

Finance and Quantitative Management

School

Greehey School of Business (<https://www.stmarytx.edu/academics/business>)

School Dean

Tanuja Singh, D.B.A. (tsingh@stmarytx.edu)

Department

Finance and Quantitative Management (<https://www.stmarytx.edu/academics/programs/finance-risk-management>)

Department Chair

Seong Lim, Ph.D. (slim1@stmarytx.edu)

Finance and Risk Management Major

The finance and risk management major develops the student's ability to analyze financial information and recommend sound financing and investment options, as well as the ability to identify, analyze and manage the risks faced by individuals and organizations.

Individuals who enjoy using analytical skills, making decisions, and explaining decision outcomes to others should consider the finance and risk management major. Additionally, students who enjoy working with people, are challenged by continuous learning requirements, and have a strong commitment to career advancement will enjoy a professional career path in finance and risk management.

Information Systems Management Major

Information is a corporate asset that is dependent on the implementation of effective computer-based systems. Development of these data systems requires knowledge of the enterprise and its functions, as well as technical competence. Individuals interested in the use of computerized management information systems, including design, analysis, and interpretation of computerized systems as aids to making decisions, should consider this major at St. Mary's University. Information systems management is a people-oriented career that requires excellent communication skills and the ability to work well in groups.

Majors in Finance

- B.B.A. in Finance and Risk Management (catalog.stmarytx.edu/undergraduate/majors-programs/greehey-school-business/finance/finance-risk-management-bba)

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Finance

FN 3310. Corporate Finance. 3 Semester Hours.

Introduction to analytical financial management. Emphasis placed on the sources, uses, and cost of short, intermediate, and long term funds; capital budgeting; leverage; cost of capital; management of working capital; and financial statement analysis. (Fall, Spring) Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320.

FN 3330. Financial Institutions. 3 Semester Hours.

Review of operations of financial intermediaries including banks, savings institutions, and insurance companies. Principles of money and credit; review of central banking and monetary policies, both national and international. (Fall;Spring) Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, FN 3310.

FN 3340. Fundamentals of Risk Management. 3 Semester Hours.

Study of risk and its impact on individuals, organizations and society. Analysis of fundamental risk management concepts and techniques. Examination of insurance as a risk management tool, including coverage of insurance economics, law, regulation and market structure. Prerequisites: MT 1305 (or MT 2303), MT 1306 or MT 2306 (or MT 2412), AC 2310, AC 2320, EC 2301, EC 2303 (Fall, Spring).

FN 4300. Special Studies in Finance. 3 Semester Hours.

A study of selected topics in Finance. Specific subject indicated each time the course is offered. May be used as elective credit and repeated when specific subject changes. Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, FN 3310, Consent of Instructor.

FN 4310. Intermediate Corporate Finance. 3 Semester Hours.

This course will build on Corporate Finance (FN 3310) and will introduce the student to basic elements of finance theory. In particular, emphasis will be placed on dividend policy theories, corporate structure theories, and real options. While the emphasis is on the theoretical aspects of corporate finance, the students will also be exposed to applications of theory in a practical corporate finance environment. (Fall; Spring) Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, FN 3310.

FN 4320. Investments I. 3 Semester Hours.

The quantitative and qualitative analysis of stock, bonds, and derivative securities such as futures and options. Quantitative analyses including valuation models and strategy design. Review of securities markets: functions and operations. (Fall & Spring) Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, FN 3310.

FN 4330. Student Managed Portfolio (Beginning). 3 Semester Hours.

Application of portfolio management theories through the active participation in an asset management team assigned the responsibility of attaining a reasonable rate of return commensurate with acceptable risk levels. Investment decisions are further guided by the investment policy guidelines of the U.S. Conference of Catholic Bishops. The U.S. Catholic bishops have highlighted seven key themes that embody Catholic social thought and social teaching. Stewardship of investment resources is covered by objectives that are framed by these themes. (Spring & Fall) Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, FN 3310, FN 4320 or Permission of the instructor.

FN 4340. Student Managed Portfolio (Advanced). 3 Semester Hours.

Application of portfolio management theories through the active participation in an asset management team assigned the responsibility of attaining a reasonable rate of return commensurate with acceptable risk levels. Investment decisions are further guided by the investment policy guidelines of the U.S. Conference of Catholic Bishops. The U.S. Catholic bishops have highlighted seven key themes that embody Catholic social thought and social teaching. Stewardship of investment resources is covered by objectives that are framed by these themes. (Spring & Fall) Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, FN 3310, FN 4320, FN 4330, Permission of the instructor.

