

Program Overview

The combined undergraduate / graduate program (3+2) allows undergraduate Bachelor of Business Administration in Economics students to enter the Master of Science in Quantitative Finance and Economics program beginning during the summer of their 4th year and earn a B.B.A in Economics and a Master of Science in Quantitative Finance and Economics.

Application Requirements

Application requirements consist of institutional and program requirements for applicable semesters of entry during the current academic year. Additional information and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu/>).

Unless otherwise noted on The Graduate College program page, AI tools can only be used to correct spelling and grammar errors in application materials.

Institutional Requirements

Institutional requirements are the minimum standards for admission to any graduate program at Texas State. These include:

- Completed online application
- Nonrefundable application fee
 - Degree Programs (Doctoral and Master's)
 - \$55 fee, or
 - \$90 for applications with international credentials
 - Post-Baccalaureate Programs (Certificate, Certification, Non-Degree, and Visiting)
 - \$20 fee, or
 - \$60 for applications with international credentials
- Official transcripts from each institution where course credit was granted. Final transcripts showing degree completion are required before the student may register for their second term of enrollment.
- GPA requirements (a higher GPA may be listed in the Program Requirements)
 - Doctoral programs require a 3.00 overall GPA or a 3.00 GPA in your last 60 hours (<https://www.gradcollege.txst.edu/admissions/policy.html#gpa>) of undergraduate course work (plus any completed graduate courses).
 - Master's and Specialist programs require a 2.75 overall GPA or a 2.75 GPA in your last 60 hours (<https://www.gradcollege.txst.edu/admissions/policy.html#gpa>) of undergraduate course work (plus any completed graduate courses).
 - Post-Baccalaureate programs require a 2.50 overall GPA or a 2.50 GPA in your last 60 hours (<https://www.gradcollege.txst.edu/admissions/policy.html#gpa>) of undergraduate course work (plus any completed graduate courses).
- Baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>). Some programs may restrict acceptable tests or require higher scores than the institutional scores; this will be noted in the Program Requirements.

- official TOEFL iBT scores required with a 78 overall if taken on or before January 21, 2026
- official TOEFL iBT scores required with a 4 overall if taken after January 21, 2026
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall
- official Texas State Intensive English Program score of 90% or higher in the highest-level course (level 5)

The institution does **not** offer admission if the scores above are not met.

Program Requirements

- enrollment as junior or senior in the Bachelor of Business Administration (B.B.A.) Major in Economics program at Texas State University with 3.2 or higher overall GPA by the end of the spring semester of their junior years and who will have completed all but 18 credits of their prescribed courses by spring of their junior year
- prerequisites: A minimum grade of B in Principles of Microeconomics and Macroeconomics (ECO 2314, ECO 2315 or equivalent), Quantitative Methods and Statistics (ANLY 2333 or equivalent), Business Calculus (Math 1329 or equivalent), and Business Finance (FIN3312 or equivalent)
- statement of purpose (minimum 500 words)
- one letter of endorsement from the MSQFE Graduate Advisor

Applicants should refer to The Graduate College website for additional information regarding the admission process.

Approved English Proficiency Exam Scores

This program accepts the English Proficiency scores as listed in the Institutional Requirements but would require the following overall and module scores for specific tests:

- official TOEFL iBT scores required with a 80 overall if taken on or before January 21, 2026
 - 19 Listening
 - 19 reading
 - 19 Speaking
 - 18 Writing
- official TOEFL iBT scores required with a 4 overall if taken after January 21, 2026
 - 4 Listening
 - 4 Reading

- 4 Speaking
- 4 Writing

Degree Requirements

- For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester (summer included) or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove the restricted status hold; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the internal application process available on the CenturyLink Academic Advising Center website. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<https://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for other information about the general education core curriculum.
- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ISAN 1325	Introduction to Microcomputer Applications in Business	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ANLY 2333	Business Statistics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
FIN 3312	Business Finance	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

4. A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.

5. Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general

sequence of courses specified for the curriculum in this section of the catalog.

