MASTER OF ARTS IN FINANCIAL ECONOMICS

We have suspended admissions to the Master of Arts in Financial Economics program. Students interested in graduate economic study are invited to apply to the Master of Science in Applied Economics program.

Program Director

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Program Description

The Master of Arts in financial economics program is designed to provide students with a background in economic theory and to teach students how to analyze financial markets. This program is intended to lead to professional employment in the financial services industry, including banking, insurance, and financial advising. Coursework in the program includes:

- coverage of micro- and macroeconomic theory,
- econometrics,
- time series analysis,
- financial markets,
- management of financial capital, and
- analysis of the valuation of stocks.

Electives allow students an opportunity to pursue additional topics such as international finance. Supplemented by upper-level courses in mathematics, the program can also help prepare students for doctoral study in finance, economics, or related fields.

Combined Bachelors/Masters Program

Highly qualified undergraduate students can apply for admission into the combined "4+1" Bachelors/Masters program for the MA in Economics. See the description of the "4+1" program (https://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/department-accounting-finance-economics/ba-economics/#text) in the undergraduate catalog.

Admission Requirements

In addition to the College of Graduate Studies admission requirements, applicants must have completed at least one course in each of the following areas:

- principles of microeconomics,
- principles of macroeconomics,
- statistics, and
- calculus.

Students who do not meet the requirements may be admitted on a provisional basis. Students with provisional admission are required to take undergraduate coursework to fulfill the admission requirements. With the permission of the Graduate Coordinator they may also be allowed to simultaneously take a limited number of masters-level courses.

Degree Requirements

Students must complete 30 semester hours (excluding 3 semester hours for Econ 6904) of graduate credit with a grade point average of 3.0 or higher for the MA in financial economics. The requirements for the degree include the following required courses plus one elective that account for a total of three semester hours for students who choose the non-thesis option. Students who need to reinforce their quantitative skills will be asked to take Econ 6904, which does not count towards the 30 semester hours.

COURSE	TITLE	S.H.
Required Courses		
ECON 6912	Microeconomic Theory	3
ECON 6922	Macroeconomic Theory	3
ECON 6939	The Economics of Financial Markets and Institutions	3
ECON 6976	Econometrics	3
ECON 6980	Applied Time Series Analysis and Forecasting	3
ECON 6998	Research Seminar	3
FIN 6912	Financial Statement Analysis	2
FIN 6902	Financial Accounting and Finance for Decision Making	1-2
FIN 6923	Corporate Financial Management	3
FIN 6924	Securities Analysis	3
Electives		
Select one 3 sh elective		3
Total Semester Hours		**30-31**

6900-level graduate courses in Economics or Finance can be used as electives (the one exception is ECON 6921, which does not count towards the degree). The elective may be either a 5800-level economics swing course or a graduate-level course outside of finance or economics that has been approved by the graduate coordinator.

Thesis Option

Students may write a thesis expanding on their project in the Research Seminar (ECON 6998) in place of the three hour elective. Students selecting the thesis option must earn a grade of B or A in the Research Seminar and submit a thesis proposal with the names of three faculty members who are willing to serve on a thesis committee to the department chair prior to registering for thesis credit hours (ECON 6999). The student must defend the thesis in an oral examination before a committee of three or more faculty members of the department. The thesis must be submitted according to the general requirements of the College of Graduate Studies.

Learning Outcomes

1. The students will demonstrate how to measure, detrend, and analyze macroeconomic variables such as GDP and inflation.
2. The students will evaluate monetary and fiscal policy using various versions of the IS-LM model.
3. The students will demonstrate the importance of expectations in current macroeconomic theory.
4. The students will compare the basic theories and models of Neoclassical and New-Keynesian Economics.
5. The student will solve for utility-maximizing and cost-minimizing outcomes using calculus.
6. The student will mathematically model the behavior of firms in competitive markets and firms who are monopolies.
7. The student will calculate the welfare losses due to a lack of competition.
8. The student will use an econometric approach to model economic phenomenon, estimate the resulting model, and interpret the estimated regression coefficients.
9. The student will demonstrate how to conduct a literature search of professional economic journals using EconLit.
10. The student will demonstrate knowledge of the various financial markets, instruments, agents, functions, and intermediaries.
11. The student will demonstrate knowledge of hedging versus speculating, primary and secondary markets for mortgage loans, and markets for future and options contracts.

12. The student will demonstrate knowledge of the market interest rates swaps, and how to use financial instruments to hedge against interest risk.

13. The student will demonstrate how to use financial models to aid managers in making value maximizing choices.

14. The student will demonstrate an understanding of the allocative role and function of financial markets, securities, and corporate financial decisions in a market economy.

15. The student will demonstrate the importance of finance as a vital function within an organization that necessitates diligence and high ethical standards in application

16. The student will demonstrate knowledge of the link between theoretically sound financial techniques and value judgment.