FN 4350. International Finance. 3 Semester Hours.

The course addresses the historical, institutional, and empirical aspects of the foreign exchange market, the eurocurrency market and the international bond market. The managerial implementation of international financial instruments in global oriented business organizations is stressed. (Fall & Spring) Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, FN 3310, IB 3321.

FN 4360. Financial Counseling. 3 Semester Hours.

Analysis and application of the financial planning process for executives and small business owners. Emphasis on life and health insurance, annuities, social security, and real estate investments; developing client data; fundamentals of estate planning and taxation relating to insurance, investments and estates. (Fall; Spring) Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, FN 3310.

FN 4361. Financial Modeling. 3 Semester Hours.

This course is intended to provide a seminar of the principles associated with the application of information technologies in business organizations. It will cover hardware technologies, software applications, personnel, procedures, and issues associated with management of an information systems function. It will also address the challenges IT managers face managing IT enabled organizations. (Fall). Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, QM 3321.

FN 4370. Corporate Risk Management. 3 Semester Hours.

Analysis of the purpose and process of risk management in organizations from an enterprise risk management perspective. Examination of various methods of risk identification, risk analysis, risk control and risk financing. Study of key areas of risk in modern organizations. Prerequisites: FN 3310 and FN 3340 (Fall, Spring).

FN 4375. Internship in Finance. 3 Semester Hours.

The opportunity to gain knowledge through experiential activities in professional life. (Fall; Spring; Summer) Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, FN 3310, Completion or concurrent enrollment in a Finance major course.

FN 4380. Employee Benefits Management. 3 Semester Hours.

Analysis of objectives, techniques, and markets for employee benefit plans. Examination of group life and health insurance coverages, social security, and retirement planning, including pension and profit sharing plan management. (Fall, Spring) Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, FN 3310, MN 3330.

FN 4390. Seminar in Finance. 3 Semester Hours.

Advanced analyses of recent developments in financial and/or investment theory, and in quantitative and qualitative techniques for risk management and financial planning decisions. A seminar approach is used to provide a high degree of student-instructor interaction. (Fall; Spring) Prerequisite: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, FN 3310, Senior Standing, Finance majors only.

Quantitative Management

QM 3320. Business Statistics. 3 Semester Hours.

An introduction to basic statistical theory and applications to business problems. Emphasis on probability, averages, and dispersion, time series and index numbers, estimation and testing, regression and correlation. Introduction to computer packages. Prerequisites: EC 2301 or EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310 or AC 2320. (Fall; Spring).

QM 3321. Business Analytics. 3 Semester Hours.

This hands-on, intensive course in Business Analytics will introduce a range of tools and techniques that can help business professionals uncover important information and make better decisions based on data. Topics are covered under course modules and include: presenting data using visuals and descriptive statistics, measuring and understanding the relationships between variables, making the most of customer feedback, and developing skills for effectively explaining the role quantitative reasoning plays in business decision making. Applications for the business environment include supply chain, marketing, pricing, and finance. Prerequisites: MT 1305 or MT 2303, MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303.

QM 3330. Management Infor Systems. 3 Semester Hours.

An introduction to the use of computers and information for problem solving and decision making in management environments; introduction to essential computer technology, information systems development methodology, and management of computer and information as strategic resources; spreadsheet and database applications for management. Prerequisites: MT 1305 or MT 2303 or MT 1306 or MT 2306 or MT 2412, AC 2310 or AC 2320, EC 2301 or EC 2303. (Fall; Spring).

QM 3340. Project Management. 3 Semester Hours.

This course provides a management perspective on managing projects. It examines the basic nature of managing business, public, engineering, and information systems projects, including the specific in sights and techniques required. Issues such as the selection and management of the project team, project initiation, implementation, and termination are addressed. Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, QM 3330.

QM 3342. Database Management. 3 Semester Hours.

Introduction to theory of database management systems as applied in private and public, profit and non-profit organizations. Balance of managerial and technical issues. Strategic aspects of information as a corporate resource and database planning. Database design, development, and administration using commercial database management systems for personal and multiuse computers and fourth generation languages. (Spring). Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, QM 3330 or AC 3331.

