ECONOMICS PROGRAMS

There are three different ways that students can pursue degree in Economics at Canisius. Students can earn a Bachelor of Arts degree in Economics by completing a set of required Economics courses. Students who wish to pursue careers in business should consider earning a Bachelor of Science degree in Economics which combines required Economics courses with a collection of courses called The Business Core Curriculum (http://catalog.canisius.edu/undergraduate/wehle-school-business/business-core/). The Business Core Curriculum is designed to provide students with a broad understanding of other areas of business, preparing them to take leadership roles in the organizations they work for. Finally, students earning degrees in other disciplines can get exposure to the field of Economics by earning a Minor degree. You can explore the details associated with each of these degree options by clicking the tabs at the top of this page. For additional information about the Economics program, please visit the Economics Program webpage (https://www.canisius.edu/academics/programs/economics/).

Qualifications
Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a major degree in Economics. All students must complete a minimum of 120 credit hours to graduate.

Advisement
All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Minors in Other Disciplines
Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. To receive a minor, the student must complete at least 9 credit hours of coursework distinct from their other credentials (i.e., majors, other minors). The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Double Majors
Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional coursework may be required. Please note that students will receive only one degree, regardless of the number of majors they complete. Both (all) majors appear on a student's transcript.

A dual major in Economics and Mathematics & Statistics (http://catalog.canisius.edu/undergraduate/college-arts-sciences/mathematics-statistics/) is strongly recommended for the student who is interested in graduate school in either finance or economics. Up to two mathematics courses beyond MAT 111 may be used as economics electives.

Dual majors in Economics (BS) and Finance (http://catalog.canisius.edu/undergraduate/wehle-school-business/finance/) are required to take six electives in total. Two must be Economics electives and four must be Finance electives.

Major Experiences
The department encourages internship experiences as part of the major and accepts one internship on a pass/fail basis as an Economics elective. Many of our majors have participated in the All-College Honors program and have written honors theses on topics in Economics and Finance.

Additional Course Considerations
ECO 455 and additional Mathematics courses are strongly recommended for students wishing to obtain graduate degrees in Economics and Finance.

Majors
The Economics and Finance Department offers two majors.
• Economics Major (BA) (http://catalog.canisius.edu/undergraduate/wehle-school-business/economics/economics/)
• Business Economics Major (BS) (http://catalog.canisius.edu/undergraduate/wehle-school-business/economics/business-economics/)

Economics Minor
This minor is only available for non-majors (student majoring in subjects other than Economics or Finance).

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECO 101</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 102</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 205</td>
<td>Intermediate Microeconomic Analysis</td>
<td>3</td>
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<tr>
<td>or ECO 206</td>
<td>Intermediate Macroeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECO 255</td>
<td>Business Statistics</td>
<td>3</td>
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<tr>
<th>Economics Electives</th>
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<tr>
<td>Three courses at the 200-, 300-, or 400-level</td>
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<td>Total Credits</td>
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Minors are an important part of the undergraduate curriculum. If students declare a minor by sophomore year, they can usually complete it in a timely manner. Students should work with their advisor to determine if it is possible that the minor can be completed by graduation.

To receive a minor, a student must complete at least 9 credit hours of coursework distinct from their major(s) and from other minors, and students must complete more than 50% of the coursework required for the minor at Canisius. Please note that “ancillary/supporting” courses required for a major may still count as distinct courses as long as the remaining coursework still meets the 30 credit-hours required for a major. For more information
about minor policies, please see the Declaring Majors and Minors (http://catalog.canisius.edu/undergraduate/academics/student-records/declaring-majors-minors/) page in the catalog.

**ECO 101 Principles of Macroeconomics**  3 Credits
Explanation of market system through supply and demand analysis.
Measurement of macroeconomic variables and development of economic models to analyze problems of unemployment, inflation and economic growth. Various fiscal and monetary policies will be discussed.
*Offered:* every fall & spring.

**ECO 102 Principles of Microeconomics**  3 Credits
Explanation of how the market system operates in the context of limited resources. Emphasis on the manner in which consumers and firms determine what to produce, how to produce and for whom to produce.

**ECO 205 Intermediate Microeconomic Analysis**  3 Credits
Analysis of demand and supply under various market structures. Cost and production theory, factor pricing, and welfare economics.
*Prerequisite:* ECO 101 & ECO 102.
*Offered:* fall & spring.