17. The students will demonstrate how to diagnose the characteristics of a time series (including linear trend, stochastic trend, seasonality, cycles, and other irregular patterns).

18. The students will learn how to apply appropriate forecasting methods to forecast economic and business data; as well as learn how to evaluate the performance of competing forecasting methods.

19. The students will learn how to use the vector autoregression model and vector error correction model to analyze the relationships among multiple time series and demonstrate how to interpret the estimated results from those models.

ECON 5801   Economics of Industrial Organization   3 s.h.
A systematic analysis of the structure, conduct, and performance of American industry. A quantitative analysis plus a comprehensive review of theoretical models of the market, firm behavior, and performance.
Prereq.: ECON 2610.

ECON 5806   History of Economic Thought   3 s.h.
Designed to provide students with an understanding of the development of economic ideas to include: Mercantilism, Physiocrats, the English Classical School, Utilitarianism, early Social Thought, Karl Marx, the German Historical School, Institutionalists and the Keynesian School.
Prereq.: ECON 2630.

ECON 5809   Current Problems in Money, Banking, and Financial Markets   3 s.h.
The financial market system, including money and capital markets. Current problems associated with trends in theory and practice. Theories of the interest rate and monetarism.
Prereq.: ECON 3701 or consent of instructor.

ECON 5811   International Trade   3 s.h.
Theories of international trade and specialization; free trade vs. protectionism; tariff and non-tariff barriers to international trade; international balance of payments and its components; the role of multinational enterprises in contemporary trade pattern; regional economic integrations and world trade; U.S. commercial policies.
Prereq.: ECON 2610.

ECON 5812   International Finance   3 s.h.
Theories of foreign exchange and capital movements, international payments, analysis of spot and forward foreign exchange markets, foreign exchange market arbitrage, speculation, and risk hedging. The Bretton Woods agreement and the contemporary international monetary system. The rise of international organizations and multinational enterprises in the international economy.
Prereq.: ECON 2630.

ECON 5822   Urban and Regional Economics   3 s.h.
Economic analysis of the problems of urbanized areas and the causes of the growth or decline in economic activity in small-area economics. Topics include benefit-cost analysis, economic base analysis, input-output applications, and the theory of location and agglomeration.
Prereq.: ECON 2610.

ECON 5824   Applied Time Series Analysis of Economic and Business Data   3 s.h.
An in-depth analysis of time series models and their applications to problems in economics and business. Emphasis on forecasting. Extensive use of standard computer programs.
Prereq.: ECON 2610 and STAT 4817 or ECON 3790 or (ECON 3788 and ECON 3789) or (ECON 3788 and BUS 3700).

ECON 5831   Labor Markets and the Economics of Unions   3 s.h.
Economic theory and analysis of labor as an input in the resource market; principles, labor problems, public policy; theories of the development of the labor movement; economic objectives of trade unions; problems in public control.
Prereq.: ECON 2610.

ECON 5843   Economics of Poverty, Transfers and Discrimination   3 s.h.
Examines the measurement and causes of poverty, trends in the distribution of income, and antipoverty programs and their effectiveness. Discussions of theories of discrimination, difficulties in measuring the impact of discrimination, and policies designed to reduce discrimination.
Prereq.: ECON 2610.

ECON 5850   Introduction to Game Theory   3 s.h.
Topics include (not limited to) Nash equilibrium, pure/mixed strategy, static/dynamic games, repeated games and coordination, perfect/incomplete information, etc.
Prereq.: ECON 2610.

ECON 5853   Applied Econometrics   3 s.h.
The practice of econometrics with emphasis on model construction, estimation, and interpretation of results. Applications in the private and public sectors involve the use of computers and economic software.
Prereq.: ECON 2630 and ECON 3788.

ECON 5861   SAS Programming for Data Analysis   3 s.h.
An introduction to SAS programming for data analytics. Topics include using SAS for data processing, manipulation, visualization, reporting, and statistical analysis. The objective is for students to develop statistical computing skills for problem solving and decision making.
Prereq.: STAT 2601 or STAT 3717 or STAT 3743 or ECON 3790, or ECON 3788 and ECON 3789, or ECON 3788 and BUS 3700.
Cross-Listed: STAT 5811.

ECON 6900   Statistical Problems   3 s.h.
A survey of the fundamental statistical techniques used in business with special emphasis on interpreting the results generated by statistical software. Techniques covered: hypothesis tests of means and proportions, estimation, chi-square tests, analysis of variance, correlation, and regression. Not applicable toward the M.A. in economics.

ECON 6904   Quantitative Methods for Economics   3 s.h.
A course designed to provide graduate students in economics with an opportunity to acquire the necessary skills in using the quantitative methods that are required to complete graduate-level economic theory and econometrics courses successfully. The course introduces the basic concepts and procedures of differential and integral calculus that are used in economic analysis, as well as the fundamental probability and statistics which are needed in the study of econometrics.

