5]	Operations Research: Stochastic Models	
ECON 4700 [0.5]	Measurement Economics	
MATH 4007 [0.5]	Measure and Integration Theory (Honours)	
MATH 4205 [0.5]	Introduction to General Topology (Honours)	
(See Note 7, below)		
Total Credits		**4.0**

Notes:

1. Students enrolled in the Concentration in Mathematics and Quantitative Economics must replace ECON 1401 [0.5] and ECON 1402 [0.5] in Item 1 of the B.Econ. Honours with Concentration(s) program requirements with either (i) MATH 1052 [0.5] and MATH 1152 [0.5], *or* (ii) MATH 1007 [0.5] and MATH 1107 [0.5]. Students who intend to take MATH 2000 [1.0] are strongly recommended to choose option (i). Please note that MATH 2000 is a prerequisite to upper year MATH courses such as MATH 3001 [0.5].

2. Students who have completed MATH 1004 [0.5] and MATH 1104 [0.5] can replace ECON 1401 [0.5] and ECON 1402 [0.5] in Item 1 of the B.Econ. Honours with Concentration(s) program requirements.

3. MATH 2007 [0.5] may replace MATH 2052 [0.5]. Students who intend to take MATH 2000 [1.0] are strongly recommended to take MATH 2052 [0.5].

4. MATH 2107 Linear Algebra II may replace MATH 2152 [0.5]. Students who intend to take MATH 2000 [1.0] are strongly recommended to take MATH 2152 [0.5].

5. MATH 2008 [0.5] may replace MATH 2000 [1.0]. In this case, the credit requirement under Item 2b will be reduced from 1.0 credit to 0.5 credit, and the credit requirement under Item 2c will be increased from 1.0 credit to 1.5 credit.

6. Students interested in other 3000 level MATH courses not listed under requirement 2c, may seek permission from the Department of Economics to have these courses count towards this requirement.

7. Students interested in other 4000 level MATH courses not listed under requirement 2d, may seek permission from the Department of Economics to have these courses count towards this requirement.

Economics
B.Econ. Combined Honours (20.0 credits)

Students admitted to the Bachelor of Economics may register for a Combined Bachelor of Economics and any other discipline in which a B.A. Combined program is available.

A. Credits Included in the Economics Major CGPA (7.5 credits)

1. 6.5 credits in:		6.5
ECON 1001 [0.5] & ECON 1002 [0.5]	Introduction to Microeconomics Introduction to Macroeconomics	
or FYSM 1003 [1.0]	Introduction to Economics	
ECON 1401 [0.5]	Elementary Mathematics for Economics I	
ECON 1402 [0.5]	Elementary Mathematics for Economics II	
ECON 2020 [0.5]	Intermediate Microeconomics I: Producers and Market Structure	
ECON 2102 [0.5]	Intermediate Macroeconomics I	
ECON 2210 [0.5]	Introductory Statistics for Economics	
ECON 2900 [0.5]	Professional Practice of Economics	
ECON 3020 [0.5]	Intermediate Microeconomics II: Consumers and General Equilibrium	
ECON 3102 [0.5]	Intermediate Macroeconomics II	
ECON 3210 [0.5]	Introductory Econometrics	
ECON 3900 [0.5]	Research Methods in Economics	
ECON 4905 [0.5]	Honours Capstone Seminar (see Note 1 below)	
2. 1.0 credit in ECON at the 3000 or 4000 level		1.0
B. Additional Requirements (12.5 credits)		**12.5**
3. The requirements for Combined Honours in the other discipline must be satisfied		
4. Sufficient credits in free electives to make 20.0 credits for the degree.		
Total Credits		**20.0**

Note: ECON 4908 [1.0] Honours Essay, may be written by students with Overall and Major CGPAs of 9.50 or higher. In cases where a grade of B- or higher is earned on this essay, it may replace the ECON 4905 requirement together with an ECON elective requirement. Qualified students who choose to pursue the Honours essay stream must first complete an Honours essay prospectus to the satisfaction of both their advisor and the Undergraduate Supervisor. See The Honours Essay guidelines maintained by the Department for further details.

Economics
B.A. Honours Combined (20.0 credits)

Students already enrolled in a B.A. discipline may add Economics as an additional discipline under the B.A. Combined Honours. Economics course requirements for the B.A. Combined Honours are the same as those listed under the B.Econ. Combined Honours, above.

Economics
B.Econ. (15.0 credits)

A. Credits Included in the Major CGPA (7.0 credits)

1. 3.5 credits in:		3.5
ECON 1001 [0.5] & ECON 1002 [0.5]	Introduction to Microeconomics Introduction to Macroeconomics	
or FYSM 1003 [1.0]	Introduction to Economics	
ECON 1401 [0.5]	Elementary Mathematics for Economics I	
ECON 1402 [0.5]	Elementary Mathematics for Economics II	
ECON 2020 [0.5]	Intermediate Microeconomics I: Producers and Market Structure	
ECON 2102 [0.5]	Intermediate Macroeconomics I	
ECON 2210 [0.5]	Introductory Statistics for Economics	
2. 3.5 credits in ECON at the 2000 level or higher		3.5
B. Credits Not Included in the Major CGPA (8.0 credits)		
3. 6.0 credits in electives not in ECON		6.0
4. 2.0 credits in free electives.		2.0
Total Credits		**15.0**

Specialization in International Economic Policy B.G.In.S. Honours (20.0 credits)

A. Credits Included in the Major CGPA (12.0 credits)

1. 4.5 credits in: Core Courses		4.5
GINS 1000 [0.5]	Global History	
GINS 1010 [0.5]	International Law and Politics	
GINS 1020 [0.5]	Ethnography, Globalization and Culture	
GINS 2000 [0.5]	Ethics and Globalization	
GINS 2010 [0.5]	Globalization and International Economic Issues	
GINS 2020 [0.5]	Global Literatures	
GINS 3010 [0.5]	Global and International Theory	
GINS 3020 [0.5]	Places, Boundaries, Movements and Global Environmental Change	
GINS 4090 [0.5]	Honours Seminar in Global and International Studies	
2. 0.0 credit in: International Experience Requirement Preparation		
GINS 1300 [0.0]	International Experience Requirement Preparation	
3. 7.5 credits in: the Specialization		
a. 1.0 credit in: Foundations		1.0
ECON 1001 [0.5] & ECON 1002 [0.5]	Introduction to Microeconomics Introduction to Macroeconomics	
or		
FYSM 1003 [1.0]	Introduction to Economics	
b. 0.5 credit in: Microeconomics		0.5
ECON 2001 [0.5]	Intermediate Microeconomics for Non-Mathematical Majors	
or ECON 2009 [0.5]	Managerial Economics	
or ECON 2020 [0.5]	Intermediate Microeconomics I: Producers and Market Structure	
c. 0.5 credit in: Macroeconomics		0.5
ECON 2101 [0.5]	Intermediate Macroeconomics for Non-Mathematical Majors	
or ECON 2102 [0.5]	Intermediate Macroeconomics I	
d. 0.5 credit in: Research Methodologies		0.5
IPAF 2000 [0.5]	Quantitative Approaches to Policy Analysis	
or ECON 2210 [0.5]	Introductory Statistics for Economics	
e. 2.0 credits in: International and Public Economics		2.0
ECON 3403 [0.5]	Introduction to Public Economics: Expenditures	

ECON 3405 [0.5]	Introduction to Public Economics: Taxation	
ECON 3601 [0.5]	Introduction to International Trade	
ECON 3602 [0.5]	International Monetary Problems	
f. 3.0 credits from: International Economic Policy		3.0
ECON 3370 [0.5]	The Economics of Migration	
ECON 3508 [0.5]	Introduction to Economic Development	
ECON 3509 [0.5]	Development Planning and Project Evaluation	
ECON 3510 [0.5]	African Economic Development	
ECON 3803 [0.5]	The Economics of Natural Resources	
ECON 3804 [0.5]	Environmental Economics	
ECON 3807 [0.5]	European Economic Integration	
ECON 3808 [0.5]	The Economics of Transition	
ECON 3860 [0.5]	Agricultural Economics	
ECON 3870 [0.5]	Comparative Economic Systems	

Note: To meet the prerequisite requirements for ECON 2020, ECON 2102, and ECON 2210, students must have obtained (i) a grade of C- or higher in one or both of ECON 1001 and ECON 1002, or FYSM 1003 [1.0] or ECON 1000 [1.0], and (ii) a grade of C- or higher in ECON 1401 and ECON 1402 or equivalent department-approved MATH course pair.