**ECO 206 Intermediate Macroeconomic Analysis**  3 Credits
The determination of national income and product in the short run and long run. Unemployment, inflation, fiscal and monetary policy will be examined in the context of static and dynamic macroeconomic models.
*Prerequisite:* ECO 101 & ECO 102.
*Offered:* fall & spring.

**ECO 255 Business Statistics**  3 Credits
Fundamental concepts of probability and statistics with emphasis on business and economic applications. Organizing and describing data, probability theory, sampling, estimation and hypothesis testing.
*Offered:* occasionally.

**ECO 256 Business Analytics**  3 Credits
Hypothesis testing, regression analysis, goodness of fit, contingency tables, analysis of variance, time series analysis and forecasting.
*Prerequisite:* ECO 255.
*Offered:* every fall & spring.

**ECO 310 Introduction to Geographic Information Systems**  3 Credits
An applied introduction to Geographic Information Systems (GIS), a mapping and spatial analysis tool that is widely used in education, government, and industry to solve spatial problems. This course combines lectures and hands-on exercises and provides students the opportunity to use ArcGIS software.
*Prerequisite:* ECO 101 & ECO 102, or permission of the instructor. Offered occasionally.

**ECO 311 Metropolitan Economic Development and GIS**  3 Credits
Economic development is an essential component of local policy and governing, and a perceived driver of success and vitality for cities, metropolitan areas and regions. This applied course will introduce students to basic economic development theory and commonly used economic performance measures within a Geographic Information Systems (GIS) environment.
*Prerequisite:* ECO 101 & ECO 102.
*Offered:* fall

**ECO 321 Economic Impact Analysis**  3 Credits
Estimation of the impact of investment, public spending, and changes in taxation or regulatory policy on a regional economy. The impact of a new project on sales, income and employment will be projected. Case studies and hands-on experience using multiple software packages will be used to conduct analysis.
*Prerequisite:* ECO 101, ECO 102 & ECO 255.
*Offered:* spring.

**ECO 330 Money, Banking and the Economy**  3 Credits
The connection between financial markets, the economy and the Federal Reserve. Examination of the nature of financial markets, the determination of interest rates, bank management and regulation, money and monetary policy. Emphasis on the impact of monetary policy on the macro economy. This course also serves as a Finance elective.
*Prerequisite:* ECO 101 & ECO 102.
*Offered:* fall.

**ECO 401 Public Economics**  3 Credits
A microeconomic analysis of the role of the public sector in resource allocation. Topics include the theory of market failures, alternative corrective measures for market failures, efficiency/equity analysis of taxes and public expenditure programs.
*Prerequisite:* ECO 101, ECO 102. Offered occasionally.
*Fulfills College Core:* Justice.

**ECO 410 Economic Research Methodology**  3 Credits
Economic Research Methodology is a course where the tools of microeconomics, macroeconomics and statistics are applied to analysis of economic data at both the national and local levels. The course will focus on Bureau of the Census and Bureau of Labor Statistics data in the analysis of labor markets and other behavioral economic issues.
*Prerequisite:* ECO 101, ECO 102, ECO 256.
*Offered:* occasionally.

**ECO 411 State and Local Finance**  3 Credits
Municipal credit risk and municipal bonds analysis of revenue sources for state and local governments. Public/private sector interaction in urban areas, city-suburban fiscal disparity and competition, state/local government structure, inter-governmental relations. This course also serves as a Finance elective.
*Prerequisite:* ECO 101, ECO 102, ECO 256 (or equivalent).
*Offered:* every spring.

**ECO 455 Econometrics**  3 Credits
Estimation and analysis of linear and non-linear regression models using statistical inference. Topics include: multicollinearity, heteroskedasticity and serially correlated errors, forecasting, dummy variables and simultaneous equation models. Emphasis on analysis of data using EViews econometric software. A good course for those contemplating graduate school.
*Prerequisite:* ECO 101 & ECO 102.
*Offered:* every spring.

**ECO 497 Internship**  3 Credits
Student must complete a WSB Internship Application Form. May be used for Economics elective credit. Pass/Fail only.
*Prerequisite:* student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair, & associate dean.
ECO 499 Independent Research 1-3 Credits
Students must work with a faculty mentor to develop their learning goals and complete a Wehle School of Business Independent Study Application Form.
Prerequisite: student must complete a WSB Independent Study Application Form and obtain the approval of a faculty supervisor, department chair, & the associate dean.