ECON 6912   Microeconomic Theory   3 s.h.
Study of demand and supply, consumer theory, the theory of the firm, various market structures, and Pareto efficiency.

ECON 6915   Health Policy   3 s.h.
A theoretical and empirical analysis of the health care sector. Topics include the demand for health care and health insurance, the perverse incentives of health insurance, moral hazard, physician and hospital behavior, and the role of competitive markets in the delivery of health care. Special emphasis is placed on the analysis of public policy, including financing and regulating the health care industry.
Prereq.: admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

ECON 6921   Economic Analysis of Markets and Industries   3 s.h.
Participants will learn to analyze and understand the impact economic factors (e.g., information, consumer behavior, supply and demand) have on shaping markets and industries. Using this knowledge, participants will be capable of assessing the different types of economic strategies (e.g., product differentiation, pricing, advertising and signaling) an organization can employ to gain market power to realize economic profits.
Prereq.: Graduate standing.

ECON 6922   Macroeconomic Theory   3 s.h.
Examines models used to determine the value of various aggregate economic variables, such as the price level, national income, employment, interest rates, and wage rates.

ECON 6939   The Economics of Financial Markets and Institutions   3 s.h.
Study of the institutions, instruments, and markets that facilitate the distribution of financial resources throughout the economy. The course discusses the money, capital, and commodity markets. Also, the topics of accessing default risk and hedging against market risk are discussed.
Prereq.: admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

ECON 6940   Financial Economics   3 s.h.
Study of various topics, including risk and the selection of the optimal monetary control tool, politics and monetary control, the financial firm as an optimizing institution, and portfolio theory.
Prereq.: ECON 6939 or permission of the instructor.

ECON 6945   Public Finance   3 s.h.
Study of the role of the government in the economy. The topics covered will include expenditure analysis, theories of taxation, provision of public goods, fiscal federalism, and public choice theory.
Prereq.: ECON 6912.

ECON 6952   Transfer Programs and Poverty   3 s.h.
A study of poverty and the effectiveness of antipoverty programs. Topics include defining and measuring poverty, trends in the rate of poverty and the distribution of income, causes of poverty, models of discrimination, effectiveness of government training programs, transfer programs and their effect on labor supply, and the financial stability of the Social Security retirement program.
Prereq.: admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

ECON 6970   Economics Internship   3 s.h.
The practical application of economic knowledge and statistical skills in the workplace. Students assist participating professionals in various kinds of industrial, financial, and public service organizations. By permit only.
Prereq.: ECON 6912 and ECON 6922.

ECON 6976   Econometrics   3 s.h.
Study of the fundamentals of econometric techniques that are useful for estimating causal economic relationships. The objectives include (1) analysis of the effects of exogenous factors on the variable whose behavior we seek to explain, (2) testing of hypotheses about new and existing economic theories, and (3) forecasting estimated economic relationships beyond the sample period for the purpose of planning and control. The course will focus on the practice of econometrics with extensive applications to a variety of real-world problems in many areas of economics.
Prereq.: ECON 6904.

ECON 6980   Applied Time Series Analysis and Forecasting   3 s.h.
Covers essential tools for time series analysis and forecasting with emphasis on how to apply those tools to analyze and forecast economic and business data. Topics include ARMA models, Time Series Decomposition, Exponential Smoothing, GARCH, VAR models, and Cointegration.
Prereq.: ECON 2610 and ECON 3789 or ECON 3790 or ECON 6976 or STAT 5817.

ECON 6988   Modeling in Financial Economics   3 s.h.
A study of modeling and evaluation of derivatives and bonds and risk management using derivatives. Topics cover various models in asset evaluation, such as bond price models, the Black-Sholes model, diffusion processes, and risk management. Also listed as STAT 6988.
Prereq.: STAT 4843 or STAT 6943 or ECON 6976.

ECON 6990   Special Topics in Economics   1-3 s.h.
Special interest topics selected by the staff in the following areas: economic education, economic theory, and applied economics analysis. May be repeated for a maximum of six hours toward a graduate degree.

ECON 6992   Data Analytics - Advanced SAS Programming   3 s.h.
This coures is designed to provide students training of advanced SAS programming for data analysis. Main topics include SQL, Macro language, Econometrics-related procedures, working with large data set, etc.
Prereq.: ECON 6976 or equivalent and either ECON 5861 or STAT 5811.
Cross-Listed: STAT 6912.

ECON 6998   Research Seminar   3 s.h.
Applied quantitative research techniques will be discussed. Students are required to undertake an original quantitative research project in a field of economics and write a paper summarizing their results. Course may be taken concurrently with ECON 6976.Prereq.: ECON 6912 and ECON 6922.

ECON 6999   Master's Thesis   3 s.h.
A research project under the supervision of a member of the department on the graduate faculty. The project typically extends the student's research in ECON 6998.
Prereq.: a grade of "A" or "B" in ECON 6998 and a thesis proposal accepted by departmental committee.