by combining economics with graduate courses in sociology, political
Master's program can be adapted for students desiring a diverse background
The Department of Economics encourages interdisciplinary training. The
theory and empirical research techniques to real-world problems.
research project is required, permitting students an opportunity to apply
government policy analysis in various specialty areas. An independent
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economics at a deeper level than in the undergraduate courses, and are more
 Dominion prior to taking the MA program core courses.
 had courses in calculus, statistics, intermediate microeconomics, and
must be completed before starting the advanced courses. One must have
higher GPA>3.3 the GRE or GMAT will be waived. If the undergraduate grade
The Old Dominion University Department of Economics is especially
strong in regional economics, international economics, and econometrics.
The department is the home of the Hampton Roads Regional Economic
Forecasting Project and the State of the Region Report. Our MA students
are often involved in those projects.
If taken full time, the MA in Economics program can be easily completed
within 21 months. At a faster pace, the program can be completed in as little
as 16 months. Alternatively, the program can be completed attending part-
time, but more time will be required.
If one was not an undergraduate economics major, certain prerequisites
must be completed before starting the advanced courses. One must have
had courses in calculus, statistics, intermediate microeconomics, and
intermediate macroeconomics. These courses may be completed here at Old
Dominion prior to taking the MA program core courses.
The Master’s degree (MA) program in Economics is more intensive than
the Bachelor’s degree (BA/BS) in Economics. The MA courses study
economics at a deeper level than in the undergraduate courses, and are more
mathematical. Graduate students must maintain a grade point average of
3.0 or better. All students in the program are trained in economic theory
and research methods, and take several courses emphasizing business or
government policy analysis in various specialty areas. An independent
research project is required, permitting students an opportunity to apply
task and empirical research techniques to real-world problems.
The Department of Economics encourages interdisciplinary training. The
Master’s program can be adapted for students desiring a diverse background
by combining economics with graduate courses in sociology, political
science, computer science, statistics, mathematics, finance, management,
marketing research, or public administration.
Admission
In addition to the University’s graduate admission requirements, applicants
seeking regular admission must have at least a 3.0 grade point average in
their major. Applicants are required to take either the Graduate Record
Examination (GRE) or the Graduate Management Admission Test (GMAT),
and they must submit at least one letter of recommendation. If undergraduate
GPA>3.3 the GRE or GMAT will be waived. If the undergraduate grade
point average falls below that required for regular status, applicants may
qualify for provisional admission.
Requirements
Undergraduate prerequisites include calculus (three credit hours), statistics
(three credit hours), an intermediate microeconomics, or intermediate
macroeconomics with grades of at least B. Students who do not yet meet
the undergraduate prerequisites can complete those courses at Old Dominion
University before taking the advanced courses.
 Thirty semester credit hours (ten courses) of approved graduate work
are required for the award of the Master of Arts degree in economics. A
maximum of six credit hours of 500-level courses approved for graduate
credit may be applied toward the degree. The remaining courses must
be taken from 600-and/or 700-level courses. Up to six credit hours (two
courses of electives (approved by the graduate program director) may be
taken from courses outside the Department of Economics. Required core
economics courses for the graduate program are:

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>21</th>
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<tbody>
<tr>
<td>ECON 625</td>
<td>Mathematical Economics</td>
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<tr>
<td>ECON 700</td>
<td>Economic Analytics</td>
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<td>ECON 701</td>
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<td>ECON 706</td>
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<tr>
<td>ECON 708</td>
<td>Econometrics III</td>
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Electives 6

Approval of Graduate Program Director required.

Capstone 3

ECON 698 Economic Methodology and Research

Total Hours 30

Writing skills commensurate with the level of this degree are also a
requirement for graduation from this program. Near the completion of
formal course work, candidates conduct independent research projects with
the non-thesis or thesis option. Non-thesis students conduct independent
research projects under the guidance of a department faculty member. The
thesis is guided and approved by the committee of at least three members
of the department. Detailed instructions, requirements, and deadlines are
contained in the guide for Preparation of Theses and Dissertations, available
from The Graduate School’s web site, http://www.odu.edu/graduateschool
(https://www.odu.edu/graduateschool/). All students must register for
ECON 698 in their last semester, a guided research seminar where students
meet to discuss, present, and critique research.

ECONOMICS Courses

ECON 502. Transportation Economics. 3 Credits.
A survey of the transportation system in the United States including its
development, pricing, and regulation. Special attention is given to railroads,
highways, pipeline, water and air transportation; and the roles that these
modes of transportation play in economic development.
ECON 507. Labor Market Economics. 3 Credits.
Economic analysis of various facets of labor markets. Emphasis is placed on the analysis of labor supply, labor demand, wage determination, earnings differentials and inequality, occupational choice, human capital investment, labor market discrimination, mobility and immigration, impact of unions, and unemployment.