6. First time in college students who went to a private, out-of-state, or home school institution will be required to demonstrate foreign language proficiency. This can be demonstrated by the successful completion of two years of the same foreign language in high school or two semesters of the same foreign language in college. However, first time in college students who went to a public high school in Texas (and therefore earned a Foundation or higher diploma) will automatically be considered as having satisfied the foreign language proficiency requirement. In addition, transfer students are not required to satisfy foreign language proficiency through high school or college-level coursework

7. Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy undergraduate degree requirements.

8. For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Economics at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1325	Introduction to Microcomputer Applications in Business	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
Total Hours		24

9. Students must achieve the following minimum grade-point averages for graduation for the B.B.A.:

- a Texas State GPA of 2.00
- a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
- a GPA of 2.0 in the minor(s).

10. Students will apply to the MSQFE program during their junior year of their undergraduate studies and accepted students will be admitted regularly. Once enrolled in the program, students may take three graduate-level courses that will count toward both their undergraduate and graduate degree requirements. These courses include:

- QFE 5320 – Econometrics
- QFE 5330 – Financial Theory and Corporate Policy
- QFE 5335 – Financial Analytics
- QFE 5310 – Microeconomic Theory and Applications
- FIN 5322 – Investment Analysis

The remaining 21 graduate credit hours may be completed within one additional year of full-time graduate study, allowing students to earn both degrees within five years.

11. Any student enrolled in a graduate degree program in the McCoy College of Business can earn no more than two grades of "C" or lower. Even if the grade of "C" or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third "C" (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 "C" Policy takes precedent over probationary status. So, if a student earns a third "C" they are automatically dismissed from their program permanently, even if probation does not occur.

Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
MATH 1329 (Mathematics Component Code 020 [TCCN MATH 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
POSI 2310 (Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Sciences Component Code 030	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCN 1311])	3	Early American History Component Code 060	3
B A 1310	3	ISAN 1325 (TCCN BCIS 1305)	3
US 1100	1		
	16		15

		Sophomore	
		First Semester Hours	Second Semester Hours
ACC 2361 (TCCN 2301)	3	ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Science Component Code 080 [TCCN ECON 2302])	3	ECO 2315 (TCCN ECON 2301)	3
ANLY 2333 (TCCN BUSI 2305)	3	POSI 2320 (Component Code 070 [TCCN GOVT 2305])	3
Modern American History Component Code 060	3	B A 3110	1
Life and Physical Sciences Component Code 030	3	Creative Arts Component Code 050	3
		Component Area Option 090	3
	15		16

		Junior	
		First Semester Hours	Second Semester Hours
BLAW 3301 (TCCN BUSI 2301)	3	ECO 3315	3
ISAN 3380	3	ECO Advanced Elective ¹	3
ECO 3314	3	FIN 3312	3
ECO Advanced Elective ¹	3	MGT 3353	3
B A 3120	1	MKT 3343	3
MGT 3303	3		
	16		15

		Senior	
		First Semester Hours	Second Semester Hours
Business Advanced Elective ²	3	Business Advanced Elective ²	3
QFE 5320	3	MGT 4335	3
QFE 5330	3	QFE 5340	3
ECO Advanced Elective ¹	3	Free Elective	3
Free Elective	3		
	15		12

		Fifth Year	
		First Semester Hours	Second Semester Hours
QFE 5310	3	QFE 5315	3
ISAN 5357, QFE 5335, or ANLY 5336	3	FIN 5322	3
Graduate Elective ³	3	Graduate Electives ³	6
	9		12

Total Hours: 141

¹ The Economics Advanced Electives may be chosen from: ECO 3301, ECO 3304, ECO 3305, and ECO 4395.

² The advanced electives in business may be chosen from any 3000-4000 level business course (ACC/ANLY/B_A/BLAW/ECO/FIN/ISAN/MGT/MKT) not already required in the degree, for which the student meet prerequisites, and available to any business major.

³ Graduate Electives may be chosen from ISAN 5355, QFE 5353, QFE 5369, QFE 5390A, QFE 5392A, QFE 5392B, QFE 5395, ANLY 5335, ANLY 5342, ANLY 5343, and ANLY 5330.

Comprehensive Examination

All candidates for graduate degrees must pass one or more comprehensive examinations, either written, oral, or both, covering at least the field of concentration.