QM 3360. Enterprise Resource Planning. 3 Semester Hours.

This course is intended to explain how fundamental business processes interact using ERP in the functional areas such as Sales and Distribution, Production Planning, Cost and Financial Accounting, and Human Capital Management. Students should gain an understanding of the impact ERP systems have on organizations using SAP as a working example. Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, QM 3330 or AC 3331. (Fall).

QM 4100. Special Studies in Information Systems Management. 1 Semester Hour.

A study of selected topics of Information Systems Management. Specific subject indicated each time the course is offered. May be used as elective credit and repeated when specific subject changes. (Fall; Spring) Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, QM 3330 or AC 3331, Consent of Instructor.

QM 4200. Special Studies in Information Systems Management. 2 Semester Hours.

A study of selected topics of Information Systems Management. Specific subject indicated each time the course is offered. May be used as elective credit and repeated when specific subject changes. (Fall; Spring) Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, QM 3330 or AC 3331, Consent of Instructor.

QM 4300. Special Studies in Information Systems Management. 3 Semester Hours.

A study of selected topics of Information Systems Management. Specific subject indicated each time the course is offered. May be used as elective credit and repeated when specific subject changes. (Fall; Spring) Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, QM 3330 or AC 3331, Consent of Instructor.

QM 4320. Systems Analysis & Design. 3 Semester Hours.

An introduction to the use of current methodologies for the analysis and design of various types of systems. Methodologies studied involve the traditional approach as well as the object-oriented approach to analysis and design, which includes use of Universal Markup Language. Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, QM 3330 or AC 3331. (Fall).

QM 4330. Operations Management. 3 Semester Hours.

The management of the production and operations functions will be examined. Qualitative and quantitative methods will be used to analyze forecasting, system design, quality, inventory management, scheduling, supply chain management, and project management. (Fall; Spring) Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310 or AC 2320, QM 3330 or AC 3331, QM 3320 or QM 3321.

QM 4340. Business Intelligence. 3 Semester Hours.

Development and application of the strategies, methods, and techniques used in data mining, predictive analytics, and other decision support systems. The course employs testing, documenting and using software programs in functional areas of business such as Finance, Production, Marketing, and Accounting. The use of SAS software is employed for hands-on experience. Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, QM 3320 or QM 3321, QM 3330 or AC 3331. (Fall; Spring).

QM 4361. Financial Modeling. 3 Semester Hours.

This course is intended to provide a seminar of the principles associated with the application of information technologies in business organizations. It will cover hardware technologies, software applications, personnel, procedures, and issues associated with management of an information systems function. It will also address the challenges IT managers face managing IT enables organizations. (Fall). Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, QM 3321.

QM 4367. Information Systems Controls and Audit. 3 Semester Hours.

An in-depth study of the techniques, systematic procedures, and tools available for conducting IT audits. Demonstrates the use of audit software to assist in the audit process. Utilizes ACL software for hands on experience. (Spring) Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, QM 3330 or AC 3331.

QM 4370. E-Business. 3 Semester Hours.

The course provides an introduction to eBusiness in a global environment. The material covered includes: (1) technologies, infrastructures and mechanisms that enable the development of eBusiness, (2) business models that include foreign outsourcing and their impact on organizational culture and diversity, (3) issues that are being raised in the areas of privacy, intellectual property, and security, and (4) the impact of the digital divide and other ethical and political topics. (Spring).

QM 4375. Internship in Information Systems Management. 3 Semester Hours.

The opportunity to gain knowledge through work experience activities in professional life. Prerequisites: Consent of the associate dean, faculty supervisor, major adviser, and department chairperson, minimum overall GPA of 2.5, successful completion of QM 3330, and completion or concurrent enrollment in an Information Systems Management major course. Pass/No Pass credit is given. (Fall; Spring; Summer). Prerequisites: MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, EC 2301, EC 2303, QM 3330 and completion or concurrent enrollment in a QM major core course.

QM 4380. Senior Project. 3 Semester Hours.

Application of information systems software techniques to a comprehensive information systems development project. Prerequisites: EC 2301, EC 2303, MT 1305 or MT 2303, MT 1306 or MT 2306 or MT 2412, AC 2310, AC 2320, QM 3320, QM 3330 or AC 3331, Consent of the instructor, Senior Standing .