ECON 521. Public Economics. 3 Credits.
This course examines the interaction between government and the economy, with particular emphasis on the role of the federal government. Topics that address the motivation for government involvement in the economy include market failure, income inequality, and redistribution of income. Specific programs studied include Medicare/Medicaid, welfare programs, and the social security system.

ECON 525. Introduction to Mathematical Economics. 3 Credits.
The course focus is on the use of differential and integral calculus, matrix algebra, difference equations and classical optimization theory in the presentation and development of economic theory.

ECON 527. Industrial Organization and Public Policy. 3 Credits.
A study of market structures and the conduct and performance of business firms in different market structures. The emphasis is on the theory and measurement of industrial concentration and public policy responses to industrial concentration.

ECON 531. Money and Banking. 3 Credits.
Examines the nature and functions of money and credit, the commercial banking system, the Federal Reserve System, the quantity theory of money, the theory of income determination, the balance of payments and exchange rates, and the history of monetary policy in the United States.

ECON 535. Health Economics: A Global Perspective. 3 Credits.
This course introduces the student to the economics of health care and the application of health economics to health care problems, the issues surrounding those problems, and the potential solutions to those problems. The course will emphasize institutional features of the health care industry, the market for health care, the political economy of health care, and government involvement in the delivery of health care. Further, the course will survey the delivery of health care in other countries and provide a global perspective on selected health care issues such as AIDS, water and air quality, and the aging of the population.

ECON 544. Development of the American Economy. 3 Credits.
A study of the economic development of the United States from colonial times to the present. An analytical course concerned with the application of economic theory in the study of the growth and development of the American economy.

ECON 545. Urban Economics. 3 Credits.
An analysis of the economic factors which give rise to the formation of urban centers and which contribute to the following problems: urban poverty, housing conditions, traffic congestion, and the fiscal crisis faced by modern cities.

ECON 547. Natural Resource and Environmental Economics. 3 Credits.
Topics discussed include conservation and scarcity, market failure, fishery management, benefit-cost analysis, water resource development, environmental quality, recreation, energy, and marine resources.

ECON 551. History of Economic Thought. 3 Credits.
A study of the history of economic theory with attention to the economic ideas and philosophy of Adam Smith, David Ricardo, Karl Marx, J.M. Keynes and other major figures in the development of economics.

ECON 554. Economic Development. 3 Credits.
This course is intended to provide an introduction to the problems of economic development in the Third World, including the problems of economic growth, income distribution, poverty, urbanization, uneven development, agricultural policy, economic planning, industrial policy, trade policy, balance of payments, finance, and currency crises. To illustrate these issues we will examine the problems of certain individual countries, such as Brazil, Korea, Philippines, India, Mexico, Kenya, Indonesia, and Thailand. In the course we try to strike a balance between economic theory and institutional economics.

ECON 555. Comparative Economic Systems. 3 Credits.
This course examines and compares different economies from around the world, including such economies as the UK, France, Germany, Sweden, Japan, India, Korea, Russia, and China. Students look at the economic growth, GDP per capita, unemployment, inflation, income distribution, economic efficiency, institutions, policies, industrial structure, legal infrastructure, and international trade of these economies. Students study the functioning of markets and the problems of market and government failure. The course addresses the question, what is the best way to organize society?.

ECON 556. Economics of Information, the Internet and E-Commerce. 3 Credits.
Outlines the economic principles of information that underpin the Internet and e-commerce. Considers auctions, economies of scale and scope, data mining, price discrimination, product bundling, versioning, networking, the diffusion of innovations and intellectual property as they are utilized on the Internet and in e-commerce. Taught in a microcomputer laboratory.

ECON 595. Selected Topics in Economics. 1-3 Credits.
Taught on an occasional basis. A study of selected topics, the title of which will appear in the course schedule. Prerequisites: Permission of the instructor.

ECON 607. Managerial Economics. 2 Credits.
This course introduces the MBA student to the use of economic analysis to aid managerial decision-making. Topics include demand and supply, theory of optimizing behavior, demand elasticity, production, cost analysis and pricing with and without market power. Other topics include an introduction to game theory, alternative pricing techniques and the internal organization of firms. Prerequisites: Admission to the MBA Program and MBA 606 (or MBA 600, MBA 601, MBA 602, MBA 603, and MBA 604).