For non-thesis option students, the comprehensive examination is a written, on-campus exam administered during the final semester of coursework. It assesses students' mastery of the program's core areas in quantitative methods, economic theory, and financial applications. The comprehensive exam will be evaluated by a committee of three faculty who are selected by the graduate program advisor. Each question on the written exam is evaluated as *pass* or *fail*.

Students must pass the comprehensive exam during the last semester in at most two attempts. If a student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester (fall or spring). If the second attempt results in failure, the student will be dismissed from the program.

Courses offered

Quantitative Finance and Economics (QFE)

QFE 5199B. Thesis.

This course represents continuing enrollment for students engaged in thesis research within the graduate program. Work focuses on the development, execution, and completion of an original research project under faculty supervision. Activities include refinement of research questions, literature review, data collection and analysis, and preparation of the written thesis. Emphasis is placed on applying appropriate research methods, maintaining academic rigor, and demonstrating independent scholarly inquiry. Enrollment continues until the thesis is completed and approved according to program requirements. Graded on a credit (CR), progress (PR), no-credit (F) basis.

1 Credit Hour. 5 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

QFE 5299B. Thesis.

This course represents continuing enrollment for students engaged in thesis research within the graduate program. Work focuses on the development, execution, and completion of an original research project under faculty supervision. Activities include refinement of research questions, literature review, data collection and analysis, and preparation of the written thesis. Emphasis is placed on applying appropriate research methods, maintaining academic rigor, and demonstrating independent scholarly inquiry. Enrollment continues until the thesis is completed and approved according to program requirements. Graded on a credit (CR), progress (PR), no-credit (F) basis.

2 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

QFE 5310. Microeconomic Theory and Applications.

This course provides a rigorous introduction to the methods of microeconomic theory and quantitative applications. Topics include consumer and producer theory, decision-making under uncertainty, markets and competition, general equilibrium, and game theory. The course also incorporates applications to empirical research through analysis and replication of quantitative results from academic journal articles. Emphasis is placed on linking theoretical models to observable economic behavior and interpreting quantitative findings within a structured analytical framework. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

QFE 5315. Macroeconomic Theory and Applications.

This course examines macroeconomic theory and policy at an advanced level, integrating traditional and modern models of income determination, price dynamics, employment, and long-run economic growth. Topics include business cycle theory, dynamic macroeconomic models, and the roles of monetary and fiscal policy in influencing economic stability. Analysis emphasizes the interaction between theoretical frameworks and empirical evidence, using data to evaluate macroeconomic relationships and policy outcomes. The course also considers contemporary macroeconomic issues and the application of models to real-world economic fluctuations and policy debates. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

QFE 5320. Econometrics.

This course introduces econometric methods for analyzing economic data at the graduate level. Topics include probability theory, simple and multiple linear regression, hypothesis testing, nonlinear models, binary outcome models, and panel data techniques. Emphasis is placed on linking statistical theory with empirical modeling to support inference, prediction, and evaluation of economic relationships. Students analyze real-world datasets to assess model performance and interpret results within an economic framework. Statistical software is used to estimate models, conduct diagnostics, and present empirical findings. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

QFE 5330. Financial Theory and Corporate Policy.

This course examines foundational theories in finance with emphasis on their application to corporate financial policy and decision-making. Topics include utility theory, state-preference frameworks, mean–variance optimization, asset pricing models, and capital structure decisions. The course analyzes how these theoretical models inform firm valuation, investment decisions, and financing strategies. Option pricing concepts are introduced and applied to corporate finance contexts, including risk management and contingent claims analysis. Emphasis is placed on integrating theoretical frameworks with quantitative methods to evaluate corporate financial decisions in uncertain and dynamic economic environments. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

QFE 5335. Financial Analytics.

This course examines the use of open-source programming tools in financial analysis and modeling. Topics include implementation of financial models related to investments and corporate finance, data visualization, and analysis of financial datasets. Emphasis is placed on applying computational methods to evaluate financial problems and interpret results. Students work with real-world data to construct models, analyze financial performance, and generate insights relevant to decision-making. Analytical tools are used to support valuation, risk assessment, and financial forecasting in applied settings.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

QFE 5340. Financial Econometrics.