B. Credits Not Included in the Major CGPA (8.0 credits)

4. 8.0 credits in free electives		8.0

C. Additional Requirements

5. The International Experience requirement must be met		
6. The language requirement must be met		
Total Credits		**20.0**

Stream in International Economic Policy B.G.In.S. (15.0 credits)

A. Credits Included in the Major CGPA (8.0 credits)

1. 4.0 credits in: Core Courses		4.0
GINS 1000 [0.5]	Global History	
GINS 1010 [0.5]	International Law and Politics	
GINS 1020 [0.5]	Ethnography, Globalization and Culture	
GINS 2000 [0.5]	Ethics and Globalization	
GINS 2010 [0.5]	Globalization and International Economic Issues	
GINS 2020 [0.5]	Global Literatures	
GINS 3010 [0.5]	Global and International Theory	
GINS 3020 [0.5]	Places, Boundaries, Movements and Global Environmental Change	
2. 4.0 credits from: the Stream		4.0
a. Foundations		
ECON 1001 [0.5] & ECON 1002 [0.5]	Introduction to Microeconomics Introduction to Macroeconomics	
or FYSM 1003 [1.0]	Introduction to Economics	
b. Microeconomics		
ECON 2001 [0.5]	Intermediate Microeconomics for Non-Mathematical Majors	
or ECON 2009 [0.5]	Managerial Economics	
or ECON 2020 [0.5]	Intermediate Microeconomics I: Producers and Market Structure	
c. Macroeconomics		

ECON 2101 [0.5]	Intermediate Macroeconomics for Non-Mathematical Majors	
or ECON 2102 [0.5]	Intermediate Macroeconomics I	
d. Research Methodologies		
IPAF 2000 [0.5]	Quantitative Approaches to Policy Analysis	
or ECON 2210 [0.5]	Introductory Statistics for Economics	
e. International Economic Policy		
ECON 3403 [0.5]	Introduction to Public Economics: Expenditures	
ECON 3405 [0.5]	Introduction to Public Economics: Taxation	
ECON 3508 [0.5]	Introduction to Economic Development	
ECON 3509 [0.5]	Development Planning and Project Evaluation	
ECON 3510 [0.5]	African Economic Development	
ECON 3601 [0.5]	Introduction to International Trade	
ECON 3602 [0.5]	International Monetary Problems	
ECON 3803 [0.5]	The Economics of Natural Resources	
ECON 3804 [0.5]	Environmental Economics	
ECON 3807 [0.5]	European Economic Integration	
ECON 3808 [0.5]	The Economics of Transition	
ECON 3860 [0.5]	Agricultural Economics	
ECON 3870 [0.5]	Comparative Economic Systems	

Note: To meet the prerequisite requirements for ECON 2020, ECON 2102, and ECON 2210, students must have obtained (i) a grade of C- or higher in one or both of ECON 1001 and ECON 1002, or FYSM 1003 [1.0] or ECON 1000 [1.0], and (ii) a grade of C- or higher in ECON 1401 and ECON 1402 or equivalent department-approved MATH course pair.

B. Credits Not Included in the Major CGPA (7.0 credits)

3. 7.0 credits in: Free Electives		7.0

C. Additional Requirements

4. The Langauge requirement must be met.		
Total Credits		**15.0**

Minor in Economics (4.0 credits)

Open to all undergraduate degree students not pursuing a Major in Economics or the B.G.In.S. Specialization or Stream in International Economic Policy.

Students are required to present a Minor CGPA of 4.00 or higher at graduation in order to be awarded a Minor in Economics.

Requirements:

1. 1.0 credit in:		1.0
ECON 1001 [0.5] & ECON 1002 [0.5]	Introduction to Microeconomics Introduction to Macroeconomics	
or FYSM 1003 [1.0]	Introduction to Economics	
2. 0.5 credit in:		0.5
ECON 2001 [0.5]	Intermediate Microeconomics for Non-Mathematical Majors	
or ECON 2009 [0.5]	Managerial Economics	
or ECON 2020 [0.5]	Intermediate Microeconomics I: Producers and Market Structure	
3. 0.5 credit in:		0.5

ECON 2101 [0.5]	Intermediate Macroeconomics for Non-Mathematical Majors (see Note, below)	
or ECON 2102 [0.5]	Intermediate Macroeconomics I	
4. 0.5 credit in:		0.5
ECON at the 2000 level or higher,		
or IPAF 2000 [0.5]		
5. 1.5 credits in ECON at the 2000 level or higher		1.5
6. The remaining requirements of the major discipline(s) and degree must be satisfied.		
Total Credits		**4.0**

Note: Advanced courses in economics such as ECON 4507, ECON 4508, and ECON 4602 require the completion of ECON 2102.

Minor in Industrial Economics (4.0 credits)

Open to all B.Eng. students and other undergraduate degree students not pursuing a Major in Economics who have successfully completed ECOR 3800 and SYSC 3200 while registered in a B.Eng. program.

Students are required to present a Minor CGPA of 4.00 or higher at graduation in order to be awarded a Minor in Industrial Economics.

Requirements:

1. 1.0 credit in:		1.0
ECON 1001 [0.5] & ECON 1002 [0.5]	Introduction to Microeconomics Introduction to Macroeconomics	
2. 0.5 credit in:		0.5
ECON 2009 [0.5]	Managerial Economics	
or ECON 2020 [0.5]	Intermediate Microeconomics I: Producers and Market Structure	
3. 1.5 credits from:		1.5
ECON 3020 [0.5]	Intermediate Microeconomics II: Consumers and General Equilibrium	
ECON 3300 [0.5]	Public Policy Toward Business	
ECON 3360 [0.5]	Introduction to Labour Economics	
ECON 3509 [0.5]	Development Planning and Project Evaluation	
ECON 3804 [0.5]	Environmental Economics	
ECON 4005 [0.5]	Operations Research: Stochastic Models	
ECON 4020 [0.5]	Advanced Microeconomic Theory	
ECON 4301 [0.5]	Market Structure and Firm Behaviour	
ECON 4407 [0.5]	Project Evaluation	
4. 1.0 credit in:		1.0
ECOR 3800 [0.5]	Engineering Economics	
SYSC 3200 [0.5]	Industrial Engineering	
5. The remaining requirements of the major discipline(s) and degree must be satisfied.		
Total Credits		**4.0**

Post-Baccalaureate Diploma in Economics (4.0 credits)

Admission to this program requires the permission of the Department of Economics.

Requirements:

1. 2.0 credits in:		2.0
ECON 4020 [0.5]	Advanced Microeconomic Theory	
ECON 4021 [0.5]	Advanced Macroeconomic Theory	
ECON 4706 [0.5]	Econometrics I	
ECON 4990 [0.5]	Research and Writing in Economics	
2. 2.0 credits in electives approved by the Department, normally in ECON at the 4000-level but may include ESLA 1900 and/or ECON 3001		2.0
Total Credits		**4.0**

Bachelor of Economics Regulations

The regulations presented in this section apply to all Bachelor of Economics (B.Econ.) programs.

In addition to the requirements presented here, students must satisfy the University regulations common to all undergraduate students including the process of Academic Continuation Evaluation (consult the *Academic Regulations of the University* section of this Calendar).

First-Year Seminars

B.Econ. degree students are strongly encouraged to include a First-Year Seminar (FYSM) during their first 4.0 credits of registration. Students are limited to 1.0 credit in FYSM and can only register in a FYSM while they have first-year standing in their B.Econ. program. Students who have completed the Enriched Support Program (ESP) or who are required to take a minimum of one English as a Second Language (ESLA) credit are not permitted to register in a FYSM.

0000-Level Courses

Students in B.Econ. programs may not count any 0000-level Mathematics courses for credit toward their degree. Such students may, however, be required to take one or more of these courses to replace missing program prerequisites in which case the courses will be set aside as "no credit for degree" (NCD).

Access to Economics Courses

To meet the prerequisite requirements for most 2000-level Economics courses, students must have obtained a grade of C- or higher in ECON 1401 and ECON 1402 or equivalent department-approved MATH course pair, and a grade of C- or higher in both ECON 1001 [0.5] and ECON 1002 [0.5] or a grade of C- or higher in either FYSM 1003 [1.0] or ECON 1000 [1.0].

Regulations

Post-Baccalaureate Diploma

In addition to the requirements presented here, students must satisfy the University regulations (see the Academic Regulations of the University section of this Calendar).

Definition

A post-baccalaureate diploma is defined as a stand-alone undergraduate credential intended to:

- qualify a candidate for consideration for entry into a master's program, or
- bring a candidate who already possesses a bachelor's degree up to a level of a bachelor's degree of 20.0 credits or more in another discipline, or

- provide a candidate who already possesses a twenty-credit bachelor's degree in the same discipline the opportunity to bring their previous studies to current equivalents and/or to examine alternative areas, or
- provide a candidate with a professional undergraduate credential for which the prior completion of an undergraduate degree program is appropriate.

Program Requirements
- A post-baccalaureate diploma is normally constituted of a minimum of 3.0 credits to a maximum of 5.0 credits of advanced undergraduate courses.
- A minimum of 3.0 residency credits counting toward the post-baccalaureate diploma.

English as a Second Language Requirement
In addition to the program requirements, completion of English as a Second Language (ESLA) courses may be required from the following sequence: ESLA 1300, ESLA 1500, ESLA 1900. No credits from this sequence will be counted toward the post-baccalaureate diploma.

Continuation
All post-baccalaureate diploma students are expected to complete their diploma requirements within two calendar years after the date of initial registration. After this period student may be withdrawn.

Graduation
- A candidate for a post-baccalaureate diploma must have an overall CGPA of at least 6.5 to graduate.
- A candidate for a post-baccalaureate diploma must obtain a grade of C- or higher in each course taken in fulfillment of the program requirements.
- Students should consult with the Department, School or Institute when planning their diploma and selecting courses.

Co-operative Education
For more information about how to apply for the Co-op program and how the Co-op program works please visit the Co-op website.

All students participating in the Co-op program are governed by the Undergraduate Co-operative Education Policy.

Undergraduate Co-operative Education Policy
Admission Requirements
Students can apply to Co-op in one of two ways: directly from high school, or after beginning a degree program at Carleton.

If a student applies to a degree program with a Co-op option from high school, their university grades will be reviewed two terms to one year prior to their first work term to ensure they meet the academic requirements after their first or second year of study. The time at which the evaluation takes place depends on the program of study. Students will automatically receive an admission decision via their Carleton email account.

Students who did not request Co-op at the time they applied to Carleton can request Co-op after they begin their university studies. To view application instructions and deadlines, please visit carleton.ca/co-op.

To be admitted to Co-op, a student must successfully complete 5.0 or more credits that count towards their degree, meet the minimum CGPA requirement(s) for the student's Co-op option, and fulfil any specified course prerequisites. To see the unique admission and continuation requirements for each Co-op option, please refer to the specific degree programs listed in the Undergraduate Calendar.

Participation Requirements
Co-op Participation Agreement
All students must adhere to the policies found within the Co-op Participation Agreement.

COOP 1000
Once a student has been admitted to the Co-op Program, they will be given access to register in COOP 1000. This zero-credit online course must be completed at least two terms prior to the student's first work term.

Communication with the Co-op Office
Students must maintain contact with the Co-op Office during their job search and while on a work term. All email communication will be conducted via the students' Carleton email account.

Employment
Although every effort is made to ensure a sufficient number of job postings for all Co-op students, no guarantee of employment can be made. The Co-op job search process is competitive, and success is dependent upon factors such as current market conditions, academic performance, skills, motivation, and level of commitment to the job search. It is the student's responsibility to apply for positions via the Co-op job board in addition to actively conducting a self-directed job search. Students who do not obtain a co-op work term are expected to continue with their academic studies. It should be noted that hiring priority for positions within the Federal Government of Canada is given to Canadian citizens.

Registration
- Students must be registered as full-time during all fall and winter study terms beginning the term in which they enroll in COOP 1000.
- Students will be registered in a Co-op Work Term course while at work. This course does not carry academic course credit, but is noted on academic transcripts.
- Students may register in a 0.5 credit during a work term, provided the course is offered during the evening or is offered asynchronously online.
- Students must have at least one term of full-time studies left to complete following their final co-op work term. Students cannot end their degree on a work term.

Work Term Assessment and Evaluation
Work Term Evaluation

Employers are responsible for submitting to Carleton University final performance evaluations for their Co-op students at the end of their work terms.

Work Term Assessment

In order to successfully complete the co-op work term, students must receive a Satisfactory (SAT) grade on their Co-op Work Term Report, which they must submit at the completion of each four-month work term.

Graduation with the Co-op Designation

In order to graduate with the Co-op Designation, students must satisfy all requirements of the degree program in addition to the successful completion of three or four work terms (the number is dependent upon the student's academic program). Students found in violation of the Co-op Participation Agreement may have the Co-op Designation withheld.

Note: Participation in the co-op option will add up to one additional year for a student to complete their degree program.

Voluntary Withdrawal from the Co-op Option

Students who are currently on a co-op work term or who have already committed to a co-op work term either verbally or in writing may not leave the position and/or withdraw from the co-op option until they have completed the work term and all related requirements.

Involuntary or Required Withdrawal from the Co-op Option

Students may be removed from the Co-op Program for any of the following reasons:

1. Failure to achieve a grade of SAT in COOP 1000;
2. Failure to attend all interviews for positions to which the student has applied;
3. Declining more than one job offer during the job search;
4. Reneging on a co-op position that the student has accepted either verbally or in writing;
5. Continuing a job search after accepting a co-op position;
6. Dismissal from a work term by the co-op employer;
7. Leaving a work term without approval from the Co-op Management Team;
8. Receipt of an unsatisfactory work term evaluation;
9. Receiving a grade of UNS on the work term report.

International Students

All international students are required to possess a Co-op Work Permit issued by Immigration, Refugees and Citizenship Canada before they can begin working. The Co-operative Education Office will provide students with a letter of support to accompany their Co-op Work Permit application. Students are advised to discuss the application process and application requirements with the International Student Services Office.

Co-op Fees

All participating Co-op students are required to pay Co-op fees. For full details, please see the Co-op website.

Bachelor of Economics Honours: Co-op Admission and Continuation Requirements

- Maintain full-time status in each study term;
- Be eligible to work in Canada (for off-campus work);
- Have successfully completed COOP 1000 .

In addition to the following:

1. Registered as a full-time student in the B.Econ. Honours program;
2. Successfully completed 5.0 or more credits;
3. Successfully completed, by the start-date of the first work term, ECON 2020, ECON 2102, ECON 2030, and ECON 2103. It is strongly recommended that students complete all second-year Economics requirements prior to entering their first work term;
4. Obtained an Overall CGPA of at least 8.00 and a Major CGPA of at least 8.00. These CGPAs must be maintained throughout the duration of the degree.

B.Econ. Honours students must successfully complete three (3) work terms to obtain the Co-op Designation.

Work Term Report Course: ECON 3999
Work/Study Pattern:

Year 1		Year 2		Year 3		Year 4		Year 5	
Term	Pattern	Term	Pattern	Term	Pattern	Term	Pattern	Term	Pattern
Fall	S	Fall	S	Fall	W	Fall	S	Fall	S
Winter	S	Winter	S	Winter	S	Winter	W	Winter	S
Summer		Summer		Summer	W	Summer	W		

Legend
S: Study
W: Work

Admissions Information

Admission Requirements are for the 2025-26 year only, and are based on the Ontario High School System. Holding the minimum admission requirements only establishes eligibility for consideration. The cut-off averages for admission may be considerably higher than the minimum. See also the **General Admission and Procedures** section of this Calendar. An overall average of at least 70% is normally required to be considered for admission. Some programs may also require specific course prerequisites and prerequisite averages and/or supplementary admission portfolios. Higher averages are required for admission to programs for which the demand for places by qualified applicants exceeds the number of places available. The overall average required for admission is determined each year on a program by program basis. Consult admissions.carleton.ca for further details.

Note: Courses listed as *recommended* are not mandatory for admission. Students who do not follow the recommendations will not be disadvantaged in the admission process.

Admissions Information

Admission requirements are based on the Ontario High School System. Prospective students can view the admission requirements through the Admissions website at admissions.carleton.ca. The overall average

required for admission is determined each year on a program-by-program basis. Holding the minimum admission requirements only establishes eligibility for consideration; higher averages are required for admission to programs for which the demand for places by qualified applicants exceeds the number of places available. All programs have limited enrolment and admission is not guaranteed. Some programs may also require specific course prerequisites and prerequisite averages and/or supplementary admission portfolios. Consult admissions.carleton.ca for further details.

Note: If a course is listed as *recommended*, it is not mandatory for admission. Students who do not follow the recommendations will not be disadvantaged in the admission process.

Degree

- Bachelor of Economics (B.Econ.) (Honours)
- Bachelor of Economics (B.Econ.)

Admission Requirements

First Year

The Ontario Secondary School Diploma (OSSD) or equivalent including a minimum of six 4U or M courses. The six 4U or M courses must include a 4U course in English (or *anglais*) and 4U Advanced Functions (or equivalent). MATH 0005 taken at Carleton with a minimum grade of C- also satisfies the Advanced Functions requirement.

Applicants who do not present with Advanced Functions or MATH 0005 may be admitted conditionally with the requirement that they complete MATH 0005 with a minimum grade of C- in their first term of study in the degree in order to be eligible to continue.

Applicants submitting an English language test to satisfy the requirements of the English Language Proficiency section of this Calendar may use that test to also satisfy the 4U English prerequisite requirement.

Advanced Standing

Applications for admission beyond first year will be assessed on their merits. Applicants must normally be Eligible to Continue in their year level, in addition to meeting the CGPA thresholds described in Section 3.1.9 of the Academic Regulations of the University. Advanced standing will be granted only for those subjects assessed as being appropriate for the program and stream selected.

Co-op Option

Direct Admission to the First Year of the Co-op Option
Applicants must:

1. meet the required overall admission cut-off average and prerequisite course average. These averages may be higher than the stated minimum requirements;
2. be registered as a full-time student in a Bachelor of Economics Honours program;
3. be eligible to work in Canada (for off-campus work placements).

Meeting the above requirements only establishes eligibility for admission to the program. The prevailing job market may limit enrolment in the co-op option. Students should also note that hiring priority is given to Canadian citizens for co-op positions in the Public Service Commission.

Note: continuation requirements for students previously admitted to the co-op option and admission requirements for the co-op option after beginning the program are described in the *Co-operative Education Regulations* section of this Calendar.

Admissions Information

Admission Requirements are for the 2025-26 year only, and are based on the Ontario High School System. Holding the minimum admission requirements only establishes eligibility for consideration. The cut-off averages for admission may be considerably higher than the minimum. See also the **General Admission and Procedures** section of this Calendar. An overall average of at least 70% is normally required to be considered for admission. Some programs may also require specific course prerequisites and prerequisite averages and/or supplementary admission portfolios. Higher averages are required for admission to programs for which the demand for places by qualified applicants exceeds the number of places available. The overall average required for admission is determined each year on a program by program basis. Consult admissions.carleton.ca for further details.

Note: Courses listed as *recommended* are not mandatory for admission. Students who do not follow the recommendations will not be disadvantaged in the admission process.

Diploma

- **Post-Baccalaureate Diploma in Economics**

To be eligible for admission to the Post-Baccalaureate Diploma in Economics students must normally have:

1. an undergraduate degree with a GPA of 9.00 or higher, preferably with honours,
2. successfully completed university-level introductory (micro- and macro-) economics, calculus, and linear algebra with a grade of C+ or higher in each, and
3. permission of the Department of Economics.

Students may be granted advanced standing to a maximum of 1.0 credit. Advanced standing does not negate the 3.0 credit residency requirement.

Note: students who already hold an honours undergraduate degree in economics are encouraged to apply for admission to graduate programs in economics through the Graduate Admissions web site at graduate.carleton.ca.

Economics (ECON) Courses

ECON 0005 [0.5 credit]
Preparatory Mathematics for Economics
Review of elementary mathematics in preparation for undergraduate economics curriculum. Topics covered include manipulation of algebraic expressions, solving equations, working with inequalities, functions, and graphical visualization of magnitudes and relationships. Students will engage in problem-solving exercises in the context of basic economic applications.
Precludes additional credit for Not recommended for students who have successfully completed: Grade 12 Mathematics - Advanced Functions, or an equivalent High School functions course, or an equivalent university-level course, such as MATH 0005.
Prerequisite(s): Grade 11 Functions (University/College Preparation), or equivalent. Restricted to B.Econ students or permission of the Department.
Lectures three hours a week, tutorial one hour a week.

ECON 1000 [1.0 credit]
Introduction to Economics
An introduction to the major tools and policy problems of economics. Economic analysis is applied to a variety of contemporary problems such as pollution, poverty, the control of monopoly, unemployment, inflation, and international economic problems.
Precludes additional credit for ECON 1001, ECON 1002, and FYSM 1003.
Lectures three hours a week, discussion groups one hour a week.

ECON 1001 [0.5 credit]
Introduction to Microeconomics
An introduction to the major tools and policy problems of microeconomics. Economic analysis is applied to a variety of contemporary issues such as taxation, pollution, wage determination, poverty, market power, and international trade.
Precludes additional credit for FYSM 1003.
Lectures three hours a week, discussion groups one hour a week.

ECON 1002 [0.5 credit]
Introduction to Macroeconomics
An introduction to the major tools and policy problems of macroeconomics. Economic analysis is applied to a variety of contemporary problems such as: saving, investment and interest rates; unemployment; money and inflation; exchange rates; fiscal and monetary policy.
Precludes additional credit for FYSM 1003.
Lectures three hours a week, discussion groups one hour a week.

ECON 1401 [0.5 credit]
Elementary Mathematics for Economics I
Elementary mathematical tools required for economic analysis: Topics include linear and non-linear functions (cost, revenue, profit, demand and supply), matrices, and mathematics of finance and growth, graphing economic magnitudes, applied algebra, solving systems of linear equations. In class participation in solving practice problems is emphasized.
Precludes additional credit for BIT 1000, BIT 1001, BIT 1100, BIT 1101, BIT 1200, BIT 1201, MATH 1007, MATH 1009, MATH 1104, MATH 1107, MATH 1119, MATH 1052, MATH 1152, MATH 1401.
Prerequisite(s): Ontario Grade-12 U Advanced Functions, or ECON 0005 with a minimum grade of C- or higher, or MATH 0005 with a minimum grade of C- or higher, or equivalent; and ECON 1001 or FYSM 1003, which may be taken concurrently with ECON 1401.
Lectures three hours a week, tutorials one hour a week.

ECON 1402 [0.5 credit]
Elementary Mathematics for Economics II
Elementary methods of calculus for economic analysis: Topics include derivatives of univariate functions, partial derivatives of multivariate functions, concavity and convexity, elasticity, and optimization (profit and utility maximization and cost minimization subject to a budget constraint). In class participation in solving practice problems is emphasized.
Precludes additional credit for BIT 1000, BIT 1001, BIT 1100, BIT 1101, BIT 1201, BIT 1200, MATH 1007, MATH 1104, MATH 1107, MATH 1119, MATH 1052, MATH 1152, MATH 1402.
Prerequisite(s): ECON 1001 or FYSM 1003 with a grade of C- or higher, and ECON 1401 or MATH 1401 with a grade of C- or higher.
Lectures three hours a week, tutorials one hour a week.

ECON 2001 [0.5 credit]
Intermediate Microeconomics for Non-Mathematical Majors
The main topics in microeconomic theory presented in a relatively non-technical manner (e.g., without requiring the knowledge of calculus) with illustrations of their applications. Not open to students in any Economics, B.Com., B.C.S., B.Eng., B.I.D., B.I.T., B.I.B., B.Math., or B.Sc. program.
Precludes additional credit for ECON 2009, ECON 2020, and ECON 3020.
Prerequisite(s): ECON 1001 or FYSM 1003, or permission of the Department.
Lectures three hours a week.

ECON 2009 [0.5 credit]
Managerial Economics
An economic analysis of managerial decision-making. Elements of production and cost; price and output determination under perfectly and imperfectly competitive market structures; the role of information; topics in business strategy; and the impact of government intervention.
Precludes additional credit for ECON 2001 and ECON 2020. Not open to students in any Bachelor of Economics program.
Prerequisite(s): ECON 1001 or FYSM 1003 with a grade of C- or higher; MATH 1009 (or equivalent) with a grade of C- or higher.
Lectures three hours a week, tutorials one and half hours a week.

ECON 2020 [0.5 credit]
Intermediate Microeconomics I: Producers and Market Structure
Theory of the firm: elements of production and cost; input allocation, pricing, and firm behaviour under perfectly and imperfectly competitive market structures; the role of information; game theory and public policy, including basic competition policy.
Precludes additional credit for ECON 2001 and ECON 2009.
Prerequisite(s): ECON 1001 or FYSM 1003 with a grade of C- or higher; ECON 1401(with a grade of C- or higher) and ECON 1402, (or equivalent department-approved MATH course pair with a grade of C- or higher in each). May be taken concurrently with ECON 1402.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 2101 [0.5 credit]
Intermediate Macroeconomics for Non-Mathematical Majors
The main topics in macroeconomic theory presented in a relatively non-technical manner (e.g., without requiring the knowledge of calculus) with illustrations of their application. Not open to students in any Economics, B.Com., B.C.S., B.Eng., B.I.D., B.I.T., B.Math., or B.Sc. program.
Precludes additional credit for ECON 2102, ECON 2103 (no longer offered), ECON 3102.
Prerequisite(s): ECON 1002 or FYSM 1003, or permission of the Department.
Lectures three hours a week.

ECON 2102 [0.5 credit]
Intermediate Macroeconomics I
An introduction to the macroeconomic modeling of output in the short and long run, and to fixed-price models of the closed and open economy over the business cycle. Policy prescriptions in relation to the business cycle are analysed.
Precludes additional credit for ECON 2101.
Prerequisite(s): ECON 1002 or FYSM 1003 with a grade of C- or higher; ECON 1401 (with a grade of C- or higher) and ECON 1402, (or equivalent department-approved MATH course pair). May be taken concurrently with ECON 1402.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 2210 [0.5 credit]
Introductory Statistics for Economics
Basic statistical methods for the study of economics. Topics include descriptive statistics, elementary probability theory, sampling distributions, estimation and hypothesis testing for one and two population parameters.
Precludes additional credit for BIT 2000, BIT 2009, DATA 1517, ENST 2006, GEOG 2006, STAT 2507, STAT 2601, STAT 2606, and STAT 3502.
Prerequisite(s): ECON 1401 (with a grade of C- or higher) and ECON 1402, (or equivalent department-approved MATH course pair). May be taken concurrently with ECON 1402.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 2708 [0.5 credit]
Applied Data Analysis
An introduction to concepts and tools for using various forms of data to study applied economic problems. Topics may include identifying relevant datasets, collecting and cleaning both research-ready and user-assembled data sets, data visualization, and summary statistics.
Includes: Experiential Learning Activity
Prerequisite(s): ECON 1401 and ECON 1402, with a grade of C- or higher (or an equivalent department-approved MATH course pair with a grade of C- or higher in each); and ECON 2210 (or equivalent), with a grade of C+ or higher.
Lectures three hours a week, tutorial 1.5 hours a week.

ECON 2900 [0.5 credit]
Professional Practice of Economics
Development of skills used by professional economists, including writing professional documents such as policy briefs and memos, data visualization, communication of economic ideas in non-technical terms, presentation skills, and team-based problem solving.
Includes: Experiential Learning Activity
Precludes additional credit for ECON 3920 (no longer offered).
Prerequisite(s): ECON 1001 and ECON 1002 or FYSM 1003 with a grade of C- or higher, and ECON 1401 and ECON 1402 with a grade of C- or higher in each, (or equivalent department approved MATH course pair with a grade of C- or higher in each), and ECON 2210 (or equivalent) with a grade of C- or higher.
Seminars three hours a week.

ECON 3001 [0.5 credit]
Mathematical Methods of Economics
Constrained optimization via Lagrange and Kuhn-Tucker conditions; implicit functions and implicit differentiation; comparative static methods applied to models such as utility maximization and least-cost production; homogeneous functions; concave and convex functions; compounding and exponential functions; economic models involving integration; differential equations.
Prerequisite(s): ECON 1001 or FYSM 1003 with a grade of C- or higher; and ECON 1401 and ECON 1402 with a grade of C- or higher in each, (or an equivalent department-approved MATH course pair with a grade of C- or higher in each); and a combined grade point average in ECON 1401 and ECON 1402 of 6.50 or higher.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 3020 [0.5 credit]
Intermediate Microeconomics II: Consumers and General Equilibrium
Theory of consumer choice and demand; applications to intertemporal choice, labour supply, and/or choice under uncertainty; welfare analysis; general equilibrium theory; externalities and the role of government.
Precludes additional credit for ECON 2001 and ECON 2030 (no longer offered).
Prerequisite(s): ECON 2020 with a grade of C- or higher or ECON 2009 with a grade of C+ or higher, and ECON 1401 and ECON 1402 with a grade of C- or higher, (or equivalent department-approved MATH course pair with a grade of C- or higher in each).
Lectures three hours a week, tutorials one and a half hours a week.

ECON 3050 [0.5 credit]
Introduction to Financial Economics
Major theories underlying financial economics: arbitrage, market efficiency, Fisher's separation theorem. Topics include: impact of cyclical fluctuations on consumption, investment, and financial decisions of consumers/firms, monetary policy and interest rate determination, loans for durables, mortgage loans, bond/stock valuation, investment-decision criteria, risk-return trade-offs, cost-of-capital analysis.
Prerequisite(s): ECON 1001 and ECON 1002 each with a grade of C- or higher, or FYSM 1003 with a grade of C- or higher, ECON 1401 and ECON 1402, (or equivalent department-approved MATH course pair with a grade of C- or higher in each), and one of (BUSI 1001, BUSI 1002, BUSI 1003, or BUSI 1005) with a grade of C- or higher.
Lectures three hours a week.

ECON 3102 [0.5 credit]
Intermediate Macroeconomics II
An extension of macroeconomic modeling to the dynamics of wage-price adjustment in the intermediate and long run, to the theoretical foundations of basic macroeconomic relationships, and to contemporary policy issues arising in relation to the business cycle and long-run growth.
Precludes additional credit for ECON 2101, ECON 2103 (no longer offered).
Prerequisite(s): ECON 2102 with a grade of C- or higher, ECON 1001 with a grade of C- or higher, and ECON 1401 and ECON 1402 with a grade of C- or higher, (or equivalent department-approved MATH course pair with a grade of C- or higher in each).
Lectures three hours a week, tutorials one and a half hours a week.

ECON 3201 [0.5 credit]
Economic Thought and Policy in Canada
An account of the interrelationship between economic theories expounded in Canada and their issue in national policy.
Prerequisite(s): an introductory course in one of the social sciences or Canadian history.
Lectures three hours a week.

ECON 3210 [0.5 credit]
Introductory Econometrics
Topics include correlation, simple and multiple linear regression, and an introduction to statistical computing using an econometrics package. Emphasis on understanding appropriate methods and their properties, as distinct from their formal theoretical development. Empirical applications.
Precludes additional credit for STAT 2509, STAT 2607, ECON 2220 (no longer offered).
Prerequisite(s): ECON 2210 (or equivalent) with a grade of C- or higher, and ECON 1401 and ECON 1402 with a grade of C- or higher (or an equivalent department approved MATH course pair with a grade of C- or higher in each), or permission of the Department.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 3220 [0.5 credit]
Canadian Economic History
A survey of Canadian economic history from the sixteenth century to the present.
Also listed as HIST 3220.
Prerequisite(s): ECON 1001 and ECON 1002, or FYSM 1003.
Lectures three hours a week.

ECON 3230 [0.5 credit]
Selected Topics in Economic History
An examination of the economic development of North America or Europe or other possible selected sets of countries. Countries examined vary from year to year.
Also listed as HIST 3230.
Prerequisite(s): ECON 1001 and ECON 1002, or FYSM 1003, or permission of the Department.
Lectures three hours a week.

ECON 3300 [0.5 credit]
Public Policy Toward Business
The interaction of government and business in the Canadian economy. Reasons for government involvement in selected public policy areas. Topics covered may include competition policy, regulation of firms by boards and commissions, environmental regulation, and public enterprise.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3360 [0.5 credit]
Introduction to Labour Economics
Basic principles of labour economics including market, institutional, and sociological forces. Technology and labour demand, wage systems, human capital, internal wage structure, market discrimination, female labour-force entry, wage-price spiral, household labour supply, and wage determination.
Prerequisite(s): ECON 1001 and ECON 1002, or ECON 1000 or FYSM 1003.
Lectures three hours a week.

ECON 3370 [0.5 credit]
The Economics of Migration
An introduction to the economic aspects of migration. Topics include, among others: the economics of migration within countries; the economics of host country integration of immigrants; the impact of immigration on outcomes in the host country; the impacts of emigration on the home country.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3380 [0.5 credit]
The Economics of Gender and Ethnicity
The impact of gender and ethnicity on labour-market outcomes. Topics may include: employment, work, earnings, and poverty; discrimination and policy responses; immigration; the economics of the household; gender and development; micro-credit; labour standards.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3400 [0.5 credit]
History of Economic Thought
The development of economic ideas from ancient times to the modern era. The course will explore contributions of key economic thinkers and examine the evolution of concepts, such as, value, markets, and the role of government in shaping economic policy.
Prerequisite(s): ECON 1001 and ECON 1002 or FYSM 1003.
Lectures: Three hours a week

ECON 3403 [0.5 credit]
Introduction to Public Economics: Expenditures
The role and nature of the government sector in the economy, the theory of public goods, the equity and efficiency effects of public expenditures, voting rules and fiscal politics, techniques of public expenditure analysis, and intergovernmental fiscal relations.
Prerequisite(s): ECON 1001 and ECON 1002 or ECON 1000 or FYSM 1003.
Lectures three hours a week.

ECON 3405 [0.5 credit]
Introduction to Public Economics: Taxation
The role and nature of the government sector in the economy, principles of taxation, tax equity, incidence and excess burden of taxes, structure of taxes in the economy, role of personal, corporate, sales and wealth taxes, fiscal stabilization policy, and the economics of public debt.
Prerequisite(s): ECON 1001 or ECON 1000 or FYSM 1003.
Lectures three hours a week.

ECON 3450 [0.5 credit]
Political Economy in the Modern State
An examination of the role of government in the economy, with emphasis on alternate forms of social coordination and the advantages and disadvantages of each form in the Canadian system.
Prerequisite(s): ECON 1001 and ECON 1002, or FYSM 1003.
Lectures three hours a week.

ECON 3460 [0.5 credit]
Introduction to Health Economics
Health as an economic good: demand and need; supply and cost. Public health and personal health care. Alternative health-care delivery systems: financing, performance, quality, and cost effectiveness.
Preclusion: credit will not be given if taken concurrently with or after ECON 4460.
Prerequisite(s): ECON 1001 or ECON 1000 or FYSM 1003.
Lectures three hours a week.

ECON 3508 [0.5 credit]
Introduction to Economic Development
A discussion of the principles of economic development. Application to the problems of the developing countries.
Prerequisite(s): ECON 1001 or ECON 1000 or FYSM 1003.
Lectures three hours a week.

ECON 3509 [0.5 credit]
Development Planning and Project Evaluation
An introduction to the tools used in the planning and evaluation of development projects. Topics include the theory, application, strengths and limitations of cost-benefit analysis and competing approaches, and an examination of project evaluation techniques.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3510 [0.5 credit]
African Economic Development
Domestic and international aspects of development problems and policies in the African context. Topics may include human resource development, growth and poverty reduction, domestic resource mobilization, the implications of ethnic diversity, governance, and institutions, and issues of trade, investment, aid, migration, and health.
Prerequisite(s): ECON 1001 and ECON 1002, or FYSM 1003.
Lectures three hours a week.

ECON 3601 [0.5 credit]
Introduction to International Trade
An extension of the basic principles of economics to international trade. Topics covered include the theory of international specialization, tariffs and other barriers to trade, trade liberalization and economic integration, international movements of labour and capital, trade and development.
Precludes additional credit for ECON 3600 (no longer offered).
Prerequisite(s): ECON 1001 or ECON 1000 or FYSM 1003.
Lectures three hours a week.

ECON 3602 [0.5 credit]
International Monetary Problems
A discussion of the theory and institutions of the international monetary system, and the related balance of payments problems of nation states.
Precludes additional credit for ECON 3600 (no longer offered).
Prerequisite(s): ECON 1001 and ECON 1002, or ECON 1000 or FYSM 1003.
Lectures three hours a week.

ECON 3607 [0.5 credit]
Monetary and Financial Institutions
The behaviour of financial intermediaries and institutions such as the Bank of Canada, banks and trust companies, and regulatory bodies such as the Canada Deposit Insurance Corporation and the Superintendent of Financial Institutions.
Prerequisite(s): ECON 1001 and ECON 1002, or FYSM 1003.
Lectures three hours a week.

ECON 3706 [0.5 credit]
Applied Econometrics
Introduction to applied econometric methods with emphasis on the use of the regression model for empirical research. Real-world examples are used extensively to illustrate key concepts. Hands-on computer exercises are an integral part of the course.
Includes: Experiential Learning Activity
Prerequisite(s): ECON 1001 and ECON 1002, or FYSM 1003, ECON 2210 (or equivalent) with a grade of C- or higher, and ECON 3210 (or equivalent) with a grade of C+ or higher.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 3803 [0.5 credit]
The Economics of Natural Resources
The application of economic analysis to questions concerning natural-resource use, management and conservation, as well as market failures and environmental effects. Policy problems relating to natural resources are discussed.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3804 [0.5 credit]
Environmental Economics
Microeconomic analysis of environmental issues. Frameworks for measuring environmental costs and benefits. The efficiency of alternative pollution control policies. Applications include air and water pollution and global environmental problems such as ozone depletion and global warming.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3807 [0.5 credit]
European Economic Integration
A discussion of the theories of free trade areas and customs, monetary, and economic unions, and the related historical experience of Europe. Topics include: currency area and the euro, coordination of fiscal policy and the EU budget, common agricultural policy, labour mobility, and regional policy.
Prerequisite(s): ECON 1001 and ECON 1002, or FYSM 1003.
Lectures three hours a week.

ECON 3808 [0.5 credit]
The Economics of Transition
The transition from state ownership and central planning to mixed ownership structure with resource allocation by market mechanisms. "Classical socialism" is criticized and the processes of transition in countries of Central and Eastern Europe, the former Soviet Union, and Asia are compared.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3820 [0.5 credit]
Topics in Canadian Economic Policy
Economic analysis applied to selected policy areas, issues or institutions. One or more of the following topics may be dealt with: decision-making by bureaucratic institutions, policy problems arising from poverty, the economics of natural resources and pollution, urban economics.
Prerequisite(s): ECON 1001 and ECON 1002, or FYSM 1003.
Lectures three hours a week.

ECON 3840 [0.5 credit]
An Economic Analysis of Law
An introduction to the application of economic principles and methodology to a variety of legal problems with emphasis on the theory of property rights and the allocation of resources.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3850 [0.5 credit]
Economics of Information and the Media
An introduction to the economics of information and the media, with a focus on the analysis of production and distribution of information, the application of theory to selected communications-media industries in Canada, and the analysis of existing Canadian policies.
Prerequisite(s): ECON 1001 or ECON 1000 or FYSM 1003.
Lectures three hours a week.

ECON 3856 [0.5 credit]
Housing Economics
Examination of housing markets, housing finance, and government housing policy using the tools of microeconomics. Models of demand, supply, and market equilibrium emphasizing the special characteristics of housing, including heterogeneity, durability, and spatial fixity. Relationships to other goods and markets and the wider macroeconomy.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3860 [0.5 credit]
Agricultural Economics
An examination of the agricultural industry in the national economy and in low-income societies, with emphasis on the working out of the basic forces that determine supply and demand for the industry, and the functional distribution of income among the factors of production.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3870 [0.5 credit]
Comparative Economic Systems
Analysis of the structure, institutions, and performance of alternative economic systems, including capitalism, socialism, and communism. Selected countries are studied as examples of these systems.
Prerequisite(s): ECON 1001 or FYSM 1003.
Lectures three hours a week.

ECON 3878 [0.5 credit]
Contemporary Economic Issues
Content may vary from year to year and is announced in advance of the registration period.
Lectures and/or seminars three hours a week.

ECON 3880 [0.5 credit]
Special Studies in Economics
Content may vary from year to year and is announced in advance of the registration period.
Prerequisite(s): ECON 1001 and ECON 1002, or FYSM 1003.
Lectures and/or seminars three hours a week.

ECON 3900 [0.5 credit]
Research Methods in Economics
The process of doing basic research in economics: development of the research proposal, finding and critically evaluating relevant literature, model development, methods for locating and collecting economic data, analytical methods, and writing mechanics. This course has a strong practical focus.
Includes: Experiential Learning Activity
Prerequisite(s): ECON 3020 with a grade of C+ or higher, ECON 3102 with a grade of C+ or higher, ECON 2210 (or equivalent) with a grade of C- or higher, and ECON 3210 (or equivalent) with a grade of C+ or higher.
Seminars three hours a week.

ECON 3999 [0.0 credit]
Co-operative Work Term
Graded Sat/Uns.
Includes: Experiential Learning Activity
Prerequisite(s): registration in the Honours Economics or Applied Economics Co-operative Education option, satisfactory completion of the Co-op preparation classes offered by the Co-operative Education Office, and permission of the Department.

ECON 4001 [0.5 credit]
Mathematical Analysis in Economics
Analysis and algebra: set theory, sequences and series, quadratic forms, separation and fixed-point theorems. Static optimization: the Weierstrass, Lagrange, and Kuhn-Tucker theorems; convexity and quasi-convexity; the envelope theorem. Dynamic optimization: the Maximum Principle and Bellman's equation. Applications of these tools to economic theory.
Prerequisite(s): ECON 3001 with a grade of C+ or higher.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 4002 [0.5 credit]
Statistical Analysis in Economics
Probability: including conditional probability, random variables and distributions, unconditional and conditional expectations. Distributions: including special distributions and their properties, and sampling distributions of estimators. Nonparametric methods and limit theorems; stochastic processes; simulation and bootstrap methods. Applications of these tools to economic theory.
Precludes additional credit for STAT 3508 and STAT 3558.

Prerequisite(s): ECON 2210 (or equivalent) with a grade of C+ or higher, and ECON 3210 (or equivalent) with a grade of C+ or higher.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 4004 [0.5 credit]
Operations Research: Linear Programming Models
Linear programming, duality, sensitivity analysis, transportation and network problems. Both theory and a wide range of applications are studied.
Precludes additional credit for BUSI 2300 (no longer offered), MATH 3801, and SYSC 3200.
Prerequisite(s): ECON 1402 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4005 [0.5 credit]
Operations Research: Stochastic Models
Dynamic programming, inventory models, queuing, simulation, and non-linear programming.
Prerequisite(s): ECON 1402 (or equivalent) with a grade of C- or higher, and ECON 2210 (or equivalent) or STAT 2605 or STAT 3502 with a grade of C- or higher.
Lectures three hours a week.

ECON 4020 [0.5 credit]
Advanced Microeconomic Theory
Advanced theory of individual economic behaviour in production, consumption, and general equilibrium. Elementary tools of mathematics are employed in the exposition of most topics.
Prerequisite(s): ECON 2020 (or ECON 2009) and ECON 3020 (or equivalent) each with a grade of C+ or higher; ECON 3001 (or MATH 2000 or MATH 2004) with a grade of C+ or higher; and ECON 3210 (or ECON equivalent, or STAT 2605 or STAT 3502), which may be taken concurrently with ECON 4020.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 4021 [0.5 credit]
Advanced Macroeconomic Theory
An introduction to advanced macroeconomic models. Topics may include analysis of business cycles, inflation, unemployment, economic growth, fiscal and monetary policy, consumption decisions of households, and investment decisions of firms.
Prerequisite(s): ECON 2102 with a grade of C+ or higher; ECON 3102 (or equivalent) with a grade of C+ or higher; ECON 3001 (or MATH 2000 or MATH 2004) with a grade of C+ or higher; and ECON 3210 (or ECON equivalent, or STAT 2605 or STAT 3502), which may be taken concurrently with ECON 4021.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 4026 [0.5 credit]
Macroeconomic Dynamics
Dynamic models as applied to topics such as economic growth, business cycles, consumption, investment, inflation, and real-financial linkages. Empirical and/or policy issues may also be discussed.
Prerequisite(s): ECON 2102 with a grade of C+ or higher; ECON 3102 (or equivalent) with a grade of C+ or higher; ECON 3001 (or MATH 2000 or MATH 2004) with a grade of C+ or higher; and ECON 3210 (or ECON equivalent, or STAT 2605 or STAT 3502), which may be taken concurrently with ECON 4026.
Lectures three hours a week.

ECON 4030 [0.5 credit]
Economics of Uncertainty and Information
Uncertainty, imperfect information, and asymmetric information in the allocation of resources and the performance of markets. Applications to insurance and financial markets are emphasized.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher and ECON 3210 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4051 [0.5 credit]
Financial Asset Pricing
Factors that drive security prices and models that attempt to account for aspects of security returns, including the generic arbitrage pricing model, the capital asset pricing model (CAPM), the consumption CAPM, and the intertemporal CAPM.
Precludes additional credit for BUSI 3500.
Prerequisite(s): ECON 3050 with a grade of C- or higher, and ECON 3210 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4052 [0.5 credit]
Corporate Financial Economics
Optimization and corporate finance. Corporate governance and managerial compensation. Capital structure and the Modigliani-Miller theorem. Agency theory and asymmetric information. The issue of equity, debt, and other securities. Dividend policy. Investment and capital budgeting, NPV, and real options.
Precludes additional credit for BUSI 3500 and BUSI 3502.
Prerequisite(s): ECON 3050 with a grade of C- or higher, and ECON 3020 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4053 [0.5 credit]
Financial Market Modeling
The modeling of the evolution of prices in (near) efficient markets and the evaluation of functions of these prices such as guarantees, options, warrants, futures, and other types of derivatives. Arrow-Debreu state-contingent claims. Notions of complete and incomplete markets.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher and ECON 3001 with a grade of C- or higher.
Lectures three hours a week.

ECON 4057 [0.5 credit]
Behavioural Financial Economics
Market efficiency and the limits of arbitrage. Heuristics and biases identified by behavioural decision theorists and their effect on the behaviour of managers and investors. Behavioural theories of market trading volume and asset prices. Behavioural approaches to corporate financial economics problems.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher, and ECON 3050 or BUSI 2501 or BUSI 2505 with a grade of C- or higher.
Lectures three hours a week.

ECON 4109 [0.5 credit]
Experimental Economics
An introduction to the use of and insights gained from both laboratory- and field-type experimental methods in economic research. Topics include analysis of individual rationality, performance of markets, and design of economic systems. In-class experiments are an integral part of the course.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher and ECON 3210 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4120 [0.5 credit]
Strategy and Behaviour
Intersection of modern game theory and behavioral economics. Students will learn about (bounded) rationality and analyze strategic situations by applying concepts such as rationalizability and equilibrium. Applications to market behavior, institutional design, and policy interventions will be discussed.
Prerequisite(s): ECON 2020 (or ECON 2009) and ECON 3020 or ECON 2030 (no longer offered) each with a grade of C+ or higher; and ECON 2210 (or equivalent, or STAT 2507 or STAT 2606 or STAT 3502).
Lectures: Three hours a week

ECON 4230 [0.5 credit]
Economic History
The application of economic theory and quantitative techniques to selected topics in economic history, which may include historical patterns of growth and welfare, nineteenth-century globalization, technological change, the development of agriculture, industrialization, the Great Depression, and the origins of central banks.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher, ECON 3102 (or equivalent) with a grade of C- or higher, and ECON 3210 (or equivalent) with a grade of C- or higher.
Also offered at the graduate level, with different requirements, as ECON 5230., for which additional credit is precluded.
Lectures three hours a week.

ECON 4301 [0.5 credit]
Market Structure and Firm Behaviour
Various theoretical and empirical studies of firm and market organization with emphasis on the pricing, advertising, investment and locational behaviour of firms in imperfectly competitive markets.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4302 [0.5 credit]
Competition and Regulatory Policy
Public policies relating to competition and regulation. Topics may include: Ramsey pricing, peak-load pricing, cross-subsidization, access pricing (ECPR), multi-part pricing and price discrimination, predatory and targeted pricing, vertical restrictions, traditional regulation (including rate-of-return regulation), incentive regulation (including price caps), and the political economy of regulation.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4360 [0.5 credit]
Labour Economics
The application of price theory to the labour market. Topics include models of labour supply and labour demand, human capital and the economics of education, and unions and their impact on the labour market.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher, and ECON 3210 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4404 [0.5 credit]
Public Economics: Taxation
A discussion of the theory of taxation and an examination of empirical attempts to quantify the theory. Some topics of current interest, such as the redistribution of income in Canada and tax reform, are examined.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4407 [0.5 credit]
Project Evaluation
Techniques and problems in the evaluation of public and private projects. Examination of alternative approaches to public decision-making including cost-benefit analysis, cost-effectiveness analysis, and multiple-objective frameworks. Case studies of projects in various areas such as natural resources, the environment, human resources, public services, and transportation.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher and ECON 3210 (or equivalent), or STAT 2605 or STAT 3502 with a grade of C- or higher.
Lectures three hours a week.

ECON 4460 [0.5 credit]
Health Economics
Economic analysis of the organization, financing, and utilization of health-care services. Topics include supply and demand of health care, the impact of private and social health insurance on demand, and policy issues in the provision of health care in Canada.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher, and ECON 3210 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4507 [0.5 credit]
The Economics of Development
An examination of some theoretical approaches to the economics of development, together with analysis of some economic policy issues of a largely internal character, such as intersectoral investment allocation, income distribution, unemployment, and investment in human development.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher and ECON 3102 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4508 [0.5 credit]
International Aspects of Economic Development
An analysis of the international economic policy problems of development in Asia, Africa and Latin America, focusing on international trade, direct foreign investment, technological transfer, regional integration, debt and development financing, and international migration.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher and ECON 3102 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4601 [0.5 credit]
International Trade Theory and Policy
International trade theory and its implications for economic policy. Topics such as determinants of trade and specialization, gains from trade and commercial policy, international factor mobility, growth and development.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4602 [0.5 credit]
International Monetary Theory and Policy
International monetary theory and its implications for economic policy. Topics such as sources of disequilibrium and adjustment in the balance of payments under fixed versus flexible exchange rates, international capital movements, and international monetary reform.
Prerequisite(s): ECON 3102 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4700 [0.5 credit]
Measurement Economics
National accounting and index numbers. Topics may include: the measurement of output and income, capital and depreciation, productivity, employment and unemployment, poverty and inequality, household production, pollution and resource depletion, and the balance of payments; price indexes; standard-of-living indexes; and international comparisons.
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C- or higher, ECON 3102 (or equivalent) with a grade of C- or higher, and ECON 3210 (or equivalent) with a grade of C- or higher.
Lectures three hours a week.

ECON 4706 [0.5 credit]
Econometrics I
An introduction to econometric theory and analysis of the classical normal linear regression model. Topics include estimation methods, hypothesis testing, multicollinearity, indicator variables, heteroscedasticity, and an introduction to time-series methods.
Prerequisite(s): ECON 2210 (or equivalent) with a grade of C+ or higher, and ECON 3210 (or equivalent) with a grade of C+ or higher.
Lectures three hours a week, tutorials one and a half hours a week.

ECON 4707 [0.5 credit]
Econometrics II
An extension of ECON 4706. Topics include model specification, diagnostic checks, qualitative and limited dependent variables, panel data, and simultaneous equations models.
Prerequisite(s): ECON 4706 with a grade of C+ or higher, or STAT 3503 with a grade of C+ or higher.
Lectures three hours a week.

ECON 4708 [0.5 credit]
Economic Data Science - Analytics
An introduction to methods of statistical and machine learning analytics for economic analysis. Tools relevant for both small and large data sets will be covered. Topics may include approaches to classification, dimension reduction strategies, and prediction models and tools.
Includes: Experiential Learning Activity
Prerequisite(s): ECON 2708 with a grade of C+ or higher; and ECON 3210 (or equivalent) with a grade of C+ or higher.
Lectures three hours a week.

ECON 4709 [0.5 credit]
Economic Data Science - Applications
Application of data science and machine learning methods to real-world economic problems. Students will apply their data science knowledge in hands-on projects to answer topical research questions. This course has a strong practical focus.
Includes: Experiential Learning Activity
Prerequisite(s): ECON 4708 with a grade of C+ or higher.
Lectures three hours a week.

ECON 4713 [0.5 credit]
Time-Series Econometrics
An introduction to the basic concepts and tools of time-series econometrics. Topics include stationary and non-stationary time series, identification, estimation and forecasting, unit root testing, cointegration analysis, error-correction models and ARCH models, together with relevant economic applications.
Precludes additional credit for STAT 4603.
Prerequisite(s): ECON 4706 with a grade of C- or higher, or STAT 3503 with a grade of C- or higher.
Lectures three hours a week.

ECON 4880 [0.5 credit]
Special Topics in Economics
Advanced topics of interest to upper-year Economics students. Topics may vary from year to year and are announced in advance of the registration period.
Includes: Experiential Learning Activity
Prerequisite(s): ECON 3020 (or equivalent) with a grade of C+ or higher; ECON 3102 (or equivalent) with a grade of C+ or higher; and ECON 3706 or ECON 4706, which may be taken concurrently with ECON 4880 or may be waived by permission of the Department.
Lectures and/or seminars three hours a week.

ECON 4903 [0.5 credit]
Tutorial in Economics
An additional tutorial in economics may be taken subsequent to, or concurrently with ECON 4905.
Prerequisite(s): permission of the Department.

ECON 4904 [0.5 credit]
Tutorial in Economics
An additional tutorial in economics may be taken subsequent to, or concurrently with, ECON 4905.
Prerequisite(s): permission of the Department.

ECON 4905 [0.5 credit]
Honours Capstone Seminar
The development of individual research projects in suitable economics topic areas with the exchange of results at each stage through in-class discussions and written and oral reports and culminating in a major research paper by each course registrant.
Includes: Experiential Learning Activity
Prerequisite(s): ECON 2900 with a grade of C+ or higher, ECON 3900 with a grade of C+ or higher, and registration in an Honours Economics program.
Seminars three hours a week.

ECON 4908 [1.0 credit]
Honours Essay
Students taking Honours in Economics or Applied Economics may write an Honours essay during their final year. This essay counts for one credit. Students work under an individual faculty adviser.
Includes: Experiential Learning Activity
Prerequisite(s): permission of the Department.

ECON 4990 [0.5 credit]
Research and Writing in Economics
Development of fundamental research and writing skills pertinent to the discipline of economics. Writing summary reviews of economics texts of increasing sophistication; writing up empirical and/or theoretical results of increasing complexity.
Prerequisite(s): registration in the Post-Baccalaureate Diploma in Economics program and/or permission of the Department.
Seminars three hours a week, tutorials one and a half hours a week.