ECON 612. Global and Applied Macroeconomics. 3 Credits.
Measurements and indicators of economic activity; short-run macroeconomic analysis, credit markets, demand for money, institutional factors in money and banking, money creation, and monetary policy, long-run macroeconomics, short-run macroeconomic comparative statics, foreign exchange markets; description and history of business cycles, inflation, economic growth and public policies. (Credit may not be applied toward the M.A. in economics.) Prerequisites: ECON 604.

ECON 618. Global Macroeconomics. 2 Credits.
This course examines the measurement of macroeconomic variables and their movements over time. Short-run and long-run models of the macroeconomy are covered along with institutional factors of financial markets. The course mixes theory with real world applicability. Students will examine critical economic policy issues of the day. Prerequisites: Admission to the MBA Program and MBA 606 or MBA 600, MBA 601, MBA 602, MBA 603, and MBA 604.

ECON 625. Mathematical Economics. 3 Credits.
This course focuses on the use of mathematical techniques in solving complex economic problems. Primary emphasis is given to matrix algebra, differential calculus, constrained optimization techniques and dynamic optimization techniques.

ECON 650. International Economics. 3 Credits.
An analysis of international trade theory, commercial policy, foreign exchange markets, open economy macroeconomics, and balance of payments. The course provides the theoretical basis to understand contemporary international economic issues. (Credit may not be applied toward the M.A. in economics.).

ECON 668. Economics Internship. 1-3 Credits.
The course is a practicum in the field of economics applying theories, concepts, and quantitative tools in a professional environment. Prerequisites: Twelve hours of economics and permission of the graduate program director.

ECON 695. Selected Topics in Economics. 1-3 Credits.
Advanced topics in economics specifically designed for school teachers. (Credit may not be applied toward the M.A. in economics or the MBA.) Prerequisites: Permission of the instructor.

ECON 696. Selected Topics in Economics. 1-3 Credits.
Advanced topics in economics are covered in this course.
ECON 697. Readings in Economics. 3 Credits.
Individual readings in a selected field under the direction of a faculty member of the department.

ECON 698. Economic Methodology and Research. 3 Credits.
Students writing the capstone empirical research paper will take this course. Under the supervision of a faculty member, students will discuss theoretical models, analytical techniques, data analysis, and policy recommendations resulting from their capstone research project.

ECON 699. Thesis. 6 Credits.
Directed research for thesis.

ECON 700. Economic Analytics. 3 Credits.
This course provides the skills necessary to successfully identify, acquire, manage, and analyze economic data. The course primarily focuses on the application of statistical methods in support of economic analysis. During the course, students will (1) develop research hypotheses; (2) identify data to test the hypotheses; (3) utilize coding to access and obtain data, (4) use descriptive statistics to discuss the properties of the data, (5) explore the bivariate least squares estimator, and (6) interpret and present the results of economic analysis.

ECON 701. Advanced Microeconomic Analysis. 3 Credits.
This course considers microeconomic theory as a means of organizing the behavior of individuals and firms in economic settings. The course provides the theoretical framework for microeconomic research in business and in government. The theory of the household and the theory of the firm will be presented in detail along with consideration of distribution theory and welfare theory. The material will be presented with the aid of graphical techniques, logic, calculus, matrix algebra, and optimization techniques. Pre- or corequisite: ECON 625 or equivalent.

ECON 703. Advanced Macroeconomic Analysis. 3 Credits.
This course presents classical and modern macroeconomic models, including the Solow growth model, the Ramsey infinite horizon model, the overlapping generations model, and the endogenous growth model. The course also explores classical and modern models of monetary policy. This course provides students with mathematical and analytical tools and techniques to analyze macroeconomic issues including the impact of monetary and fiscal policy and the interaction among inflation, unemployment, and interest rates. Pre- or corequisite: ECON 625 or equivalent.

ECON 706. Econometrics I. 3 Credits.
Single-equation econometric models; serial correlation, heteroscedasticity, specification error, missing observations, and errors-in-variables and forecasting. Pre- or corequisite: ECON 625 or equivalent.

ECON 707. Econometrics II. 3 Credits.
Multi-equation econometric models; problems such as identification, single-equation estimation, estimation of equation systems, and model evaluation techniques; time-series models such as autoregressive and moving average models; forecasting with time-series models. Prerequisites: ECON 706 or equivalent.

ECON 708. Econometrics III. 3 Credits.
Issues in cross-section and panel data, focuses on problems such as selection bias, heterogeneity, unobserved heterogeneity, treatment effects, truncation and censoring. The course covers multivariate techniques such as principal component analysis and factor analysis, along with event studies and nonparametric and semiparametric estimators. Pre- or corequisite: ECON 706 or equivalent.