This course examines econometric methods applied to corporate finance and asset pricing using financial data. Topics include estimation and inference in financial models, principal component and factor analysis, capital asset pricing models, volatility modeling, and risk measurement. The course also analyzes derivative pricing, portfolio allocation and optimization, and simulation of financial systems. Emphasis is placed on applying statistical techniques to model financial relationships, evaluate risk, and interpret empirical results. Analytical software is used to estimate models, analyze datasets, and assess model performance in financial applications. Prerequisite: QFE 5320 with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

QFE 5353. Fixed Income Analysis.

This course examines the valuation and analysis of fixed income securities and their derivatives in modern financial markets. Topics include money-market instruments, government and corporate bonds, repurchase agreements, interest rate swaps, and mortgage-backed securities. The course analyzes pricing frameworks, yield measures, and term structure relationships used in fixed income markets. Emphasis is placed on analytic tools for bond portfolio management, including duration, convexity, and interest rate risk measurement. Additional topics include credit risk assessment, securitization, and the role of fixed income instruments in investment and risk management strategies. Prerequisite: FIN 5322 with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

QFE 5369. Internship.

This course integrates graduate-level academic study with supervised professional experience in a finance- or economics-related setting. Students apply advanced theoretical frameworks and quantitative methods to workplace responsibilities, analyzing how economic and financial concepts inform organizational and policy decisions. Emphasis is placed on reflective analysis, professional development, and the evaluation of real-world problems using data-driven and model-based approaches. Students examine the relationship between theory and practice while developing skills relevant to professional environments in finance, economics, and related fields. Prerequisite: Must have completed 12 graduate hours and other prerequisites may be specified by the employer with the consent of Program Director and department chair and instructor approval.
3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.
Grade Mode: Standard Letter

QFE 5390A. International Economics.

This course examines open economy macroeconomics and monetary issues in international economics. Topics include international financial markets, exchange rate determination, trade policies, and international monetary systems. The course also covers financial crises, contagion effects, and the interaction between macroeconomic policy and global financial conditions. Emphasis is placed on applying theoretical models to empirical data to analyze international macroeconomic and financial behavior. Analytical tools are used to interpret exchange rate movements, capital flows, and cross-border economic activity in a global context. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better or advisor approval.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing|Topics
Grade Mode: Standard Letter

QFE 5390C. Big Data in Economics and Finance.

This course examines big data techniques for analyzing financial markets and economic phenomena. Topics include Python programming, data acquisition, and machine learning methods such as factor models, regularization, dimensionality reduction, and neural networks. Emphasis is placed on predictive modeling, model validation, and the analysis of complex, high-dimensional datasets. Students implement quantitative models to evaluate financial and economic data and assess their performance in applied settings. Analytical tools are used to support data-driven decision-making in finance and economics. Prerequisite: QFE 5320 with a grade of a "C" or better.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Topics

Grade Mode: Standard Letter

QFE 5392A. Financial Markets and Institutions.

This course focuses on U.S. financial markets and institutions, with additional consideration of international counterparts. Topics include the structure and functions of money and capital markets, equity and debt markets, and the roles of financial intermediaries. Analysis covers interest rate determination, term structure relationships, and the interaction between financial markets and institutions. The course also examines regulatory frameworks, central banking policies, and their influence on market behavior, financial stability, and economic activity. Emphasis is placed on applying analytical tools to evaluate market developments, institutional performance, and policy impacts in a dynamic financial environment. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better or advisor approval.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Topics

Grade Mode: Standard Letter

QFE 5392C. Active Portfolio Management.

This course examines the practical application of modern portfolio theory in active investment management. Topics include signal extraction, return forecasting, portfolio construction, and risk control using quantitative methods. Analysis focuses on identifying and evaluating predictive signals from financial data and transforming them into investment strategies. Economic, econometric, and operations research techniques are used to address complex portfolio allocation and optimization problems. Emphasis is placed on integrating forecasting models with risk management frameworks to guide active portfolio decisions. Students evaluate portfolio performance and assess the effectiveness of investment strategies in dynamic market environments. Prerequisite: QFE 5330 and QFE 5320 both with grades of "C" or better or advisor approval.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Topics

Grade Mode: Standard Letter

QFE 5392D. Financial Derivatives with Python.

