



Economics

Bachelor of Science

- > Major in Economics and Mathematics
(pending approval)
- > Minor in Environmental Economics
and Sustainable Development
(pending approval)

TRU School of Business and Economics

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Myths and Truths About Economics

MYTH: People become economists only if they want to “make money”.

FACT: Economics is a science concerned with decision making, and it can offer something of interest to people with diverse interests. The three main fields within economics are described below.

- Microeconomics studies how individuals, households, and firms make decisions to allocate limited resources. Many of the tools used in this field are also used in fields such as physics and engineering.
- Macroeconomics explains the “big picture” of the economy and the relationships between such factors as national income, production, spending, unemployment, inflation, savings, investment, international trade and international finance.
- Econometrics and forecasting combine economic theory with statistical methods to analyze and test economic relationships.

All of economics is founded on logical development of theories of behaviour. Some courses in economics emphasize logic, others add varying degrees of mathematics to create models of decision processes, and still others emphasize the use of statistics in determining relationships and testing models.

MYTH: Economics is all about mathematics and statistics.

FACT: Economics Majors and Minors can choose among the courses to find ones with the desired amount of emphasis on mathematics. It is possible to create a course of study, leading to a degree, that includes primarily economics courses that are intuitive, based on real world, and not math intensive. It is also possible to get your degree in economics by taking mostly economics courses that are based heavily on mathematics and statistics.

MYTH: Employers aren't much concerned with a student's major, and a bachelor's degree in any one of a number of fields would open the same employment doors as would a degree in Economics.

FACT: A degree in Economics is highly marketable. Unlike some business graduates, Economics graduates enjoy the flexibility of being able to work in both the public and the private sectors. Average inflation-adjusted annual earnings for male Economics graduates five years after graduation, according to one study, were \$50,600. This compares favorably with earnings for male graduates in Math & Other Physical Sciences (\$50,900), Other Social Sciences (\$42,100), and Fine Arts & Humanities (\$37,100). (*Data are from Statistics Canada, published in 2002.*)

More recent data (2007) are available for the United States, where the National Association of Colleges and Employers identified the starting salary offers in different disciplines. The starting salary in Economics was \$48,483. The same survey found that majors in Political Science, English, Psychology, Sociology, and History were offered an average of less than \$35,000. You can find many more useful and interesting statistics related to the topic of how much each degree is worth on http://money.cnn.com/2007/07/11/pf/college/starting_salaries/index.htm

What Do Economists Do?

Economics teaches skills in research, analysis, forecasting, and planning that can serve you in almost any field. The upper-level courses offered within economics give some idea of the exciting jobs available with the training offered: Canadian Financial Markets, Public Finance, International Economics, Benefit-Cost Analysis and Economics of Project Evaluation, Forecasting in Business and Economics, Government and Business, Economics of the Environment, Forestry Economics, Economic Analysis of Health Services, and Development Economics.

Economists work in the following fields and in the following positions, as well as in many more:

BANKING

- > Credit Analyst
- > Investment Analyst
- > Financial Manager
- > Loan Officer

FINANCIAL SERVICES

- > International Analyst
- > Newsletter Editor
- > Investment Banker
- > Broker

GOVERNMENT

- > Bank of Canada Researcher
- > Department of Finance Forecaster
- > Policy Analyst
- > Environmental Protection Agency (EPA) Consultant

GENERAL BUSINESS

- > Business Analyst
- > Marketing Analyst
- > Business Consultant
- > Business Forecaster

A bachelor's degree in Economics is an excellent preparation for graduate studies — whether in economics itself or in another field, such as law, business, public administration, environmental studies, health-care administration, labor relations, urban planning, diplomacy, or one of many others. A degree in economics is excellent preparation for an MBA program. Many MBA courses have significant economics content, and many MBA instructors are themselves trained as economists. Furthermore, economics majors do very well on the Graduate Management Admissions Test (GMAT). One 2006 study¹ found that the average GMAT score for economics majors was higher than the averages for most other majors.

Your decision to obtain an economics degree will yield benefits even after you finish your education, whether it is in business school, law school, or some other field. A recent study² found that "Among individuals who pursue a master's degree in business or a professional degree in law, those who have an undergraduate economics major generally earn more than individuals with other majors."

The program requirements of Bachelor of Science Major in Economics and Mathematics

Lower Level Courses:

- MATH 113: Enriched Calculus 1 and MATH 123: Enriched Calculus 2 or MATH 114: Calculus 1 and MATH 124: Calculus 2

- MATH 170: Discrete Mathematics 1
- ECON 190: Introduction to Microeconomics
- ECON 195: Introduction to Macroeconomics
- MATH 211: Calculus III
- MATH 212: Linear Algebra 1
- MATH 270: Discrete Mathematics 2
- MATH 224: Differential Equations
- BUEC 232: Statistics for Business and Economics I, or STAT 200: Introduction to Statistics
- ECON 290: Intermediate Microeconomic Theory I
- ECON 295: Intermediate Macroeconomic Theory I

Upper Level Courses:

- ECON 320: Introduction to Mathematical Economics
- ECON 390: Intermediate Microeconomics 2
- ECON 395: Intermediate Macroeconomics 2
- ECON 432: Econometrics
- BUEC 433: Forecasting in Business and Economics

Depending on student's interests and qualification, one the following Streams may be chosen:

Mathematics Stream Upper Level Courses:

- MATH 316: Differential Equations 2
- STAT 306: Applied Regression Analysis
- MATH 340: Introduction to Linear Programming
- MATH 441: Modeling of Discrete Optimization Problems
- MATH Elective (3 credits)

Statistics Stream Upper Level Courses:

- MATH 302: Introduction to probability
- MATH 303: Introduction to stochastic processes
- STAT 305: Introduction to Statistical Inference
- STAT 306: Applied Regression Analysis
- STAT 404: Analysis of Variance

General Stream Upper Level Courses:

Students in the General Stream can select any five courses from the above list of upper level courses for the Mathematics and Statistics Streams.

¹ Monson, T. D. and Nelson P. A., "Economics Majors Score Well on the GMAT Tool" Working Paper, Michigan Technological University, 2006.

² Black D.A. et al., "The Economic Reward for Studying Economics," *Economic Enquiry*, vol. 41(3): 365-377.

Ask Your Program Advisor About the Following Programs:

- > Bachelor of Arts Major in Economics and Mathematics (*pending final approval*)
- > Bachelor of Natural Resource Science Minor in Environmental Economics and Sustainable Development (*pending final approval*)
- > Certificate in First Nations Applied Economics