ECON 752. International Trade. 3 Credits.
Pure theory of international trade, mathematical models of trade, instruments of trade policy, theory and practice of economic integration, trade liberalization issues from international and regional viewpoints. Prerequisites: ECON 604 or ECON 650 or equivalent.

ECON 753. International Finance. 3 Credits.
International capital flows, exchange rates and price level, income, money supplies, inflation, international liquidity, causes of international balance and imbalance, balance-of-payments adjustments. Monetary magnitudes as a basis for insight into international financial policies. Prerequisites: ECON 612 or ECON 650 or equivalent.

ECON 754. Economic Development. 3 Credits.
Introduction to the problems of economic development in the third world, including the problems of economic growth, income distribution, poverty, urbanization, uneven development, agricultural policy, economic planning, industrial policy, trade policy, balance of payments, finance, and currency crises. Prerequisites: ECON 604 or ECON 650.

ECON 795. Selected Topics in Economics. 1-3 Credits.
Designed to provide the advanced student with an opportunity to study independently or in small groups and investigate specific topics of current interest in the field of economics. Prerequisites: Ph.D. standing and permission of the chair and coordinator.

ECON 801. Advanced Microeconomic Analysis. 3 Credits.
This course considers microeconomic theory as a means of organizing the behavior of individuals and firms in economic settings. The course provides the theoretical framework for microeconomic research in business and in government. The theory of the household and the theory of the firm will be presented in detail along with consideration of distribution theory and welfare theory. The material will be presented with the aid of graphical techniques, logic, calculus, matrix algebra, and optimization techniques. Prerequisites: ECON 607 or equivalent. Pre- or corequisite: ECON 625 or equivalent.

ECON 803. Advanced Macroeconomic Analysis. 3 Credits.
This course presents classical and modern macroeconomic models, including the Solow growth model, the Ramsey infinite horizon model, the overlapping generations model, and the endogenous growth model. The course also explores classical and modern models of monetary policy. This course provides students with mathematical and analytical tools and techniques to analyze macroeconomic issues including the impact of monetary and fiscal policy and the interaction among inflation, unemployment, and interest rates. Prerequisites: ECON 618 or equivalent. Pre- or corequisite: ECON 625 or equivalent.

ECON 806. Econometrics I. 3 Credits.
Single-equation econometric models; serial correlation, heteroscedasticity, specification error, missing observations, and errors-in-variables and forecasting. Pre- or corequisite: ECON 625 or equivalent.

ECON 807. Econometrics II. 3 Credits.
Multi-equation econometric models; problems such as identification, single-equation estimation, estimation of equation systems, and model evaluation techniques; time-series models such as autoregressive and moving average models; forecasting with time-series models. Prerequisites: ECON 806 or equivalent.

ECON 808. Econometrics III. 3 Credits.
Issues in cross-section and panel data, focuses on problems such as selection bias, heterogeneity, unobserved heterogeneity, treatment effects, truncation and censoring. The course covers multivariate techniques such as principal component analysis and factor analysis, along with event studies and nonparametric and semiparametric estimators. Pre- or corequisite: ECON 806 or equivalent.

ECON 852. International Trade. 3 Credits.
Pure theory of international trade, mathematical models of trade, instruments of trade policy, theory and practice of economic integration, trade liberalization issues from international and regional viewpoints. Prerequisites: ECON 604 or ECON 650 or equivalent.

ECON 853. International Finance. 3 Credits.
International capital flows, exchange rates and price level, income, money supplies, inflation, international liquidity, causes of international balance and imbalance, balance-of-payments adjustments. Monetary magnitudes as a basis for insight into international financial policies. Prerequisites: ECON 612 or ECON 650 or equivalent.

ECON 854. Economic Development. 3 Credits.
Introduction to the problems of economic development in the third world, including the problems of economic growth, income distribution, poverty, urbanization, uneven development, agricultural policy, economic planning, industrial policy, trade policy, balance of payments, finance, and currency crises. Prerequisites: ECON 604 or ECON 650.
ECON 895. Selected Topics in Economics. 1-3 Credits.
Designed to provide the advanced student with an opportunity to study independently or in small groups and investigate specific topics of current interest in the field of economics. Prerequisites: Ph.D. standing and permission of the chair and coordinator.

ECON 998. Master's Graduate Credit. 1 Credit.
This course is a pass/fail course for master's students in their final semester. It may be taken to fulfill the registration requirement necessary for graduation. All master's students are required to be registered for at least one graduate credit hour in the semester of their graduation.

ECON 999. Doctoral Graduate Credit. 1 Credit.
This course is a pass/fail course doctoral students may take to maintain active status after successfully passing the candidacy examination. All doctoral students are required to be registered for at least one graduate credit hour every semester until their graduation.