This course examines the theoretical foundations and computational methods used in the pricing and risk management of financial derivatives. Topics include arbitrage pricing, replication, binomial and lattice models, stochastic processes, Itô calculus, risk-neutral valuation, and the Black–Scholes framework. Numerical techniques such as Monte Carlo simulation and finite-difference methods are applied to derivative valuation and portfolio risk analysis. Emphasis is placed on implementing quantitative models in Python to analyze volatility, estimate Value at Risk (VaR), and conduct scenario-based risk assessments. Analytical tools, including AI-assisted coding support, are evaluated for their effectiveness and limitations in quantitative finance applications. Prerequisite: QFE 5330 and QFE 5320 both with grades of "C" or better or instructor approval.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Topics

Grade Mode: Standard Letter

QFE 5392E. Artificial Intelligence in Finance.

This course examines the application of artificial intelligence and machine learning in finance. Topics include data organization, feature engineering, predictive modeling, and evaluation of algorithmic performance in financial contexts. Methods such as supervised and unsupervised learning, deep learning, and large language models are applied to problems in capital markets, credit risk modeling, and real estate analysis. Emphasis is placed on using advanced computational techniques to extract insights from financial data and support decision-making. Students analyze real-world datasets and assess the effectiveness and limitations of AI-based approaches in financial applications. Prerequisite: QFE 5335 with a grade of "C" or better.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Topics

Grade Mode: Standard Letter

QFE 5395. Independent Study.

This course allows graduate students to engage in independent, faculty-guided study of a selected topic or applied area in quantitative finance and economics. Emphasis is placed on advanced analytical inquiry, development of specialized knowledge, and application of theoretical and quantitative methods to complex problems. Students conduct focused research or applied projects using relevant data sources, modeling techniques, and computational tools. The course supports exploration of topics beyond regularly offered coursework and promotes independent scholarship and professional skill development. This course may be repeated once for credit with different emphasis. Prerequisite: instructor and program director.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

QFE 5399A. Thesis.

This course represents continuing enrollment for students engaged in thesis research within the graduate program. Work focuses on the development, execution, and completion of an original research project under faculty supervision. Activities include refinement of research questions, literature review, data collection and analysis, and preparation of the written thesis. Emphasis is placed on applying appropriate research methods, maintaining academic rigor, and demonstrating independent scholarly inquiry. Enrollment continues until the thesis is completed and approved according to program requirements. Graded on a credit (CR), progress (PR), no-credit (F) basis.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Credit/No Credit

QFE 5999B. Thesis.

This course represents continuing enrollment for students engaged in thesis research within the graduate program. Work focuses on the development, execution, and completion of an original research project under faculty supervision. Activities include refinement of research questions, literature review, data collection and analysis, and preparation of the written thesis. Emphasis is placed on applying appropriate research methods, maintaining academic rigor, and demonstrating independent scholarly inquiry. Enrollment continues until the thesis is completed and approved according to program requirements. Graded on a credit (CR), progress (PR), no-credit (F) basis.

9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

QFE 5399B. Thesis.

This course represents continuing enrollment for students engaged in thesis research within the graduate program. Work focuses on the development, execution, and completion of an original research project under faculty supervision. Activities include refinement of research questions, literature review, data collection and analysis, and preparation of the written thesis. Emphasis is placed on applying appropriate research methods, maintaining academic rigor, and demonstrating independent scholarly inquiry. Enrollment continues until the thesis is completed and approved according to program requirements. Graded on a credit (CR), progress (PR), no-credit (F) basis.

3 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

QFE 5599B. Thesis.

This course represents continuing enrollment for students engaged in thesis research within the graduate program. Work focuses on the development, execution, and completion of an original research project under faculty supervision. Activities include refinement of research questions, literature review, data collection and analysis, and preparation of the written thesis. Emphasis is placed on applying appropriate research methods, maintaining academic rigor, and demonstrating independent scholarly inquiry. Enrollment continues until the thesis is completed and approved according to program requirements. Graded on a credit (CR), progress (PR), no-credit (F) basis.

5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit