

# Table of Contents

<b>Business Administration (M.B.A.)</b>	<b>2</b>
<b>Catholic School Leadership (M.A.)</b>	<b>16</b>
<b>Clinical and Mental Health Counseling (M.A.)</b>	<b>22</b>
<b>Communication Studies (M.A.)</b>	<b>27</b>
<b>Computer Engineering (M.S.)</b>	<b>43</b>
<b>Computer Information Systems (M.S.)</b>	<b>53</b>
<b>Computer Science (M.S.)</b>	<b>57</b>
<b>Education (M.A.)</b>	<b>60</b>
<b>Educational Leadership (M.A.)</b>	<b>71</b>
<b>Electrical Engineering (M.S.)</b>	<b>77</b>
<b>Engineering Systems Management (M.S.)</b>	<b>86</b>
<b>English Literature and Language (M.A.)</b>	<b>90</b>
<b>Industrial Engineering (M.S.)</b>	<b>102</b>
<b>Industrial/Organizational Psychology</b>	<b>109</b>
<b>International Relations (M.A.)</b>	<b>115</b>
<b>Marriage and Family Therapy (M.A.)</b>	<b>131</b>
<b>Public Administration (M.P.A.)</b>	<b>136</b>
<b>Software Engineering (M.S.)</b>	<b>146</b>
<b>Theology (M.A.)</b>	<b>151</b>
<b>Counselor Education and Supervision (Ph.D.)</b>	<b>159</b>
<b>Marriage and Family Therapy (Ph.D.)</b>	<b>165</b>
<b>Certificate Programs</b>	<b>168</b>
<b>Joint Degree Programs</b>	<b>181</b>
<b>Combined Bachelor's/Master's Degree Programs</b>	<b>182</b>

# BUSINESS ADMINISTRATION (M.B.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Tanuja Singh, D.B.A. [tsingh@stmarytx.edu](mailto:tsingh@stmarytx.edu)

## Department

M.B.A.

## Program Director

Earnest Broughton [ebroughton@stmarytx.edu](mailto:ebroughton@stmarytx.edu)

## Program Specific Admission Requirements

Regular admission allows a student to pursue an M.B.A. on either a part-time or full-time basis. It is expected that part-time students will complete the M.B.A. in three years of study, exclusive of prerequisite requirements. Admission as a Greehey Scholar requires an undergraduate degree in business and has higher admission standards. Students admitted as Greehey Scholars must commit to the one-year M.B.A. which requires full-time study and provides a full scholarship with a research assistantship commitment by the student.

## Requirements

1. An undergraduate degree from an accredited institution
2. A minimum GMAT score of 525 or a minimum GRE score of 1120
3. An acceptable undergraduate GPA
4. Letters of reference and a current resume;
5. International residents also must have a minimum TOEFL score of 570 (paper), 230 (computer) or 67 (Internet) [87 including speaking]. A minimum score of 6.5 on the IELTS English-language proficiency test (Academic or General) also will be accepted.

The GMAT is a basic aptitude test and does not require previous knowledge of business subjects.

## Prerequisites

In addition to demonstrating high potential for success, requirements for admission include satisfactory completion of the following courses or their equivalent prior to enrolling in the related graduate-level core or elective course. These requirements are normally satisfied by students who have earned an

# BUSINESS ADMINISTRATION (M.B.A.)

undergraduate degree in business from an accredited institution and a minimum grade of C is required to satisfy these requirements with undergraduate courses; a grade of B- is required for all BA 6311 through BA 6316 courses. Students do not receive graduate-level credit for M.B.A. prerequisite-knowledge courses.

## Courses (hours)

- BA 6311 Fundamentals of Accounting (3 hours) [or AC 2310 and AC 2320, 6 hours]
- BA 6312 Fundamentals of Economics and Markets in the Global Economy (3 hours) or [EC2301 and EC 2303, 6 hours]
- BA 6313 Fundamentals of Management and Marketing (3 hours) [or BA 3325W and MK 3310, 6 hours]
- FN 3310 or BA 6314 Fundamentals of Finance (3 hours)
- QM 3320 or BA 6315 Fundamentals of Statistics (3 hours)
- QM 3330 or BA 6316 Fundamentals of Management Information Systems (3 hours)

Total Hours: 18

Students also may satisfy prerequisite requirements by completing the following undergraduate courses (normally taken when pursuing an undergraduate business degree from an AACSB-accredited institution) with a grade of C or better or by satisfactorily completing the related CLEP or DANTES exam. The Accounting II (Managerial Accounting) CLEP exam is no longer offered.

## Courses (Exam)

- AC 2310 Accounting I [Financial Accounting] (CLEP)
- EC 2301 Introductory Macroeconomic Theory (CLEP)
- EC 2303 Introductory Microeconomic Theory (CLEP)
- HR 3325W Managing People and Organizations (CLEP)
- MK 3310 Principles of Marketing (CLEP)
- FN 3310 Corporate Finance (DANTES)
- QM 3320 Business Statistics (DANTES)
- QM 3330 Management Information Systems (CLEP)

Undergraduate prerequisite courses must be completed with a grade of C or better; graduate prerequisite courses must be completed with a grade of B- or better. Prerequisite knowledge also may be satisfied by other means that may be deemed acceptable by the Program Director. Prerequisites must be completed prior to enrolling in the related graduate-level course. If a student completes an M.B.A. course prior to completing the relevant prerequisite course, the prerequisite must still be satisfied by one of the methods described above. Students admitted to the M.B.A. program do not receive graduate credit for prerequisite courses. **Students electing the Financial Planning Track or the Professional Accountancy Track are required to complete additional undergraduate prerequisites as described in the track-specific section.**

## Degree Requirements

# BUSINESS ADMINISTRATION (M.B.A.)

## Business Administration (30 hours) Greehey M.B.A. 18-Month Cohort

Please note that all students are required to attend an M.B.A. orientation activity

Course #	Course Title	Hours
BA6301	International Field Study	3
BA6375	International Business Core	3
BA6385	Marketing Core	3
BA7325	Management of Information and Technology	3
BA7332	Values-Driven Leadership Lab I	3
BA7333	Values-Driven Leadership Lab II	3
BA7355	Accounting for Decision Making	3
BA7365	Financial Management	3
BA7375	MBA Internship or BA9370 Practicum	3
Course #	Course Title	Hours
		<b>Total Hours30</b>

## Business Administration (30 hours) Concentration: Professional Accountancy

Course #	Course Title	Hours
<u>Professional Accountancy Foundation Courses (12hrs):</u>		
BA6375	International Business Core	3
BA7325	Management of Information & Technology Core	3
BA7342	Leadership	3
BA7365	Financial Management	3
<u>Professional Accountancy Focus Courses (12 hrs):</u>		
AC8305	Advanced Accounting	3
AC8315	Auditing II	3
AC8356	Advanced Income Tax Planning	3
AC8361	Financial Accounting Research & Communication	3
<u>Accounting Electives (6hrs):</u>		

# BUSINESS ADMINISTRATION (M.B.A.)

Course #	Course Title	Hours
AC5306	Accounting for Government and Not-for-Profits (unless taken as an undergraduate)	3
AC5333	Business & Professional Ethics (unless taken as an undergraduate)	3
AC5344	Corporate Accounting & Governance (unless taken as an undergraduate)	3
AC5355	Research in Federal Taxation	3
AC5375	Internship in Accounting	3
AC6300	Selected Topics in Accounting	3
AC8303	Contemporary Accounting Problems	3
AC8321	Selected Topics in Auditing	3
AC8344	Advanced Management Accounting	3
AC8351	Taxation for Corporation	3
AC8352	Taxation for Partnership & Subchapter S Corporations	3
AC9354	Selected Topics in Taxation	3
AC8357	Estate Planning	3
AC8360	Business Law II	3
<b>Total Hours</b>		<b>30</b>

## Department Courses and Descriptions

### Prerequisite Courses

These prerequisite courses can be used to satisfy general M.B.A. prerequisite knowledge requirements. They cannot be used to satisfy graduate-level or elective requirements for the M.B.A. and are not eligible for graduate-level credit. These courses do not include the undergraduate prerequisite requirements that are specific only to the Professional Accountancy track.

#### BA 6311 **Fundamentals of Accounting** (3)

A study of financial and managerial accounting. Topics include: recording of transactions, preparation of financial statements, and the communication of accounting information to management and investors. Substitutes for AC2310 and AC2320. This course is not eligible for graduate-level credit.

#### BA 6312 **Fundamentals of Economics and Markets in the Global Economy** (3)

A study of the development of the market system and the application of economic principles to the conduct and organization of business. Analysis of both individual and firm behavior in the international marketplace. A study of the fluctuations in the level of economic activity and the micro and macro analytical tools needed to understand those fluctuations. Substitutes for EC2301 and EC2303. This course

# BUSINESS ADMINISTRATION (M.B.A.)

is not eligible for graduate-level credit.

## BA 6313 **Fundamentals of Management and Marketing** (3)

This course explores modern concepts and practices in management and marketing in light of the historical foundations of these two subjects. Topics covered include new organizational structures and new paradigms of management thinking, globalization, service and customer contact. Understanding of basic quantitative analysis and methodologies is reinforced through use of financial and statistical applications. Substitutes for HR3325W (or BA3325W or MN 3330) and MK3310. This course is not eligible for graduate-level credit.

## FN 3310 or BA 6314 **Fundamentals of Finance** (3)

A study of the financial decisions required in organizations. Quantitative decision-making criteria are emphasized in the course. The approach is problem-oriented with emphasis on the mechanics of financial calculations. Topics include forecasting, financial statement analysis, working capital management, capital budgeting, capital structure, cost of capital, financial markets, hedging, and finance in a non-corporate setting. Prerequisite: BA 6311 or AC 2310 and AC 2320. This course is not eligible for graduate-level credit.

## QM 3320 or BA 6315 **Fundamentals of Statistics**

A comprehensive study of the statistical methods used in business. Descriptive statistics including measures of central tendency, variation, control charts, linear regression, and correlation will be studied together with time series decomposition and forecasting methods. A review of parametric and nonparametric statistics will include emphasis on inferential applications, including probability distributions, sampling distributions, hypothesis testing, and linear multiple regression models. This course is not eligible for graduate-level credit.

## QM 3330 or BA 6316 **Fundamentals of Management Information Systems and Quantitative Methods**

Computer hardware, software, and communications for management applications. Survey of management of the information system function, information system's terminology, decision support systems, and artificial intelligence. Study of project management and operations research techniques with an emphasis on linear programming.

## **M.B.A. Core Courses and Business Electives**

### AC 5306G **Accounting for Governments and Not-for-Profits**

A study of financial accounting concepts and practices for state and local governments and not-for-profit entities such as hospitals, educational institutions, and voluntary health and welfare organizations. Activities include study of theory research on practices, as well as in depth analysis of financial statements of actual organizations, including the City of San Antonio. This course also emphasizes related current issues and the developing nature of accounting for these entities. Prerequisite: Intermediate Accounting I (AC3310 or equivalent).

### AC 5344G **Corporate Accounting and Governance**

# BUSINESS ADMINISTRATION (M.B.A.)

Covers the basics of corporate governance, including the structure of a corporation, board and audit committee requirements, relevant financial statement reporting requirements, the effect of the Sarbanes-Oxley Act on governance, the role of the board in takeover situations, management compensation issues, corporate governance in other countries, the legal framework of the SEC, and the preparation of SEC required forms for publicly traded companies. Students admitted to the M.B.A. program may enroll in the course for graduate credit if they did not previously receive credit for AC4344 (or the equivalent) as an undergraduate.

## AC 5375G **Accounting Internship**

The accounting internship provides students with an opportunity to gain knowledge and experience through hands-on experiential activities. It represents cooperation among the University and business, public and government institutions in monitoring and gaining experience that supplements the learning process. Prerequisites: Completion of all undergraduate accounting prerequisites, minimum GPA in graduate-level courses of 3.0, consent of the Chairperson of the Accounting Department and the M.B.A. Program Director.

## AC 6100, 6200, 6300 **Selected Topics in Accounting**

Selected topics vary from semester to semester. Prerequisite: Completion of all undergraduate accounting prerequisites.

## AC 8303 **Contemporary Accounting Problems**

This course synthesizes the broad accounting knowledge students have obtained from prior accounting and business courses into specific problem-solving tasks. The course focuses on current accounting issues and on preparing the students for successful completion of the uniform certified public accountant (CPA) exam. Prerequisites: Completion of all undergraduate accounting prerequisites.

## AC 8305 **Advanced Accounting**

A study of the consolidation process for parent and subsidiary relationships, both domestic and foreign, using the entity theory approach of accounting for business combinations. Accounting for partnerships and foreign transactions also are emphasized. Prerequisite: Intermediate Accounting II (AC3320 or equivalent).

## AC 8315 **Auditing II**

Emphasis is on statistical sampling and use of electronic data processing in the conduct of the audit process. Auditing and review services by the CPA and the ethical and legal liabilities in these engagements. Prerequisite: Auditing (AC4330 or equivalent).

## AC 8321 **Selected Topics in Auditing**

Selected topics vary from semester to semester. Prerequisite: AC8315 and completion of all undergraduate accounting prerequisites.

## AC 8344 **Advanced Management Accounting**

An in-depth study of accounting data relevant to managerial decision making, profit planning, and control. Emphasizes application of mathematics and statistics to accounting. Prerequisite: Introductory Cost Accounting (AC3341 or equivalent).

# BUSINESS ADMINISTRATION (M.B.A.)

## AC 8350 **Research in Federal Taxation**

A study of the tax materials available and their use in tax research, including the Internal Revenue Code, tax services, case reporters, and treasury publications. Emphasizes understanding and solving tax issues of current importance and the communication of such information. Prerequisites: Personal Income Tax (AC4350 or equivalent) and Business Income Tax AC4360 or equivalent).

## AC 8351 **Taxation for Corporations**

A study of the federal income taxation of corporations and their shareholders. Emphasizes formation, capital structure, distributions, liquidations, personal holding companies, accumulated earnings tax, and the alternative minimum tax. Prerequisite: Business Income Tax (AC4360 or equivalent).

## AC 8352 **Taxation for Partnerships and Subchapter S Corporations**

A study of the federal income tax consequences of doing business as a partnership or Subchapter S Corporation. Emphasizes formation, operation, distributions, and dissolutions of these organizations. Prerequisites: Personal Income Tax (AC4350 or equivalent) and Business Income Tax AC4360 or equivalent).

## AC 8354 **Selected Topics in Taxation**

Selected topics vary from semester to semester. Prerequisite: Research in Federal Taxation (AC8350) and completion of all undergraduate accounting prerequisites.

## AC 8356 **Advanced Income Tax Planning**

An examination of complex individual income tax concepts with an emphasis on planning considerations. Subjects include sources of tax authority tax compliance, tax characteristics of business entities, passive losses, property transactions, alternative minimum tax, accounting periods and methods, deferred compensation, taxation of investments, and charitable contributions. Prerequisite: Personal Income Tax (AC4350 or equivalent).

## AC 8357 **Estate Planning**

A study of the principles of planning for the use, conservation, and efficient transfer of an individual's wealth. Estate planning seeks to arrange future wealth transfers and management to maximize financial well being for the client and the client's survivors. Prerequisite: Personal Income Tax (AC4350 or equivalent).

## AC 8360 **Business Law II**

An in-depth study of both legal and ethical concerns involving agency, partnerships, corporations, and bankruptcy. Policy, rationale, and legal concepts of areas such as property, wills, trusts, and estates, insurance, partnerships, and corporate law are emphasized. Prerequisite: Business Law I (AC3350 or equivalent).

## AC 8361 **Financial Accounting Research and Communication**

Students will examine both complex and contemporary financial accounting issues as well as learn how to use the more common financial accounting research databases. Written and oral communication of research findings will be emphasized. Prerequisite: Intermediate Accounting II (AC3320 or equivalent).

## BA 5333G **Business and Professional Ethics**



# BUSINESS ADMINISTRATION (M.B.A.)

This course is designed to meet the requirement of the state of Texas for CPA candidates to have a business and professional ethics course before sitting for the CPA exam, and to provide a broader discussion of ethics issues that are important to business and the free enterprise system. Students will develop a fundamental understanding of the moral reasoning process and learn to recognize the impact of various approaches to moral reasoning on moral behavior in accounting and business.

The course is also intended to inculcate in students the importance of integrity, objectivity, and independence to the proper functioning of the accounting profession and the free enterprise system. The course will provide students with a balanced understanding of the variety of ethical issues in accounting and business, provide exposure to relevant codes of professional conduct, particularly for CPAs, and prepare students for coverage of professional ethics topics on the CPA exam and other professional accreditation exams. It is open to all upper division business majors and to other upper division students by permission of the instructor. Students admitted to the M.B.A. program may enroll in this course for graduate credit if they did not previously receive credit for BA 4333 (or the equivalent) as an undergraduate.

## **BA5350G Exploring Entrepreneurship**

This course is offered to junior, senior and graduate students to increase awareness and understanding of essential qualities for business success. This is primarily accomplished through an executive speaker series featuring highly successful entrepreneurs and senior executives. Students also have the opportunity to read about and discuss the 10 essential qualities for business success. BA6000X Matriculation (0 semester hours). Students must register for this course the semester they plan to graduate if they are not already registered for other courses. \$25.00 fee.

## **BA 6100, 6200, 6300 Selected Topics in Management (1-3)**

Selected topics vary from semester to semester.

## **BA6301 Special International Studies (3)**

Selected topics vary from one year to the next depending upon contemporary issues in international business and international study destinations. This particular class is a cohort-based study experience that typically is only offered in the summer.

## **BA6323 The Strategic Importance of the European Union: Implications for U.S. Firms (3)**

This course provides a comparative overview of the business and legal environment of the European Union [EU]. Discussion will focus on the economic, legal-political and social-cultural dimensions of EU-member countries. The impact of these dimensions on business practice, regulation and global strategy implications for U.S. firms will be the major focus of research and writing in the course. Cross-listed with IR 6323.

## **BA 6355 Human Resources (3)**

This course develops students skills in assessing and managing the contemporary business environment at individual, group, and organizational levels. Topics include issues such as motivation, communication, leadership, human resource policy, external business analysis, and strategy formulation and implementation. The course also explores the dynamic interaction of these levels by focusing on topics such as organizational culture, human resources management, teams, job design, organizational development, and change. Replaced as an M.B.A. core course by BA7342 but available as an elective.

# BUSINESS ADMINISTRATION (M.B.A.)

Prerequisites: HR3325W or BA3325W or MN 3330 or BA6313G or equivalent.

## BA 6365 **Accounting/Finance Core** (3)

This course has been replaced by BA 7355 (Accounting for Decision Making) and BA 7365 (Financial Management). Both BA 7355 and BA 7365 are required as part of the M.B.A. core.

## BA 6375 **International Business Core** (3)

This course serves two objectives. First, it introduces the student to the major institutions and organizations that affect the international economic and political context in which firms operate, the international economic, political, and cultural milieu, the growing globalization of business, and the growing complexity of doing business within the rapidly changing international context. Second, it serves as a foundation for more advanced courses that include an international dimension.

## BA 6385 **Marketing Management Core** (3)

This course focuses on preparing students to develop and implement the major strategic decisions facing marketing executives in their attempt to harmonize the objectives and resources of the organization with the needs and opportunities in the global marketplace. Through case analyses and the development of a comprehensive marketing plan, students analyze the functional areas of marketing, including market analysis and research, marketing communications, distribution, and pricing. Current topics in marketing are integrated into the course. Topics vary but may include current political/legal, social/cultural, or technological (e.g., eCommerce) issues surrounding marketing. Prerequisite: MK3310 or BA6313 or equivalent.

## BA 7311 **Managing Business Projects** (3)

This course has been replaced by BA 7353; cross-listed with EG 7353.

## BA 7322 **eCommerce** (3)

This course examines infrastructure and technologies of eCommerce, including Internet and intranets, languages, and security systems. It addresses business models associated with eCommerce, including media & communities, B2B, B2C, and C2C and examines other issues facing e-commerce companies, including electronic payment systems, public policy issues (e.g., privacy, intellectual property, free speech, ethical issues, taxation), and global implications.

## BA 7325 **Management of Information and Technology** (3)

This course examines a broad range of topics in the management of technology, information systems and organizational issues in exploiting new technology. The course explores concepts of applying computer information systems and communications technology to provide an effective framework for managing competitiveness in an environment of rapid global change. Managing R &D, systems acquisition, decision-making, and links to other functional areas in the corporation are emphasized. Prerequisite: BA6316 or QM3330 or equivalent.

## BA 7331 **The Management of Quality** (3)

This course provides the student with an awareness of the history and evolution of the quality management philosophy and its principles and methodologies, (2) a thorough knowledge of the quality design and planning processes, (3) the ability to deploy basic and advanced quality methods and functions in various organizational settings and (4) the skills to analyze and develop strategies to transition

# BUSINESS ADMINISTRATION (M.B.A.)

organizations to a quality management perspective using relevant case studies.

## BA 7332 **Values-driven Leadership Lab I** (3)

This is the first of two courses intended to explain how to develop socially responsible and sustainable approaches to business with a special emphasis on social entrepreneurship, corporate social responsibility, and sustainability; fundamentals of ethical leadership, to include values-driven strategies for aligning individual behavior and organizational culture; and the development of Advanced Behavioral Skills and familiarity with contemporary business and operational issues and strategies.

## BA 7333 **Values-driven Leadership Lab II** (3)

This is the second of two courses intended to explain how to develop socially responsible and sustainable approaches to business with a special emphasis on social entrepreneurship, corporate social responsibility, and sustainability; fundamentals of ethical leadership, to include values-driven strategies for aligning individual behavior and organizational culture; and the development of Advanced Behavioral Skills and familiarity with contemporary business and operational issues and strategies.

## BA 7342 **Leadership & Ethics** (3)

This M.B.A. core course fosters the students' ability to become an effective, ethical, visionary leader in the modern global business world. It explores ethical leadership challenges, informed by historical, cultural and contemporary leadership thought including servant leadership. Topics such as interpersonal skills, empowerment and delegation, conflict resolution, problem solving and the importance of values-based decision making are emphasized. Required of all students who have not previously completed BA 6355.

## BA 7344 **Organizational Culture, Power, and Politics** (3)

This course examines the linkages between organizational culture and strategy, types of power, and politics that exist in organizations. Students conduct an organizational cultural analysis.

## BA 7347 **Creative Thinking** (3)

This course exposes students to various creative thinking techniques applied to business and management problems.

## BA 7353 **Project Management** (3)

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 insights and techniques required. Issues such as the selection and management of the project team, project initiation, implementation, and termination are addressed. Cross-listed with EG 7353. Students who have previously completed BA 7311 may not register for BA 7353.

## BA 7355 **Accounting for Decision Making** (3)

This M.B.A. core course covers the use of financial statement information, managerial accounting information, qualitative data and the application of statistical techniques in managerial decision making. Prerequisites: AC 2310, AC 2320 and QM 3320. Not required for students who have previously completed BA 6365. Students who have previously completed BA 6365 may enroll in this course as an elective.

# BUSINESS ADMINISTRATION (M.B.A.)

## BA 7365 **Financial Management** (3)

This quantitative M.B.A. core course serves two purposes. It assists the non-financial manager in understanding and using financial information to make decisions related to investing, financial arrangements and operating alternatives. It also will discuss theoretical issues related to capital structure and dividend policy. This course will serve as a foundation for the M.B.A. and more advanced finance courses. Prerequisites: AC 2310, AC 2320 and FN 3310. Not required for students who have previously completed BA 6365. Students who have previously completed BA 6365 may enroll in this course as an elective.

## BA 7370 **Investment and Portfolio Analysis** (3)

Alternative investment opportunities, types of securities, security markets, investment theories, and workable criteria for selection of issues. Prerequisite: BA6365 or BA 7355 and BA 7365.

## BA 7375 **M.B.A. Internship** (3)

The M.B.A. internship enables students in the full-time M.B.A. program to gain hands-on experience with either a for-profit or not-for profit organization during a 12 week period during the summer. Students must successfully complete a minimum of 20 hours weekly over a 12-week period (mid-May through mid-August) and other course requirements to receive three (3) hours of graduate credit. To be eligible for an internship for elective credit, M.B.A. students must complete the Application for M.B.A. Internship and have it signed by the M.B.A. Director to verify that they meet the following requirements: they must be enrolled in regular status in the One-year M.B.A., not be actively employed, not be receiving tuition reimbursement, did not receive more than three hours of credit for internships as an undergraduate, have completed all prerequisite-knowledge requirements and a minimum of 12 hours of M.B.A. core courses with a cumulative GPA of 3.25.

## BA 8312 **Marketing Research: Methods and Applications** (3)

This course provides students with current methodology and applications in research with a focus on marketing and marketing research. The three phases of the course are qualitative marketing research, quantitative data analysis, and special topics such as the Internet, international issues, and measurement instruments. Prerequisite: BA6385.

## BA 8314 **Improving the Performance and Productivity of Teams** (3)

This course provides the student with intensive exposure on how work groups can be led and developed into high-performance teams through the self- management process. The three phases of the course include planning and preparation, organizational requirements and changes, and detailed steps of creating, developing, and leading teams at the lowest level of the organization. The course emphasizes leadership, job redesign, and the dynamics of interpersonal and group interaction.

## BA 8316 **Nonlinear Concepts, Methods, and Business Applications** (3)

This course provides innovative yet practical methods based on nonlinear systems theory which can be used in a wide variety of business applications. Students review traditional statistical approaches and compare them to nonlinear assumptions. They then review the concepts of wholeness and dialogue, and examine the nonlinear metrics which facilitate the analysis of whole systems. Using these concepts and methods, students examine the dynamics of a practical business system.

## BA 8317 **Services Operation Management** (3)

# BUSINESS ADMINISTRATION (M.B.A.)

This course is designed to provide graduate students with an understanding of operations management in service industries. Topics include issues such as forecasting demand, service design, quality, location planning, facility layout, inventory planning and management, work measurement, technology and information systems, scheduling, and project management.

## **BA 8318 Supply Chain Management (3)**

This course provides an understanding of the strategic role of supply chain management, key drivers of supply chain performance, and analytical tools and techniques for supply chain analysis. The course focuses on the interrelationship of these concepts. Topics include issues such as supply chain planning, design, and operation; inventory, transportation, information, and technology; and logistics and supply chain methodologies.

## **BA 8319 NAFTA Law (3)**

This course provides coverage of the North American Free Trade Agreement (NAFTA) along with the legal and business issues that surround the treaty.

## **BA 8321 Management Control Systems (3)**

This course examines the design and implementation of formal performance measurement and management control systems within the organization. The examination includes the design and implementation of profitability and cost management systems at the organizational and sub-organizational levels. It also includes consideration of the characteristics of measurement systems and their compatibility with the organization's competitive strategy. Prerequisite: BA6365 or BA 7355.

## **BA 8322 Manager's Guide to Financial Statement Analysis (3)**

This research course facilitates the judicious use of financial statements and other sources of company financial information in various management decisions. Students examine opportunities for earnings management and management of other information possible in today's regulatory and economic environment, enabling them to identify company reality which is often hidden by allowable reporting choices. Course activities include identifying reporting latitude, exploring recent company attempts at information management, and documenting the relative transparency of company financial information in the US and abroad. Prerequisite: BA6365 or BA7355.

## **BA 8323 Corporate Social Responsibility (3)**

This course provides an understanding of the theory and practice of companies that choose to fulfill social responsibility roles in addition to traditional profit-oriented activities that maximize shareholder value. Students study the philosophical and economic rationale for such activities, identify sources of information about participating companies, and document the extent of reported company activities related to the environment, the community, and employees and their families. Companies in the US and abroad are examined.

## **BA 8324 Employment Law (3)**

This course examines the rights and responsibilities of organizations and workers regarding the employment laws that shape the workplace in the United States. General intellectual considerations are also addressed.

## **BA 8342 Inter-Cultural Skill for International Entrepreneurs (3)**

# BUSINESS ADMINISTRATION (M.B.A.)

This course examines the cultural dimensions of conducting business in the international environment. Topics include effective verbal and non-verbal communication skills, diversity, differing values, culture shock, effective strategies for international negotiating, and cross-cultural training.

## BA 8344 **International Market Assessment** (3)

This course addresses the issues and challenges associated with the identification, analysis, and selection of foreign market opportunities. Special attention is given to the development of market attractiveness measures for emerging markets and the tradeoffs that may be necessary when selecting from a number of attractive markets. Prerequisite: BA 6375.

## BA 8345 **International Entrepreneurship** (3)

This course provides a holistic approach to entrepreneurship. It focuses on opportunities to initiate new ventures, how to develop a business plan, and how to grow and manage a small business in the global market place. Sources of capital funding and financial issues are discussed along with international opportunities and obstacles. Prerequisite: BA 6375.

## BA 8352 **Business Intelligence** (3)

Business intelligence (BI) is an environment in which business users receive data that is reliable, consistent, understandable, easily manipulated and timely. With this data, business users are able to conduct analyses that yield overall understanding of where the business has been, where it is now and where it will be in the near future. BI monitors the financial and operational health of the organization, including reports, alerts, alarms, analysis tools, key performance indicators and dashboards. Data Mining is a primary (but not the only) tool to achieve these goals. Students will learn to use software that searches for significant patterns or correlations in the data and to interpret results.

## BA 8363 **Quantitative Techniques in Finance** (3)

This course is an introduction to many of the quantitative techniques that are used across a wide spectrum of financial applications. Topics include statistical analysis, asset pricing models, option pricing, and cost of capital, value at risk, duration, convexity, immunization, and portfolio theory. The course includes many Excel exercises and an introduction to VBA programming. Prerequisite: BA7365. QM3320 strongly recommended.

## BA 8367 **Risk Management and Insurance Planning** (3)

This course is a review of risk management and insurance concepts and techniques, including personal and business insurance and life and property-liability risks. It covers the fundamentals of insurance, insurance taxation, law, and policy selection.

## BA 9301 **Topics in International Relations: International Field Studies** (3)

The primary focus of the course is sustainable, economic development and a second focus is the relationship of sustainable economic development to security and conflict resolution. The course is normally taught in Summer 1 or Summer 2 and includes a required international field trip that is designed to give students an exposure to governmental, not-for-profit, educational, micro-entrepreneurial, small business, and co-operative organizations in less-developed countries that are struggling with sustainable, economic development. Cross-listed with IR 9301.

## BA 9325 **Seminar in Financial Planning** (3)

# BUSINESS ADMINISTRATION (M.B.A.)

This course is a review, analysis, and application of the financial planning process. It examines insurance coverages applicable to financial planning. The course includes case application of the tools learned in several courses to accomplish the goals of individual financial planning. Information development, risk management, investment strategies, retirement planning, tax planning, and estate planning are reviewed. Prerequisites: Students must have completed all prerequisite courses, all M.B.A. foundation or core courses (BA6355, BA6365, BA6375, BA6385 and BA7325) and AC8356, AC8357, BA7370 and BA8367 and be within nine (9) hours of graduation to register for this course. Permission of the M.B.A. Program Director required.

## BA 9355 **Applied Business Research** (3)

In this course, the student will conduct and submit an applied research paper covering a topic approved by the instructors that will be useful and of value to an organization's management. This will require that the student examine and apply what they have learned in graduate business-level coursework, especially as it relates to research, project analysis and management and evidence-based decision making. It is intended that the paper prepared for this course serve as a lead-in to the student's graduate thesis.

Schmalkalden joint-degree students who successfully complete this course will satisfy the University's comprehensive/general examination requirement. The course may be taken by an elective by St. Mary's M.B.A.-General Management track students; these students will receive course credit but also would be required to complete BA9375 (M.B.A. capstone course) which includes a component that enables those students to satisfy the University's comprehensive/general examination requirement.

## BA 9370 **Practicum** (3)

This course is a graduate level experiential learning activity in the form of a consultative practicum project for an external non-profit, for profit, Non-Governmental Agency, or similar entity. The actual content and structure of the practicum will vary according to contemporary business issues and the needs of practicum clients.

## BA 9375 **Leaders, Strategy, & Society** (3)

As the capstone course for the General Management Track of the M.B.A. degree, students will examine and gain an understanding of the role of a firm's leaders, approaches to strategic management and interactions with ethics and social responsibility. A grade of B+ or better on a designated component of this course satisfies the University's comprehensive/general examination requirement. Prerequisites: Students must have satisfied all prerequisite knowledge requirements, all M.B.A. foundation or core courses (BA6355 or BA7342, BA6365 or BA7355 and BA7365, BA6375, BA6385 and BA7325) and be within nine (9) hours of graduation to register for this course. Permission of the M.B.A. Program Director required.

# CATHOLIC SCHOOL LEADERSHIP (M.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [atyler@stmarytx.edu](mailto:atyler@stmarytx.edu)

## Department

Education

## Program Director

Daniel J. Higgins, Ph.D. [dhiggins@stmarytx.edu](mailto:dhiggins@stmarytx.edu)

## Program Specific Admission Requirements

Generally, admission is granted only to those with high promise for success in graduate study. Potential may be demonstrated by experience in increasingly responsible positions, previous schooling, GPA, bachelor's degree from an accredited institution, and acceptable test scores on the GRE. Generally, students must provide acceptable test scores at the time of enrollment. If students are otherwise highly qualified, they may take the GRE during their first semester of enrollment with further enrollment contingent upon test results.

The minimum Academic Index required for admission is:

$$200 \times \text{GPA} + \text{Average GRE } [(\text{Verbal} + \text{Quantitative}) / 2] = 1050$$

As an exception, students with five years work experience may be admitted with an Academic Index of:

$$200 \times \text{GPA} + \text{Average GRE } [(\text{Verbal} + \text{Quantitative}) / 2] = 1000$$

## Degree Requirements

**Catholic School Leadership (36 hrs)**

**Master of Arts**



# CATHOLIC SCHOOL LEADERSHIP (M.A.)

Course #	Course Title	Hours
BA 7342	Leadership & Ethics	3
ED 6302	Foundation of Educational Practice	3
ED6306	Curriculum, Theory & Practice	3
ED6311	Applied Educational Research	3
ED6368	Moral and Spiritual Development	3
ED6395	Current Topics in Education (EDL or CSL)	3
ED7301	Organizational Theory and Administration	3
ED7302	Private & Public School Law	3
ED7306	Catholic School-Community Relations Development	3
ED7307	Instructional Supervision & Evaluation	3
ED7312	Educational Resource Development	3
ED7316	Issues in Catholic School Leadership	3
ED7391	Internship in Catholic School Leadership	3
	<b>Total:</b>	<b>36</b>

## Department Courses and Descriptions

### BA 6316 **Fundamentals of Management Information Systems and Quantitative Methods** (3)

Computer hardware, software, and communications for management applications. Survey of management of the information system function, information system's terminology, decision support systems, and artificial intelligence. Study of project management and operations research techniques with an emphasis on linear programming.

### CS 6305 **Computer Literacy** (3)

Survey of computer systems and their applications. The fundamentals of software are studied and applied through word processing, data base, spread sheet, DOS, and E-mail applications. For non-majors only.

### ED 6302 **Foundations of Educational Practice** (3)

Explores presuppositions of educational efforts via analysis of existence and intentionality and inquiries into cognition and epistemology. Relates basic norms of ethical educational practice to the intellectual, moral, and religious conversions of the educator and learner. Locates the ground of professional practice in the self-transcending intentionality of the existential subject. Relates the commonsense, theoretical, transcendent, and methodological realms of meaning to the practice of formal education. Criteria for interpretation of educational ends and means established through investigation of personal belief systems, goal setting, and self-assessment strategies.

# CATHOLIC SCHOOL LEADERSHIP (M.A.)

## ED 6304 **Human Development and Learning** (3)

Theory and research related to cognitive development and learning and their importance to the sequencing and structuring of curricula. Classroom management theories and techniques. Understanding and use of social justice, collaborative decision making, team building, and coalition building.

## ED 6306 **Curriculum Theory and Practice** (3)

Strategic planning for curriculum development and improvement to promote life-long learning. Theory and research related to the evaluation of the teaching/learning process, the systemic change process and collaborative instructional planning.

## ED 6311 **Applied Educational Research 2**

Research designs and methods including gathering, analyzing, disaggregating, and interpreting data. Utilize pupil personnel services and programs to meet the needs of all students. Use of data to facilitate informed decisions for school improvement and maximization of student learning.

## ED 6314 **Understanding Education in a Multicultural Society** (3)

Designed to introduce educators to the major issues, concepts, paradigms, and teaching strategies in multicultural education. It will provide students with a comprehensive overview of multicultural education, a grasp of its complexity, and understanding of what it means for educational practice. Characteristics of a multicultural school and the ways in which knowledge of multicultural education can transform the curriculum to promote the attitudes and skills students need to become effective citizens will be identified and described as well as ways to help students from diverse groups increase their academic achievement.

## ED 6318 **History and Philosophy of Education** (3)

Development of the educational system with reference to social movements and the educational philosophies of important educators. A critical analysis of the basic characteristics of alternative philosophical families of thought, with their implications and applications in the schools.

## ED 6320 **Early Childhood Language Acquisition** (3)

A study of children's language through recent sociolinguistic research and the implications of this learning on classroom behaviors. A keener knowledge, awareness, and understanding of young children's literacy development is a projected outcome of class.

## ED 6343 **Foundations of Reading** (3)

The reading process in relation to its psychological foundations. This includes principles of learning and reading, personality factors in reading, the perceptual nature of reading, the sensory bases of reading, and intellectual factors relevant to topics such as readiness, motivation, and evaluation in the classroom.

## ED 6344 **Curriculum and Instruction in Reading** (3)

An intensive analysis of reading programs from the standpoint of current instructional and remedial methodologies, including an appraisal of current research literature. The course will require extensive review of the literature including the topics of administration, supervision, and evaluation of remedial reading/reading disabilities programs and techniques. Field experience required.

## ED 6345 **Developmental Reading** (3)

# CATHOLIC SCHOOL LEADERSHIP (M.A.)

Reading as a process is examined in terms of development of integrated skills. Materials and teaching techniques are considered as to appropriateness of specific teaching approaches for use with students with reading differences and in different stages of reading development. Student will build a repertoire of materials for developing reading skills and procedures for organizing and managing reading instruction.

## ED 6346 **Diagnosis and Correction of Reading Difficulties** (3)

The study of diagnostic instruments and techniques useful in identifying various syndromes, recommended procedures for corrections of reading difficulties, and practice in administering, interpreting, and reporting diagnostic test results. The student will use instruments for hearing screening and vision screening as well as individual diagnostic instruments suitable for use in both the classroom and clinic.

## ED 6347 **Reading: The Exceptional Student** (3)

Theoretical issues confronting educators involved in program development for children and adolescents. Analysis of educational perspectives and instructional implications for the gifted and talented as well as special problem populations.

## ED 6348 **Literature and Reading** (3)

Identification and perception of literary conventions, types and genres of literature, and an appreciation of the role of children's literature in all phases of reading development and in transition of cultural heritage.

## ED 6349 **Literature and Reading for Adolescents** (3)

Identification and perception of literary conventions, types and genres of literature, and an appreciation of the role of adolescent literature in intellectual, social, and emotional growth as well as in reading development.

## ED 6350 **Secondary Content Area Reading** (3)

Introduction to reading instruction in various academic subjects. Study of instructional strategies for vocabulary development, for actively involving students in critical thinking activities through questioning and group discussion, and for developing study skills.

## ED 6351 **Reading in the Content Area in the Elementary School** (3)

The study of instructional strategies to develop technical vocabulary, note taking skills, research skills, comprehension and study skills; to actively involve students in critical thinking activities which will improve learning in various academic subjects.

## ED 6368 **Moral and Spiritual Development** (3)

A study of the human response to God in the light of contemporary psychology. The implications for the Catholic school in the various stages of human development, in the process of conversion and commitment, and in the crises of faith; integrating theory and practical techniques for teaching Morals and Values in Catholic education today.

## ED 6395 **Current Topics in Education** (3)

A collection of topics related to critical educational issues of the current educational scene. Case studies of successful school programs as well as local, state, and national initiatives are investigated. Subject

# CATHOLIC SCHOOL LEADERSHIP (M.A.)

matter varies from semester to semester.

## ED 7301 **Organizational Theory and Administration** (3)

Relationship of professional ethics and personal integrity to leadership. Strategies for achieving and maintaining personal health and wellness. Maximizing student achievement through collaborative visioning, strategic planning, risk taking, and decision making. Use of collaborative techniques to identify, assess, analyze, and develop strategies to improve school culture and climate to enhance student learning.

## ED 7302 **Private and Public School Law** (3)

Federal and state laws, regulations, and codes for public and private schools are studied. Emphasis on how law affects the daily operation of the school with respect to personal, finance, individual rights, and student discipline.

## ED 7305 **School-Community Relations** (3)

Political theory and application of political skills to build internal and external support for the campus and district. Strategies for strengthening school/community relations utilizing verbal and non-verbal communication skills in coalition building as well as school/business partnerships (public and private agencies). Communicating effectively with students, parents, staff, community, and media to project positive image. Politics of school governance and board relations.

## ED 7306 **Catholic School Community Relations and Development** (3)

Emphasis on communication skills, political understandings, guidelines, techniques, and practices needed to improve relationships between the Catholic school and the church, the community at large, and the legislative and business communities. Design, goals, and strategies for marketing and development of Catholic School.

## ED 7307 **Instructional Supervision and Evaluation** (3)

Effective communication with all constituencies through cooperative planning, organizing, staffing, developing, monitoring, and evaluating to improve systematically the instructional process and learning environment within a multicultural setting.

## ED 7312 **Human Resource Development** (3)

Theories, concepts, and techniques of human resource management to organize and manage a public or private school. Staffing, budgeting, operations, and scheduling are areas of concentration. Techniques in management of resources will be researched and each student will begin to develop his/her own management style.

## ED 7315 **Effective School Leadership** (3)

Capstone Course. Current developments in education on local, regional, state, and national levels. Allocation of human, material, and fiscal resources for optimal student learning including management of school facilities.

## ED 7316 **Issues in Catholic School Leadership** (3)

Capstone Course. Develops the skills and attitudes essential to understand and refine leadership effectiveness in the Catholic School setting. Include examination of institutional management,

# CATHOLIC SCHOOL LEADERSHIP (M.A.)

collaborative visioning, strategic planning, supervision and personal management, school governance structures, and curriculum development.

## ED 7321 **Measurement and Evaluation Methodology** (3)

Review and interpretation of theories of instruction, analysis of teaching behaviors, modification of instructional design and development, execution and evaluation of instruction.

## ED 7359 **Clinical Practice in Reading** (3)

A synthesis and application of theoretical models of diagnosis and remediation through individual laboratory experience with students with reading problems under supervision, prepare case reports, and consult with parents.

## ED 7390 **Internship in Educational Leadership** (3)

Administrator's internship in a public or "recognized" school. The internship provides the opportunity to develop and enhance leadership skills under the supervision of a person holding a Texas Education Agency Certificate with three years experience at the level of assignment. Planning, development, and implementation of an effective instructional system. Use of research findings, time, staff, advanced technologies, community resources, and financial means to maximize student outcomes. Presentations to boards of program preparation personnel and practitioners. Field-based assessments by field and preparation program personnel. Peer assessment.

## ED 7391 **Internship in Catholic School Leadership** (3)

Administrator's internship in a Catholic school. The internship provides the opportunity to develop and enhance leadership skills under the supervision of a person with three years experience at the level of assignment. Planning, development, and implementation of an effective instructional system. Use of research findings, time, staff, advanced technologies, community resources, and financial means to maximize student outcomes. Presentations to boards of program preparation personnel and practitioners. Field-based assessments by field and preparation program personnel. Peer assessment.

## ED 8390 **Organizational Behavior** (3)

Comparative analysis of the major bodies of theory and empirical facts generated by the study of individuals and groups within various organizational settings. Special attention to the psychological and sociological variables crucial in interpreting and predicting behavior of individuals and groups within the organizations.

# CLINICAL AND MENTAL HEALTH COUNSELING (M.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [atyler@stmarytx.edu](mailto:atyler@stmarytx.edu)

## Department

Counseling

## Program Director

Julie Strentzsch, Ph.D. [jstrentzsch@stmarytx.edu](mailto:jstrentzsch@stmarytx.edu)

## Degree Requirements

### Counseling & Human Services (60hrs) Clinical Mental Health Counseling

Course #	Course Title	Hours
<u>Core Courses (46hrs):</u>		
CN6354	Introduction to Counseling	3
CN6150	Practicum in Group Process	1
CN6253	Group Process	2
CN6321	Assessment & Appraisal in Counseling	3
CN6352	Career Planning	3
CN6355	Theories of Counseling	3
CN6381	Methods of Research	3
CN7301	Professional & Ethical Issues	3
CN7302	Social/Cultural Issues in Counseling	3
CN7351	Human Growth & Development	3
CN7377	Sexuality Counseling & Somatic Issues	3
CN6361	Crisis Counseling	3

# CLINICAL AND MENTAL HEALTH COUNSELING (M.A.)

Course #	Course Title	Hours
CN6369	Introduction to Marriage & Family Therapy	3
CN7333	Mental Health & Psychopathology	3
CN7267	Community Counseling and Social Justice	2
CN6382	Hope Resilience and Human Transcendence	2
CN6251	Advanced Professional Issues in Organization & Administration of Counseling Services	2
CN7199	Clinical Mental Health Capstone	1
<u>Elective Courses (totaling at least 5 credit hours)</u>		5
<u>Clinical Courses (9hrs):</u>		
CN6357	Counseling Practicum	3
CN7359	Counseling Internship I	3
CN7360	Counseling Internship II	3
<b>Total hours</b>		<b>60</b>

## Department Courses and Descriptions

### CN 6150 **Practicum in Group Process** (1)

Theory and practice in group work. Psychological foundations of group work, including group guidance, growth groups and group counseling and therapy, with an opportunity to apply experientially the basic principles of group leadership. Limited enrollment.

### CN 6251 **Advanced Professional Issues and Organization/Administration** (2)

Introduction to counseling services in schools, community centers and other helping agencies and private practice. Basic philosophy and objectives of guidance, counseling and therapy programs. Overview of roles, structures, functions, resources and other topics related to the organization of human services programs.

### CN 6253 **Group Process**(2)

Theory and practice in group work. Psychological foundations of group work, including group guidance, growth groups and group counseling and therapy, with an opportunity to apply experientially the basic principles of group leadership. Limited enrollment.

### CN 6321 **Assessment and Appraisal in Counseling** (3)

This course instructs students in how to learn how to measure healthy human processes, optimal mental health, vital balance and life-impeding factors. It will provide students with a basic framework for understanding the functions and limits of testing and measurement. Basic principles, research, and theories on the measurement of psychological constructs and clinical diagnosing and their significance of treatment will be covered. Theories and techniques of administering, scoring, and interpreting

# CLINICAL AND MENTAL HEALTH COUNSELING (M.A.)

psychological tests within the cultural context will be emphasized.

## CN 6352 **Career Planning** (3)

Selection and use of the career information; community resources; survey of theories of vocational choice; use of interest and aptitude inventories in career development; personnel selection procedures; individual and group vocational counseling; placement and follow up procedures.

## CN 6354 **Introduction to Counseling** (3)

This course is designed to review intensively each student's basic counseling micro skills via role play and video tape. In addition, the course presents a general model of counseling. Classes maintain a 5 to 1 student/teacher ratio.

## CN 6355 **Theories of Counseling** (3)

This course provides a detailed review of the theoretical foundations of major counseling theories. Reviewed theories include Psychoanalytic, Neo-Freudian, Person-Centered, Gestalt Therapy, Existentialist, Behaviorist, Transactional Analysis, Rational Emotive Therapy, and Reality Therapy.

## CN 6357 **Counseling Practicum** (3)

Students apply counseling principles and procedures to develop skills in the treatment of individuals with emotional and behavioral problems. Students learn under the direction of doctoral qualified supervisors at an approved site. Case experiences are further analyzed and discussed under the supervision of faculty in weekly class meetings. Students complete a minimum of 100 hours on site, 20 client contact hours, and 15 hours of supervision. Favorable final evaluations by the site supervisor and faculty are required for credit. Limited enrollment. Prerequisite: CN6354.

## CN 6361 **Crisis Counseling** (3)

This course will be an introduction to the fundamental concepts and theories of crisis and crisis counseling. Special attention will be paid to the ecosystemic and multicultural considerations involved in providing crisis intervention as well as developing effective counseling crisis strategies. Students will be exposed to the most prevalent types of crises and to the current intervention methodologies used in crisis counseling.

## CN 6369 **Introduction to Marriage and Family Therapy** (3)

An overview of the techniques and strategies used in marriage and family therapy with special emphasis for those students who are not seeking a degree specialization in Marriage and Family Therapy. Required for the Marriage and Family Relations Certificate Program.

## CN 6381 **Methods of Research** (3)

Methods and tools of research in behavioral sciences. Emphasis on practical application of basic concepts in producing and consuming research. Prerequisite: A course in introductory and inferential statistics.

## CN 6282 **Hope, Resilience and Human Transcendence** (2)

This course will cover many aspects of positive and existential counseling including the emphasis on character strengths, total wellbeing, self and group efficacy, happiness and life satisfaction as well as human resilience and flow. It will examine how human thoughts, emotions, spirit, behaviors, and social connections contribute to a life worth living. Hope-instilling intervention skills designed to assist clients



# CLINICAL AND MENTAL HEALTH COUNSELING (M.A.)

view and transform stressful circumstances into growth experiences and regard daily experiences as meaningful will be covered. The emphasis will be on learning about what is right with people, their resilience, their spirituality, their character strengths, their willingness to serve, their capacity for doing evil, their sources of happiness, their life-impeding social realities, their empowering connections, their life-enhancing social structure, and their human potential.

## **CN 6283 MFT Person of the Therapist Training (2)**

This course is designed to enhance the clinical skills and competence of master's level family therapist through the Person of the Therapist Training model. The POTT model encourages students involved in clinical practice to actively explore person of the therapist issues to enhance clinical practice. Person of the therapist issues are inherent in clinical work and student learn self-reflection and interpersonal skills to identity and work with personal issues that may arise in the context of clinical work. This course is designed to complement student's growing clinical competence as students develop an awareness of the self within ones' own family of origin, as well as the broader social context. Prerequisite: MFT program permission.

## **CN 7199 Clinical Mental Health Capstone (1)**

This course is designed to assess students' overall professional knowledge, clinical skills and practices, and multicultural and advocacy competencies in their work with individuals, families, groups and/or communities. Under the supervision of the students' faculty advisor, students will demonstrate their ability to conceptualize cases; utilize diagnoses (or not); create treatment plans; assess client/familial progress; work with other mental health professionals in an interdisciplinary context; determine when to refer for an evaluation for psychotropic medications; understand the usage of such medications, their side effects, and how to consult with a client's respective medication provider; monitor and assess the impact of traumatic events; and terminate therapeutic relationships. Students will also be required to assess their strengths and weaknesses, and develop plans for continued professional development and a long-term self-care plan.

## **CN 7267 Community Counseling and Social Justice (2)**

The roles of counselors in community agencies, private practice, in litigation and consulting processes, and in client advocacy will be explored with the intent of assessing means by which counselors can provide access to and delivery of optimal mental health services. Counselors' roles and responsibilities in promoting fair and equitable mental health policy and legislation in a variety of contexts will be examined. Special attention will be paid to how the confluence of social and political barriers impact counselors' ability to assess and advocate for individual and community needs, facilitate conflict resolution, and secure resources for programs designed to empower and serve oppressed populations. Such oppressed populations include those individuals dealing with racism, sexism, religious persecution, poverty, immigration issues, language barriers, trauma (i.e. natural disaster, domestic violence etc.), heterosexism, physical disabilities, mental illness and interpersonal and/or institutional rankism.

## **CN 7301 Professional and Ethical Issues (3)**

Problems in professional practice of guidance, counseling, marriage and family therapy and research. Professional ethics, relations to other professionals and the public. Liability issues.

## **CN 7302 Social/Cultural Issues in Counseling (3)**

The effects of social change, cultural patterns, roles of men and women, different lifestyles, ethnic

# CLINICAL AND MENTAL HEALTH COUNSELING (M.A.)

groups, and other special populations in the counseling process.

## **CN 7319 Health Counseling and Medical Aspects of Disabilities (3)**

This course will address issues of public health as well as counseling people with chronic and disabling diseases. This course will also provide medical information essential to understanding the functional capacities of individual with disabilities and restoratives techniques. Basic anatomy and physiology will be covered.

## **CN 7333 Mental Health and Psychopathology (3)**

Reviews the healthy personality and various models of psychopathology, including the DSM IV and organic diseases that masquerade as psychological problems.

## **CN 7351 Human Growth and Development (3)**

Survey of human growth and development from birth through adolescence to maturity. Special emphasis on biophysical, cognitive, affective, and psycho-social domains. Prerequisite for CN7373.

## **CN 7359, 7360, 7361 Internship in Counseling I, II, III (3, 6, 9)**

The internship provides the opportunity to develop skills in the treatment of individuals with emotional and behavioral problems, under the direction of doctoral qualified supervisors at an approved site. Case experiences are further analyzed and discussed under the supervision of faculty in weekly class meetings. Students complete a minimum of 300 hours on site, 120 client contact hours, and 15 hours of supervision. Favorable final evaluations by the site supervisor and faculty are required for credit. Limited enrollment. Prerequisite: CN6150/6253, 6352, 6354, 6355, 6357, 7301, 7302, 7351, or permission of instructor, and, completion of 30 semester hours in the program, and admission to candidacy for the Master's degree.

## **CN 7377 Sexuality Counseling and Somatic Issues (3)**

This class will explore the physiological, psychological, sociological, and theological aspects of human sexuality. Special emphasis will be given to the connection of sexual desire with love and intimacy. This course will include discussion of sexual arousal and response, nature, origin, treatment of sexual difficulties and sexual disorders.

## **CN 7399 Thesis Direction (3)**

The thesis is the culminating experience which provides a record of a student's achievement in the program. The thesis requires research leading to the discovery or new knowledge or enhancement of existing knowledge in the field of interest. A project that helps solve a practical problem may also be acceptable. The thesis is a complete documentation of the research study, including theoretical background, description of the problem, the method used to investigate or solve the problem, presentation of results, interpretation of results, and explanation of the significance of the results.

# COMMUNICATION STUDIES (M.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [at Tyler@stmarytx.edu](mailto:at Tyler@stmarytx.edu)

## Department

Communication Studies

## Program Director

Elijah Akhahenda, Ph.D. [eakhahenda@stmarytx.edu](mailto:eakhahenda@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted only to those with high promise for success in graduate study. Potential may be demonstrated by significant professional experience, previous schooling, and test scores recorded within the past five years on the GRE . A minimum GPA of 3.1 is acceptable, with special consideration given to course work in the broad field of Communication Studies. Generally, students must provide acceptable test scores at the time of enrollment. If students are otherwise highly qualified, they may take the GRE during their first semester of enrollment with continued enrollment contingent upon test results.

The minimum Academic Index required for admission is:

**GPA X Average GRE Score [(Verbal + Quantitative)] / Analytical writing minimum of 4.0 = 1350**

Up to 10 percent of students in the program may be accepted with less than the minimum index if they demonstrate to the Graduate Communication Committee that they can perform at the graduate level.

## Degree Requirements

### Communication Studies (36hr)

### Concentration: Communication Theory & Research

Course #	Course Title	Hours
<u>Communication Courses Required (9hrs):</u>		
CM7390	Seminar in Professional Development	3

# COMMUNICATION STUDIES (M.A.)

Course #	Course Title	Hours
CM8300	Foundation in Communication Studies	3
CM9300	Foundations in Communication Theory	3
<u>Communication Theory &amp; Research Courses (15hr):</u>		
CM8301	Survey of Critical and Interpretive Methods	3
CM8311	Survey of Rhetorical Criticism	3
CM9303	Topics in Communication Theory	3
CM9311	Survey of Rhetorical Theory	3
CM9331	Survey of Critical Theory	3
CM9343	Survey of Feminist Theory	3
<u>Electives (12hrs):</u>		
Any graduate level course with the exception of xx6000x subject to the approval of the Graduate Program Director.		
<b>Total hours</b>		<b>36</b>

## Communication Studies (36hr)

### Concentration: Communication Theory & Research -Thesis

Course #	Course Title	Hours
<u>Communication Courses Required (9hrs):</u>		
CM7390	Seminar in Professional Development	3
CM8300	Foundation in Communication Studies	3
CM9300	Foundations in Communication Theory	3
<u>Communication Theory &amp; Research Courses (15hr):</u>		
CM8301	Survey of Critical and Interpretive Methods	3
CM8311	Survey of Rhetorical Criticism	3
CM9303	Topics in Communication Theory	3
CM9311	Survey of Rhetorical Theory	3
CM9331	Survey of Critical Theory	3
CM9343	Survey of Feminist Theory	3
<u>Electives (6hrs):</u>		
Any graduate level course with the exception of xx6000x subject to the approval of the		

# COMMUNICATION STUDIES (M.A.)

Course #	Course Title	Hours
Graduate Program Director.		
<u>Thesis (6hrs):</u>		
CM8395	Thesis	3
CM8396	Thesis Project	3
<b>Total hours</b>		<b>36</b>

## Communication Studies (36hr)

### Concentration: Communication Studies

Course #	Course Title	Hours
<u>Communication Courses Required (9hrs):</u>		
CM7390	Seminar in Professional Development	3
CM8300	Foundation in Communication Studies	3
CM9300	Foundations in Communication Theory	3
<u>Communication Courses (15hr):</u>		
CM7301	Publication Design & Layout: Multimedia Production	3
CM7302	Electronic Publishing & Presentation	3
CM7305	Photojournalism	3
CM7303	Free Lance Writing	4
CM7311	Media Script Writing	3
CM7313	Video Design & Production	3
CM7332	Public Relations Writing & Campaigns	3
CM7334	Grant Proposal Writing	3
CM7336	Report Writing	3
CM7341	Interpersonal Communication Skills	3
CM7343	Business Communications	3
CM7345	Applied Persuasion	3
CM7347	Technical Writing	3
CM7395	Graduate Colloquium	3
CM7396	Communication Internship	3
CM8301	Survey of Critical and Interpretive Methods	3

# COMMUNICATION STUDIES (M.A.)

Course #	Course Title	Hours
CM8303	Topics in Critical & Interpretative Methods	3
CM8311	Survey of Rhetorical Criticism	3
CM8313	Topics in Rhetorical Criticism	3
CM8321	Survey of Film Criticism	3
CM8323	Topics in Film Criticism	3
CM8332	Qualitative Methods in Communication Research	3
CM8334	Quantitative Methods in Communication Research	3
CM9301	Survey of Communication Theory	3
CM9303	Topics in Communication Theory	3
CM9311	Survey of Rhetorical Theory	3
CM9313	Topics in Rhetorical Theory	3
CM9321	Survey of Film Theory	3
CM9323	Topics in Film Theory	3
CM9324	The Law & Ethics of Mass Communication	3
CM9331	Survey of Critical Theory	3
CM9333	Topics in Critical Theory	3
CM9341	Survey of Feminist Theory	3
CM9343	Topics in Feminist Theory	3
<u>Communication Studies Electives (12hrs):</u>		
Any graduate level course with the exception of xx6000x subject to the approval of the Graduate Program Director.		
<b>Total hours</b>		<b>36</b>

## Communication Studies (36hr)

### Concentration: Communication Studies -Thesis

Course #	Course Title	Hours
<u>Communication Courses Required (9hrs):</u>		
CM7390	Seminar in Professional Development	3
CM8300	Foundation in Communication Studies	3
CM9300	Foundations in Communication Theory	3

# COMMUNICATION STUDIES (M.A.)

Course #	Course Title	Hours
<u>Communication Courses (15hr):</u>		
CM7301	Publication Design & Layout: Multimedia Production	3
CM7302	Electronic Publishing & Presentation	3
CM7305	Photojournalism	3
CM7303	Free Lance Writing	4
CM7311	Media Script Writing	3
CM7313	Video Design & Production	3
CM7332	Public Relations Writing & Campaigns	3
CM7334	Grant Proposal Writing	3
CM7336	Report Writing	3
CM7341	Interpersonal Communication Skills	3
CM7343	Business Communications	3
CM7345	Applied Persuasion	3
CM7347	Technical Writing	3
CM7395	Graduate Colloquium	3
CM7396	Communication Internship	3
CM8301	Survey of Critical and Interpretive Methods	3
CM8303	Topics in Critical & Interpretive Methods	3
CM8311	Survey of Rhetorical Criticism	3
CM8313	Topics in Rhetorical Criticism	3
CM8321	Survey of Film Criticism	3
CM8323	Topics in Film Criticism	3
CM8332	Qualitative Methods in Communication Research	3
CM8334	Quantitative Methods in Communication Research	3
CM9301	Survey of Communication Theory	3
CM9303	Topics in Communication Theory	3
CM9311	Survey of Rhetorical Theory	3
CM9313	Topics in Rhetorical Theory	3
CM9321	Survey of Film Theory	3

# COMMUNICATION STUDIES (M.A.)

Course #	Course Title	Hours
CM9323	Topics in Film Theory	3
CM9324	The Law & Ethics of Mass Communication	3
CM9331	Survey of Critical Theory	3
CM9333	Topics in Critical Theory	3
CM9341	Survey of Feminist Theory	3
CM9343	Topics in Feminist Theory	3
<b><u>Communication Studies Electives (6hrs):</u></b>		
Any graduate level course with the exception of xx6000x subject to the approval of the Graduate Program Director.		
<b><u>Thesis (6hrs):</u></b>		
CM8395	Thesis	3
CM8396	Thesis Project	3
<b>Total hours</b>		<b>36</b>

## Communication Studies (36hr)

### Concentration: Media

Course #	Course Title	Hours
<b><u>Communication Courses Required (9hrs):</u></b>		
CM7390	Seminar in Professional Development	3
CM8300	Foundation in Communication Studies	3
CM9300	Foundations in Communication Theory	3
<b><u>Media Courses (15hr):</u></b>		
CM7301	Publication Design & Layout: Multimedia Production	3
CM7302	Electronic Publishing & Presentation	3
CM7305	Photojournalism	3
CM7313	Video Design & Publication	3
CM8321	Survey of Film Criticism	3
CM9321	Survey of Film Theory	3
CM9324	The Law & Ethics of Mass Communication	3
CS6325	Computer Graphics	3



# COMMUNICATION STUDIES (M.A.)

Course #	Course Title	Hours
<u>Electives (12hrs):</u>		
Any graduate level course with the exception of xx6000x subject to the approval of the Graduate Program Director.		
<b>Total hours</b>		<b>36</b>

## Communication Studies (36hr)

### Concentration: Media - Thesis

Course #	Course Title	Hours
<u>Communication Courses Required (9hrs):</u>		
CM7390	Seminar in Professional Development	3
CM8300	Foundation in Communication Studies	3
CM9300	Foundations in Communication Theory	3
<u>Media Courses (15hr):</u>		
CM7301	Publication Design & Layout: Multimedia Production	3
CM7302	Electronic Publishing & Presentation	3
CM7305	Photojournalism	3
CM7313	Video Design & Publication	3
CM8321	Survey of Film Criticism	3
CM9321	Survey of Film Theory	3
CM9324	The Law & Ethics of Mass Communication	3
CS6325	Computer Graphics	3
<u>Electives (6hrs):</u>		
Any graduate level course with the exception of xx6000x subject to the approval of the Graduate Program Director.		
<u>Thesis (6hrs):</u>		
CM8395	Thesis	3
CM8396	Thesis Project	3
<b>Total hours</b>		<b>36</b>

## Communication Studies (36hr)

### Concentration: Organizational Communications

# COMMUNICATION STUDIES (M.A.)

Course #	Course Title	Hours
<u>Communication Courses Required (9hrs):</u>		
CM7390	Seminar in Professional Development	3
CM8300	Foundation in Communication Studies	3
CM9300	Foundations in Communication Theory	3
<u>Organizational Communication Courses (15hr):</u>		
BA7344	Organization Culture, Power, & Politics	3
BA8314	Improving the Performance & Productivity of Teams	3
CM7341	Interpersonal Communication Skills	3
CM7343	Business Communications	3
CM8332	Qualitative Methods in Communication Research	3
CM8334	Quantitative Methods in Communication Research	3
CM9301	Survey of Communication Theory	3
CM9303	Topics in Communication Theory	3
<u>Electives (12hrs):</u>		
Any graduate level course with the exception of xx6000x subject to the approval of the Graduate Program Director.		
<b>Total hours</b>		<b>36</b>

## Communication Studies (36hr)

### Concentration: Organizational Communications - Thesis

Course #	Course Title	Hours
<u>Communication Courses Required (9hrs):</u>		
CM7390	Seminar in Professional Development	3
CM8300	Foundation in Communication Studies	3
CM9300	Foundations in Communication Theory	3
<u>Organizational Communication Courses (15hr):</u>		
BA7344	Organization Culture, Power, & Politics	3
BA8314	Improving the Performance & Productivity of Teams	3
CM7341	Interpersonal Communication Skills	3
CM7343	Business Communications	3

# COMMUNICATION STUDIES (M.A.)

Course #	Course Title	Hours
CM8332	Qualitative Methods in Communication Research	3
CM8334	Quantitative Methods in Communication Research	3
CM9301	Survey of Communication Theory	3
CM9303	Topics in Communication Theory	3
<u>Electives (6hrs):</u>		
Any graduate level course with the exception of xx6000x subject to the approval of the Graduate Program Director.		
<u>Thesis (6hrs):</u>		
CM8395	Thesis	3
CM8396	Thesis Project	3
<b>Total hours</b>		<b>36</b>

## Communication Studies (36hr)

### Concentration: Public Relations

Course #	Course Title	Hours
<u>Communication Courses Required (9hrs):</u>		
CM7390	Seminar in Professional Development	3
CM8300	Foundation in Communication Studies	3
CM9300	Foundations in Communication Theory	3
<u>Public Relations Required (15hr):</u>		
CM7302	Electronic Publishing & Presentation	3
CM7303	Free Lance Writing	3
CM7311	Media Script Writing	3
CM7313	Video Design & Production	3
CM7332	Public Relations Writing & Campaigns	3
CM7343	Business Communications	3
CM7345	Applied Persuasion	3
CM7347	Technical Writing	3
<u>Electives (12hrs):</u>		
Any graduate level course with the exception of xx6000x subject to the approval of the		

# COMMUNICATION STUDIES (M.A.)

Course #	Course Title	Hours
Graduate Program Director.		
<b>Total hours</b>		<b>36</b>

## Communication Studies (36hr)

### Concentration: Public Relations - Thesis

Course #	Course Title	Hours
<u>Communication Courses Required (9hrs):</u>		
CM7390	Seminar in Professional Development	3
CM8300	Foundation in Communication Studies	3
CM9300	Foundations in Communication Theory	3
<u>Public Relations Required (15hr):</u>		
CM7302	Electronic Publishing & Presentation	3
CM7303	Free Lance Writing	3
CM7311	Media Script Writing	3
CM7313	Video Design & Production	3
CM7332	Public Relations Writing & Campaigns	3
CM7343	Business Communications	3
CM7345	Applied Persuasion	3
CM7347	Technical Writing	3
<u>Electives (6hrs):</u>		
Any graduate level course with the exception of xx6000x		
<u>Thesis (6hrs):</u>		
CM8395	Thesis	3
CM8396	Thesis Project	3
<b>Total hours</b>		<b>36</b>

## Department Courses and Descriptions

### CM 7301 **Publication Design and Layout** (3 semester hours)

A workshop in which students design layout, and produce an in-house magazine, newsletter, or annual report. Includes experience in solving problems of design and makeup, as well as evaluating publishing techniques and procedures.

# COMMUNICATION STUDIES (M.A.)

## CM 7302 **Electronic Publishing and Presentations I** (3 semester hours)

Provides experience in Internet electronic publishing and basic Web design through manipulation of Hypertext Markup Language (HTML), Extensible Hypertext Markup Language (XHTML), and Cascading Style Sheets (CSS). Includes basic graphic manipulation techniques and basic use of a Web building application.

## CM 7303 **Electronic Publishing and Presentations II** (3 semester hours)

Explores the role of communication professional as both web content creator and as program manager. Helps students to hone writing skills for the medium, to manage development of web team and clients, and to make disparate pieces cohere into a quality product.

## CM 7305 **Photojournalism** (3 semester hours)

The course will examine a wide range of photo communication and pictorial forms in newspaper, magazine, and other print media, as well as the design and techniques used to construct visual messages. Topic areas include a history of photojournalism and documentary photography, photo communication research, photographic styles, subliminal messages in visuals, journalistic ethics including the art of lying through photo manipulation. The class will utilize traditional and digital photographic tools.

## CM 7311 **Media Script Writing** (3 semester hours)

Explores various approaches and conventions of film, television, motion picture, and audio visual script writing, with special emphasis on narrative and documentary production.

## CM 7313 **Video Design and Production** (3 semester hours)

The course will give participants an opportunity to explore the techniques employed in lighting, camera work, and audio manipulation for a full range of television presentations.

## CM 7332 **Public Relations Writing and Campaigns** (3 semester hours)

The study, analysis, and application of principles of and formats used in public relations communication to consumers. Participants learn how to collect, prepare and distribute information through the mass media, reports, and other forms of public information campaigns. Additionally, the course offers experience in the preparation and execution of campaign strategies, presentation of position papers, and scenarios to work out realistic and efficient solutions to communication and public relations problems.

## CM 7334 **Grant Proposal Writing** (3 semester hours)

This course is designed to teach the fundamental process of grant development for the beginning grant writer. Participants will be expected to develop a complete grant proposal suitable for submission to a funding agency. Those registering for the course should have conducted preliminary, independent research about a potential grant development project suitable for a major grant submission. Projects may be related to education, public works, museum programs, art, research, or similar areas. Specific projects are normally developed during the first two weeks of the course.

## CM 7336 **Report Writing** (3 semester hours)

Development of writing skills appropriate to the demands of the counseling discipline and profession. Acquisition of advanced writing proficiency in areas such as reports, proposals, articles for publication, and technical documents, as well as an understanding of protocols for the dissertation. (Open to

# COMMUNICATION STUDIES (M.A.)

Counseling Students Only).

## CM 7341 **Interpersonal Communication Skills** (3 semester hours)

Explores the theory and research pertaining to interpersonal communication skills in dyadic, group, and organizational contexts with emphasis on developing the skills necessary for effective personal and professional relationship building and maintenance, listening, problem solving, and conflict management. Other topics include the dynamics of culture and power in communicative interactions, the ethics of interpersonal communication, and differences in communicative styles.

## CM 7343 **Business Communication** (3 semester hours)

A study of style, organization, and formats used in business communication--both corporate and non-corporate--including interoffice communications, major letter formats, and business report writing. Emphasizes critical thinking, problem solving, and maturity in handling tone and style.

## CM 7345 **Applied Persuasion** (3 semester hours)

Explores the theory, practice, and research methodology of persuasion with the dual purpose of providing a scholarly understanding of persuasion and practical knowledge of the principles and tools of persuasion.

## CM 7347 **Technical Writing** (3 semester hours)

A study of the methods and processes organizations require to produce and use technical information through planning, drafting, and revising. Emphasis on the organization and presentation of written information.

## CM 7378 **Free Lance Writing** (3 semester hours)

Provides experience in writing for publication for those who wish to build a career as free lance writers. Topics covered include generating marketable ideas, researching markets, writing query letters, and dealing with editors. Also includes the history, theory, and practice of the "new journalism" to supplement work with more traditional types of non-fiction.

## CM 7350 **Topics in Communication Studies** (1-3 semester hours)

Explores changing topics in the field of communication.

## CM 7390 **Seminar in Professional Development: Quantitative Methods** (3 semester hours)

A survey of quantitative methods used to advance communication research. Includes an overview of statistical techniques employed to analyze, organize, interpret, and summarize information, as well as basic probability concepts, sampling techniques, and survey methods. Introduction to statistics recommended, but not required as a prerequisite.

## CM 7395 **Graduate Colloquium** (3 semester hours)

Gives students an opportunity to present and defend a research paper or creative project to an audience of graduate students and faculty in the department. The interaction contributes to a greater sense of community in the department, enhances stronger relationships between faculty and graduate students, and enables participants to gain insightful feedback about completed projects or work in progress.

## CM 7396 **Communication Internship** (3 semester hours)

Provides practical experience in selected communication fields under the guidance of practicing

# COMMUNICATION STUDIES (M.A.)

specialists. Supervised by a graduate faculty member. Prerequisite: 24 hours graduate work and approval of the graduate program director.

## CM 8300 **Foundations in Communication Studies: Qualitative Methods** (3 semester hours)

A survey of qualitative methods used in communication research. Provides students with hands-on application of qualitative approaches to research.

## CM 8301 **Survey of Critical Theory** (3 semester hours)

This course is a broad introduction to the nearly endless varieties of critical and interpretive methods. As such, it will survey a variety of specific critical and interpretive methods and examine the essential tenets of each approach. Participants should expect to leave this course with ability to understand and critically discuss scholarship that employs such methodologies.

## CM 8303 **Topics in Critical and Interpretive Methods** (3 semester hours)

Although the specific focus of this course will change with each offering, its purpose--to allow students to understand and employ critical methods as a tool for analysis--will remain the same. Offerings may include emancipator ethics, semiotic analysis, discourse analysis, feminist epistemologies of color, case analysis, and narrative. Other methodological positions addressed may include post-positivist and post-structural approaches to validity and interpretation, voice, audience and art, the politics of interpretation, and multiple interpretive communities.

## CM 8311 **Survey of Rhetorical Criticism** (3 semester hours)

Beginning with the understanding that rhetorical criticism is an approach to critical analysis used unconsciously by all humans, this course is designed to assist students in making conscious decisions and improving each of the steps of this process of making sense of various communicative texts--journalistic articles, essays, television programs, literature, films, song lyrics, political rhetoric, business correspondence, commercials, billboards, clothing, architecture, etc. The course surveys formal methods of criticism, examines various critical texts, and provides students with significant opportunity to write their own criticism.

## CM 8313 **Topics in Rhetorical Criticism** (3 semester hours)

Although the specific focus of this course will change with each offering, its purpose--to allow students to gain experience in utilizing rhetorical criticism as a tool for analysis--will remain the same. Offerings will focus either on a specific human event (e.g. the Holocaust or the environment), through the lens of many types of criticism, or on many different texts through the lens of a specific method. Regardless of topic, however, each course will provide participants with examples of criticism and experience as a critic.

## CM 8321 **Survey of Film Criticism** (3 semester hours)

The course provides a broad overview of the methods and practice of film criticism. Consequently, participants in this course will examine and critique various approaches to film criticism and will become familiar with the essential framework of philosophical assumptions of each approach.

## CM 8323 **Topics in Film Criticism** (3 semester hours)

Under this topic, students will learn how to interpret films from a variety of analytical approaches, including genre, theme, authorship, or national origin. The course develops techniques of analysis and classification of films which take into account the circumstances of their production and reception, as

# COMMUNICATION STUDIES (M.A.)

well as their social and political effects.

CM 8395 **Thesis** (3 semester hours)

Requires students to develop a project or thesis in some area of communication. The course is repeated for a total of 6 hours.

CM 8396 **Project** (3 semester hours)

CM 9300 **Foundations in Communication Theory** (3 semester hours)

The interdisciplinary nature of communication requires that practitioners in the field be knowledgeable of humanistic, empirical, and quasi-empirical contributions to a scholarly interpretation of communication phenomena. This course introduces students to seminal and current literature on the various approaches to communication theory. Its primary purpose is to give participants an overview of the scholarship in the area.

CM 9301 **Survey of Communication Theory** (3 semester hours)

This course moves beyond the Foundations in Communication Theory course to a more detailed exploration of specific theories in each of the areas of specialization within Communication Studies. Thus, it creates a more detailed map of the theoretical foundations of this field and suggests areas of overlap with other academic areas. As a result, participants should leave the course with an understanding of their personal orientation among communication scholars and within an intellectual tradition or approach.

CM 9303 **Topics in Communication Theory** (3 semester hours)

Includes topics that focus on a variety of figures, movements, and research areas in Communication Studies that form the intellectual background of the discipline today. Although the specific focus of the course will change with each offering, possible areas include: Marxism, post-structuralism, post-modernism, family communication, intercultural communication, and political communication.

CM 9311 **Survey of Rhetorical Theory** (3 semester hours)

This course traces the evolution of rhetorical theory through its major eras and configurations. Starting with the Sophists and pre-Socratics, participants will trace the intellectual path of rhetorical theory through the ancient period into medieval times, from the church fathers to fathers of the Renaissance, from the modern era into the post-modern world. Thus, participants should expect to leave the course with a strong understanding of the relationship among power, knowledge, and rhetorical theory throughout history.

CM 9313 **Topics in Rhetorical Theory** (3 semester hours)

This course explores the rhetorical theories of a particular author, period, or genre, and it will seek to demonstrate the relevance of these theories to contemporary life. Possible offerings include the Rhetoric of Social Change, The Works of Kenneth Burke, Contemporary Rhetorical Theory, Feminist Rhetorical Theory, The Rhetoric of Religion, and Argumentation.

CM 9321 **Survey of Film Theory** (3 semester hours)

The course provides an opportunity for participants to conduct a survey and engage in a critique of the



# COMMUNICATION STUDIES (M.A.)

theories offered by the various approaches to cinema, including formalism, structuralism, semiotics, narratology, phenomenology, Marxism, psychoanalysis, and feminism. Participants will also have the opportunity to develop an overview of questions and concerns raised by film theorists.

## CM 9323 **Topics in Film Theory** (3 semester hours)

Although the specific focus of this course will change with each offering, possible topics include theories of film and ideology, race and ethnicity, gender and sexuality, culture and politics, as well as modernity and post-modernity. Regardless of the topic, however, participants will read and examine critically the essential theoretical works relating to the specific topic and will seek to apply such theories in an original piece of scholarship.

## CM 9324 **The Law and Ethics of Mass Communication** (3 semester hours)

A study of the historical development of the First Amendment and a discussion of the moral reasoning which informs a responsible exercise of press freedom. Participants will pay special attention to areas of law essential for mass communication practitioners, such as libel, invasion of privacy, copyright, and information access. The course also includes a discussion of the growing convergence between information delivery systems and ensuing patterns of regulation and deregulation.

## CM 9331 **Survey of Critical Theory** (3 semester hours)

This course is a broad overview of the contributions to communication theory that have been made by critical theorists. Thus, participants will examine the historical development of and the relationships among such approaches as Marxism, feminism, post-structuralism and post-modernism. Participants should expect to leave the course with an understanding of the basic commonalities between and differences among the various critical schools.

## CM 9333 **Topics in Critical Theory** (3 semester hours)

This course focuses on the critical, interpretive approach to human communication, particularly the contribution of the Frankfurt School scholars such as Lukacs, Habermas, Freud, and the Feminists. Topics explored center on the basic principle that understanding is historic, linguistic, dialectical, and gender based.

## CM 9341 **Survey of Feminist Theory** (3 semester hours)

The course seeks to make sense of and offer inroads into the mass of contradictory theories that have been labeled feminist theory. Specifically, participants will examine and contrast the traditions of social theory around which feminist theories coalesce and will critique the viability of each school of thought.

## CM 9343 **Topics in Feminist Theory** (3 semester hours)

This course will address a range of issues germane to feminist theory and gender studies. Its primary aim, however, will be to describe, analyze, and discuss the issues that inform current feminist theories in the interrelated fields of communication studies, literary studies, cultural studies, new histories, as well as studies in race and post-colonialism. Possible issues include the ways feminism constructs, the relationship between theory and practice, the way political and ethnic issues are dealt with in feminist theory, and concepts of identity and community that inform feminist viewpoints.

## CS 6305 **Computer Literacy** (3 semester hours)

Survey of computer systems and their applications. The fundamentals of software are studied and applied

# COMMUNICATION STUDIES (M.A.)

through word processing, data base, spread sheet, DOS, and E-mail applications. For non-majors only.

## EN 7341 **Analysis and Criticism of Television and Film** (3 semester hours)

The purpose of this course is to introduce students to the major critical and analytical approaches to the study of television and film and to help students apply these approaches to individual films and television programs. Once learned, these skills can be applied in a classroom setting or used to enhance one's own viewing. After you take this course, television and film will never be the same again.

## BA 6313 **Fundamentals of Management and Marketing** (3 semester hours)

This course explores modern concepts and practices in management and marketing in light of the historical foundations of these two subjects. Topics covered include new organizational structures and new paradigms of management thinking, globalization, service and customer contact. Understanding of basic quantitative analysis and methodologies is reinforced through use of financial and statistical applications.

## BA 7385 **Organization Ethics and Legal Issues** (3 semester hours)

A study of the management of ethical and legal decision-making within organizations. A logical framework for the analysis of ethical issues will be presented. The perspectives of the individual, the organization, and associated stockholders will all be addressed. Special emphasis will be given to current topics.

## BA 8365 **Human Resources Management** (3 semester hours)

Emphasizes the application of the latest human resource theory in the operation of the modern organization. Special attention is given to the role of strategic thinking in human resource management applications, the initiation of missioning and visioning in the implementation of a quality philosophy in the organization, and to the application of the latest quantitative and qualitative programs in the field of human resource management.

## BA 8390 **Organizational Behavior** (3 semester hours)

Comparative analysis of the major bodies of theory and empirical facts generated by the study of individuals and groups within various organizational settings. Special attention to the psychological and sociological variables crucial in interpreting and predicting behavior of individuals and groups within the organization, noting comparative aspects of management as related to service and governmental organizations and institutions.

# COMPUTER ENGINEERING (M.S.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Winston F. Erevelles, Ph.D. [werevelles@stmarytx.edu](mailto:werevelles@stmarytx.edu)

## Department

Engineering

## Program Director

Djaffer Ibaroudene, Ph.D. [dibaroudene@stmarytx.edu](mailto:dibaroudene@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted only to those with high promise for success in graduate study. Applicants demonstrate this potential through previous academic records and testing.

To be considered for admission to the M.S.C.E. program, applicants must:

1. Have a Bachelor of Science (B.S.) degree in computer engineering, electrical engineering, or a closely related discipline. Applicants who earned a bachelor's degree in a closely related discipline, such as physics or mathematics, may be admitted with the provision that they take the prerequisite courses listed below. The Graduate Program Director will evaluate applicants from other disciplines on an individual basis.
2. Have a minimum Grade Point Average (GPA) of 3.00 (A = 4.00) for their bachelor's degree.
3. Have minimum GRE quantitative score of 600 and a minimum GRE analytical score within the 50th percentile.
4. Applicants who fail to meet any of the above requirements may be admitted on a conditional status. The Graduate Program Director will evaluate these cases on an individual basis.
5. Submit the TOEFL scores (international students only) and show a minimum of 213 in the computer-based test, or 550 in the paper-based test, or 79 in Internet-based test.
6. Submit a completed application form, a written statement of purpose indicating the applicant's interests and objectives, two letters of recommendation concerning the applicant's potential for succeeding in the graduate program, and official transcripts of all college level work.

## Prerequisites

EG 2141 Logic Design Laboratory

# COMPUTER ENGINEERING (M.S.)

EG 2152 Circuit Laboratory  
EG 2341 Fundamentals of Logic Design  
EG 2352 Circuit Analysis I  
EG 1302 or 1304 C Programming or equivalent  
EG 2342 Data Structure and Algorithms

## Degree Requirements

### Computer Engineering (30 hrs)

#### Non-Thesis

Course #	Course Title	Hours
<u>Engineering Courses Required (15hrs):</u>		
EG6328	Software Engineering	3
EG6356	Computer Networking	3
EG6370	Parallel Processing	3
EG6374	Computer Architecture	3
EG6378	Microprocessors	3
<u>Engineering Electives (15hrs):</u>		
EG6301	Statistical Data Analysis	3
EG6306	Software Project Planning & Management	3
EG6308	Random Variables & Stochastic Processes	3
EG6311	Wireless Communication	3
EG6312	Data Mining	3
EG6318	Introduction to VSLI	3
EG6329	Artificial Intelligence	3
EG6331	Computer Simulation	3
EG6338	Special Topics	3
EG6345	Digital Control Systems	3
EG6350	Digital Signal Processing	3
EG6357	Computer Controlled Systems	3
EG6359	Optical Communications	3
EG6362	Computer Visions & Pattern Recognition	3

# COMPUTER ENGINEERING (M.S.)

Course #	Course Title	Hours
EG6365	Communication Systems	3
EG6367	Automatic Control Systems	3
EG6380	Microcomputer Interfacing	3
EG6386	Engineering Problem Solving	3
EG6388	Data Acquisition, Presentation, & Analysis	3
EG6390	Digital System Design with VHDL	3
EG6392	Network Programming	3
EG6396	Computer Security	3
EG6397	Fault-Tolerant Computing	3
EG7304	Requirements Engineering	3
EG7305	Object-Oriented Analysis, & Design Methodologies	3
EG7306	Total Quality Systems	3
EG7155	Internship	1
EG7255	Internship	2
EG7355	Internship	3
<b>Total hours</b>		<b>30</b>

## Computer Engineering (30 hrs)

### Thesis

Course #	Course Title	Hours
<u>Engineering Courses Required (15hrs):</u>		
EG6328	Software Engineering	3
EG6356	Computer Networking	3
EG6370	Parallel Processing	3
EG6374	Computer Architecture	3
EG6378	Microprocessors	3
<u>Engineering Electives (12hrs):</u>		
EG6301	Statistical Data Analysis	3
EG6306	Software Project Planning & Management	3
EG6308	Random Variables & Stochastic Processes	3

# COMPUTER ENGINEERING (M.S.)

Course #	Course Title	Hours
EG6311	Wireless Communication	3
EG6312	Data Mining	3
EG6318	Introduction to VSLI	3
EG6329	Artificial Intelligence	3
EG6331	Computer Simulation	3
EG6338	Special Topics	3
EG6345	Digital Control Systems	3
EG6350	Digital Signal Processing	3
EG6357	Computer Controlled Systems	3
EG6359	Optical Communications	3
EG6362	Computer Visions & Pattern Recognition	3
EG6365	Communication Systems	3
EG6367	Automatic Control Systems	3
EG6380	Microcomputer Interfacing	3
EG6386	Engineering Problem Solving	3
EG6388	Data Acquisition, Presentation, & Analysis	3
EG6390	Digital System Design with VHDL	3
EG6392	Network Programming	3
EG6396	Computer Security	3
EG6397	Fault-Tolerant Computing	3
EG7304	Requirements Engineering	3
EG7305	Object-Oriented Analysis, & Design Methodologies	3
EG7306	Total Quality Systems	3
EG7155	Internship	1
EG7255	Internship	2
EG7355	Internship	3
<u>Thesis required (3hrs):</u>		
EG6339	Thesis Direction	3
<b>Total hours</b>		<b>30</b>

# COMPUTER ENGINEERING (M.S.)

## Department Courses and Descriptions

### EG 6328 **Software Engineering** (3)

This course surveys the entire software engineering field. It presents the management and technical aspects of the software development process. Software architectures, paradigms, and life-cycles are briefly discussed and compared. It covers topics in software management, problem specification and analysis, system design techniques, documentation, system testing and performance evaluation, and system maintenance. The technical aspects include software requirement analysis, design methodologies, system implementation, and testing techniques. Software verification and validation, quality assurance, and configuration management are also introduced.

### EG 6356 **Computer Networking (Protocols, Modeling and Analysis)** (3)

Networks types, layered communication architectures, data link layer, network layer, transport layer, polling and random access in data network, local area network, introduction to circuit switching, call processing in digital circuit switching systems, the evolution toward integrated networks.

### EG 6370 **Parallel Processing** (3)

Topics in parallel architectures, including systolic architectures, wave front arrays, interconnection networks, reconfigurable architecture. Design of algorithms for use on highly parallel machines. Application to artificial intelligence.

### EG 6374 **Computer Architecture** (3)

Overview of basic concepts. Memory systems design, semiconductor memories, cache memory, and virtual memory. Pipeline design techniques and memory structure in pipeline computers. Design constraints for high-performance machines. Vector computers, multiprocessors, and algorithms. Prerequisite: Consent of instructor.

### EG 6301 **Statistical Data Analysis** (3)

An applied approach to statistical inference in engineering and scientific work. Tests of hypothesis, regression analysis, analysis of variance and experimental design.

### EG 6306 **Software Project Planning and Management** (3)

Planning and control of software project. Cost factors and cost estimation. Project scheduling, staffing, setting milestones. Role of project manager and organization of project team. Project management tools. Factors influencing productivity and success. Productivity metrics. Software project economics. Metrics for software quality, schedule, budget, and progress. Analysis of options and risks. Planning for change. Management of expectations. Release and configuration management. Software process standards and process implementation. Software contracts and intellectual property. Approaches to maintenance and long-term software development. Case studies of real industrial projects. CASE tools for project planning, cost estimation, and project management

### EG 6308 **Random Variables and Stochastic Processes** (3)

Introduction to the underlying theory of stochastic processes. Topics include: Random sequences and convergence; autocorrelation, autocovariance, stationarity, ergodicity; stochastic calculus (continuity, differentiability, integrability); Poisson process; white-noise process; Gaussian process; random walk,

# COMPUTER ENGINEERING (M.S.)

Brownian motion, Wiener process; Markov chains; Markov processes; linear systems driven by random inputs.

## EG 7308 **Software Verification and Validation** (3)

Testing techniques and principles: defects versus failures, equivalence classes, boundary testing. Types of defects. Black-box versus structural testing. Testing categories: Unit testing, integration testing, profiling, test driven development. State-based testing, configuration testing, compatibility testing. Website testing. Alpha, beta, and acceptance testing. Coverage criteria. Test instrumentation and tools. Developing a test plan. Managing the test process. Problem reporting, tracking, and analysis. Testing metrics. Software safety. Debugging and fault isolation techniques. Defect analysis.

## EG 6312 **Data Mining** (3)

Recent advances in database technology along with the phenomenal growth of the Internet have resulted in an explosion of data collected, stored, and disseminated by various organizations. Because of its massive size, it is difficult for analysts to sift through the data even though it may contain useful information. Data mining holds great promise to address this problem by providing efficient techniques to uncover useful information hidden in the large data repositories. The key objectives of this course are two-fold: (1) to teach the fundamental concepts of data mining and (2) to provide extensive hands-on experience in applying the concepts to real-world applications. The core topics to be covered in this course include classification, clustering, association analysis, and anomaly/novelty detection. Students will develop and/or apply data mining techniques to applications such as network intrusion detection, Web traffic analysis, business/financial data analysis, text mining, bioinformatics, Earth Science, and other scientific and engineering areas.

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## CS 6320 **File and Database Systems** (3)

Development and application of databases with emphasis on topologies, normalization, and queries. Prerequisites: CS 6310 and proficiency in Pascal or Pascal-like language.

## EG 6331 **Computer Simulation** (3)

The modeling of the operational aspects of manufacturing and service systems using discrete and continuous simulation techniques.

## EG 6334 **Software Quality Assurance** (3)



# COMPUTER ENGINEERING (M.S.)

Quality: How to assure it and verify it? Avoidance of errors and other quality problems. Inspections and formal technical reviews. Testing, verification, and validation techniques. Process assurance versus product assurance. Quality work product attributes. Software quality measurements and metrics. Quality process standards and formal approaches to SQA. Product and process assurance. Problem analysis and reporting. Statistical approach to quality control. Software configuration management: baselines, version control, change control, configuration audits, and SCM standards. CASE tools for SQA.

## EG 6338 **Special Topics** (3)

### EG 6339 **Thesis Direction** (3)

The thesis is a culminating experience which provides a record of a student's achievement in the program. The thesis requires research leading to the discovery or new knowledge or enhancement of existing knowledge in the field of interest. A project that helps solve a practical problem may also be acceptable. The thesis is a complete documentation of the research study, including the theoretical background, description of the problem, the method used to investigate or solve the problem, presentation of results, interpretation of results, and explanation of the significance of the results.

### EG 7311 **User Interface Design** (3)

Psychological principles of human-computer interaction. Evaluation of user interfaces. Usability engineering. Task analysis, user-centered design, and prototyping. Conceptual models and metaphors. Software design rationale. Design of windows, menus, and commands. Voice and natural language I/O. Response time and feedback. Color, icons, and sound. Internationalization and localization. User interface architectures and APIs. Case studies and project.

### EG 6350 **Digital Signal Processing I** (3)

Discrete time signals & systems, z-transform, discrete fourier transform, flow graph and matrix representation of digital filters, digital filter design techniques and computation of the discrete fourier transform (FFT).

### EG 7313 **Web Engineering** (3)

Concepts, principles, techniques, and methods of Web engineering. Topics include requirement engineering for Web applications, modeling Web applications, Web application architectures, Web application design, technologies for Web applications, testing Web applications, operation and maintenance of Web applications, web project management, web application development process, usability of Web applications, performance of Web applications, and security of Web applications. Quality characteristic and attributes for websites.

### EG 7314 **Software Security** (3)

Theory and practice of software security. Identification of potential threats and vulnerabilities early in the design cycle. Methodologies and tools for identifying and eliminating security vulnerabilities. Techniques to prove the absence of vulnerabilities and ways to avoid security holes in new software. Essential guidelines for building secure software: how to design software with security in mind from the ground up and to integrate analysis and risk management throughout the software life cycle.

### EG 6362 **Computer Vision and Pattern Recognition** (3)

# COMPUTER ENGINEERING (M.S.)

Digital image characterization, image transforms, image enhancement, image restoration, image encoding, image analysis, applications of digital image processing to robotics. Prerequisite: EG 6350.

## EG 6365 **Automatic Control Systems** (3)

This course introduces students to the theory and practice of control systems engineering. The topics include basic concepts and mathematical foundations for analysis and design of continuous control systems, transfer function techniques and state- variable analysis, frequency and time domain design and analysis of control systems.

## EG 6367 **Communication Systems** (3)

Introductory information theory, frequency response of linear systems, analog-to-digital conversion, time multiplexing of signals, Pulse Amplitude Modulation (PAM), Pulse Code Modulation (PCM), quantization noise, Amplitude Modulation (AM) and Frequency Modulation (FM) techniques.

## EG 6376 **Neural Networks** (3)

Neuron model and network architecture; Heb net; perception learning rule; ADALINE and MADALINE architectures and algorithms; back propagation algorithm; pattern classification; pattern association competitive neural networks. Prerequisite: Consent of instructor.

## EG 6380 **Microcomputer Interfacing** (3)

Programming parallel ports and Input/Output. Interfacing a microcomputer to keyboards, to alphanumeric displays, and interfacing microcomputer parts to high-power devices. Review of operational amplifiers and circuits, sensors, and transducers. D/A converter operation and interfacing, A/D converter operations and interfacing. Prerequisite: EG 6378.

## EG 6386 **Engineering Problem Solving** (3)

This course covers elementary applied mathematics, basic numerical methods, and problem solving methodology. MATLAB and its associated Toolboxes are used for computations. Topics include introduction to problem solving, introduction to MATLAB, scalar, and array computation, control flow, matrix computation, plotting capabilities, solution to systems of linear equations, interpolation and curve fitting, polynomial analysis, numerical integration and differentiation, ordinary differential equations, matrix decomposition and factorization.

## EG 6388 **Data Acquisition, Presentation, and Analysis** (3)

Principles, methods, and applications of data acquisitions, presentation, and analysis. Topics covered include methods of analog-to-digital conversion, the Nyquist criteria and aliasing errors, signal processing, the use of analog and digital filters, system identification, frequency-spectral estimation, techniques for clear and concise presentation of data, and error analysis of computational results. Hands-on experiments and applications will be emphasized. Lab VIEW software and the associated hardware will be used. Oral and written presentations of application projects will be required of each student.

## EG 6390 **Digital Systems Design Using VHDL** (3)

Brief review of combinational and sequential circuit design principles; VHDL basic language organization; structural modeling in VHDL; data flow modeling in VHDL; VHDL technology information; describing synchronous behavior in VHDL; algorithmic modeling in VHDL. Prerequisite: undergraduate logic design course.

# COMPUTER ENGINEERING (M.S.)

## EG 6392 **Network Programming** (3)

Introduction to networks; Client-server model and software design; concurrent processing in client-server software; program interface to protocols; socket interface; algorithms and issues in client-server software design; connectionless servers (UDP); connection-oriented servers (TCP); client-server concurrencies; application level gateways; remote procedure calls (RPC). Prerequisites: EG 6356 and working knowledge of C programming language.

## EG 6396 **Computer Security** (3)

This course covers the theory and practice of computer security, focusing in particular on the security aspects of the web and internet. It surveys cryptographic tools used to provide security, such as shared key encryption, public key encryption, key exchange, and digital signature. It then reviews how these tools are utilized in the Internet protocols and applications such as SSL, PGP, S/MIME, and others. System security issues, such as viruses, intrusion, firewalls, and other will also be covered.

## EG 6397 **Fault Tolerant Computing** (3)

This course covers the theory and practice of fault tolerant systems, focusing in particular on techniques for achieving high reliability in computational systems with software, hardware, and networking components. Approaches for testing, fault handling and assessing reliability will be examined. It discusses reliability measures, error detection and correcting codes, fault-tolerant networks, redundant disks (RAID), software fault-tolerance, case studies of fault-tolerant systems, and others.

## EG 7155 **Internship** (1)

An experimental approach to advanced engineering topics through work in a company or organization. Industry/University cooperation is required. Topics vary depending on the needs of the sponsoring company or organization and the academic needs of the student. Students may start an internship projects anytime after enrolling in any Engineering program. A minimum of three credit hours is required. Credit hours may be completed in increments of 1, 2, or 3 credit hours per semester. Prerequisite: Consent of the Graduate Program Director.

## EG 7255 **Internship** (2)

An experimental approach to advanced engineering topics through work in a company or organization. Industry/University cooperation is required. Topics vary depending on the needs of the sponsoring company or organization and the academic needs of the student. Students may start an internship projects anytime after enrolling in any Engineering program. A minimum of three credit hours is required. Credit hours may be completed in increments of 1, 2, or 3 credit hours per semester. Prerequisite: Consent of the Graduate Program Director.

## EG 7355 **Internship** (3)

An experimental approach to advanced engineering topics through work in a company or organization. Industry/University cooperation is required. Topics vary depending on the needs of the sponsoring company or organization and the academic needs of the student. Students may start an internship projects anytime after enrolling in any Engineering program. A minimum of three credit hours is required. Credit hours may be completed in increments of 1, 2, or 3 credit hours per semester. Prerequisite: Consent of the Graduate Program Director.

# COMPUTER ENGINEERING (M.S.)

## EG 7304 **Requirement Engineering** (3)

Domain engineering. Techniques for discovering and eliciting requirements. Languages and models for representing requirements. Analysis and validation techniques, including need, goal, and use case analysis. Requirements in the context of system engineering. Specifying and measuring external qualities: performance, reliability, availability, safety, security, etc. Specifying and analyzing requirements for various types of systems: embedded systems, consumer systems, web-based systems, business systems, systems for scientists and other engineers. Resolving feature interactions. Requirements documentation standards. Requirement traceability. Human factors. Requirements in the context of agile processes. Requirements management: Handling requirements changes. CASE tools for requirement engineering.

## EG 7305 **Object-Oriented Analysis and Design Methodologies** (3)

Review of object oriented concepts: objects, classes, instances, inheritance, and entity relationship diagrams. Object-oriented analysis methodologies and their role in the software development process. Object-oriented modeling and prototyping using UML. Software reuse. Design patterns, frameworks, architectures. Component design. Measures of design attributes. Component and system interface design.

## EG 7306 **Total Quality Systems** (3)

Total quality management philosophy, with emphasis on statistical quality strategies. Statistical process control; supplier certification; benchmarking; simultaneous engineering; re-engineering; quality teams; quality audits; Kaizen; quality function deployment, Malcolm Baldrige National Quality Award guidelines. Prerequisite: Consent of Instructor

# COMPUTER INFORMATION SYSTEMS (M.S.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Winston F. Erevelles, Ph.D. [werevelles@stmarytx.edu](mailto:werevelles@stmarytx.edu)

## Department

Computer Science

## Program Director

Carol Luckhardt Redfield, Ph.D. [credfield@stmarytx.edu](mailto:credfield@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted to those with high promise for success in graduate study. Applicants can demonstrate this potential through previous academic records, testing, certification and work performance. Some talented undergraduates may want to apply to our combined BA/BS+MS program where a student can take up to 12 credit hours of graduate work while completing an undergraduate degree. Those students may take the GRE anytime before the first semester after completing the undergraduate degree.

## Admission Requirements

To be considered for admission to this master's program, applicants should have:

- Minimum grade point average (GPA) of 2.7 out of a possible 4.0 in a bachelor's degree
- Minimum Graduate Record Exam quantitative score of 143 or better (480 on tests prior to 2011), or a minimum GMAT score of 334
- For international students, minimum TOEFL score of at least 80 on the Internet-based test or 6.0 on IELTS. Some students may be required to take an English class for graduate international students as part of their degree plan.
- Completed application form to include the following:
  - written statement of purpose indicating interest and objective
  - two letters of recommendation
  - official transcripts of all college-level work

For admissions to the Master of Science in Computer Information Systems program, applicants should have typing, word processing (Microsoft Word equivalent), and extensive computer programming (any

# COMPUTER INFORMATION SYSTEMS (M.S.)

high-level language) skills in addition to the following prerequisites:

- College algebra or higher, with a C or better
- Programming classes including data structures and object oriented programming with a C or better
- One other computer-related class such as computer architecture or operating systems.

Applicants for other disciplines or those lacking specific classes may be admitted with the provision that they take the prerequisite courses selected by the graduate program director on an individual basis. Some of these prerequisites may be fulfilled by work certification or previous experience. Applicants that fail to meet any of the above standard may be admitted on a conditional basis.

## International Students

Please note that for students from outside of the United States, completed applications must be in the Graduate Admissions office at least 6 weeks before classes begin to be considered for that semester. GRE and English proficiency scores must be at St. Mary's before the application can be reviewed, and if accepted, an I-20 can be issued. International students may be required to take English classes so that the students can be successful in our classes.

Our students should have their own laptop computers that they bring to class and a printer at their residence.

## Degree Requirements

### Computer Information Systems (33 hrs)

Course #	Course Title	Hours
<u>Computer Science Core (18 hrs):</u>		
CS6310	Systems Analysis & Design	3
CS6320	Files & Databases	3
CS6330	Advanced Network & Data-Communications	3
CS6340	Advanced Software Engineering	3
CS6350	Hardware & Operating Systems	3
CS6395	Project	3
<u>Computer Science Electives (9 hrs):</u>		
Any other graduate computer science course (other than the core courses) for a total of 9 (nine) credit hours. This is typically 3 courses.		9
<u>Business Electives (6 hrs):</u>		
Any two 3-credit hour BA classes for which the pre-requisites are met.		

# COMPUTER INFORMATION SYSTEMS (M.S.)

Course #	Course Title	Hours
<b>Total hours</b>		<b>33</b>

## Computer Information Systems (33 hrs)

### Thesis Option

Course #	Course Title	Hours
<u>Computer Science Core (15 hrs):</u>		
CS6310	Systems Analysis & Design	3
CS6320	Files & Databases	3
CS6330	Advanced Network & Data-Communications	3
CS6340	Advanced Software Engineering	3
CS6350	Hardware & Operating Systems	3
<u>Computer Science Electives (6 hrs):</u>		
CS6315	Artificial Intelligence	3
CS6325	Computer Graphics	3
CS6375	Special Topics in Computer Science (May be taken more than once with different topic)	3
CS6385	Internship	3
<u>Business Electives (9 hrs):</u>		
Any three 3-credit hour BA classes for which the pre-requisites are met.		
<u>Thesis (3 hrs):</u>		
CS6390	Thesis	3
<b>Total hours</b>		<b>33</b>

## Department Courses and Descriptions

### CS 6310 **Introduction to Systems Analysis and Design** (3)

Concepts, methods and techniques used in the analysis and design of information systems. Student will complete projects using the techniques in practice.

### CS 6320 **File and Database Systems** (3)

Development and application of databases with emphasis on topologies, normalization, and queries.

### CS 6330 **Advanced Network and Data Communication** (3)

Introduction to intra- and inter-computer communications concepts and methodology. Issues include

# COMPUTER INFORMATION SYSTEMS (M.S.)

topologies, error detection and correction, LAN, ISO models, and protocols.

## CS 6340 **Advanced Software Engineering** (3)

Modern methods of software design development and implementation. Emphasis is placed on application system generators and very high level programming languages. Prerequisite: CS 6310, proficiency in high-level programming language.

## CS 6350 **Hardware and Operating Systems** (3)

Introduction to different types of computer hardware and operating systems software at both the microcomputer and large system level.

## CS 6185, CS 6252, CS 6385 **Internship** (1, 2 or 3)

An experiential, practical applications approach to advanced computer science topics through work in a leading computer company or organization and the academic needs of the graduate CS/CIS programs. Consent of the Graduate Program Director is required.

## CS 6315 **Artificial Intelligence** (3)

An advanced study into the area of artificial intelligence including topics such as expert systems, intelligent tutoring systems, robotics, search and gaming, predicate calculus, learning theories, and natural language processing.

## CS 6325 **Computer Graphics** (3)

An advanced study into the development and implementation of computer graphics. The course may cover topics such as windowing, shearing, transformations, fractals, shading, and animation.

## CS 6375 **Special Topics in Computer Science** (3)

A seminar based approach to advanced computer science topics. Topics may include areas such as computer security, game development, modeling and simulation, Internet programming and e-learning. May be repeated for credit as topics change. Consent of the Graduate Program Director is required for the Research section.



# COMPUTER SCIENCE (M.S.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Winston F. Erevelles, Ph.D. [werevelles@stmarytx.edu](mailto:werevelles@stmarytx.edu)

## Department

Computer Science

## Program Director

Carol Luckhardt Redfield, Ph.D. [credfield@stmarytx.edu](mailto:credfield@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted to those with high promise for success in graduate study. Applicants can demonstrate this potential through previous academic records, testing, certification and work performance. Some talented undergraduates may want to apply to our combined BA/BS+MS program where a student can take up to 12 credit hours of graduate work while completing an undergraduate degree. Those students may take the GRE anytime before the first semester after completing the undergraduate degree.

## Admission Requirement

To be considered for admission to this master's program, applicants should have typing, word processing (Microsoft Word equivalent), and extensive computer programming (any high-level language) skills in addition to the following prerequisites:

- Calculus with a C or better
- Programming classes including data structures and object oriented programming
- One other computer-related class such as computer architecture or operating systems
- Minimum grade point average (GPA) of 2.7 out of a possible 4.0 in a bachelor's degree
- Minimum Graduate Record Exam quantitative score of 143 or better (480 on tests prior to 2011)
- For international students, minimum TOEFL score of at least 80 on the Internet-based test or 6.0 on IELTS. Some students may be required to take an English class for graduate international students as part of their degree plan.
- Completed application form to include the following:
  - written statement of purpose indicating interest and objective
  - two letters of recommendation

# COMPUTER SCIENCE (M.S.)

- official transcripts of all college-level work

Our students should have their own laptop computers that they bring to class and a printer at their residence.

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## Degree Requirements

### Computer Science (33 hrs)

Course #	Course Title	Hours
<u>Computer Science Core (18 hrs):</u>		
CS6310	Systems Analysis & Design	3
CS6320	Files & Databases	3
CS6330	Advanced Network & Data-Communications	3
CS6340	Advanced Software Engineering	3
CS6350	Hardware & Operating Systems	3
CS6395	Project	3
<u>Computer Science Electives (9 hrs):</u>		
Any other graduate computer science course (other than the core courses) for a total of 9 (nine) credit hours. This is typically 3 courses.		9
<u>Engineering Electives (6 hrs):</u>		
Any two 3-credit hour EG classes for which the pre-requisites are met.		6
<b>Total hours</b>		<b>33</b>

## Department Courses and Descriptions

### CS 6310 Introduction to Systems Analysis and Design (3)

Concepts, methods and techniques used in the analysis and design of information systems. Student will complete projects using the techniques in practice.

### CS 6320 File and Database Systems (3)

# COMPUTER SCIENCE (M.S.)

Development and application of databases with emphasis on topologies, normalization, and queries.

## CS 6330 **Advanced Network and Data Communication** (3)

Introduction to intra- and inter-computer communications concepts and methodology. Issues include topologies, error detection and correction, LAN, ISO models, and protocols.

## CS 6340 **Advanced Software Engineering** (3)

Modern methods of software design development and implementation. Emphasis is placed on application system generators and very high level programming languages. Prerequisite: CS 6310, proficiency in high-level programming language.

## CS 6350 **Hardware and Operating Systems** (3)

Introduction to different types of computer hardware and operating systems software at both the microcomputer and large system level.

## CS 6185, CS 6252, CS 6385 **Internship** (1, 2 or 3)

An experiential, practical applications approach to advanced computer science topics through work in a leading computer company or organization and the academic needs of the graduate CS/CIS programs. Consent of the Graduate Program Director is required.

## CS 6315 **Artificial Intelligence** (3)

An advanced study into the area of artificial intelligence including topics such as expert systems, intelligent tutoring systems, robotics, search and gaming, predicate calculus, learning theories, and natural language processing.

## CS 6325 **Computer Graphics** (3)

An advanced study into the development and implementation of computer graphics. The course may cover topics such as windowing, shearing, transformations, fractals, shading, and animation.

## CS 6375 **Special Topics in Computer Science** (3)

A seminar based approach to advanced computer science topics. Topics may include areas such as computer security, game development, modeling and simulation, Internet programming and e-learning. May be repeated for credit as topics change. Consent of the Graduate Program Director is required for the Research section.

## CS 6395 **Project** (3)

Students will work on their comprehensive or a related project for the CS or CIS master's degree, typically taken the semester before graduation for full-time students. Permission of instructor required and pre-proposal submitted before class.

# EDUCATION (M.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [atyler@stmarytx.edu](mailto:atyler@stmarytx.edu)

## Department

Education

## Program Director

Daniel Higgins, Ph.D. [dhiggins@stmarytx.edu](mailto:dhiggins@stmarytx.edu)

## Program Specific Admission Requirements

Generally, admission is granted only to those with high promise for success in graduate study. Potential may be demonstrated by experience in increasingly responsible positions, previous schooling, and test scores on the GRE or MAT. Generally, students must provide acceptable test scores at the time of enrollment. If students are otherwise highly qualified, they may take the GRE or MAT during their first semester of enrollment, with further enrollment contingent upon test results.

The minimum Academic Index required is:

$$200 \times \text{GPA} + \text{Average GRE } [(\text{Verbal} + \text{Quantitative})/2] = 1050$$

OR

$$10 \times \text{GPA} + \text{MAT} = 68$$

Additional prerequisites may also be required in preparation for certain graduate course work. This will be determined upon transcript evaluation by the Director of the program. A student may proceed with graduate work while completing undergraduate deficiencies, with permission from the Graduate Program Director.

## Degree Requirements

**Education (36hrs)**

**Concentration: Computer Science**

## EDUCATION (M.A.)

Course #	Course Title	Hours
<b><u>General Education Required (18hrs):</u></b>		
ED6350	Reading in the Classroom	3
ED6302	Foundations of Educational Practice	3
ED6304	Human Development and Learning	3
ED6306	Curriculum Theory & Practice	3
ED6311	Applied Educational Research	3
ED7301	Organizational Theory & Administration	3
ED7302	Private and Public School Law	3
ED7307	Instructional Supervision & Evaluation	3
ED7392	Internship in Education	3
<p><i>NOTE: One of the student teaching courses listed below (or both of the teaching internship courses) is required of students seeking <b>initial teacher certification</b>. Students must have completed <b>at least four</b> of the courses listed above (including ED7392) with a grade of "B" or better in <b>each</b> course. A six-hour student-teaching course of both of the teaching internship courses can be substituted for ED7392 and one other course from the list above. Students must take the Professional Development Seminar undergraduate course or a 3-hour graduate course during their student-teaching semester. Interns must take a 3-hour graduate education course during each semester of internship.</i></p>		
ED6639	Student Teaching in the Elementary School	6
ED6689	Student Teaching in the Secondary School	6
ED5398	Teaching Internship I	3
ED5399	Teaching Internship II	3
<b><u>Concentration Computer Science (18 Hrs):</u></b>		
CS6310	Systems Analysis & Design	3
CS6320	Files & Databases	3
CS6330	Advanced Network & Data Communications	3
CS6340	Advanced Software Engineering	3
CS6350	Hardware & Operating Systems	3
<b><u>Concentration Computer Science Elective (3 hrs):</u></b>		
Any Graduate level CS course with the exception of CS6000		3
<b>Total hours</b>		<b>36</b>

# EDUCATION (M.A.)

## Education (36hrs)

### Concentration: English Literature and Language

Course #	Course Title	Hours
<u>General Education Required (18hrs):</u>		
ED6302	Foundations of Educational Practice	3
ED6304	Human Development and Learning	3
ED6306	Curriculum Theory & Practice	3
ED6311	Applied Educational Research	3
ED6350	Reading in the Classroom	3
ED7301	Organizational Theory & Administration	3
ED7302	Private and Public School Law	3
ED7307	Instructional Supervision & Evaluation	3
ED7392	Internship in Education	3
<p><i>NOTE: One of the student teaching courses listed below (or both of the teaching internship courses) is required of students seeking <b>initial teacher certification</b>. Students must have completed <b>at least four</b> of the courses listed above (including ED7392) with a grade of "B" or better in <b>each</b> course. A six-hour student-teaching course of both of the teaching internship courses can be substituted for ED7392 and one other course from the list above. Students must take the Professional Development Seminar undergraduate course or a 3-hour graduate course during their student-teaching semester. Interns must take a 3-hour graduate education course during each semester of internship.</i></p>		
ED6639	Student Teaching in the Elementary School	6
ED6689	Student Teaching in the Secondary School	6
ED5398	Teaching Internship I	3
ED5399	Teaching Internship II	3
<u>Concentration English Literature &amp; Language (18 Hrs):</u>		
EN7301*	Contemporary Literary Criticism	3
EN7302	Myth & Psyche in 20th Century Literature	3
EN7303*	Critical Approaches to the Short Story	3
EN7307	Courtly Love & Social Disclosure	3
EN7311	Comparative Literature: Modern & Post Modern	3
EN7321*	Shakespeare's Major Plays	3

## EDUCATION (M.A.)

Course #	Course Title	Hours
EN7313	Realism & Naturalism in the American Novel	3
EN7315*	American Transcendentalism	3
EN7316*	History of the American Novel	3
EN7331*	Writing Assessment	3
EN7334	Approaches to Teaching Writing/Critical Thinking	3
<b>*Strongly recommended</b>		
<b>Total hours</b>		<b>36</b>

### Education (36hrs)

#### Concentration: International Relations

Course #	Course Title	Hours
<u>Reading Focus Required (18hrs):</u>		
ED6350	Secondary Content Area Reading	3
ED6302	Foundations of Educational Practice	3
ED6304	Human Development and Learning	3
ED6306	Curriculum Theory & Practice	3
ED6311	Applied Educational Research	3
ED7301	Organizational Theory & Administration	3
ED7302	Private and Public School Law	3
ED7307	Instructional Supervision & Evaluation	3
ED7392	Internship in Education	3
<p><i>NOTE: One of the student teaching courses listed below (or both of the teaching internship courses) is required of students seeking <b>initial teacher certification</b>. Students must have completed <b>at least four</b> of the courses listed above (including ED7392) with a grade of "B" or better in <b>each</b> course. A six-hour student-teaching course of both of the teaching internship courses can be substituted for ED7392 and one other course from the list above. Students must take the Professional Development Seminar undergraduate course or a 3-hour graduate course during their student-teaching semester. Interns must take a 3-hour graduate education course during each semester of internship.</i></p>		
ED6639	Student Teaching in the Elementary School	6
ED6689	Student Teaching in the Secondary School	6
ED5398	Teaching Internship I	3

## EDUCATION (M.A.)

Course #	Course Title	Hours
ED5399	Teaching Internship II	3
<u>International Relations Electives (18 Hrs):</u>		
IR7320	Asian Security Issues	3
IR7340	Middle East Security Issues	3
IR7350	European Security Issues	3
IR7380	African Security Issues	3
IR8325	Business in an Interdependent World	3
IR8305	International Conflict Resolution	3
PO6324	Inter-American Security Issues	3
PO6315	US Foreign Policy	3
<b>Total hours</b>		<b>36</b>

### Education (36hrs)

#### Concentration: Political Science

Course #	Course Title	Hours
<u>General Education Required (18hrs):</u>		
ED6302	Foundations of Educational Practice	3
ED6304	Human Development and Learning	3
ED6306	Curriculum Theory & Practice	3
ED6311	Applied Educational Research	3
ED6350	Reading in the Classroom	3
ED7301	Organizational Theory & Administration	3
ED7302	Private and Public School Law	3
ED7307	Instructional Supervision & Evaluation	3
ED7392	Internship in Education	3

*NOTE: One of the student teaching courses listed below (or both of the teaching internship courses) is required of students seeking **initial teacher certification**. Students must have completed **at least four** of the courses listed above (including ED7392) with a grade of "B" or better in **each** course. A six-hour student-teaching course of both of the teaching internship courses can be substituted for ED7392 and one other course from the list above. Students must take the Professional Development Seminar undergraduate course or a 3-hour graduate course during their student-teaching semester. Interns must*



# EDUCATION (M.A.)

Course #	Course Title	Hours
<i>take a 3-hour graduate education course during each semester of internship.</i>		
ED6639	Student Teaching in the Elementary School	6
ED6689	Student Teaching in the Secondary School	6
ED5398	Teaching Internship I	3
ED5399	Teaching Internship II	3
<b><u>Political Science Required (6 Hrs):</u></b>		
PO6305	American Institutions	3
PO6316	Great Political Thinkers	3
<b><u>Political Science Required (12 hrs):</u></b>		
PO5303	Urban Political Institutions & Processes	3
PO6300	Political Science Research Methods	3
PO6301*	Public Administration & Policy	3
PO6307*	Constitutional Law	3
PO6312*	International Relations Theory	3
PO6315	United States Foreign Policy	3
PO6324	National Security Policy	3
PO6352*	U.S. Latino Communities	3
PO6353	Urban Issues	3
PO6354	Campaign Management	3
PO6356	Campaign Finance	3
PO6358	Gender Politics	3
PO7300	Directed Readings	3
<b>*Strongly recommended</b>		
<b>Total hours</b>		<b>36</b>

## Department Courses and Descriptions

### ED 6302 Foundations of Educational Practice (3)

Explores presuppositions of educational efforts via analysis of existence and intentionality and inquiries into cognition and epistemology. Relates basic norms of ethical educational practice to the intellectual, moral, and religious conversions of the educator and learner. Locates the ground of professional practice in the self-transcending intentionality of the existential subject. Relates the commonsense, theoretical,

# EDUCATION (M.A.)

transcendent, and methodological realms of meaning to the practice of formal education. Criteria for interpretation of educational ends and means established through investigation of personal belief systems, goal setting, and self-assessment strategies.

## ED 6304 **Human Development and Learning** (3)

Theory and research related to cognitive development and learning and their importance to the sequencing and structuring of curricula. Classroom management theories and techniques. Understanding and use of social justice, collaborative decision making, team building, and coalition building.

## ED 6306 **Curriculum Theory and Practice** (3)

Strategic planning for curriculum development and improvement to promote life-long learning. Theory and research related to the evaluation of the teaching/learning process, the systemic change process and collaborative instructional planning.

## ED 6311 **Applied Educational Research** (2)

Research designs and methods including gathering, analyzing, disaggregating, and interpreting data. Utilize pupil personnel services and programs to meet the needs of all students. Use of data to facilitate informed decisions for school improvement and maximization of student learning.

## ED 6350 **Secondary Content Area Reading** (3)

Introduction to reading instruction in various academic subjects. Study of instructional strategies for vocabulary development, for actively involving students in critical thinking activities through questioning and group discussion, and for developing study skills.

## ED 7390 **Internship in Educational Leadership** (3)

Administrator's internship in a public or "recognized" school. The internship provides the opportunity to develop and enhance leadership skills under the supervision of a person holding a Texas Education Agency Certificate with three years experience at the level of assignment. Planning, development, and implementation of an effective instructional system. Use of research findings, time, staff, advanced technologies, community resources, and financial means to maximize student outcomes. Presentations to boards of program preparation personnel and practitioners. Field-based assessments by field and preparation program personnel. Peer assessment.

## CS 6310 **Introduction to Systems Analysis and Design** (3)

Concepts, methods and techniques used in the analysis and design of information systems. Student projects using the techniques in practice.

## CS 6320 **File and Database Systems** (3)

Development and application of databases with emphasis on topologies, normalization, and queries. Prerequisites: CS 6310 and proficiency in Pascal or Pascal-like language.

## CS 6330 **On-Line and Communication Based Systems** (3)

Introduction to intra- and inter-computer communications concepts and methodology. Issues include topologies, error detection and correction, LAN, ISO models, and protocols. Prerequisite: CS 6310.

## CS 6340 **Advanced Software Concepts** (3)

# EDUCATION (M.A.)

Modern methods of software design development and implementation. Emphasis is placed on application system generators and very high level programming languages. Prerequisite: CS 6310, proficiency in Pascal or Pascal-like language.

## CS 6350 **Systems Hardware and Software** (3)

Introduction to different types of computer hardware and operating systems software at both the microcomputer and large system level. Students will work with both the DEC VAX and a representative micro computer and their operating systems. Prerequisite: CS 6310.

## EN 7301 **Contemporary Literary Criticism** (3)

This course offers a background in current literary criticism including approaches such as: Psychoanalytical, Feminist, Postmodern, and Postcolonial. Students are introduced to key thinkers in each school of criticism. These critical approaches are applied to a selection of contemporary masterpieces, such as, Proust, Poe, Kafka, Fuentes, Hawthorne, and Borges.

## EN 7302 **Myth and Psyche in 20th Century Literature** (3)

This course focuses on myth as a source of knowledge of the human psyche and rests theoretically on the findings of Sigmund Freud, Carl Jung, and Jacques Lacan, who provide through myth a wealth of knowledge about human values, fears, and obsessions. The works of literature to be analyzed are 20th century classics by writers such as Kafka, Sartre, Garcia-Marquez, and Lessing.

## EN 7303 **Critical Approaches to the Short Story** (3)

The course will be divided between the "classic stories by classic writers" and the contemporary stories that are revitalizing the short story form in America and throughout world literature. The course will benefit writers and teachers, as well as all those who wish to understand how the short story has emerged as a major form of literary expression in our age.

## EN 7311 **Comparative Literature: Modern and Postmodern** (3)

By concentrating on the fascinating phenomenon of postmodernism, this course develops a thorough perspective of contemporary literature from modernity to recent days. It also sharpens analytical skills through the study of critical theories that define the Postmodern. Works will range from Kafka and T.S. Eliot to Jorge Luis Borges, Julio Cortazar, Marguerite Duras, Margaret Atwood, and Thomas Pynchon.

## EN 7312 **Literature of the Renaissance** (3)

This course is designed to provide graduate students with a detailed survey of non-dramatic poetry and prose of the early Tudor and Elizabethan periods. The course will examine selected texts from an historical perspective with special emphasis on the development of literary genres during the sixteenth century. Political, philosophical and social issues of the period will be raised as we consider the debates that shaped the poetics of the early and High Renaissance. Readings include Sir Thomas, Sir Philip Sidney, Edmund Spenser, and many more.

## EN 7313 **Realism and Naturalism in the American Novel** (3)

Based in historical interpretation, this course offers the first literature of the modern, mass society we ourselves live in. The interpretive strategy will consider the complex, self-contradictory nature of a literary construct as it reflects its social context. We will cover eight novels (none very long), among which are Rebecca Harding Davis's Margaret Howth, Elizabeth Stuart Phelps's Doctor Zay, Mark

# EDUCATION (M.A.)

Twain's *Huckleberry Finn*, Henry James's *The Bostonians*, and Edith Wharton's *The Reef*.

## EN 7315 **American Transcendentalism** (3)

This course defines transcendentalism by exploring its origins and development in 19th and 20th Century American history, culture, and literature. The course should provide an in-depth philosophical approach to American literature, as well as an increased ability to read literature critically. We will study works by the following authors: Emerson, Thoreau, Whitman, Dickinson, Hawthorne, Alcott, James, Cather, Frost, Welty, Stevens, and Percy.

## EN 7316 **History of the American Novel** (3)

As a comprehensive overview of the American novel, this course offers on highly representative novel from each literary period with additional attention to minority fiction. Periods and possible authors are as follows: Neo-Classical (Brockden Brown), Low Romantic (Cooper), Romantic (Melville), Realist (James), Naturalist (Wharton), Modernist (Faulkner), and others.

## EN 7321 **Shakespeare's Major Plays** (3)

The course follows four Shakespeare plays through the centuries, examining how they were treated--or mistreated--during the Restoration, and during the eighteenth and nineteenth centuries. Film versions of the plays will be compared with Shakespeare's text. The course also traces the main lines of Shakespeare criticisms from Ben Johnson to Benard Spivak.

## EN 7331 **Writing Assessment** (3)

This course asks, "What is good writing?" Through holistic grading, portfolio grading, and other types of grading, students learn how to evaluate all types of writing. Both discussion and a final project teach students to derive their own conclusions about good writing through process instead of product. This course also involves multicultural, gender, class, and age issues in writing.

## EN 7334 **Approaches to Teaching Writing & Critical Thinking** (3)

## IR 7320 **Asian Security Issues** (3)

This course examines the politics and economics of current security issues in Asia. Both military and non-military security issues will be discussed. Examples are: collective security organizations, environmental security issues, technological transfers, the arms trade, and immigration/refugee patterns.

## IR 7340 **Middle East Security Issues** (3)

This course examines the politics and economics of current security issues in the Middle East. Both military and non-military security issues will be discussed. Examples are: regional balance of power politics, the role of international agencies, environmental security issues such as water, technological transfers, and immigration/refugee patterns.

## IR 7350 **European Security Issues** (3)

This course examines the politics and economics of current security issues in Europe. Both military and non-military security issues will be discussed. Examples are: the changing role of NATO, a united European defense system, environmental security issues such as water, technological transfers, and immigration/refugee patterns.

# EDUCATION (M.A.)

## IR 7380 **African Security Issues** (3)

This course examines the politics and economics of current security issues in Africa. Military and non-military security issues will be discussed. Examples are: root causes of regional conflict, the international arms trade, environmental security issues, technological transfers, and immigration/refugee patterns.

## IR 8300 **Theories on the Causes of War** (3)

This course examines the current theories on the root causes of war and violent conflict, both civil and international. Causal actors such as ethnicity, race, religion, territory, water, population migration/refugees, arms race/militarism, personality of leaders, etc. are researched.

## IR 8305 **International Conflict Resolution Theory** (3)

This course examines the latest research on how to resolve civil and international conflict. Emphasis is placed on pairing the appropriate conflict resolution theory to various categories of conflict.

## IR 8325 **Business in an Interdependent World (same as BA 8325)** (3)

A survey of the effects that differences in the cultural, economic, legal, political, social, and technological environments of countries have on the way business is conducted throughout the world. Also explored are the effects that regional economic and political arrangements, and international institutions are having on firms involved in business activities that cross national borders. The course concludes with an examination of some of the contemporary issues and challenges confronting U.S. business people at home and overseas as a consequence of the growing globalization of economic activities.

## PO 6300 **Political Science Research Methods (same as PA 6300)** (3)

This course is designed to introduce graduate students to the principles of social science research design and the various statistical techniques used to manipulate social science data. Students will be introduced to various research techniques and methods utilized in all facets of the discipline from behavioral research to public policy analysis.

## PO 6301 **Public Administration and Policy (same as PA 6301)** (3)

A survey of the field of public administration and public policy including politics and the policy process, organization theory, management principles, human resources management, fiscal policy, program design and evaluation, and ethics.

## PO 6305 **American Political Institutions (same as PA 6305)** (3)

A study of the interrelationships between the three branches of government, intergovernmental relations and major trends in state governments.

## PO 6307 **Public and Constitutional Law** (3)

The role of the judiciary in the interpretation and application of constitutional and public law. Problems and issues arising from various legal areas as well as judicial behavior.

## PO 6312 **International Relations Theory** (3)

This course will provide students with an understanding of the diversity of approaches to the study of international relations, along with an appreciation of key concepts and frameworks. Another aim is to identify themes and issues that have enduring importance rather than those which are of the moment.

# EDUCATION (M.A.)

## PO 6315 **United States Foreign Policy** (3)

History of U.S. foreign policy; consistencies and variations. Analysis of the role of vital interests of the United States in the world today.

## PO 6316 **Great Political Thinkers** (3)

An introduction to the schools of thought and methods of analysis that could include normative or empirical theory. An in depth evaluation of the traditions of discourse in political thought to include classical and contemporary political theorists.

## PO 6324 **National Security Policy** (3)

This course will examine the politics and economics of national security issues. Special emphasis will be given to the changing international paradigm (i.e., post Cold War) and the impact on domestic political and economic decision making.

## PO 6352 **U.S. Latino Communities** (3)

Examination of U.S. cities with significant Latino populations, as well as urbanization issues of U.S. - Mexican border.

## PO 6353 **Urban Issues in the Americas** (3)

Comparative examination of phenomenon of organization in Latin America (e.g., Mexico City, Buenos Aires, Sao Paulo, Santiago, etc.).

## PO 6354 **Campaign Management** (3)

This course is designed to give students an overview of the functioning of a political campaign. Topics covered include the creation of a campaign organization, development of a strategic plan, the use of media, fund raising activities, and the organization of field operations. This latter topic includes construction of databases, polling, phone banking and block walling. This is a survey seminar in applied political science.

## PO 6356 **Campaign Finance: Political and Legal Aspects** (3)

Scope includes campaign finance law on the national, state, and local levels; history of growth of money and electoral campaigns; effects of money on American electoral system; research methods in campaign finance sources; campaign finance reform and democratic government.

## PO 6358 **Gender Politics** (3)

This course is designed to provide students an overview of the relationship between gender and politics. Topics include: the role of women in politics, women as candidates, officeholders and voters, gender differences in attitudes and beliefs, and issues that have particular relevance to women, i.e. gender discrimination and equal rights.

## PO 7300 **Directed Readings** (3)

# EDUCATIONAL LEADERSHIP (M.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [at Tyler@stmarytx.edu](mailto:at Tyler@stmarytx.edu)

## Department

Education

## Program Director

Daniel Higgins, Ph.D. [dhiggins@stmarytx.edu](mailto:dhiggins@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted to those with high promise for success in graduate study. Potential may be demonstrated by experience in increasingly responsible positions, previous schooling, GPA, bachelor's degree from an accredited institution, and acceptable test scores on the GRE. Generally, students must provide acceptable test scores at the time of enrollment. If students are otherwise highly qualified, they may take the GRE during their first semester of enrollment with further enrollment contingent upon test results.

## Degree Requirements

### Educational Leadership (36hrs)

Course #	Course Title	Hours
<u>Educational Leadership:</u>		
ED6302	Foundations of Educational Practice	3
ED6304	Human Development and Learning	3
ED6306	Curriculum Theory & Practice	3
ED6311	Applied Educational Research	3
ED6395	Current Topics in Education	3
ED7301	Organizational Behavior & Administration	3
ED7302	Private and Public School Law	3

# EDUCATIONAL LEADERSHIP (M.A.)

Course #	Course Title	Hours
ED7305	School - Community Relations	3
ED7307	Instructional Supervision & Evaluation	3
ED7312	Educational Resource Development	3
ED7315	Effective School Leadership & Resource Management	3
ED7390	Internship in Educational Leadership	3
<b>Total hours</b>		<b>36</b>

## Department Courses and Descriptions

### ED 6302 **Foundations of Educational Practice** (3)

Explores presuppositions of educational efforts via analysis of existence and intentionality and inquiries into cognition and epistemology. Relates basic norms of ethical educational practice to the intellectual, moral, and religious conversions of the educator and learner. Locates the ground of professional practice in the self-transcending intentionality of the existential subject. Relates the commonsense, theoretical, transcendent, and methodological realms of meaning to the practice of formal education. Criteria for interpretation of educational ends and means established through investigation of personal belief systems, goal setting, and self-assessment strategies.

### ED 6304 **Human Development and Learning** (3)

Theory and research related to cognitive development and learning and their importance to the sequencing and structuring of curricula. Classroom management theories and techniques. Understanding and use of social justice, collaborative decision making, team building, and coalition building.

### ED 6306 **Curriculum Theory and Practice** (3)

Strategic planning for curriculum development and improvement to promote life-long learning. Theory and research related to the evaluation of the teaching/learning process, the systemic change process and collaborative instructional planning.

### ED 6311 **Applied Educational Research** (2)

Research designs and methods including gathering, analyzing, disaggregating, and interpreting data. Utilize pupil personnel services and programs to meet the needs of all students. Use of data to facilitate informed decisions for school improvement and maximization of student learning.

### ED 6314 **Understanding Education in a Multicultural Society** (3)

Designed to introduce educators to the major issues, concepts, paradigms, and teaching strategies in multicultural education. It will provide students with a comprehensive overview of multicultural education, a grasp of its complexity, and understanding of what it means for educational practice. Characteristics of a multicultural school and the ways in which knowledge of multicultural education can transform the curriculum to promote the attitudes and skills students need to become effective citizens will be identified and described as well as ways to help students from diverse groups increase their academic achievement.



# EDUCATIONAL LEADERSHIP (M.A.)

## ED 6318 **History and Philosophy of Education** (3)

Development of the educational system with reference to social movements and the educational philosophies of important educators. A critical analysis of the basic characteristics of alternative philosophical families of thought, with their implications and applications in the schools.

## ED 6320 **Early Childhood Language Acquisition** (3)

A study of children's language through recent sociolinguistic research and the implications of this learning on classroom behaviors. A keener knowledge, awareness, and understanding of young children's literacy development is a projected outcome of class.

## ED 6343 **Foundations of Reading** (3)

The reading process in relation to its psychological foundations. This includes principles of learning and reading, personality factors in reading, the perceptual nature of reading, the sensory bases of reading, and intellectual factors relevant to topics such as readiness, motivation, and evaluation in the classroom.

## ED 6344 **Curriculum and Instruction in Reading** (3)

An intensive analysis of reading programs from the standpoint of current instructional and remedial methodologies, including an appraisal of current research literature. The course will require extensive review of the literature including the topics of administration, supervision, and evaluation of remedial reading/reading disabilities programs and techniques. Field experience required.

## ED 6345 **Developmental Reading** (3)

Reading as a process is examined in terms of development of integrated skills. Materials and teaching techniques are considered as to appropriateness of specific teaching approaches for use with students with reading differences and in different stages of reading development. Student will build a repertoire of materials for developing reading skills and procedures for organizing and managing reading instruction.

## ED 6346 **Diagnosis and Correction of Reading Difficulties** (3)

The study of diagnostic instruments and techniques useful in identifying various syndromes, recommended procedures for corrections of reading difficulties, and practice in administering, interpreting, and reporting diagnostic test results. The student will use instruments for hearing screening and vision screening as well as individual diagnostic instruments suitable for use in both the classroom and clinic.

## ED 6347 **Reading: The Exceptional Student** (3)

Theoretical issues confronting educators involved in program development for children and adolescents. Analysis of educational perspectives and instructional implications for the gifted and talented as well as special problem populations.

## ED 6348 **Literature and Reading** (3)

Identification and perception of literary conventions, types and genres of literature, and an appreciation of the role of children's literature in all phases of reading development and in transition of cultural heritage.

## ED 6349 **Literature and Reading for Adolescents** (3)

Identification and perception of literary conventions, types and genres of literature, and an appreciation of

# EDUCATIONAL LEADERSHIP (M.A.)

the role of adolescent literature in intellectual, social, and emotional growth as well as in reading development.

## **ED 6350 Secondary Content Area Reading (3)**

Introduction to reading instruction in various academic subjects. Study of instructional strategies for vocabulary development, for actively involving students in critical thinking activities through questioning and group discussion, and for developing study skills.

## **ED 6351 Reading in the Content Area in the Elementary School (3)**

The study of instructional strategies to develop technical vocabulary, note taking skills, research skills, comprehension and study skills; to actively involve students in critical thinking activities which will improve learning in various academic subjects.

## **ED 6368 Moral and Spiritual Development (3)**

A study of the human response to God in the light of contemporary psychology. The implications for the Catholic school in the various stages of human development, in the process of conversion and commitment, and in the crises of faith; integrating theory and practical techniques for teaching Morals and Values in Catholic education today.

## **ED 6395 Current Topics in Education (3)**

A collection of topics related to critical educational issues of the current educational scene. Case studies of successful school programs as well as local, state, and national initiatives are investigated. Subject matter varies from semester to semester.

## **ED 7301 Organizational Theory and Administration (3)**

Relationship of professional ethics and personal integrity to leadership. Strategies for achieving and maintaining personal health and wellness. Maximizing student achievement through collaborative visioning, strategic planning, risk taking, and decision making. Use of collaborative techniques to identify, assess, analyze, and develop strategies to improve school culture and climate to enhance student learning.

## **ED 7302 Private and Public School Law (3)**

Federal and state laws, regulations, and codes for public and private schools are studied. Emphasis on how law affects the daily operation of the school with respect to personal, finance, individual rights, and student discipline.

## **ED 7305 School-Community Relations (3)**

Political theory and application of political skills to build internal and external support for the campus and district. Strategies for strengthening school/community relations utilizing verbal and non-verbal communication skills in coalition building as well as school/business partnerships (public and private agencies). Communicating effectively with students, parents, staff, community, and media to project positive image. Politics of school governance and board relations.

## **ED 7306 Catholic School Community Relations and Development (3)**

Emphasis on communication skills, political understandings, guidelines, techniques, and practices needed to improve relationships between the Catholic school and the church, the community at large, and the

# EDUCATIONAL LEADERSHIP (M.A.)

legislative and business communities. Design, goals, and strategies for marketing and development of Catholic School.

## ED 7307 **Instructional Supervision and Evaluation** (3)

Effective communication with all constituencies through cooperative planning, organizing, staffing, developing, monitoring, and evaluating to improve systematically the instructional process and learning environment within a multicultural setting.

## ED 7312 **Human Resource Development** (3)

Theories, concepts, and techniques of human resource management to organize and manage a public or private school. Staffing, budgeting, operations, and scheduling are areas of concentration. Techniques in management of resources will be researched and each student will begin to develop his/her own management style.

## ED 7315 **Effective School Leadership** (3)

Capstone Course. Current developments in education on local, regional, state, and national levels. Allocation of human, material, and fiscal resources for optimal student learning including management of school facilities.

## ED 7316 **Issues in Catholic School Leadership** (3)

Capstone Course. Develops the skills and attitudes essential to understand and refine leadership effectiveness in the Catholic School setting. Include examination of institutional management, collaborative visioning, strategic planning, supervision and personal management, school governance structures, and curriculum development.

## ED 7321 **Measurement and Evaluation Methodology** (3)

Review and interpretation of theories of instruction, analysis of teaching behaviors, modification of instructional design and development, execution and evaluation of instruction.

## ED 7359 **Clinical Practice in Reading** (3)

A synthesis and application of theoretical models of diagnosis and remediation through individual laboratory experience with students with reading problems under supervision, prepare case reports, and consult with parents.

## ED 7390 **Internship in Educational Leadership** (3)

Administrator's internship in a public or "recognized" school. The internship provides the opportunity to develop and enhance leadership skills under the supervision of a person holding a Texas Education Agency Certificate with three years experience at the level of assignment. Planning, development, and implementation of an effective instructional system. Use of research findings, time, staff, advanced technologies, community resources, and financial means to maximize student outcomes. Presentations to boards of program preparation personnel and practitioners. Field-based assessments by field and preparation program personnel. Peer assessment.

## ED 7391 **Internship in Catholic School Leadership** (3)

Administrator's internship in a Catholic school. The internship provides the opportunity to develop and enhance leadership skills under the supervision of a person with three years experience at the level of

# EDUCATIONAL LEADERSHIP (M.A.)

assignment. Planning, development, and implementation of an effective instructional system. Use of research findings, time, staff, advanced technologies, community resources, and financial means to maximize student outcomes. Presentations to boards of program preparation personnel and practitioners. Field-based assessments by field and preparation program personnel. Peer assessment.

## ED 8390 **Organizational Behavior** (3)

Comparative analysis of the major bodies of theory and empirical facts generated by the study of individuals and groups within various organizational settings. Special attention to the psychological and sociological variables crucial in interpreting and predicting behavior of individuals and groups within the organizations.

# ELECTRICAL ENGINEERING (M.S.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Winston F. Erevelles, Ph.D. [werevelles@stmarytx.edu](mailto:werevelles@stmarytx.edu)

## Department

Engineering

## Program Director

Djaffer Ibaroudene, Ph.D. [dibaroudene@stmarytx.edu](mailto:dibaroudene@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted to those with high promise for success in graduate study. Applicants demonstrate this potential through previous academic records and testing.

To be considered for admission to the M.S.E.E. program, applicants must:

1. Have a Bachelor of Science (B.S.) degree in electrical engineering, computer engineering or a closely related discipline. Applicants who earned a bachelor's degree in a closely related discipline, such as physics or mathematics, may be admitted with the provision that they take the prerequisite courses listed below. The Graduate Program Director will evaluate applicants from other disciplines on an individual basis.
2. Have a minimum Grade Point Average (GPA) of 3.00 (A = 4.00) for their bachelor's degrees.
3. Have a minimum GRE quantitative score of 600 and a minimum GRE analytical score within the 50th percentile.
4. Applicants who fail to meet any of the above standards may be admitted on a conditional basis. The graduate program director evaluates these cases on an individual basis.
5. Submit the TOEFL scores (international students only) and show a minimum of 213 in the computer-based test or 550 in the paper-based test.
6. Submit a completed application form, a written statement of purpose indicating the applicant's interests and objectives, two letters of recommendation concerning the applicant's potential for succeeding in the graduate program and official transcripts of all college level work.

## Prerequisites

EG 2141 Logic Design Laboratory

# ELECTRICAL ENGINEERING (M.S.)

EG 2152 Circuit Laboratory  
EG 2341 Fundamentals of Logic Design  
EG 2352 Circuit Analysis I  
EG 2353 Circuit Analysis II  
EG 3372 Signals and Systems

## Degree Requirements

### Electrical Engineering (30 hrs)

#### Non-Thesis

Course #	Course Title	Hours
<u>Engineering Courses Required (15hrs):</u>		
EG6308	Random Variables & Stochastic Processes	3
EG6350	Digital Signal Processing I	3
EG6362	Computer Vision & Pattern Recognition	3
EG6365	Automatic Control System (S/G)	3
EG6367	Communication Systems (S/G)	3
<u>Engineering Electives (15hrs):</u>		
EG6301	Statistical Data Analysis	3
EG6311	Wireless Communication	3
EG6312	Data Mining	3
EG6318	Introduction to VSLI	3
EG6328	Software Engineering	3
EG6338	Special Topics	3
EG6345	Digital Control Systems	3
EG6356	Computer Networking	3
EG6357	Computer Controlled Systems	3
EG6358	Stochastic Control Theory	3
EG6359	Optical Communications	3
EG6360	Digital Signal Processing II	3
EG6364	Digital Speech Processing	3
EG6370	Parallel Processing	3

# ELECTRICAL ENGINEERING (M.S.)

Course #	Course Title	Hours
EG6374	Computer Architecture	3
EG6376	Neural Networking	3
EG6378	Microprocessors	3
EG6380	Microcomputer Interfacing	3
EG6386	Engineering Problem Solving	3
EG6388	Data Acquisition, Presentation, & Analysis	3
EG6390	Digital System Design with VHDL	3
EG6392	Network Programming	3
EG6396	Computer Security	3
EG6397	Fault-Tolerant Computing	3
EG7304	Requirements Engineering	3
EG7305	Object-Oriented Analysis, & Design Methodologies	3
EG7306	Total Quality Systems	3
EG7155	Internship	1
EG7255	Internship	2
EG7355	Internship	3
<b>Total hours</b>		<b>30</b>

## Electrical Engineering (30 hrs)

### Thesis

Course #	Course Title	Hours
<u>Engineering Courses Required (15hrs):</u>		
EG6308	Random Variables & Stochastic Processes	3
EG6350	Digital Signal Processing I	3
EG6362	Computer Vision & Pattern Recognition	3
EG6365	Automatic Control System (S/G)	3
EG6367	Communication Systems (S/G)	3
<u>Engineering Electives (12hrs):</u>		
EG6301	Statistical Data Analysis	3
EG6311	Wireless Communication	3

# ELECTRICAL ENGINEERING (M.S.)

Course #	Course Title	Hours
EG6312	Data Mining	3
EG6318	Introduction to VSLI	3
EG6328	Software Engineering	3
EG6338	Special Topics	3
EG6345	Digital Control Systems	3
EG6356	Computer Networking	3
EG6357	Computer Controlled Systems	3
EG6358	Stochastic Control Theory	3
EG6359	Optical Communications	3
EG6360	Digital Signal Processing II	3
EG6364	Digital Speech Processing	3
EG6370	Parallel Processing	3
EG6374	Computer Architecture	3
EG6376	Neural Networking	3
EG6378	Microprocessors	3
EG6380	Microcomputer Interfacing	3
EG6386	Engineering Problem Solving	3
EG6388	Data Acquisition, Presentation, & Analysis	3
EG6390	Digital System Design with VHDL	3
EG6392	Network Programming	3
EG6396	Computer Security	3
EG6397	Fault-Tolerant Computing	3
EG7304	Requirements Engineering	3
EG7305	Object-Oriented Analysis, & Design Methodologies	3
EG7306	Total Quality Systems	3
EG7155	Internship	1
EG7255	Internship	2
EG7355	Internship	3
<u>Thesis required (3hrs):</u>		



# ELECTRICAL ENGINEERING (M.S.)

Course #	Course Title	Hours
EG6339	Thesis Direction	3
<b>Total hours</b>		<b>30</b>

## Department Courses and Descriptions

### EG 6308 **Random Variables and Stochastic Processes** (3)

Introduction to the underlying theory of stochastic processes. Topics include: Random sequences and convergence; autocorrelation, autocovariance, stationarity, ergodicity; stochastic calculus (continuity, differentiability, integrability); Poisson process; white-noise process; Gaussian process; random walk, Brownian motion, Wiener process; Markov chains; Markov processes; linear systems driven by random inputs.

### EG 6350 **Digital Signal Processing I (S/G)** (3)

Discrete time signals & systems, z-transform, discrete fourier transform, flow graph and matrix representation of digital filters, digital filter design techniques and computation of the discrete fourier transform (FFT).

### EG 6362 **Computer Vision and Pattern Recognition** (3)

Digital image characterization, image transforms, image enhancement, image restoration, image encoding, image analysis, applications of digital image processing to robotics. Prerequisite: EG 6350.

### EG 6365 **Automatic Control Systems (S/G)** (3)

This course introduces students to the theory and practice of control systems engineering. The topics include basic concepts and mathematical foundations for analysis and design of continuous control systems, transfer function techniques and state- variable analysis, frequency and time domain design and analysis of control systems.

### EG 6367 **Communication Systems (S/G)** (3)

Introductory information theory, frequency response of linear systems, analog-to-digital conversion, time multiplexing of signals, Pulse Amplitude Modulation (PAM), Pulse Code Modulation (PCM), quantization noise, Amplitude Modulation (AM) and Frequency

### EG 6301 **Statistical Data Analysis** (3)

An applied approach to statistical inference in engineering and scientific work. Tests of hypothesis, regression analysis, analysis of variance and experimental design.

### EG 6311 **Wireless Communications** (3)

This course addresses wireless communications in four parts. The first part addresses wireless systems with an overview of wireless channels, propagation characteristics, wireless system architecture and elements. The second part reviews wireless communications techniques, including modulation, diversity and combining, and multiple access. The third part introduces analysis and simulation methods and procedures for system performance evaluation. The fourth part presents various wireless communications systems and applications. Topics include: Introduction to Wireless Communications; The Cellular

# ELECTRICAL ENGINEERING (M.S.)

Concept; Wireless Channel Environment; Statistical Communications Theory; Path Loss Prediction; Received-Signal; Envelope and Phase Characteristics; Modulation Techniques; Diversity and Combining Technique; Multiple-Access Schemes; System Performance Evaluation; Wireless Systems and Applications.

## EG 6312 **Data Mining** (3)

Recent advances in database technology along with the phenomenal growth of the Internet have resulted in an explosion of data collected, stored, and disseminated by various organizations. Because of its massive size, it is difficult for analysts to sift through the data even though it may contain useful information. Data mining holds great promise to address this problem by providing efficient techniques to uncover useful information hidden in the large data repositories. The key objectives of this course are two-fold: (1) to teach the fundamental concepts of data mining and (2) to provide extensive hands-on experience in applying the concepts to real-world applications. The core topics to be covered in this course include classification, clustering, association analysis, and anomaly/novelty detection. Students will develop and/or apply data mining techniques to applications such as network intrusion detection, Web traffic analysis, business/financial data analysis, text mining, bioinformatics, Earth Science, and other scientific and engineering areas.

## EG 6318 **Introduction to VLSI Design** (3)

This course provides an introduction to VLSI (very large scale integrated) systems, and presents the concepts and techniques for the design and fabrication of VLSI integrated circuits. Topics include: basic semiconductor theory; p-n junctions; MOS transistors; integrated circuit fabrication technology; VLSI layout; digital MOS circuit design; memory and processor design; and testing of VLSI circuits.

## EG 6328 **Software Engineering** (3)

This course surveys the entire software engineering field. It presents the management and technical aspects of the software development process. Software architectures, paradigms, and life-cycles are briefly discussed and compared. It covers topics in software management, problem specification and analysis, system design techniques, documentation, system testing and performance evaluation, and system maintenance. The technical aspects include software requirement analysis, design methodologies, system implementation, and testing techniques. Software verification and validation, quality assurance, and configuration management are also introduced.

## EG 6338 **Special Topics** (3)

## EG 6339 **Thesis Direction** (3)

The thesis is a culminating experience which provides a record of a student's achievement in the program. The thesis requires research leading to the discovery or new knowledge or enhancement of existing knowledge in the field of interest. A project that helps solve a practical problem may also be acceptable. The thesis is a complete documentation of the research study, including the theoretical background, description of the problem, the method used to investigate or solve the problem, presentation of results, interpretation of results, and explanation of the significance of the results.

## EG 6345 **Digital Control Systems** (3)

Analysis and design of discrete-time linear systems, sampling and reconstruction, open-loop and closed-

# ELECTRICAL ENGINEERING (M.S.)

loop discrete-time systems, system time-response characteristics, stability analysis techniques, digital controller design, pole-assignment design and state estimation. Prerequisite: EG 6365.

## EG 6356 **Computer Networking (Protocols, Modeling and Analysis)** (3)

Networks types, layered communication architectures, data link layer, network layer, transport layer, polling and random access in data network, local area network, introduction to circuit switching, call processing in digital circuit switching systems, the evolution toward integrated networks.

## EG 6357 **Computer-Controlled Systems** (3)

Control theory relevant to analysis and design of computer-controlled systems, computer control, computer-oriented mathematical models, process-oriented models, disturbance models, design of digital controllers, state-space design method, pole placement design based on input-output models, optimal design methods, identification, adaptive control and implementation of digital controllers. Prerequisite: EG 6345.

## EG 6358 **Stochastic Control Theory** (3)

Analysis and synthesis of dynamic systems, stochastic processes, stochastic state models, parameter optimization, minimal variance control strategies, prediction and filtering theory, linear stochastic control theory. Emphasis is given to discrete-time systems.

## EG 6359 **Optical Communications** (3)

Study of wave propagation in single mode and multimode optical fibers, light emitting diodes and laser diodes, detectors, and communication networking. Students should have a reasonable background in Electromagnetic field theory and solid state devices.

## EG 6360 **Digital Signal Processing II** (3)

Finite world length effects in digital filters, discrete orthogonal transforms such as Walsh-Hadamard, Haar, slant and discrete cosine, power spectrum estimation and digital signal processing applications. Prerequisite: EG 6350.

## EG 6364 **Digital Speech Processing** (3)

Fundamentals of digital speech processing, digital models for the speech signal, time domain models for speech processing, digital representation of the speech wave form, short-time fourier analysis, linear predictive coding of speech. Prerequisite: EG 6350.

## EG 6370 **Parallel Processing** (3)

Topics in parallel architectures, including systolic architectures, wave front arrays, interconnection networks, reconfigurable architecture. Design of algorithms for use on highly parallel machines. Application to artificial intelligence.

## EG 6374 **Computer Architecture** (3)

Overview of basic concepts. Memory systems design, semiconductor memories, cache memory, and virtual memory. Pipeline design techniques and memory structure in pipeline computers. Design constraints for high-performance machines. Vector computers, multiprocessors, and algorithms. Prerequisite: Consent of instructor.

# ELECTRICAL ENGINEERING (M.S.)

## EG 6376 **Neural Networks** (3)

Neuron model and network architecture; Heb net; perception learning rule; ADALINE and MADALINE architectures and algorithms; back propagation algorithm; pattern classification; pattern association competitive neural networks. Prerequisite: Consent of instructor.

## EG 6378 **Microprocessors** (3)

Overview of number systems, codes and digital devices. An introduction to microcomputers and microprocessors. Assembly language programming. A survey of a number of microprocessor families. Microcomputer structure, bus structure, bus protocols, and system expansion.

## EG 6380 **Microcomputer Interfacing** (3)

Programming parallel ports and Input/Output. Interfacing a microcomputer to keyboards, to alphanumeric displays, and interfacing microcomputer parts to high-power devices. Review of operational amplifiers and circuits, sensors, and transducers. D/A converter operation and interfacing, A/D converter operations and interfacing. Prerequisite: EG 6378.

## EG 6386 **Engineering Problem Solving** (3)

This course covers elementary applied mathematics, basic numerical methods, and problem solving methodology. MATLAB and its associated Toolboxes are used for computations. Topics include introduction to problem solving, introduction to MATLAB, scalar, and array computation, control flow, matrix computation, plotting capabilities, solution to systems of linear equations, interpolation and curve fitting, polynomial analysis, numerical integration and differentiation, ordinary differential equations, matrix decomposition and factorization.

## EG 6388 **Data Acquisition, Presentation, and Analysis** (3)

Principles, methods, and applications of data acquisitions, presentation, and analysis. Topics covered include methods of analog-to-digital conversion, the Nyquist criteria and aliasing errors, signal processing, the use of analog and digital filters, system identification, frequency-spectral estimation, techniques for clear and concise presentation of data, and error analysis of computational results. Hands-on experiments and applications will be emphasized. Lab VIEW software and the associated hardware will be used. Oral and written presentations of application projects will be required of each student.

## EG 6390 **Digital Systems Design Using VHDL** (3)

Brief review of combinational and sequential circuit design principles; VHDL basic language organization; structural modeling in VHDL; data flow modeling in VHDL; VHDL technology information; describing synchronous behavior in VHDL; algorithmic modeling in VHDL. Prerequisite: undergraduate logic design course.

## EG 6392 **Network Programming** (3)

Introduction to networks; Client-server model and software design; concurrent processing in client-server software; program interface to protocols; socket interface; algorithms and issues in client-server software design; connectionless servers (UDP); connection-oriented servers (TCP); client-server concurrencies; application level gateways; remote procedure calls (RPC). Prerequisites: EG 6356 and working knowledge of C programming language.

## EG 6396 **Computer Security** (3)

# ELECTRICAL ENGINEERING (M.S.)

This course covers the theory and practice of computer security, focusing in particular on the security aspects of the web and internet. It surveys cryptographic tools used to provide security, such as shared key encryption, public key encryption, key exchange, and digital signature. It then reviews how these tools are utilized in the Internet protocols and applications such as SSL, PGP, S/MIME, and others. System security issues, such as viruses, intrusion, firewalls, and other will also be covered.

## EG 6397 **Fault Tolerant Computing** (3)

This course covers the theory and practice of fault tolerant systems, focusing in particular on techniques for achieving high reliability in computational systems with software, hardware, and networking components. Approaches for testing, fault handling and assessing reliability will be examined. It discusses reliability measures, error detection and correcting codes, fault-tolerant networks, redundant disks (RAID), software fault-tolerance, case studies of fault-tolerant systems, and others.

## EG 7155 **Internship** (1)

An experimental approach to advanced engineering topics through work in a company or organization. Industry/University cooperation is required. Topics vary depending on the needs of the sponsoring company or organization and the academic needs of the student. Students may start an internship projects anytime after enrolling in any Engineering program. A minimum of three credit hours is required. Credit hours may be completed in increments of 1, 2, or 3 credit hours per semester. Prerequisite: Consent of the Graduate Program Director.

## EG 7255 **Internship** (2)

An experimental approach to advanced engineering topics through work in a company or organization. Industry/University cooperation is required. Topics vary depending on the needs of the sponsoring company or organization and the academic needs of the student. Students may start an internship projects anytime after enrolling in any Engineering program. A minimum of three credit hours is required. Credit hours may be completed in increments of 1, 2, or 3 credit hours per semester. Prerequisite: Consent of the Graduate Program Director.

## EG 7355 **Internship** (3)

An experimental approach to advanced engineering topics through work in a company or organization. Industry/University cooperation is required. Topics vary depending on the needs of the sponsoring company or organization and the academic needs of the student. Students may start an internship projects anytime after enrolling in any Engineering program. A minimum of three credit hours is required. Credit hours may be completed in increments of 1, 2, or 3 credit hours per semester. Prerequisite: Consent of the Graduate Program Director.

## EG 7306 **Total Quality Systems** (3)

Total quality management philosophy, with emphasis on statistical quality strategies. Statistical process control; supplier certification; benchmarking; simultaneous engineering; re-engineering; quality teams; quality audits; Kaizen; quality function deployment, Malcolm Baldrige National Quality Award guidelines. Prerequisite: Consent of Instructor

# ENGINEERING SYSTEMS MANAGEMENT (M.S.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Winston F. Erevelles, Ph.D. [werevelles@stmarytx.edu](mailto:werevelles@stmarytx.edu)

## Department

Engineering

## Program Director

Rafael Moras, Ph.D., P.E. [rmoras@stmarytx.edu](mailto:rmoras@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted only to those with high promise for success in graduate study. Applicants demonstrate this potential through previous academic records and testing. To be considered for admission to the MS Engineering Systems Management program, an applicant must fulfill the following:

1. Have a Bachelor of Science (B.S.) degree in engineering, or related areas such as the physical sciences or mathematics. Students with a degree in other disciplines may be admitted on a contingency basis provided they complete a set of prerequisites dictated by the Graduate Program Director.
2. Have a minimum grade point average (GPA) of 3.00 (A=4.00) in their BS degree. (Applicants who fail to meet the standard may be admitted on a conditional basis. The graduate programs director evaluates these cases on an individual basis.)
3. Submit GRE scores.
4. International students must submit minimum TOEFL scores of 80 on the Internet-based test or its equivalent on other forms of the test. Alternatively, they must score at least 6.0 on the IELTS test. Students who score 6.0 on the IELTS exam or 80-82 on the internet based TOEFL will be required to enroll in EN6301 Academic Writing for International Students during the first semester of attendance.
5. Submit a completed application form, a written statement of purpose indicating the applicant's interests and objectives, two letters of recommendation, and official transcripts of all college level work.

## Degree Requirements

### Engineering Systems Management (30hrs)

# ENGINEERING SYSTEMS MANAGEMENT (M.S.)

## Project Option

Course #	Course Title	Hours
EG6303	Lean production	3
EG7306	Six Sigma Quality	3
EG6341	Supply Chain Management	3
Financial Management Elective (choose three hours from: EG6305 Engineering Economic Analysis/Decision Making, EG7350 Financial Aspects of Supply Chains, EG 7354 Engr. Cost Analysis)		
EG7351	Systems Engineering	3
EG8300	Engineering Systems Management	3
EG/BA 7353	Project Management	3
EG7356	Engineering Leadership and Ethics	3
ESM elective (EG 7155, 7255, 7355 Internship or an ESM or BA course, with Program Director approval)		
EG/PS 6309	Human Factors and Ergonomics	3
EG8396	Capstone project	3
<b>Total hours</b>		<b>36</b>

## Engineering Systems Management (30hrs)

### Thesis Option

Course #	Course Title	Hours
<b><u>Required: 30 hours.</u></b>		
EG6303	Lean Production*	3
EG7306	Six Sigma Quality*	3
EG6341	Supply Chain Management*	3
EG7351	Systems Engineering	3
EG8300	Engineering Systems Management	3
EG/BA 7353	Project Management	3
Elective: EG7155, 7255, 7355	Internship or EG7356 Engineering Management Leadership and Ethics	3

# ENGINEERING SYSTEMS MANAGEMENT (M.S.)

Course #	Course Title	Hours
Financial Management Elective: (EG6305 Engineering Economic Analysis/Decision Making, EG7350 Financial Aspects of Supply Chains, EG6338 Topics: Financial Aspects of Engineering Projects, EG6338 Topics: Engineering Cost Accounting)		
EG8390	Thesis I	3
EG8391	Thesis II	3
<b>Total hours</b>		<b>30</b>

## Department Courses and Descriptions

### BA 7311 **Managing Business Projects or EG 7353 Project Management** (3)

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 insights and techniques required. Issues such as the selection and management of the project team, project initiation, implementation and termination are addressed. This course is cross-listed with BA 7353. Students who have previously received credit for BA 7311 may not enroll in this course.

### EC 6381 **Cost Benefit Analysis** (3)

This course studies the theory and the application of cost benefit analysis to the evaluation of investment projects.

### EC 6382 **Corporate Economics** (3)

A study of the economic decisions faced by the modern corporation and Chief Financial Officer, this course covers topics such as working capital management, financing, cost of capital, dividend policy, and risk management. Practical application is emphasized.

### EG 6303 **Lean Production Systems** (3)

This course covers forecasting, inventory planning and control, aggregate planning, deterministic and stochastic inventory models, master scheduling, just-in-time and lean, theory of constraints, sequencing and scheduling, and assembly line balancing.

### EG 6338 **Lean Supply Chain Management** (3)

Supply chain systems. Lean. Logistics.

### EG 6354 **Computer Sys. Management or BA 7325 Management of Information Technology** (3)

This course examines a broad range of topics in the management of technology, information systems and organizational issues in exploiting new technology. The course explores concepts of applying computer information systems and communications technology to provide an effective frame work for managing competitiveness in an environment of rapid global change. Managing R&D, systems acquisition, decision-making, and links to other functional areas in the corporation are emphasized.

### EG 7306 **Six Sigma Quality** (3)

This course provides the student with (1) an awareness of the history and evolution of the Quality



# ENGINEERING SYSTEMS MANAGEMENT (M.S.)

Management philosophy and its principles and methodologies, (2) a thorough knowledge of the quality design and planning process, (3) the ability to deploy basic and advanced quality methods and functions in various organizational settings, and (4) the skills to analyze and develop strategies using relevant case studies and ways to transition organizations to the quality.

## EG 7351 **Systems Engineering** (3)

This course deals with systems analysis, engineering economics, and systems engineering and their impact on decision making.

## EG 8300 **Engineering Systems Management** (3)

This is a comprehensive course for the Engineering Systems Management graduate program. It incorporates case studies to permit integration of the functional areas studied in the program and engineering ethics. Class activities typically focus on practical applications of engineering systems management (systems of systems) concepts.

## PS 6309 **Human Factors and Ergonomics** (3)

This course is a comprehensive and practical review of basic concepts in the integration of the human component into the design, development and evaluation of man-machine systems and sub-systems. It emphasizes the data and practices of human engineering (same as EG 6309).

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [atyler@stmarytx.edu](mailto:atyler@stmarytx.edu)

## Department

English

## Program Director

Gwen Diaz, Ph.D. [gdiaz@stmarytx.edu](mailto:gdiaz@stmarytx.edu)

## Program Specific Admission Requirements

Generally, admission is granted to those with high promise for success in graduate study. Potential may be demonstrated by experience in increasingly responsible positions, previous schooling, and test scores on the Graduate Record Exam (GRE) recorded within the past five years.

A minimum GPA of 3.0 is acceptable, with special consideration given to course work in English.

Generally, the student is expected to score within the top 35% of the verbal section and the top 35% of the analytical section of the GRE as reported for the year in which it is taken.

Students otherwise highly qualified, they may take the GRE during their first semester of enrollment, with further enrollment contingent upon receipt of test scores.

## Degree Requirements

### English Literature (36hrs)

### English Literature and Language Non-Thesis

Course #	Course Title	Hours
<u>Required (9hrs):</u>		
EN7301	Contemporary Literary Criticism	3
EN7311	Comparative Literature: Modern & Postmodern	3
EN7380	Research Project	3

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

Course #	Course Title	Hours
<u>Required (3hrs):</u>		
EN7312	Literature of the Renaissance	3
EN7321	Shakespeare's Major Plays	3
<u>Electives (24hrs):</u>		
EN7302	Myth & Psyche in 20th Century Literature	3
EN7303	Critical Approaches to the Short Story	3
EN7309	Seminar in Medieval Literature	3
EN7312	Literature of the Renaissance	3
EN7313	Realism & Naturalism in the American Novel	3
EN7314	International Literature	3
EN7315	American Romanticism	3
EN7316	History of the American Novel	3
EN7317	The American Novel: Multicultural Literature	3
EN7318	Nineteenth Century British Literature	3
EN7322	T.S. Elliot, Emily Dickenson, & Walt Whitman	3
EN7323	Faulkner & Hemingway	3
EN7324	D.H. Lawrence & Virginia Woolf	3
EN7332	Persuasive Writing	3
EN7333	Contemporary Rhetorical Theory	3
EN7334	Approaches to Teaching Writing/Critical Thinking	3
EN7335	History of the English Language	3
EN7341	Analysis & Criticism of Television & Film	3
EN7342	Approaches to Teaching Literature	3
EN7343	Linguistics: Voice and Text	3
EN7351	Fiction: The Creative Process	3
EN7352	Poetry: The Creative Process	3
EN7353	Writing for Publication	3
EN7362	Peace & Violence in Literature	3
EN7170	Directed Readings*	1

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

Course #	Course Title	Hours
EN7270	Directed Readings*	2
EN7370	Special Studies in Literature & Language	3
EN7396	English Internship	
*Requires Program Director Approval		
<b>Total hours</b>		<b>36</b>

## English Literature (36hrs)

### English Literature and Language Thesis

Course #	Course Title	Hours
<u>Required (15hrs):</u>		
EN7301	Contemporary Literary Criticism	3
EN7311	Comparative Literature: Modern & Postmodern	3
EN7312	Literature of the Renaissance <b>OR</b>	3
EN7321	Shakespeare's Major Plays	3
EN7390	Thesis Research	3
EN7391	Thesis	3
<u>Electives (21hrs):</u>		
EN7302	Myth & Psyche in 20th Century Literature	3
EN7303	Critical Approaches to the Short Story	3
EN7309	Seminar in Medieval Literature	3
EN7312	Literature of the Renaissance	3
EN7313	Realism & Naturalism in the American Novel	3
EN7314	International Literature	3
EN7315	American Romanticism	3
EN7316	History of the American Novel	3
EN7317	American Novel: Multicultural Literature	3
EN7318	Nineteenth Century British Literature	3
EN7322	T.S. Elliot, Emily Dickenson, & Walt Whitman	3
EN7323	Faulkner & Hemingway	3
EN7324	D.H. Lawrence & Virginia Woolf	3

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

Course #	Course Title	Hours
EN7332	Persuasive Writing	3
EN7333	Contemporary Rhetorical Theory	3
EN7334	Approaches to Teaching Writing/Critical Thinking	3
EN7335	History of the English Language	3
EN7341	Analysis & Criticism of Television & Film	3
EN7342	Approaches to Teaching Literature	3
EN7343	Linguistics: Voice and Text	3
EN7351	Fiction: The Creative Process	3
EN7352	Poetry: The Creative Process	3
EN7353	Writing for Publication	3
EN7362	Peace & Violence in Literature	3
EN7170	Directed Readings*	1
EN7270	Directed Readings*	2
EN7370	Special Studies in Literature & Language	3
EN7396	English Internship	
*Requires Program Director Approval		
<b>Total hours</b>		<b>36</b>

## Department Courses and Descriptions

### EN 3341G **Teaching of Composition (W)** (3)

Focuses on rhetoric as both theory and practice, studying the history of rhetorical theory from Aristotle to the present, researching recent composing processes and methods for facilitating and developing student writing in today's culturally diverse classroom. (formerly EN 4380)

### EN 3381G **Modern Short Story (W)** (3)

Cross-cultural reading of the modern short story; historical development of the genre; theory and practice of short story criticism. (formerly EN 4374)

### EN 3383G **Twentieth Century Novel (W)** (3)

A study of novels written throughout the Twentieth Century focusing on genres, themes and stylistic concerns particular to the Twentieth Century novel. Authors likely to be included are Samuel Beckett, James Joyce, Virginia Woolf, Lawrence Durrell, Zora Neale Hurston, Margaret Atwood, and Joyce Carol Oates. (formerly EN 3327)

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

## EN 3386G **Masterpieces of Drama (W)** (3)

Study the greatest plays of the western world. Emphasis on the genre, and the dramatization of issues and values in cultural contexts. Aeschulus, Sophocles, Euripides, Aristophanes, Shakespeare, Jonson, Moliere, Wycherley, Racine, Ibsen, Strindberg, Chekhov, and modern dramatists. Emphasis on specific genres developed by writers. (formerly EN 3382)

## EN 4310G **American Romanticism: Origins and Development (W)** (3)

A consideration of the origins and development of American Romanticism in literature. The study begins with romantic origins in American Puritanism; considers its flowering during the rise of American Transcendentalism; examines its on-going influence in modern and contemporary American writers. It considers the writings of authors such as: Poe, Emerson, Thoreau, Dickinson, Whitman, Hawthorne, Cather, Frost, Stevens, Walker Percy. (formerly EN 3371)

## EN 4312G **American Realism (W)** (3)

The course will probe how the novel as genre in the Age of Realism (Civil War to First World War) expresses the class, racial, and gender tensions of the times. Typical authors read include Twain, James, Howells, Wharton, Jewett, Dreiser. (formerly EN 4378)

## EN 4321G **Southern Experience in Fiction (W)** (3)

A consideration of the raise of U.S. Southern fiction, examining the historical, cultural, and philosophical forces which gave rise to this literature through the study of the South's function and criticism. Authors will include: Cable, Chopin, Faulkner, O'Connor, Warren, Welty, Gordon, Petry, Wright, Gaines, Porter. (formerly EN 4362)

## EN 4331G **American Literature Since 1950 (W)** (3)

As America as a nation came to maturity and American writers developed into significant literary figures after the Second World War, so too, this period embraces a new chorus of feminine and minority voices. It coincides with America's reluctant assumption of the role of world power and adds significantly to an understanding of ourselves as a diverse people with a distinct culture within the world community. (formerly EN 4353)

## EN 4351G **Medieval English Literature (W)** (3)

The correlation of cultural meaning and literary excellence in the medieval world view manifested in the English mystery cycles, the Pearl Poet, Chaucer, and the alliterative Morte Arthur. (formerly EN 3352)

## EN 4361G **Renaissance Literature (W)** (3)

Critical study of selected readings in British prose, poetry, and drama from 1500 to 1600. (formerly EN 3353)

## EN 4365G **Shakespeare Studies I (W)** (3)

Taming of the Shrew, Richard II, Henry IV, Much Ado About Nothing, Twelfth Night, Julius Caesar, Troilus and Cressida, Othello, Lear, Tempest. (formerly EN 4372)

## EN 4366G **Shakespeare Studies II (W)** (3)

Richard III, Romeo and Juliet, Midsummer Night's Dream, Merchant of Venice, As You Like It, Measure for Measure, Hamlet, Macbeth, Anthony and Cleopatra. (EN 4365 not a prerequisite) (formerly EN 4373)

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

## EN 4371G **Eighteenth Century British Literature (W)** (3)

A critical study of selected readings in prose and poetry from 1660 to 1780. (formerly EN 3356)

## EN 4375G **The Beginnings of the British Novel (W)** (3)

Correlation of story, narrative voice, and cultural movement from Daniel Defoe to Maria Edgeworth. Interaction between theme and narrative voice with the economic and political events of the 18th Century. Evolution of narrative voice to ideological stance and literary self-consciousness. (formerly EN 3325)

## EN 4381G **Nineteenth Century British Literature (W)** (3)

This course will cover the poetry and prose of the Romantic and Victorian periods. The course will consider the influence of historical, social, political, and philosophical thought on the literature and the effect of ideas developed during this time on contemporary thinking. (formerly EN 3358 or 3360)

## EN 4385G **Nineteenth Century British Novel (W)** (3)

This course studies the different forms of the novel in the Nineteenth Century and the social and cultural reasons for their emergence. Authors whose works may be included are: Emily and Charlotte Bronte, Jane Austin, Charles Dickens, Conan Doyle, and Mary Shelley. (formerly EN 3326)

## EN 4390G **American**; EN 4391G **British**; EN 5300G **International Love in Literature and Life (W)** (3)

Romantic love imaged in literature as a means of self-transcendence in and through the life cycle, gender differences, and personal quest.

## EN 4392G **American**; EN 4393G **British**; EN 5301G **International The Self (W)** (3)

The Self in Literature Psychological constructs of self as paradigms to examine fictional selves who project an imaginative world that mirrors and structures daily life.

## EN 4394G **American**; EN 4395G **British**; EN 5302G **International Hero and Anti-Hero (W)** (3)

From the epic hero to the anti-hero and postmodern hero in literature.

## EN 4396G **American**; EN 4397 **British**; EN 5303 **International Literature (formerly EN 3365) and Modernism (W)** (3)

Modernism as a concept; its beginnings as a major aesthetic and philosophical revolt, and its evolution as it is reflected in the literary works.

## EN 5320G **History of the Novel (W)** (3)

This international course will trace the development of the novel as a form, beginning with the earliest versions, the picaresque, such as Cervantes' *Don Quixote*, moving to courtly narratives, such as Madame de Lafayette's *The Princess de Cleves*, moving to the social canvasses of 18th Century England, such as Fielding's *Tom Jones*, then on to the high 19th Century realism of Russia, such as Tolstoy's *Anna Karenina*, then finally to the great modernist novels of the early 20th century, such as Proust's *Remembrance of Things Past*.

## EN 5325G **Classic Literature of the Western World (W)** (3)

Designed to familiarize the student with the classic works of the Western World from Dante to Moliere,

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

to more recent authors such as Sartre and Simone de Beauvoir. Works selected represent the various literary movements of the Western World. (formerly EN 3342)

## EN 5326G **Literature of American Minority Groups (W) (3)**

A consideration of significant poetry and fiction by authors from three American minority groups; Afro-American, Mexican-American, Native American Indian. It examines the historical, cultural, and philosophical aspects of these groups through a study of their literature and criticism. It includes works by writers such as the following: Langston Hughes, Alice Walker, Ernest Gaines, Rudolfo Anaya, Roberta Fernandez, Leslie Silko, N. Scott Momaday. (formerly EN 3341)

## EN 5328G **Mexican and other Latin American Literature (W) (3)**

20th Century Latin American Literature focusing mainly on Mexican literature from the revolution to the present (Fuentes/Paz). It also incorporates Nobel and award-winning authors of other Latin American cultures (Neruda, Bombal, Valenzuela).

## EN 5330G **Women Authors (W) (3)**

Cross-cultural reading of the works of women authors; study of the development of a woman's tradition in literature, with emphasis on the themes, genre, and writing styles created by 20th Century female authors. (formerly EN 4342)

## EN 5333G **U.S. Latino Literature (W) (3)**

The course explores the contemporary Hispanic-American authors of Mexican-American background particularly, and also of Cuban-American and Puerto Rican-American backgrounds. A variety of literature including novels, short stories, and poetry will be read and analyzed. Through the works, issues of culture, ethnicity, assimilation, and heritage will be discussed. Among authors to read are Sandra Cisneros, Rudolfo Anaya, Rosario Ferre, Oscar Hijuelos, Rolando Hinojosa-Smith, and Ana Castillo.

## EN 5335G **Catholic Authors (W) (3)**

The focus of this course is on the cultural, philosophical, historical, and religious vision of a selection of major catholic authors from early writers such as Dante and Sor Juana Ines. to writers of the present time, such as Shusaku Endo, Flannery O'Connor, Walker Percy.

## EN 5340G **Literature of Peace and War (W) (3)**

A consideration of selected International Literature, from ancient Greece to the present, which expresses the concepts of peace and war, violence and non- violence. Emphasis is given to the philosophical and psychological concepts of conflict resolution - personal, historical, and cultural - as they are expressed in literature. It includes poetry, fiction, and film from ancient Greece, Germany, England, Japan, the United States, and other nations. (formerly EN 4393)

## EN 5342G **The Romance Throughout History (W) (3)**

The lover as created in the dialogue of the subjective and social. From the foundations of the traditional in the Late Greek pastoral tradition and the medieval French and German romances through the English Renaissance to the postmodern romance.

## EN 5348G, EN 5349G **Topics in International Literature (W) (3)**

With International Literature as its focus, this course may develop a cross- cultural theme common to



# ENGLISH LITERATURE AND LANGUAGE (M.A.)

various nations, such as: the world's struggle, marriage and the family, religion and politics, philosophy, and culture. Or the course may concentrate on one nation or region to study its culture, history, philosophy, and religion as portrayed through its literature.

## EN 6300 **Introduction to Academic Writing for International Students** (3)

The course would enable graduate students to increase their written and reading fluency in English. The emphasis in this course is on understanding the structure of a paragraph, the function of a topic sentence, the use of supporting details and how to give sources credit, the use of transitional expressions, and academic grammar usage leading toward the composition of an essay to meet American academic standards.

## EN 6301 **Academic Writing for International Students** (3)

The course would enable graduate students to read and respond to academic texts written in English by evaluating and responding to texts ranging from narratives to essays and becoming familiar with the wide range of rhetorical options available—narration, classification, and argument. The course is structured so that students have the opportunity to interact with texts while working with grammatical structures and new vocabulary. The conventions of a research paper differ from country to country and ESL graduate students will learn American academic requirements about how incorporate original thought, critical analysis, citation of academic texts, and synthesis of a topic as well as become familiar with standards of academic honesty in written work.

## EN 7301 **Contemporary Literary Criticism** (3)

This course offers a background in current literary criticism including approaches such as: Psychoanalytical, Feminist, Postmodern, and Postcolonial. Students are introduced to key thinkers in each school of criticism. These critical approaches are applied to a selection of contemporary masterpieces, such as, Proust, Poe, Kafka, Fuentes, Hawthorne, and Borges.

## EN 7302 **Myth and Psyche in 20th Century Literature** (3)

This course focuses on myth as a source of knowledge of the human psyche and rests theoretically on the findings of Sigmund Freud, Carl Jung, and Jacques Lacan, who provide through myth a wealth of knowledge about human values, fears, and obsessions. The works of literature to be analyzed are 20th century classics by writers such as Kafka, Sartre, Garcia-Marquez, and Lessing.

## EN 7303 **Critical Approaches to the Short Story** (3)

The course will be divided between the "classic stories by classic writers" and the contemporary stories that are revitalizing the short story form in America and throughout world literature. The course will benefit writers and teachers, as well as all those who wish to understand how the short story has emerged as a major form of literary expression in our age.

## EN 7309 **Seminar in Medieval Literature** (3)

This course introduces students to major works from Old and Middle English literature, such as Beowulf, "Dream of the Rood", The Canterbury Tales, and various fictions of the Grail including "Sir Gawain and the Green Knight" and Le Morte d'Arthur.

## EN 7311 **Comparative Literature: Modern and Postmodern** (3)

By concentrating on the fascinating phenomenon of postmodernism, this course develops a thorough

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

perspective of contemporary literature from modernity to recent days. It also sharpens analytical skills through the study of critical theories that define the Postmodern. Works will range from Kafka and T.S. Eliot to Jorge Luis Borges, Julio Cortazar, Marguerite Duras, Margaret Atwood, and Thomas Pynchon.

## EN 7312 **Literature of the Renaissance** (3)

This course is designed to provide graduate students with a detailed survey of non-dramatic poetry and prose of the early Tudor and Elizabethan periods. The course will examine selected texts from an historical perspective with special emphasis on the development of literary genres during the sixteenth century. Political, philosophical and social issues of the period will be raised as we consider the debates that shaped the poetics of the early and High Renaissance. Readings include Sir Thomas, Sir Philip Sidney, Edmund Spenser, and many more.

## EN 7313 **Realism and Naturalism in the American Novel** (3)

Based in historical interpretation, this course offers the first literature of the modern, mass society we ourselves live in. The interpretive strategy will consider the complex, self-contradictory nature of a literary construct as it reflects its social context. We will cover eight novels (none very long), among which are Rebecca Harding Davis's Margaret Howth, Elizabeth Stuart Phelps's Doctor Zay, Mark Twain's Huckleberry Finn, Henry James's The Bostonians, and Edith Wharton's The Reef.

## EN 7314 **International Literature** (3)

The purpose of this course is to introduce the student to literary masterpieces of the Western World while placing them in the cultural and geo-temporal context in which they arose. Emphasis will be placed on understanding the various cultural and aesthetic movements and how they evolved. Some of the authors to be read are Sophocles, Cervantes, Moliere, Mary Shelley, Jean Paul Sartre, and T.S. Eliot.

## EN 7315 **American Romanticism** (3)

This course defines Romanticism by exploring its origins and development in 19th and 20th century American history, culture, and literature. The course should provide an in-depth philosophical approach to American literature, as well as an increased ability to read literature critically. We will study works by the following authors: Emerson, Thoreau, Whitman, Dickenson, Hawthorne, Alcott, James, Poe, Frost, Welty, Stevens, and Percy.

## EN 7316 **History of the American Novel** (3)

As a comprehensive overview of the American novel, this course offers on highly representative novel from each literary period with additional attention to minority fiction. Periods and possible authors are as follows: Neo-Classical (Brockden Brown), Low Romantic (Cooper), Romantic (Melville), Realist (James), Naturalist (Wharton), Modernist (Faulkner), and others.

## EN 7317 **The American Novel: Multicultural Literature** (3)

This course examines the work of contemporary American writers from the many cultures that make-up the United States of America, specifically Latino American, African/Black American, Asian American, Middle Eastern American, Indian American, and Native American writers. The course emphasizes critical reading, critical writing, and critical analysis of the work and application of multicultural theory. Scholarly research and writing emphasized and required.

## EN 7320 **Writers and Their Works** (3)

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

This course focuses in detail on the works of 1 or 2 of the following: Shakespeare (Major Plays); T.S. Elliot, Emily Dickinson, and Walt Whitman; Faulkner and Hemingway; D.H. Lawrence and Virginia Woolf; W.B. Yeats, James Joyce, and Virginia Woolf.

## EN 7321 **Shakespeare's Major Plays** (3)

The course follows four Shakespeare plays through the centuries, examining how they were treated--or mistreated--during the Restoration, and during the eighteenth and nineteenth centuries. Film versions of the plays will be compared with Shakespeare's text. The course also traces the main lines of Shakespeare criticisms from Ben Jonson to Benard Spivak.

## EN 7322 **T.S. Eliot, Emily Dickinson, and Walt Whitman** (3)

This course will examine the new structures and underlying philosophies in the poetry of Whitman, Dickinson, and Eliot.

## EN 7323 **Faulkner and Hemingway** (3)

This course will examine the concepts of transcendentalism, realism, and modernism through a study of the works of Faulkner and Hemingway.

## EN 7324 **D.H. Lawrence and Virginia Woolf** (3)

In this course we will study the major fiction of two contemporary modernists whose original experiments with technique are responsible for the modern novel and whose versions of reality challenged Victorian constructs of gender and class.

## EN 7332 **Persuasive Writing** (3)

Based on the analysis of classic and contemporary approaches to persuasive writing, the student will learn to develop strong and convincing arguments. Writing Intensive Course.

## EN 7333 **Contemporary Rhetorical Theory** (3)

This course surveys and analyzes contemporary mainstream rhetorical theory. Students will be introduced to current thinkers in the field and will learn to apply the theories to the text.

## EN 7334 **Approaches to Teaching Writing & Critical Thinking** (3)

## EN 7335 **History of the English Language** (3)

This course explores the development of the English language historically – where it has come from and where it seems to be going. The two main foci are (1) the history of language as it developed and changed in England and ultimately the United States; and (2) how the development of a language is impacted by socio-historical reality of its speakers.

## EN 7341 **Analysis and Criticism of Television and Film** (3)

The purpose of this course is to introduce students to the major critical and analytical approaches to the study of television and film and to help students apply these approaches to individual films and television programs. Once learned, these skills can be applied in a classroom setting or used to enhance one's own viewing. After you take this course, television and film will never be the same again.

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

## EN 7342 **Approaches to Teaching Literature** (3)

### EN 7343 **Linguistics: Voice and Text** (3)

This course will explore the various types of discourse drawing upon the methods of discourse analysis - Austin Speech Act Theory, Bakhtin's concept of Heteroglossia, Habermas' concept of Communicative Ethics.

### EN 7351 **Fiction: The Creative Process** (3)

This course focuses on writing short fiction. Students also work on related forms such as dramatic nonfiction, narrative essays, profiles, and personal narrative construction in short works by recent authors, in particular, complication and resolution, foreshadowing and pace, audience, and point of view. The chief emphasis of the course, however, will be given to developing the student's own voice and style.

### EN 7352 **Poetry: The Creative Process** (3)

This course combines the study of contemporary poetry and poetics with the writing and workshopping of poetry. The course will examine poetry by major writers since Eliot, Stevens, and Bishop, including work by Denise Levertov, Anne Sexton, Richard Hugo, Sylvia Plath, W.S. Merwin, Nikki Giovanni, Charles Simic, Rita Dove, and others. Students will write and workshop a number of their own poems for the course and will select one contemporary poet to study in some detail for a final essay to be presented to the class.

### EN 7353 **Writing for Publication** (3)

This writing course is designed to train student writers in "writing for publication" and in the methodologies for getting their work published. The student will learn to target writing for a market, to become acquainted with copyright problems, style sheets, manuscript preparation, and the publishing industry.

### EN 7362 **Peace and Violence in Literature** (3)

This course is an exploration of literature that centers on the topics of peace and violence as they are portrayed in a selection of international works of diverse times throughout history.

### EN 7370 **Special Studies in Literature and Language** (3)

This course is an opportunity for the student to explore an area of literature of the particular interest with a professor who specializes in the area of choice. To be arranged with consent of professor and Graduate Director.

### EN 7380 **Project** (3)

The project is an original work based on academic research in the field. The length of the project is considerably more extensive than that of a final graduate class paper, but not as extensive as the thesis. The topic of the project is agreed upon by the student and the graduate director. Together they will pick one professor as chair of the project.

### EN 7390 **Thesis Research** (3)

Prior to writing a Master's thesis, students are required to develop and defend a thesis proposal and actively engage in thesis research. The thesis proposal will include a statement of the research goals, a

# ENGLISH LITERATURE AND LANGUAGE (M.A.)

review of the pertinent literature/bibliographical sources, and written statement of the proposed project to include in which way the project is original.

## EN 7391 **Thesis** (3)

The thesis is a culminating research manuscript which provides a record of a student's achievement in the program. The thesis requires research leading to the discovery of new knowledge or original enhancement of existing knowledge in the field of interest. The thesis should include thematic, formal and theoretical components. The thesis requires a panel of three professors who will guide the student. These professors will be selected in consultation with the graduate director.

\*See Graduate Dean's office for thesis guidelines.

# INDUSTRIAL ENGINEERING (M.S.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Winston F. Erevelles, Ph.D. [werevelles@stmarytx.edu](mailto:werevelles@stmarytx.edu)

## Department

Engineering

## Program Director

Rafael Moras, Ph.D., P.E. [rmoras@stmarytx.edu](mailto:rmoras@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted only to those with high promise for success in graduate study. Applicants demonstrate this potential through previous academic records and testing. To be considered for admission to the MS Industrial Engineering program, an applicant must fulfill the following:

1. Have a Bachelor of Science (B.S.) degree in engineering, or related areas such as the physical sciences or mathematics. Students with a degree in other disciplines may be admitted on a contingency basis provided they complete a set of prerequisites dictated by the Graduate Program Director.
2. Have a minimum grade point average (GPA) of 3.00 (A=4.00) in their BS degree. (Applicants who fail to meet the standard may be admitted on a conditional basis. The graduate programs director evaluates these cases on an individual basis.)
3. Submit GRE scores.
4. International students must submit minimum TOEFL scores of 80 on the Internet-based test or its equivalent on other forms of the test. Alternatively, they must score at least 6.0 on the IELTS test. Students who score 6.0 on the IELTS exam or 80-82 on the internet based TOEFL will be required to enroll in EN6301 Academic Writing for International Students during the first semester of attendance.
5. Submit a completed application form, a written statement of purpose indicating the applicant's interests and objectives, two letters of recommendation, and official transcripts of all college level work.

## Degree Requirements

### Industrial Engineering (30hrs)

# INDUSTRIAL ENGINEERING (M.S.)

## Project Option

Course #	Course Title	Hours
<b><u>Required: 15 hours (take all of the following)</u></b>		
EG6303	Lean Production	3
EG7306	Six-Sigma Quality	3
EG6341	Supply Chain Management	3
EG6331	Simulation	3
EG8396	Capstone Project	3
<b><u>Required: 3 hours Engineering Finance (choose one from the following):</u></b>		
EG6305	Engr. Eco	3
EG7350	Financial Aspects Business	3
EG7354	Engr. Cost Analysis or another financial-based course, with Director's approval	3
<b><u>Required: 3 hours Operations Research (choose one from the following):</u></b>		
EG6332	Operations Research I	3
EG6333	Operations Research II	3
EG6310	Nonlinear Optimization	3
EG6308	Stochastic Processes	3
<b><u>Required: 3 hours Manufacturing (choose one course from the following):</u></b>		
EG6340	Manufacturing Engineering	3
EG6327	CAM and Robotics	3
<b><u>Required: 6 hours IE elective work (choose two from the following)</u></b>		
EG6301	Statistics	3
EG6304	Reliability	3
EG6307	Sequencing and Scheduling	3
EG6308	Stochastic Processes	3
EG6309	Human Factors/Ergo	3
EG6310	Nonlinear Optimization	3
EG6317	Advanced Quality Control	3
EG6327	CAM	3

# INDUSTRIAL ENGINEERING (M.S.)

Course #	Course Title	Hours
EG6332	Operations Research I	3
EG6333	Operations Research II	3
EG6338	Special Topics	3
EG6340	Manufacturing Engineering	3
EG7303	Safety	3
EG7307	Plant/Facilities	3
EG7155, 7255, 7355	Internship	3
Other course work w/Graduate Program Director approval.		
<b>Total hours</b>		<b>30</b>

## Industrial Engineering (30hrs)

### Thesis Option

Course #	Course Title	Hours
<b><u>Required: 18 hours</u></b>		
EG6341	Supply Chain Management*	3
EG6303	Lean Production*	3
EG6331	Simulation	3
EG7306	Six-sigma Quality*	3
EG8390	Thesis I and EG 8391 Thesis II	3
<b><u>Required: 12 hours (choose four courses from the following, with Graduate Program Director approval)</u></b>		
EG6301	Statistics	3
EG6304	Reliability	3
EG6305	Eg Eco	3
EG7354	Engr. Cost Analysis	3
EG7350	Financial Aspects	3
EG6307	Sequencing and Scheduling	3
EG6308	Stochastic Processes	3
EG6309	Human Factors/Ergo	3
EG6310	Nonlinear Optimization	3



# INDUSTRIAL ENGINEERING (M.S.)

Course #	Course Title	Hours
EG6317	Advanced Quality Control	3
EG6327	CAM	3
EG6332	Operations Research I	3
EG6333	Operations Research II	3
EG6338	Special Topics	3
EG6340	Manufacturing Engineering	3
EG7303	Safety	3
EG7307	Plant/Facilities	3
EG7155, 7255, 7355	Internship	3
Other course work w/Graduate Program Director approval.		
<b>Total hours</b>		<b>30</b>

## Department Courses and Descriptions

### EG 6301 **Statistical Data Analysis** (3)

An applied approach to statistical inference in engineering and scientific work. Tests of hypothesis, regression analysis, analysis of variance and experimental design.

### EG 6302 **Engineering Management & Decision Systems** (3)

Philosophy, theory, and practice of management; decision theory and social responsibility; management of research and development; the professional interrelationships of engineering to modern production organizations. Case studies in engineering management.

### EG 6303 **Lean Production Systems** (3)

Forecasting. Inventory planning and control. Aggregate planning. Deterministic and stochastic inventory models. Master scheduling. Just-in-time and lean. Theory of constraints. Sequencing and scheduling. Assembly line balancing.

### EG 6304 **Reliability and Maintainability** (3)

Statistics of reliability. Reliability estimation and decision making. Reliability models. Redundancy. Experimentation and testing.

### EG 6305 **Economic Analysis for Managerial Decisions** (3)

Criteria used for making decisions about proposed capital investments and the implementation of selected criteria in engineering design and investment decisions. Present worth, rate of return, payback period, cost-benefit analysis. Depreciation. Inflation. Taxes.

### EG 6307 **Sequencing and Scheduling** (3)

Quantitative analysis of operational problems of production systems with a concentration on operations

# INDUSTRIAL ENGINEERING (M.S.)

sequencing and scheduling in job shops, flow lines, and project work.

## EG 6308 **Random Variables and Stochastic Processes** (3)

Introduction to the underlying theory of stochastic processes. Topics include: random sequences and convergence; autocorrelation, autocovariance, stationarity, ergodicity; stochastic calculus (continuity, differentiability, integrability); Poisson processes; white-noise processes; Gaussian process; random walk, Brownian motion, Wiener process; Markov chains; Markov processes; linear systems driven by random inputs.

## EG 6309 **Human Factors and Ergonomics** (3)

Comprehensive and practical review of basic concepts in the integration of the human component into the design, development and evaluation of human-machine systems. (Same as PS 6309).

## EG 6310 **Nonlinear Programming** (3)

Classical optimization, formulation, unconstrained and constrained optimization. Numerical search techniques, including penalty functions, gradient search and quadratic programming. Genetic algorithms.

## EG 6327 **Computer Aided Manufacturing (CAM) & Robotics** (3)

Modern manufacturing systems including automation, computer integrated manufacturing, robotics, and programmable logic controllers. Computer implementation of CAM topics such as computational geometric modeling, dimensioning, and tolerancing. Experiments on programmable logic controllers, computer numerical control (CNC) programming, coordinate measuring machine (CMM) techniques, and computer aided design.

## EG 6331 **Computer Simulation** (3)

Modeling of operational aspects of manufacturing and service systems using discrete and continuous simulation techniques. The statistics of simulation

## EG 6332 **Operations Research I** (3)

Linear programming, Big-M and two-phase methods, revised simplex, duality theory, sensitivity analysis, transportation and assignment methods. Goal programming.

## EG 6333 **Operations Research II** (3)

Network flow programming, dynamic programming, Markov chains, queuing theory, Monte Carlo simulation. May be taken independently of EG6332, Operations Research I.

## EG 6338 **Special Topics** (3)

Course may be repeated for credit if topics vary

## EG 6339 **Thesis Direction** (3)

The thesis is a culminating experience that provides a record of a student's achievement in the program. The thesis requires research leading to the discovery of new knowledge or enhancement of existing knowledge in the field of interest. A project that helps solve a practical problem may also be acceptable. The thesis features a complete documentation of the research study, including the theoretical background, description of the problem, the method used to investigate or solve the problem, presentation of results, interpretation of results, and explanation of the significance of the results.

# INDUSTRIAL ENGINEERING (M.S.)

## EG 6340 **Manufacturing Engineering** (3)

An overview of modern manufacturing systems including computer aided manufacturing, computer integrated manufacturing, manufacturing resources planning, lean and just-in-time, and robotics. Economic and ergonomic aspects of product design. Experiments on computer integrated manufacturing and manufacturing processes are conducted.

## EG 6354 **Management of Computer and Information Systems** (3)

This course examines a broad range of topics in the management of technology, information systems and organizational issues in exploiting new technology. The course explores concepts of applying computer information systems and communications technology to provide an effective frame work for managing competitiveness in an environment of rapid global change. Managing R&D, systems acquisition, decision-making, and links to other functional areas in the corporation are emphasized.

## EG 6376 **Neural Networks** (3)

Neuron model and network architecture; Heb net; perception learning rule; ADALINE and MADALINE architectures and algorithms; back propagation algorithm; pattern classification; pattern association competitive neural networks. Prerequisite: Consent of instructor.

## EG 6382 **Computer Aided Design and Manufacturing (CAD/CAM)** (3)

Overview of basic concepts of CAD/CAM. Application of computers for the design and creation of a manufacturing database. Hardware and software considerations in CAD. Modern manufacturing systems including automation, computer integrated manufacturing, robotics, and programmable logic controllers. Computer implementation of CAM topics such as computational geometric modeling, dimensioning, and tolerancing. A term project is required. Experiments on programmable logic controllers, computational modeling, computer numerical control (CNC) programming, and coordinate measuring machine (CMM) techniques are conducted.

## EG 7303 **Safety Engineering.** (3)

Systems safety; product safety; safety and health related workplace hazards; worker safety; loss prevention principles and regulations; loss assessment and control, theories of accident causation. Safety standards.

## EG 7306 **Six-Sigma Quality Systems.** (3)

Total quality management philosophy, with emphasis on statistical quality strategies. Statistical process control; supplier certification; benchmarking; simultaneous engineering; re-engineering; quality teams; quality audits; Kaizen; quality function deployment, Malcolm Baldrige National Quality Award guidelines.

## EG 7307 **Plant Layout and Facilities Design** (3)

Principles and method of analysis and design of service, production, and manufacturing facilities. Location selection. Plant layout. Materials requirement and resource planning. Enterprise resource planning (ERP). Use of computers in facilities planning and control. A term project featuring the design of a production system is required.

## EG 7351 **Systems Engineering** (3)

# INDUSTRIAL ENGINEERING (M.S.)

Systems analysis, engineering economics, and systems engineering and their impact on decision making. Systems of systems.

## EG 7353 **Project Management** (3)

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 insights and techniques required. Issues such as the selection and management of the project team, project initiation, implementation and termination are addressed. This course is cross-listed with BA 7353. Students who have previously received credit for BA 7311 may not enroll in this course.

## EG 7155, 7255, 7355 **Internship 1,2**, (3)

An experiential approach to advanced engineering topics through work in a company or organization. Industry/university cooperation is required. Topics vary depending upon the needs of the sponsoring company or organization and the academic needs of the student. Students may start an internship project anytime after enrollment in any engineering program. A minimum of three credit hours is required. Credit hours may be completed in increments of 1, 2, or 3 credit hours per semester. Prerequisite: consent of the graduate program director.

## EG 8300 **Engineering Systems Management** (3)

A comprehensive course in the Engineering Systems Management graduate program. An analysis of case studies is conducted to integrate the functional areas studied in the program and engineering ethics. Class activities typically focus on practical applications of engineering systems management concepts.

# INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [at Tyler@stmarytx.edu](mailto:at Tyler@stmarytx.edu)

## Department

Psychology

## Program Director

Gregory Pool, Ph.D. [gpool@stmarytx.edu](mailto:gpool@stmarytx.edu)

## Program Specific Admission Requirements

1. A Bachelor's degree from an accredited institution.
2. Satisfactory completion of the pre-requirement psychology courses or their equivalent [12 hours].
3. A combined GRE score on the verbal and quantitative sections of 950 or greater (no less than 400 on either section).
4. A average cumulative and psychology undergraduate GPA of 3.0 OR a cumulative and psychology GPA of 3.2 for the last 60 hours of undergraduate courses
5. Final grades of "C" or better in all undergraduate prerequisites.

## Deadline June 1

No Spring and Summer admissions

Send the following supplementary items to:

The Graduate School, St. Mary's University, One Camino Santa Maria, San Antonio, TX 78228:

- Official GRE scores
- Personal Statement
- Resume and/or curriculum vita
- Two complete and official transcripts showing previous college work and degree or arrange to have them sent to the Dean of the Graduate School. Documents must be in English for international students.
- Two letters of recommendation from individuals well acquainted with your academic/professional ability. Students who have graduated from St. Mary's University are exempt from this

# INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

requirement.

## Degree Requirements

### Industrial/Organizational Psychology (40 hrs)

### Industrial/Organizational Psychology Non-Thesis

Course #	Course Title	Hours
<u>Required Courses (31hrs):</u>		
PS 6185	SPSS Basics	1
PS6366	Personnel Psychology I: Job appraisal to Selection	3
PS6367	Personnel Psychology II: Performance & Training	3
PS6369	Organizational Psychology	3
PS6370	Professional Development & Assessment Centers	3
PS6381	Psychology Research	3
PS6385	Advanced Statistics: Descriptive & Inferential	3
PS6386	Multivariate Statistics	3
PS7321	Advanced Test & Measurements	3
PS7367	Methods in Industrial/Organizational Psychology: Survey Development	3
PS7385	Practicum in Personnel Psychology	3
<u>Electives (9hrs):</u>		
Any graduate Level course with the exception of XX6000.		9
<b>Total hours</b>		<b>40</b>

### Industrial/Organizational Psychology (40 hrs)

### Industrial/Organizational Psychology Thesis

Course #	Course Title	Hours
<u>Required Courses (28 hrs):</u>		
PS 6185	SPSS Basics	1
PS6366	Personnel Psychology I: Job appraisal to Selection	3
PS6367	Personnel Psychology II: Performance & Training	3

# INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

Course #	Course Title	Hours
PS6369	Organizational Psychology	3
PS6370	Professional Development & Assessment Centers	3
PS6381	Psychology Research	3
PS6385	Advanced Statistics: Descriptive & Inferential	3
PS6386	Multivariate Statistics	3
PS7321	Advanced Test & Measurements	3
PS7367	Methods in Industrial/Organizational Psychology: Survey Development	3
<b><u>Thesis (6hrs):</u></b>		
PS6387	Thesis: Research	3
PS6388	Thesis: Defense	3
<b><u>Electives (6hrs):</u></b>		
Any graduate Level course with the exception of XX6000.		6
<b>Total hours</b>		<b>40</b>

## Department Courses and Descriptions

### PS 6185 **Computer Applications in Behavioral and Social Science** (1)

This course provides students with the knowledge about the analysis and database features of SPSS, with emphasis on the data editor, variable view, and output windows, and cross-platform use with other software applications. The course is practice-based to ensure students gain skills in using the data editor, creating databases, manipulating and transforming data, merging and exporting data across files and platforms, and editing and printing statistical output.

### PS 6363 **Group Dynamics in Organizations** (3)

The purpose of this seminar is to cover special topics in psychology, utilizing faculty and community professionals (possessing appropriate certification and degrees). (When different topics are treated, PS 6363 may be repeated for additional credit upon approval of the graduate program director.)

### PS 6366 **Personnel Psychology** (3)

The application of psychological theory and practices to human resources activities in organizations. Special emphasis is placed on job analysis and design, employee selection and placement, training and development, and performance management and appraisal. Legal and ethical considerations are underscored. Students will gain a working knowledge of the psychological principles in effective organizations.

### PS 6369 **Organizational Psychology** (3)

This course is designed as a graduate-level introduction to classic and contemporary research literature

# INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

in organizational psychology. The course objectives are to: 1) provide an overview of the literature (theory, empirical studies) in a sampling of major content areas, 2) develop research skills through critical review/analysis of organizational literature, and 3) stimulate ideas for original research projects.

## PS 6371 **Motivation and Human Behavior** (3)

Theories and reports of empirical investigations.

## PS 6370 **Professional Development and Assessment Centers** (3)

This course provides students with knowledge of current issues of professional development in Industrial-Organizational Psychology and the use of assessment centers in professional development. Assessment centers are widely used in industry for personnel development, training, and decision making. Students will participate in an assessment center process, receive developmental feedback about their performance, and write a personal development plan based on the feedback. Prerequisite: PS 6366.

## PS 6381 **Psychological Research** (3)

Methodology and scientific inquiry in psychology. Experimentation, its relation to theory and design. Prerequisite: PS 6385.

## PS 6383 **Advanced Experimental Psychology** (3)

Projects and lectures. Advanced methodology for thesis, dissertation, and professional journal research. Includes a laboratory.

## PS 6385 **Advanced Statistics** (3)

Advanced topics in statistics to include the analysis of variance, factor analysis, multiple discriminant analysis, multiple regression analysis and the use of statistical software to assist in these analyses.

## PS 6386 **Multivariate Statistics** (3)

Topics in multivariate analysis with wide application in the behavioral and management sciences such as analysis of variance, analysis of covariance, multivariate analysis of variance, multivariate analysis of covariance, principal components, exploratory factor analysis, reliability analysis and discriminant function analysis. The course stresses theory, assumptions, and practical application of each technique. Students apply methods using SPSS and interpret results of analyses. Prerequisite: PS 6385.

## PS 6387 **Research (Thesis)** (3)

Normal empirical projects designed to test a well formulated hypothesis. Other approaches may be considered. Required for thesis candidates. Prerequisites: PS 6381, PS 6385, and approval from Graduate Program Director.

## PS 6388 **Thesis (Defense)** (3)

The thesis is a complete documentation of an independent research project conducted by the student and supervised and approved by a thesis committee. The final report includes information related to the relevant theoretical background, research area, hypotheses, methods and procedures, results and interpretations, and discussion related to the significance of the results and application to the discipline.

## PS 7321 **Advanced Tests and Measurements** (3)

Advanced topics in psychological measurements to include: reliability and validity theory, criterion



# INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

development, performance appraisal, test construction, and questionnaire development. Prerequisites: PS 6381, PS 6385.

## **PS 7361 Psychological Factors in Systems Management (3)**

Human characteristics and their effect on systems management; psychological principles and innovations relative to selection, classification and placement; job analysis; job evaluation; performance evaluation; employee morale, working conditions, effects on personnel; human engineering and consumer psychology; communications.

## **PS 7363 Human Performance Assessment and Measurement (3)**

Comprehensive and practical review of basic concepts in the integration of the human component into the design, development and evaluation of man-machine systems and subsystems: Human and computer performance capabilities, interface problems in man-machine systems; human factors theory and data applied toward effective systems management, design, operation, environment; personnel subsystems; workplace layout and arrangements; design for ease of maintenance; anthropometry; man-machine dynamics (same as EG 6309).

## **PS 7365 Operation Dynamics in Systems Management (3)**

Analysis of operator dynamics; special environments and life science considerations emphasizing applications to systems management; homeostasis, stress, sensory systems, fatigue, biorhythms acceleration, radiation, pollution, ecology; training-learning factors.

## **PS 7367 Survey Development (3)**

This course covers theories, methods, and procedures for conducting survey research in business. Topics include designing a survey instrument, planning a survey research study, and basic survey analysis techniques. Sampling issues will be addressed. Prerequisites: PS 6381, PS 6385.

## **PS 7368 Job Analysis (3)**

In-depth review of major job analysis techniques. Quantitative data analysis will be stressed along with some examination of scaling and data display techniques.

## **PS 7381 Practicum in Experimental Psychology & Research Design (3)**

Supervised practice in the design and execution of research in psychology. As a portion of the practicum, the student will plan, carry out research, and perform statistical and other analyses of results, all leading toward a publishable paper. Student may also act as laboratory instructor, planning research experiments, setting up equipment, supervising write ups of experiments and grading reports. Prerequisites: PS 6381, PS 6385, and permission of instructor.

## **PS 7383 Practicum in Quantitative Methods in Psychology (3)**

Supervised practice in the selection and execution of statistical techniques appropriate to specific problem areas in psychology. The student will participate in data capture and reduction projects. The student may act as a tutor in the statistics laboratory as a means of enhancing his/her ability to communicate his/her knowledge of quantitative methods. Prerequisites: PS 6381, PS 6385, and permission of instructor.

## **PS 7385 Practicum in Personnel Psychology (3)**

Supervised practice in research and/or application of psychological principles and innovations to

# INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

selection, classification, and placement; job analysis; job evaluation; performance evaluation; employee morale; working conditions; human engineering and consumer psychology. The student may select certain of these topics for special emphasis. When feasible, on-the-job training in some business or industry may be recommended. May be repeated once for additional credit. Prerequisites: PS 6385, PS 6385, and approval from Graduate Program Director.

# INTERNATIONAL RELATIONS (M.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [at Tyler@stmarytx.edu](mailto:at Tyler@stmarytx.edu)

## Department

International Relations

## Program Director

Amber Aubone, Ph.D. [aaubone@stmarytx.edu](mailto:aaubone@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted only to those with promise for success in graduate study as demonstrated by work experience, previous education, test scores (GRE) and an essay explaining their reason for pursuing a Master of Arts in International Relations. Generally, students must provide acceptable test scores at the time of enrollment.

Test scores are considered in conjunction with undergraduate grade point average to produce an Academic Index. The minimum Academic Index required is:

$$\text{GPA} \times \text{Verbal GRE score} = 450. \text{ Minimum writing score is } 4.0$$

An undergraduate cumulative GPA of 3.0 or above is required. Exceptions to this minimum may be granted at the discretion of the program director if extenuating circumstances warrant.

There are no course prerequisites for the Master of Arts in International Relations.

## Degree Requirements

### International Relations (36hrs)

### International Conflict Resolution Studies Non-Thesis

Course #	Course Title	Hours
<u>Core Curriculum (18hrs):</u>		

# INTERNATIONAL RELATIONS (M.A.)

Course #	Course Title	Hours
IR6312	International Relations Theory	3
IR6315	US Foreign Policy	3
IR6320	Research & Writing in International Relations	3
IR6340	International Political Economy	3
IR7300	Ethical Issues in International Relations	3
IR8311	World Religions & International Affairs	3
<b><u>International Conflict Resolution Focus (12 hrs):</u></b>		
IR6313	Topics in International Conflict Resolution*	3
IR6346	International Law & Treaties	3
IR6352	Human Rights	3
IR8300	Theories on the Causes of War	3
IR8307	Sustainable Development	3
IR8330	Global Political Geography	3
IR9300	Topics in International Relations**	3
<p><b>*Course may be repeated if a different topic is offered</b>  <b>**If topic is appropriate to focus area</b></p>		
<b><u>Electives (Electives can also include courses from other Focus Areas and Other Programs with approval) (6 hrs):</u></b>		
IR6301	Internship	3
IR6302	Internship	3
IR9301	Topics in International Relations: International Field Studies (Summer Study Tour)	3
IRxxx	Electives	3

# INTERNATIONAL RELATIONS (M.A.)

Course #	Course Title	Hours
IRxxx	Electives	3
<b>Total hours</b>		<b>36</b>

## International Relations (36hrs)

### International Conflict Resolution Studies Thesis

Course #	Course Title	Hours
<u>Core Curriculum (18hrs):</u>		
IR6312	International Relations Theory	3
IR6315	US Foreign Policy	3
IR6320	Research & Writing in International Relations	3
IR6340	International Political Economy	3
IR7300	Ethical Issues in International Relations	3
IR8311	World Religions & International Affairs	3
<u>International Conflict Resolution Focus (12 hrs):</u>		
IR6313	Topics in International Conflict Resolution*	3
IR6346	International Law & Treaties	3
IR6352	Human Rights	3
IR8300	Theories on the Causes of War	3
IR8307	Sustainable Development	3
IR8330	Global Political Geography	3
IR9300	Topics in International Relations**	3
*Course may be repeated if a different topic is offered		
**If topic is appropriate to focus area		
<u>Electives (6hrs):</u>		

# INTERNATIONAL RELATIONS (M.A.)

Course #	Course Title	Hours
IR6398	Thesis Research	3
IR6399	Thesis	3
<b>Total hours</b>		<b>36</b>

## **International Relations (36hrs)**

### **International Development Studies Non-Thesis**

Course #	Course Title	Hours
<u>Core Curriculum (18hrs):</u>		
IR6312	International Relations Theory	3
IR6315	US Foreign Policy	3
IR6320	Research & Writing in International Relations	3
IR6340	International Political Economy	3
IR7300	Ethical Issues in International Relations	3
IR8311	World Religions & International Affairs	3
<u>International Development Studies Focus (12 hrs):</u>		
CM7334	Grant Proposal Writing	3
IR6309	Topics in International Development*	3
IR8307	Sustainable Development	3
IR8308	NGO Theory & Practice	3
IR8309	Foundations of International Aid	3
IR8313	Cross-Cultural Approaches to Socioeconomic Development	3
IR8330	Global Political Geography	3
IR9300	Topics in International Relations**	3

# INTERNATIONAL RELATIONS (M.A.)

Course #	Course Title	Hours
PO6318/PA6318	Introduction to Non-Profit Management	3
PO6319/PA6319	Topics in Non-Profit Management*	3
<p><b>*Course may be repeated if a different topic is offered</b>  <b>**If topic is appropriate to focus area</b></p>		
<p><u>Electives (Electives can also include courses from other Focus Areas and Other Programs with approval) (6 hrs):</u></p>		
IR6301	Internship	3
IR6302	Internship	3
IR9301	Topics in International Relations: International Field Studies (Summer Study Tour)	3
IRxxx	Electives	3
IRxxx	Electives	3
<b>Total hours</b>		<b>36</b>

## International Relations (36hrs)

### International Development Studies Thesis

Course #	Course Title	Hours
<p><u>Core Curriculum (18hrs):</u></p>		
IR6312	International Relations Theory	3
IR6315	US Foreign Policy	3
IR6320	Research & Writing in International Relations	3
IR6340	International Political Economy	3
IR7300	Ethical Issues in International Relations	3
IR8311	World Religions & International Affairs	3

# INTERNATIONAL RELATIONS (M.A.)

Course #	Course Title	Hours
<u>International Development Studies Focus (12 hrs):</u>		
CM7334	Grant Proposal Writing	3
IR6309	Topics in International Development*	3
IR8307	Sustainable Development	3
IR8308	NGO Theory & Practice	3
IR8309	Foundations of International Aid	3
IR8313	Cross-Cultural Approaches to Socioeconomic Development	3
IR8330	Global Political Geography	3
IR9300	Topics in International Relations**	3
PO6318/PA6318	Introduction to Non-Profit Management	3
PO6319/PA6319	Topics in Non-Profit Management*	3
*Course may be repeated if a different topic is offered **If topic is appropriate to focus area		
<u>Electives (6hrs):</u>		
IR6398	Thesis Research	3
IR6399	Thesis	3
<b>Total hours</b>		<b>36</b>

## International Relations (36hrs)

### Security Policy Non-Thesis

Course #	Course Title	Hours
<u>Core Curriculum (18hrs):</u>		
IR6312	International Relations Theory	3
IR6315	US Foreign Policy	3
IR6320	Research & Writing in	3



# INTERNATIONAL RELATIONS (M.A.)

Course #	Course Title	Hours
	International Relations	
IR6340	International Political Economy	3
IR7300	Ethical Issues in International Relations	3
IR8311	World Religions & International Affairs	3
<b><u>Security Policy Focus (12 hrs):</u></b>		
IR6314	Topics in Security Policy*	3
IR6324	National Security	3
IR6342	Inter-American Security Issues	3
IR7320	Asian Security Issues	3
IR7340	Middle East Security Issues	3
IR7350	European Security Issues	3
IR7380	African Security Issues	3
IR8303	Women & War	3
IR8330	Global Political Geography	3
IR9300	Topics in International Relations**	3
<p><b>*Course may be repeated if a different topic is offered</b>  <b>**If topic is appropriate to focus area</b></p>		
<b><u>Electives (Electives can also include courses from other Focus Areas and Other Programs with approval) (6 hrs):</u></b>		
IR6301	Internship	3
IR6302	Internship	3
IR9301	Topics in International Relations: International Field Studies (Summer Study Tour)	3
IRxxx	Electives	3
IRxxx	Electives	3
<b>Total hours</b>		<b>36</b>

# INTERNATIONAL RELATIONS (M.A.)

## International Relations (36hrs)

### Security Policy Thesis

Course #	Course Title	Hours
<u>Core Curriculum (18hrs):</u>		
IR6312	International Relations Theory	3
IR6315	US Foreign Policy	3
IR6320	Research & Writing in International Relations	3
IR6340	International Political Economy	3
IR7300	Ethical Issues in International Relations	3
IR8311	World Religions & International Affairs	3
<u>Security Policy Focus (12 hrs):</u>		
IR6314	Topics in Security Policy*	3
IR6324	National Security	3
IR6342	Inter-American Security Issues	3
IR7320	Asian Security Issues	3
IR7340	Middle East Security Issues	3
IR7350	European Security Issues	3
IR7380	African Security Issues	3
IR8303	Women & War	3
IR8330	Global Political Geography	3
IR9300	Topics in International Relations**	3
*Course may be repeated if a different topic is offered		
**If topic is appropriate to focus area		
<u>Electives (6hrs):</u>		
IR6398	Thesis Research	3

# INTERNATIONAL RELATIONS (M.A.)

Course #	Course Title	Hours
IR6399	Thesis	3
<b>Total hours</b>		<b>36</b>

## **International Relations (36hrs)**

### **Security Policy Ft Hood (Non-Thesis Only)**

Course #	Course Title	Hours
<u>Core Curriculum (18 hrs):</u>		
IR6312	International Relations Theory	3
IR6320	Research & Writing in International Relations	3
IR6324	National Security	3
IR6340	International Political Economy	3
IR7300	Ethical Issues in International Relations	3
IR8311	World Religions & International Affairs	3
<u>Security Policy Focus (9 hrs):</u>		
IR6342	Inter-American Security Issues	3
IR7320	Asian Security Issues	3
IR7340	Middle East Security Issues	3
IR7350	European Security Issues	3
IR7380	African Security Issues	3
<u>Conflict Management (3 hrs):</u>		
IR8300	Theories on the Causes of War	3
IR8305	Conflict Transformation: Theory & Practice	3
<u>Electives (6 hrs):</u>		
IR6314	Topics in Security Policy*	3

# INTERNATIONAL RELATIONS (M.A.)

Course #	Course Title	Hours
IR9300	Topics in International Relations**	3
IR9301	Topics in International Relations: International Field Studies (Summer Study Tour)	3
*Course may be repeated if a different topic is offered		
**If topic is appropriate to focus area		
<b>Total hours</b>		<b>36</b>

## International Relations (36hrs) Security Policy Focus Online (Non-Thesis Only)

Course #	Course Title	Hours
<u>Core Curriculum (18 hrs):</u>		
IR6312	International Relations Theory	3
IR6320	Research & Writing in International Relations	3
IR6324	National Security	3
IR6340	International Political Economy	3
IR7300	Ethical Issues in International Relations	3
IR8311	World Religions & International Affairs	3
<u>Security Policy Focus (9 hrs):</u>		
IR6342	Inter-American Security Issues	3
IR7320	Asian Security Issues	3
IR7340	Middle East Security Issues	3
IR7350	European Security Issues	3
IR7380	African Security Issues	3
<u>Conflict Management (3 hrs):</u>		

# INTERNATIONAL RELATIONS (M.A.)

Course #	Course Title	Hours
IR8300	Theories on the Causes of War	3
IR8305	Conflict Transformation: Theory & Practice	3
<u>Electives (6 hrs):</u>		
IR6314	Topics in Security Policy*	3
IR9300	Topics in International Relations**	3
IR9301	Topics in International Relations: International Field Studies (Summer Study Tour)	3
*Course may be repeated if a different topic is offered		
**If topic is appropriate to focus area		
<b>Total hours</b>		<b>36</b>

## Department Courses and Descriptions

### IR 6300 **International Relations research Methods** (3)

This course is designed to introduce graduate students to the principles of social science research design and the various statistical techniques used to manipulate social science data. Students are introduced to various research techniques and methods utilized in all facets of the discipline from behavioral research to public policy analysis.

### IR 6301 **Internship** (3)

Credit is awarded for work with a U.S. or foreign private business, non-governmental agency, state, national, or international organization that is involved in international trade, activity, or research. Three hours may be earned during a regular academic semester in which a student works 20 hours a week. Students may enroll in two semesters (up to six hours) for internship credit. If a student enrolls for six hours of internship in one semester, the student must work 40 hours a week. A member of the graduate faculty coordinates the internship. The internship student keeps a weekly log of activities and prepares at least one paper integrating theory with the internship experience.

### IR 6302 **Internship** (3)

Same description as IR 6301; used if student is enrolling for additional 3 hours of internship

### IR 6305 **Research Design** (3)

An advanced application of social science research design applied to international relations issues.  
Prerequisite: IR 6300

# INTERNATIONAL RELATIONS (M.A.)

## IR 6309 **Topics in International Development** (3)

A special topics seminar that focuses on critical issues related to sustainable development within the context of the international arena. The specific topics may vary and students may take the course more than once if topic is different and with permission of the Program Director. The course will fulfill a focus course requirement for students in the International Development Studies focus area and will be considered an elective for students in other focus areas.

## IR 6311 **Topics in Inter-American Studies** (3)

A special topics seminar that focuses on issues of politics, economics, security, or social and cultural history as they relate to Latin, Central, or South America. The specific topics may vary and students may take the course more than once if topic is different and with permission of the Program Director. The course will fulfill a focus course requirement for students in the Inter-American Studies focus area and will be considered an elective for students in other focus areas.

## IR 6312 **International Relations Theory** (3)

This course provides students with an understanding of the diversity of approaches to the study of international relations, along with an appreciation of key concepts and frameworks. Another aim is to identify themes and issues that have enduring importance rather than those which are of the moment.

## IR 6313 **Topics in International Conflict Resolution** (3)

A special topics seminar that focuses on various issues related to resolution of conflict, intra-state and/or inter-state within context of the international arena. The specific topics may vary and students may take the course more than once if topic is different and with permission of the Program Director. The course will fulfill a focus course requirement for students in the International Conflict Resolution focus area and will be considered an elective for students in other focus areas.

## IR 6314 **Topics in Security Policy** (3)

A special topics seminar that focuses on issues related to national and international security issues. The specific topic can vary and students may take the course more than once if topic is different and with permission of the Program Director. The course will fulfill a focus course requirement for students in the Security Policy focus area and will be considered an elective for students in other focus areas.

## IR 6315 **United States Foreign Policy** (3)

History of the United States' foreign policy; consistencies and variations. Analysis of the role of vital interests of the United States in the world today.

## IR 6320 **Research and Writing in International Relations** (3)

Introduction to research and writing assignments required in the program. General knowledge of the learning objectives and requirements for graded exercises. Understanding the research process and the steps to producing original research and a quality written product.

## IR 6323 **European Integration** (3)

This course examines the historical evolution of the European Economic Community, the economic and political impact of the collapse of Communism on Western Europe, and the problems/possibilities for future economic and political integration.

# INTERNATIONAL RELATIONS (M.A.)

## IR 6324 **National Security** (3)

This course examines the politics and economics of national security issues. Special emphasis is given to the changing international paradigm (i.e., post cold War) and the impact on domestic political and economic decision making.

## IR 6340 **International Political Economy** (3)

This course stresses the human, strategic, and political dimensions of managing international economic change. The interrelatedness of the state, multinationals, NGOs, and international institutions will be examined as they impact North-North and North-South competition.

## IR 6342 **Inter-American Security Issues** (3)

This course will examine the politics and economics of current security issues in the Americas. Military and non-military security issues will be discussed. Examples are: narco-trafficking, role of the military, human rights, environmental policies, population, etc.

## IR 6346 **International Law and Treaties** (3)

Study of rules governing the community of nations, their nature, sources and development; international treaties and the agencies responsible for their development, interpretation, and administration.

## IR 6352 **Human Rights** (3)

An analysis of the philosophical and legal basis for the development of international human rights. The discussion will include reference to cultural, ideological and religious debates on human rights issues.

## IR 6398 **Thesis Research** (3)

Prior to writing a Master's thesis, students are required to develop and defend a review of the pertinent literature, and an explanation and defense of the proposed methodology. The thesis proposal will be orally defended before the Thesis Committee comprised of three faculty.

## IR 6399 **Thesis** (3)

The thesis is a culminating experience which provides a record of a student's achievement in the program. The thesis requires research leading to the discovery of new knowledge or enhancement of existing knowledge in the field of interest. A project that helps solve a practical problem may also be acceptable. The thesis is a complete documentation of the research study, including the theoretical background, description of the problem, the method used to investigate or solve the problem, presentation of results, interpretation of results, and explanation of the significance of the results.

## IR 7101, IR 7201, IR 7301 **Directed Studies in International Relations (1, 2, 3 semester hours)** (3)

The course emphasis will vary according to area of study, perceived needs, or research interest. Course must be approved the Graduate Program Director.

## IR 7300 **Ethical Issues in International Relations** (3)

This is designed as a capstone course and discusses the ethical dimension of international relations from an interdisciplinary perspective.

## IR 7320 **Asian Security Issues** (3)

This course examines the politics and economics of current security issues in Asia. Both military and non-

# INTERNATIONAL RELATIONS (M.A.)

military security issues are discussed. Examples are: collective security organizations, environmental security issues, technological transfers, the arms trade, and immigration/refugee patterns.

## IR 7340 **Middle East Security Issues** (3)

This course examines the politics and economics of current security issues in the Middle East. Both military and non-military security issues are discussed. Examples are: regional balance of power politics, the role of international agencies, environmental security issues such as water, technological transfers, and immigration/refugee patterns.

## IR 7350 **European Security Issues** (3)

This course examines the politics and economics of current security issues in Europe. Military and non-military security issues are discussed. Examples are: the changing role of NATO, a united European defense system, environmental security issues, technological transfers, and immigration/refugee patterns.

## IR 7380 **African Security Issues** (3)

This course examines the politics and economics of current security issues in Africa. Military and non-military security issues are discussed. Examples are root causes of regional conflict, the international arms trade, environmental security issues, technological transfers, and immigration/refugee patterns.

## IR 8300 **Theories on the Causes of War** (3)

This course examines current theories on the root causes of war and violent conflict, both civil and international. Causal actors such as ethnicity, race, religion, territory, water, population migration/refugees, arms race/militarism, personality of leaders, etc. are researched.

## IR 8303 **Women and War** (3)

An examination of the role of women in war. Literature will examine women in the workforce during war, women in the service, women as victims of war, and women in the peace movement.

## IR 8305 **Conflict Transformation: Theory and Practice** (3)

This course examines the latest research on how to resolve civil and international conflict. Emphasis is placed on pairing the appropriate conflict resolution theory to various categories of conflict.

## IR 8307 **Sustainable Human Development** (3)

This course examines alternative theories of development that are oriented towards sustainable models of creating cultural, economic and political democracy. The course researches sustainable development models that apply to both South and North nations.

## IR 8308 **NGOs, Civil Society and Non-State Actors** (3)

This course aims to foster a critical perspective on non-governmental organizations (NGOs) and other non-state actors by examining key concepts underlying their evolution and practice, including civil society, social capital and development.

## IR 8309 **Foundations of International Aid** (3)

This course examines international aid programs originating in donor countries. The decision-making process regarding program/resource allocation and assessment will be analyzed as well as designing donor nation participation in this process.



# INTERNATIONAL RELATIONS (M.A.)

## IR 8311 **World Religions and International Conflict** (3)

This course will provide students with a general understanding of major world religions, then analyze the extent to which religion/s are a major source of conflict and how religion/s can become part of a peaceful end to violent conflict and to successful reconciliation between warring parties.

## IR 8313 **Cross-Cultural Communication for International Development** (3)

This course focuses on developing an understanding of patterns of communication and discourse in a variety of cultures to increase awareness of different communication norms within different cultures and an understanding of cross-cultural discourse interactions. Primary methodologies for the course are rooted in Sociolinguistics and the Ethnography of Communication.

## IR 8320 **Globalization of Crime** (3)

This course will introduce students to crime as a worldwide phenomenon and study international cooperation attempts to compile crime-related data, crime trends, violations of human rights, and the prevention and control of crimes such as international terrorism, manufacture and trafficking of illicit drugs, and other forms of internationally interconnected criminal activity.

## IR 8322 **International Justice System** (3)

This course will introduce the student to selected criminal justice systems of developed, developing, and underdeveloped countries. This will include study of police functions and roles, functions and forms of judicial systems, and correctional practices and processes.

## IR 8324 **International Legal System** (3)

This course will introduce the student to various international legal systems focusing on: the development of ancient legal systems and current civil law, common law, socialist law, and Islamic law processes and practices along with study of their respective countries.

## IR 8325 **Business in an Interdependent World** (3)

A survey of the effects that differences in the cultural, economic, legal, political, social, and technological environments of countries have on the way business is conducted throughout the world. Also explored are the effects that regional economic and political arrangements and international institutions are having on firms involved in business activities that cross national borders. The course concludes with an examination of some of the contemporary issues and challenges confronting U.S. business people at home and overseas as a consequence of the growing globalization of economic activities.

## IR 8326 **International Development of Criminological Thought** (3)

This course will introduce the student to various European and American historical explanations of criminal behavior and related research leading to current theoretical explanations.

## IR 8328 **Intelligence Gathering and National Security** (3)

An examination of the role intelligence agencies play in defining national security interests and in the making of foreign policy (i.e., the relationship between the intelligence communities, the NSC, Congress, and the White House).

## IR 8330 **Global Political Geography** (3)

# INTERNATIONAL RELATIONS (M.A.)

This course is an introduction to the theories and methods of political geography. It focuses on where the political and spatial meet, illuminating the close relationship between geography and power on a variety of scales – from local to global. Included are such topics as geopolitics, frontiers and boundaries, physical and ideological characteristics of the States, imperialism, nationalism, war and terrorism, migration, laws of the sea, and human geography and the environment.

## IR 8342 **Ethical Issues in International Development** (3)

This course will examine ethical issues in economic development and globalization. Students will be asked to apply ethical theory/reasoning to hard cases related to environment, free trade, marketing practices in poor countries, tax policies, outsourcing, etc.

## IR 8350 **Reform and Revolution in Latin America** (3)

This course will historically examine revolution in Latin America and reasons for success/failure in efforts to bring about lasting reform to political and economic systems.

## IR 9300 **Topics in International Relations** (3)

A special topics seminar that can focus on a variety of issues that cannot be limited to any one focus area. Topics can include a systematic consideration of politics, economics, security and/or social and cultural history as related to a specific topic in international relations. The specific topic can vary and students may take the course more than once if topic is different and with permission of the Program Director. The Program Director will determine whether or not the course will be considered a focus course or an elective for the different areas.

## IR 9301 **Topics in International Relations: International Field Studies (same as BA9301)** (3)

The primary focus of the course is sustainable economic development and a second focus is the relationship of sustainable economic development to security and conflict resolution. The course is normally taught in Summer 1 or Summer 2 and includes a required international field trip that is designed to give students an exposure to governmental, not-for-profit, educational, micro-entrepreneurial, small business, and cooperative organizations in less-developed countries that are struggling with sustainable economic development.

## IR 9396 **Grant Proposal Writing (same as CM7334)** (3)

This course is designed to teach the fundamental process of grant development for the beginning grant writer. Participants will be expected to develop a complete grant proposal suitable for submission to a funding agency. Those registering for the course should have conducted preliminary, independent research about a potential grant development project suitable for a major grant submission. Projects may be related to education, public works, museum programs, art, research, or similar areas. Specific projects are normally developed during the first two weeks of the course.

# MARRIAGE AND FAMILY THERAPY (M.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [at Tyler@stmarytx.edu](mailto:at Tyler@stmarytx.edu)

## Department

Counseling

## Program Director

Carolyn Tubbs, Ph.D. [ctubbs@stmarytx.edu](mailto:ctubbs@stmarytx.edu)

## Degree Requirements

### Marriage & Family Therapy Master's Course Schedule (54 hrs.)

Course #	Course Title	Hours
<u>Core Courses (9 hrs):</u>		
CN6361	Crisis Counseling	3
CN7333	Mental Health & Psychopathology	3
CN7377	Human Sexuality	3
<u>Specialization Courses (36 hrs):</u>		
CN6283 A	MFT Seminar-POTT	4
CN6370	Foundations of Family Therapy I	3
CN6371	Foundations of Family Therapy II	3
CN7287	Relationship Education Workshop	2
CN7370	Marital Therapy	3
CN7371	Strategies of MFT (Treatment Planning)	3
CN7372	Clinical Practicum in MFT	3
CN7373	Marriage and Family Life Development	3

# MARRIAGE AND FAMILY THERAPY (M.A.)

Course #	Course Title	Hours
CN7374	Professional Issues (Ethics)	3
CN7375	Child Development and Play Therapy	3
CN7384	MFT Outcome Research	3
CN8375	Working with Latino Families	3
<b><u>Clinical Courses (9 hrs):</u></b>		
CN7380	MFT Internship I	3
CN7381	MFT Internship II	3
CN7382	MFT Internship III	3
<b>Total hours</b>		<b>54</b>

## Department Courses and Descriptions

### CN 6150 **Practicum in Group Process** (1)

Theory and practice in group work. Psychological foundations of group work, including group guidance, growth groups and group counseling and therapy, with an opportunity to apply experientially the basic principles of group leadership. Limited enrollment.

### CN 6251 **Advanced Professional Issues and Organization/Administration** (2)

Introduction to counseling services in schools, community centers and other helping agencies and private practice. Basic philosophy and objectives of guidance, counseling and therapy programs. Overview of roles, structures, functions, resources and other topics related to the organization of human services programs.

### CN 6253 **Group Process**(2)

Theory and practice in group work. Psychological foundations of group work, including group guidance, growth groups and group counseling and therapy, with an opportunity to apply experientially the basic principles of group leadership. Limited enrollment.

### CN 6321 **Assessment and Appraisal in Counseling** (3)

This course instructs students in how to learn how to measure healthy human processes, optimal mental health, vital balance and life-impeding factors. It will provide students with a basic framework for understanding the functions and limits of testing and measurement. Basic principles, research, and theories on the measurement of psychological constructs and clinical diagnosing and their significance of treatment will be covered. Theories and techniques of administering, scoring, and interpreting psychological tests within the cultural context will be emphasized.

### CN 6352 **Career Planning** (3)

Selection and use of the career information; community resources; survey of theories of vocational choice; use of interest and aptitude inventories in career development; personnel selection procedures; individual and group vocational counseling; placement and follow up procedures.

# MARRIAGE AND FAMILY THERAPY (M.A.)

## CN 6354 **Introduction to Counseling** (3)

This course is designed to review intensively each student's basic counseling micro skills via role play and video tape. In addition, the course presents a general model of counseling. Classes maintain a 5 to 1 student/teacher ratio.

## CN 6355 **Theories of Counseling** (3)

This course provides a detailed review of the theoretical foundations of major counseling theories. Reviewed theories include Psychoanalytic, Neo-Freudian, Person-Centered, Gestalt Therapy, Existentialist, Behaviorist, Transactional Analysis, Rational Emotive Therapy, and Reality Therapy.

## CN 6357 **Counseling Practicum** (3)

Students apply counseling principles and procedures to develop skills in the treatment of individuals with emotional and behavioral problems. Students learn under the direction of doctoral qualified supervisors at an approved site. Case experiences are further analyzed and discussed under the supervision of faculty in weekly class meetings. Students complete a minimum of 100 hours on site, 20 client contact hours, and 15 hours of supervision. Favorable final evaluations by the site supervisor and faculty are required for credit. Limited enrollment. Prerequisite: CN6354.

## CN 6361 **Crisis Counseling** (3)

This course will be an introduction to the fundamental concepts and theories of crisis and crisis counseling. Special attention will be paid to the ecosystemic and multicultural considerations involved in providing crisis intervention as well as developing effective counseling crisis strategies. Students will be exposed to the most prevalent types of crises and to the current intervention methodologies used in crisis counseling.

## CN 6369 **Introduction to Marriage and Family Therapy** (3)

An overview of the techniques and strategies used in marriage and family therapy with special emphasis for those students who are not seeking a degree specialization in Marriage and Family Therapy. Required for the Marriage and Family Relations Certificate Program.

## CN 6381 **Methods of Research** (3)

Methods and tools of research in behavioral sciences. Emphasis on practical application of basic concepts in producing and consuming research. Prerequisite: A course in introductory and inferential statistics.

## CN 6282 **Hope, Resilience and Human Transcendence** (2)

This course will cover many aspects of positive and existential counseling including the emphasis on character strengths, total wellbeing, self and group efficacy, happiness and life satisfaction as well as human resilience and flow. It will examine how human thoughts, emotions, spirit, behaviors, and social connections contribute to a life worth living. Hope-instilling intervention skills designed to assist clients view and transform stressful circumstances into growth experiences and regard daily experiences as meaningful will be covered. The emphasis will be on learning about what is right with people, their resilience, their spirituality, their character strengths, their willingness to serve, their capacity for doing evil, their sources of happiness, their life-impeding social realities, their empowering connections, their life-enhancing social structure, and their human potential.

# MARRIAGE AND FAMILY THERAPY (M.A.)

## **CN 6283 MFT Person of the Therapist Training (2)**

This course is designed to enhance the clinical skills and competence of master's level family therapist through the Person of the Therapist Training model. The POTT model encourages students involved in clinical practice to actively explore person of the therapist issues to enhance clinical practice. Person of the therapist issues are inherent in clinical work and student learn self-reflection and interpersonal skills to identity and work with personal issues that may arise in the context of clinical work. This course is designed to complement student's growing clinical competence as students develop an awareness of the self within ones' own family of origin, as well as the broader social context. Prerequisite: MFT program permission.

## **CN 7199 Clinical Mental Health Capstone (1)**

This course is designed to assess students' overall professional knowledge, clinical skills and practices, and multicultural and advocacy competencies in their work with individuals, families, groups and/or communities. Under the supervision of the students' faculty advisor, students will demonstrate their ability to conceptualize cases; utilize diagnoses (or not); create treatment plans; assess client/familial progress; work with other mental health professionals in an interdisciplinary context; determine when to refer for an evaluation for psychotropic mediations; understand the usage of such medications, their side effects, and how to consult with a client's respective medication provider; monitor and assess the impact of traumatic events; and terminate therapeutic relationships. Students will also be required to assess their strengths and weaknesses, and develop plans for continued professional development and a long-term self-care plan.

## **CN 7267 Community Counseling and Social Justice (2)**

The roles of counselors in community agencies, private practice, in litigation and consulting processes, and in client advocacy will be explored with the intent of assessing means by which counselors can provide access to and delivery of optimal mental health services. Counselors' roles and responsibilities in promoting fair and equitable mental health policy and legislation in a variety of contexts will be examined. Special attention will be paid to how the confluence of social and political barriers impact counselors' ability to assess and advocate for individual and community needs, facilitate conflict resolution, and secure resources for programs designed to empower and serve oppressed populations. Such oppressed populations include those individuals dealing with racism, sexism, religious persecution, poverty, immigration issues, language barriers, trauma (i.e. natural disaster, domestic violence etc.), heterosexism, physical disabilities, mental illness and interpersonal and/or institutional rankism.

## **CN 7301 Professional and Ethical Issues (3)**

Problems in professional practice of guidance, counseling, marriage and family therapy and research. Professional ethics, relations to other professionals and the public. Liability issues.

## **CN 7302 Social/Cultural Issues in Counseling (3)**

The effects of social change, cultural patterns, roles of men and women, different lifestyles, ethnic groups, and other special populations in the counseling process.

## **CN 7319 Health Counseling and Medical Aspects of Disabilities (3)**

This course will address issues of public health as well as counseling people with chronic and disabling diseases. This course will also provide medical information essential to understanding the functional capacities of individual with disabilities and restoratives techniques. Basic anatomy and physiology will

# MARRIAGE AND FAMILY THERAPY (M.A.)

be covered.

## CN 7333 **Mental Health and Psychopathology** (3)

Reviews the healthy personality and various models of psychopathology, including the DSM IV and organic diseases that masquerade as psychological problems.

## CN 7351 **Human Growth and Development** (3)

Survey of human growth and development from birth through adolescence to maturity. Special emphasis on biophysical, cognitive, affective, and psycho-social domains. Prerequisite for CN7373.

## CN 7359, 7360, 7361 **Internship in Counseling I, II, III** (3, 6, 9)

The internship provides the opportunity to develop skills in the treatment of individuals with emotional and behavioral problems, under the direction of doctoral qualified supervisors at an approved site. Case experiences are further analyzed and discussed under the supervision of faculty in weekly class meetings. Students complete a minimum of 300 hours on site, 120 client contact hours, and 15 hours of supervision. Favorable final evaluations by the site supervisor and faculty are required for credit. Limited enrollment. Prerequisite: CN6150/6253, 6352, 6354, 6355, 6357, 7301, 7302, 7351, or permission of instructor, and, completion of 30 semester hours in the program, and admission to candidacy for the Master's degree.

## CN 7377 **Sexuality Counseling and Somatic Issues** (3)

This class will explore the physiological, psychological, sociological, and theological aspects of human sexuality. Special emphasis will be given to the connection of sexual desire with love and intimacy. This course will include discussion of sexual arousal and response, nature, origin, treatment of sexual difficulties and sexual disorders.

## CN 7399 **Thesis Direction** (3)

The thesis is the culminating experience which provides a record of a student's achievement in the program. The thesis requires research leading to the discovery or new knowledge or enhancement of existing knowledge in the field of interest. A project that helps solve a practical problem may also be acceptable. The thesis is a complete documentation of the research study, including theoretical background, description of the problem, the method used to investigate or solve the problem, presentation of results, interpretation of results, and explanation of the significance of the results.

# PUBLIC ADMINISTRATION (M.P.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [atyler@stmarytx.edu](mailto:atyler@stmarytx.edu)

## Department

Public Administration

## Program Director

Henry Flores, Ph.D. [hflores@stmarytx.edu](mailto:hflores@stmarytx.edu)

## Program Specific Admission Requirements

Admissions is granted only to those with high promise for success in graduate study and a strong motivation for public service. Potential may be demonstrated by experience in increasingly responsible positions and previous schooling. Admission decisions taken into account previous schooling, letters of recommendation, and a writing sample or GRE test performance. Writing samples consist of an essay to the question: "why public service matters?" If GRE scores are submitted in lieu of writing sample, the minimum Academic Index required is:

$$\text{GPA} \times \text{Average GRE} [(\text{Verbal} + \text{Quantitative} + \text{Analytical}) / 3] = 1380$$

## Degree Requirements

### Public Administration (36 hrs)

Course #	Course Title	Hours
<u>Core Curriculum (24hrs):</u>		
PA6300	Quantitative Methods for Public Administration	3
PA6301	Public Administration & Management	3
PA6302	Policy Formation & Implementation	3



# PUBLIC ADMINISTRATION (M.P.A.)

Course #	Course Title	Hours
PA7302	Leadership & Organizational Culture	3
PA7303	Ethics in Public Sector	3
PA7304	The Management of Public Budgets	3
PA8301	Internship I	3
PA8302	Internship II	3
<u>Electives (6hrs):</u>		
Any Graduate level PA course with the exception of PA 6000		6
<b>Total hours</b>		<b>30</b>

## Department Courses and Descriptions

### PA 6300 **Political Science Research Methods (same as PO 6300)** (3)

This course is designed to introduce graduate students to the principles of social science research design and the various statistical techniques used to manipulate social science data. Students will be introduced to various research techniques and methods utilized in all facets of the discipline from behavioral research to public policy analysis.

### PA 6301 **Public Administration and Management (same as PO 6301)** (3)

A survey of the field of public administration and public policy including politics and the policy process, organization theory, management principles, human resources management, fiscal policy, program design and evaluation, and ethics.

### PA 6302 **Public Policy and Planning** (3)

This course is designed to introduce graduate students to the processes through which public policy decisions are reached. The course integrates an understanding of the role and interaction played by the disparate variables that affect public policy decisions. A particular part of the course is dedicated to developing an understanding of how local governments plan for economic development, the use of land and other natural resources.

### PA 6305 **American Political Institutions (same as PO 6305)** (3)

A study of the interrelationships between the three branches of government, intergovernmental relations and major trends in state governments.

### PA 6318 **Introduction to Non-Profit Management (same as PO 6318)** (3)

A survey of the main body of literature in the nonprofit field. Topics may include mission design, budgeting, finance fiscal management, organizational design, human resource policies, legal issues, and ethics.

### PA 6319 **Non-Profit Management (same as PO 6319)** (3)

A survey of the main body of literature in the nonprofit field. Topics may include mission design,

# PUBLIC ADMINISTRATION (M.P.A.)

budgeting, finance fiscal management, organizational design, human resource policies, legal issues, and ethics.

## PA 6345 **Business, Government, and the Public** (3)

A study of business as a political actor and its relationships with governmental and other non-governmental political actors. Specific policy areas to be analyzed may include work place safety and health, economic and industrial, environmental, consumer affairs, taxing and banking. A consideration of Catholic Social Teaching and the U.S. economy may be included.

## PA 7300 **Directed Readings** (3)

## PA 7302 **Leadership and organizational Culture** (3)

This is a course that offers a comparative study of organizations and how different types of organizations affect the nature and style of leadership. The environment, structure and culture of public, non-profit and private sector organizations and leadership will be compared and contrasted. The purpose of this course is to give the future public leader insight and understanding into the differences and similarities of the organizations that comprise public life and affect public policy.

## PA 7303 **Ethics in the Public Sector (same as PO 7303)** (3)

This course engages the student in thinking systematically about morals and conduct and making judgments about right and wrong as a public official. Three primary questions are addressed: 1) What counts? 2) What is at stake? 3) How can public officials ensure professional success and ethical survival?

## PA 7304 **The Management of Public Budgets (same as PO 7304)** (3)

This course focuses on the operational level of public budgeting and finance systems rather than the specific details of practice or theory. It is designed to train public managers to exercise control over the financial resources of their organization through an understanding of accounting, budgeting, and financial practices following the guidelines of the governmental Generally Accepted Accounting Principles (GAPP). This course will help public managers to understand financial language and practices so that they can interpret financial reports, control organizational resources, ensure that financial systems support each other, and maintain the financial integrity of their organization.

## PA 7305 **Municipal Law** (3)

This course examines how cities in the states of Texas function. This course will explore the jurisdiction of cities and their powers. Special attention will be paid to the common issues public officials must face on a daily basis; land use regulations, how to purchase materials and build city facilities; conducting open meetings and public disclosure requirements and much more. This course will discuss the reasons why a city, as a public entity, cannot be run like a business enterprise and vice-versa

## PA 7306 **Urban Economic Development** (3)

This course is designed to introduce the student to the rationale behind the development and growth of cities. The course will begin with a discussion of the origin of cities and what function they play in society and culminate with an exploration of the intricacies of the politics underlying why cities take the physical forms that they do.

# PUBLIC ADMINISTRATION (M.P.A.)

## PA 7307 **Local Politics and Public Conflict Resolution** (3)

How disputes over public policy choices and outcomes are either resolved constructively or evolve into chronic community conflicts is the focus of this course. Conflict is viewed as an opportunity for positive growth and change in local communities if and when leaders in these communities demonstrate the will and point the way to constructively resolve conflict. This course examines the sources of public policy conflicts, ways of resolving and transforming the conflict into constructive change, and the leadership competencies associated with effectively meeting this challenge.

## PA 7386 **Public Policy Evaluation** (3)

The methods of critical thinking and microeconomic analyses are used to evaluate current government policy proposals. The values underlying the policy and the likely consequences are analyzed. Examples include minimum wage, affirmative action, deficit spending, health insurance, trade, and flat tax.

## PA 8301 **Internship (same as PO 8301)** (3)

Credit will be awarded upon completion of two consecutive regular academic semesters or one regular academic semester and two summer semesters work with an elected or appointed official at the national, state, or local levels. The PA graduate program director will coordinate the Internship with the public official under whom the Intern will serve. The Intern will keep a weekly log of his or her activities and will prepare at least one paper based upon special projects assigned during the Internship.

## PA 8302 **Internship (same as PO 8302)** (3)

## PA 8310 **Applied Public Service Management (same as PO 8310)** (3)

Limited to in-service students (graduate students with one or more years of full-time employment in the public or non-profit sector). Students will be required to undertake an advanced organizational and strategic analysis of a public or non-profit organization under the supervision of a designed faculty member.

## PA 8320 **Applied Public Management (same as PO 8320)** (3)

## PA 8325 **Business in an Interdependent World (same as BA 8325)** (3)

A survey of the effects that differences in the cultural, economic, legal, political, social, and technological environments of countries have on the way business is conducted throughout the world. Also explored are the effects that regional economic and political arrangements, and international institutions are having on firms involved in business activities that cross national borders. The course concludes with an examination of some of the contemporary issues and challenges confronting U.S. business people at home and overseas as a consequence of the growing globalization of economic activities.

## PA 8365 **Human Resources Management (same as BA 8365)** (3)

Emphasizes the application of the latest human resource theory in the operation of the modern organization. Special attention is given to the role of strategic thinking in human resource management applications, the initiation of missioning and visioning in the implementation of a quality philosophy in the organization, and to the application of the latest quantitative and qualitative programs in the field of human resource management.

# PUBLIC ADMINISTRATION (M.P.A.)

## PA 8390 **Organizational Behavior (same as BA 8390)** (3)

Comparative analysis of the major bodies of theory and empirical facts generated by the study of individuals and groups within various organizational settings. Special attention to the psychological and sociological variables crucial in interpreting and predicting behavior of individuals and groups within the organization, noting comparative aspects of management as related to service and governmental organizations and institutions.

## PO 6300 **Political Science Research Methods (same as PA 6300)** (3)

This course is designed to introduce graduate students to the principles of social science research design and the various statistical techniques used to manipulate social science data. Students will be introduced to various research techniques and methods utilized in all facets of the discipline from behavioral research to public policy analysis.

## PO 6301 **Public Administration and Policy (same as PA 6301)** (3)

A survey of the field of public administration and public policy including politics and the policy process, organization theory, management principles, human resources management, fiscal policy, program design and evaluation, and ethics.

## PO 6302 **Topics in Public Administration and Urban Affairs** (3)

## PO 6303 **Urban Political Institutions and Processes** (3)

A study of power, conflict and consensus in the urban political arena. Includes a survey of the research sources and methods of research in urban politics. Trends in urban political representation, decision-making and service delivery.

## PO 6304 **Topics in American and State Governments** (3)

## PO 6305 **American Political Institutions (same as PA 6305)** (3)

A study of the interrelationships between the three branches of government, intergovernmental relations and major trends in state governments.

## PO 6306 **Topics in Public Law** (3)

## PO 6307 **Public and Constitutional Law** (3)

The role of the judiciary in the interpretation and application of constitutional and public law. Problems and issues arising from various legal areas as well as judicial behavior.

## PO 6308 **Topics in Political Theory** (3)

## PO 6309 **Seminar in Political Theory** (3)

An introduction to the schools of thought and methods of analysis that could include normative or

# PUBLIC ADMINISTRATION (M.P.A.)

empirical political theory. An in depth evaluation of the traditions of discourse in political thought to include classical and contemporary political theorists.

## PO 6310 **Topics in Comparative and International Politics** (3)

### PO 6311 **International Politics** (3)

Study of various theories, problems and conditions in international politics. May include analyses of the foreign policies of selected nations, with special emphasis upon the United States and the Soviet Union.

### PO 6312 **International Relations Theory** (3)

This course will provide students with an understanding of the diversity of approaches to the study of international relations, along with an appreciation of key concepts and frameworks. Another aim is to identify themes and issues that have enduring importance rather than those which are of the moment.

### PO 6313 **Comparative Political Systems** (3)

A study of the political behavior and institutional structure and function of selected national states. Study could include democratic and/or totalitarian systems, as well as developing nations.

### PO 6314 **Topics in Political Behavior** (3)

Study of one of a broad range of topics in political behavior, including electoral behavior, political socialization, political participation, ethnic politics, politics and religion.

### PO 6315 **United States Foreign Policy** (3)

History of U.S. foreign policy; consistencies and variations. Analysis of the role of vital interests of the United States in the world today.

### PO 6316 **Great Political Thinkers** (3)

An introduction to the schools of thought and methods of analysis that could include normative or empirical theory. An in depth evaluation of the traditions of discourse in political thought to include classical and contemporary political theorists.

### PO 6318 **Introduction to Non-Profit Management (same as PA 6318)** (3)

A survey of the main body of literature in the nonprofit field. Topics may include mission design, budgeting, finance fiscal management, organizational design, human resource policies, legal issues, and ethics.

### PO 6319 **Non-Profit Management (same as PA 6319)** (3)

### PO 6320 **Behavior and Management in Public Service Organizations** (3)

An extensive review of the concepts of organizational theory and behavior applied to public organizational settings.

### PO 6323 **European Integration** (3)

This course will examine the historical evolution of the European Economic Community, the economic

# PUBLIC ADMINISTRATION (M.P.A.)

and political impact of the collapse of Communism on Western Europe, and the problems/possibilities for future economic and political integration.

## PO 6324 **National Security Policy** (3)

This course will examine the politics and economics of national security issues. Special emphasis will be given to the changing international paradigm (i.e., post Cold War) and the impact on domestic political and economic decision making.

## PO 6342 **Inter-American Security Issues** (3)

This course will examine the politics and economics of current security issues in the Americas. Military and non-military security issues will be discussed. Examples are: narco-trafficking, role of the military, human rights, environmental policies, population, etc.

## PO 6343 **European Security Issues** (3)

This course will examine the politics and economics of current security issues in Europe. Military and non-military security issues will be discussed. Examples are: the changing role of NATO, a united European defense system, environmental security issues, technological transfers, and immigration/refugee patterns.

## PO 6352 **U.S. Latino Communities** (3)

Examination of U.S. cities with significant Latino populations, as well as urbanization issues of U.S. - Mexican border.

## PO 6353 **Urban Issues in the Americas** (3)

Comparative examination of phenomenon of organization in Latin America (e.g., Mexico City, Buenos Aires, Sao Paulo, Santiago, etc.).

## PO 6354 **Campaign Management** (3)

This course is designed to give students an overview of the functioning of a political campaign. Topics covered include the creation of a campaign organization, development of a strategic plan, the use of media, fund raising activities, and the organization of field operations. This latter topic includes construction of databases, polling, phone banking and block walling. This is a survey seminar in applied political science.

## PO 6356 **Campaign Finance: Political and Legal Aspects** (3)

Scope includes campaign finance law on the national, state, and local levels; history of growth of money and electoral campaigns; effects of money on American electoral system; research methods in campaign finance sources; campaign finance reform and democratic government.

## PO 6358 **Gender Politics** (3)

This course is designed to provide students an overview of the relationship between gender and politics. Topics include: the role of women in politics, women as candidates, officeholders and voters, gender differences in attitudes and beliefs, and issues that have particular relevance to women, i.e. gender discrimination and equal rights.

## PO 8301 **Public Service Internship (same as PA 8301)** (3)

# PUBLIC ADMINISTRATION (M.P.A.)

Credit will be awarded upon completion of two consecutive regular academic semesters or one regular academic semester and two summer semesters work with an elected or appointed official at the national, state, or local levels. The PA graduate program director will coordinate the Internship with the public official under whom the Intern will serve. The Intern keeps a weekly log of his or her activities and will prepare at least one paper based upon special projects assigned during the Internship.

PO 8302 **Internship (same as PA 8302)** (3)

PO 8310 **Applied Public Service Management (same as PA 8310)** (3)

Limited to in-service students (graduate students with one or more years of full-time employment in the public or non-profit sector). Students will be required to undertake an advanced organizational and strategic analysis of a public or non-profit organization under the supervision of a designed faculty member.

PO 8320 **Applied Public Management (same as PA 8320)** (3)

PO 8390 **Organizational Behavior (same as PA 8390)** (3)

Comparative analysis of the major bodies of theory and empirical facts generated by the study of individuals and groups within various organizational settings. Special attention to the psychological and sociological variables crucial in interpreting and predicting behavior of individuals and groups within the organization, noting comparative aspects of management as related to service and governmental organizations and institutions.

PO 9301 **Internship** (3)

Credit will be awarded for work with an elected or appointed official at the national, state or local level. Three hours may be earned during a regular academic semester or six hours may be earned upon completion of two consecutive regular academic semesters or one regular academic semester with two summer semesters. A member of the graduate faculty will coordinate the Internship with the public official under whom the Intern will serve. The Intern keeps a weekly log of his or her activities (20 hours per week) and will prepare at least one paper based upon special projects assigned during the Internship. The course may be repeated for a total of 6 hours.

CM 7332 **Public Relations Writing and Campaigns** (3)

The study, analysis, and application of principles of and formats used in public relations communication to consumers. Participants learn how to collect, prepare and distribute information through the mass media, reports, and other forms of public information campaigns. Additionally, the course offers experience in the preparation and execution of campaign strategies, presentation of position papers, and scenarios to work out realistic and efficient solutions to communication and public relations problems.

CM 7334 **Grant Proposal Writing** (3)

This course is designed to teach the fundamental process of grant development for the beginning grant writer. Participants will be expected to develop a complete grant proposal suitable for submission to a funding agency. Those registering for the course should have conducted preliminary, independent research about a potential grant development project suitable for a major grant submission. Projects may

# PUBLIC ADMINISTRATION (M.P.A.)

be related to education, public works, museum programs, art, research, or similar areas. Specific projects are normally developed during the first two weeks of the course.

## CM 7341 **Interpersonal Communication Skills** (3)

Explores the theory and research pertaining to interpersonal communication skills in dyadic, group, and organizational contexts with emphasis on developing the skills necessary for effective personal and professional relationship building and maintenance, listening, problem solving, and conflict management. Other topics include the dynamics of culture and power in communicative interactions, the ethics of interpersonal communication, and differences in communicative styles.

## CM 7343 **Business Communication** (3)

A study of style, organization, and formats used in business communication--both corporate and non-corporate--including interoffice communications, major letter formats, and business report writing. Emphasizes critical thinking, problem solving, and maturity in handling tone and style.

## CM 7347 **Technical Writing** (3)

A study of the methods and processes organizations require to produce and use technical information through planning, drafting, and revising. Emphasis on the organization and presentation of written information.

## CM 9324 **The Law and Ethics of Mass Communication** (3)

A study of the historical development of the First Amendment and a discussion of the moral reasoning which informs a responsible exercise of press freedom. Participants will pay special attention to areas of law essential for mass communication practitioners, such as libel, invasion of privacy, copyright, and information access. The course also includes a discussion of the growing convergence between information delivery systems and ensuing patterns of regulation and deregulation.

## CS 6305 **Computer Literacy** (3)

Survey of computer systems and their applications. The fundamentals of software are studied and applied through word processing, data base, spread sheet, DOS, and E-mail applications. For non-majors only.

## HS 6395 **History of Colonialism** (3)

A readings and research seminar on the problems and interpretation of the evolution of Western colonialism from the 15th through the 20th centuries. Colonial settlement, transition from mercantilist to capitalist economies, international slavery, imperialism, the anti-colonial and independence movements, and neo-colonial movements are some of the themes that may be addressed.

## HS 8305 **History of Cuba and Its Relations with the United States** (3)

A readings seminar that considers Cuba's historical development from the eighteenth through the twentieth centuries. This is accompanied by a particular focus on how Cuba's development was influenced by its relations with the United States so an understanding of how Cuba became a communist nation after 1959 will be achieved. The course also considers Communist Cuba and its relations with the United States.

## HS 8311 **Latin American Cultural History** (3)

A readings seminar that considers Latin American History from the perspective of philosophy,



# PUBLIC ADMINISTRATION (M.P.A.)

intellectual currents, religion, literature, and the arts. In considering some or all of the above fields of study, the question of central concern will be what constitutes a Latin American identity or world view. What is unique about the Latin American experience?

## HS 8325 **Topics in the History of Mexico** (3)

A reading and research seminar focusing on Mexico from the arrival the Spanish to the present. Topics may include the Conquest, the establishment of New Spain, the Independence Movement, national development in the nineteenth century, the Revolution of 1910, the rise of nationalism, emergence of the social welfare state in the twentieth century, one-party rule, and industrialization. Of particular emphasis will be the forces that brought change in Mexican society during the nineteenth and twentieth centuries.

## HS 8334 **Topics in the History of Argentina** (3)

A readings and research seminar focusing on the political, economic, social, and cultural history of Argentina. Topics sometimes focus on particular periods and at other times concentrate on themes central to Argentina's historical development.

## HS 8335 **Topics in the History of Brazil** (3)

A readings and research seminar focusing on the political, economic, social, and cultural history of Brazil. Topics sometimes focus on particular periods and at other times concentrate on themes central to Brazil's historical development.

## HS 8340 **History of United States-Latin American Relations** (3)

A readings and research seminar that traces the relationships between Latin America and the United States during the nineteenth and twentieth centuries. The course examines historical developments that have helped define the political, economic, and cultural interactions between the two regions, beginning with United States western expansionism during the first half of the nineteenth century and concluding with relations in the 1990s.

## IR 6311 **Topics in Inter-American Studies** (3)

# SOFTWARE ENGINEERING (M.S.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Winston F. Erevelles, Ph.D. [werevelles@stmarytx.edu](mailto:werevelles@stmarytx.edu)

## Department

Engineering

## Program Director

Jaffer Ibaroudene, Ph.D. [jibaroudene@stmarytx.edu](mailto:jibaroudene@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted only to those with high promise for success in graduate study. Applicants demonstrate this potential through previous academic records and testing. To be considered for admission to the M.S.S.E. program, an applicant must fulfill the following:

1. Have a bachelor's degree in Software Engineering, Computer Science, Computer Engineering or a closely related discipline.
2. Have
  1. a minimum grade point average (GPA) of 3.00 (A=4.00) in their B.S. degree; and
  2. a minimum quantitative GRE score of 600;
  3. Applicants who fail to meet any of the above standards may be admitted on a conditional basis. The graduate programs director evaluates these cases on an individual basis.
3. International students must submit minimum TOEFL scores of 213 on the computer-based test, 550 on the paper-based test, or 79 on the Internet-based test. Alternatively, students may submit a minimum ISELS score or 6.5
4. Submit a completed application form, a written statement of purpose indicating the applicant's interests and objectives, two letters of recommendation concerning the applicant's potential for succeeding in the graduate program and official transcripts of all college level work.

## Prerequisites

Applicants whose Bachelor of Science degree is not in Software Engineering, Computer Science, or Computer Engineering are required to demonstrate proficiency or take the following prerequisite courses:

EG1302/4 or CS1410 (or equivalent C/C++ course) - 3 semester hour

# SOFTWARE ENGINEERING (M.S.)

EG2342 Data Structure & Algorithms course (or CS1311 & CS1315) - 3 semester hours  
MT3323 (or equivalent Discrete Math course) - 3 semester hours  
Calculus I and II - 8 semester hours

## Degree Requirements

### Software Engineering (30 hrs)

#### Software Engineering Non-Thesis

Course #	Course Title	Hours
<u>Engineering Courses Required:</u>		
EG 6306	Software Project & Planning Management	3
EG6328	Software Engineering	3
EG6334	Software Quality Assurance	3
EG7304	Specification, Design, & Implementation of Software Systems	3
EG7305	Object-Oriented Analysis & Design Methodologies	3
EG7308	Software Verification & Validation	3
EG7309	Formal Methods in Software Engineering	3
EG7310	Software Maintenance, Evolution, & Reengineering	3
EG7311	User Interface Design	3
EG7312	Software Design & Architecture	3
EG7313	Web Engineering	3
EG7314	Software Security	3
EG7155	Internship	1
EG7255	Internship	2
EG7355	Internship	3
<b>Total:</b>		<b>36</b>

### Software Engineering (30 hrs)

#### Software Engineering - Thesis

Course #	Course Title	Hours
<u>Engineering Courses Required (27hrs):</u>		
EG 6306	Software Project & Planning Management	3

# SOFTWARE ENGINEERING (M.S.)

Course #	Course Title	Hours
EG6328	Software Engineering	3
EG6334	Software Quality Assurance	3
EG7304	Specification, Design, & Implementation of Software Systems	3
EG7305	Object-Oriented Analysis & Design Methodologies	3
EG7308	Software Verification & Validation	3
EG7309	Formal Methods in Software Engineering	3
EG7310	Software Maintenance, Evolution, & Reengineering	3
EG7311	User Interface Design	3
EG7312	Software Design & Architecture	3
EG7313	Web Engineering	3
EG7314	Software Security	3
EG7155	Internship	1
EG7255	Internship	2
EG7355	Internship	3
<u>Thesis (3hrs):</u>		
EG6339	Thesis Direction	3
<b>Total hours</b>		<b>30</b>

## Department Courses and Descriptions

### EG 6306 **Software Project Planning and Management** (3)

Planning and control of software project. Cost factors and cost estimation. Project scheduling, staffing, setting milestones. Role of project manager and organization of project team. Project management tools. Factors influencing productivity and success. Productivity metrics. Software project economics. Metrics for software quality, schedule, budget, and progress. Analysis of options and risks. Planning for change. Management of expectations. Release and configuration management. Software process standards and process implementation. Software contracts and intellectual property. Approaches to maintenance and long-term software development. Case studies of real industrial projects. CASE tools for project planning, cost estimation, and project management

### EG 6328 **Software Engineering** (3)

This course surveys the entire software engineering field. It presents the management and technical aspects of the software development process. Software architectures, paradigms, and life-cycles are briefly discussed and compared. It covers topics in software management, problem specification and analysis, system design techniques, documentation, system testing and performance evaluation, and system maintenance. The technical aspects include software requirement analysis, design methodologies,

# SOFTWARE ENGINEERING (M.S.)

system implementation, and testing techniques. Software verification and validation, quality assurance, and configuration management are also introduced.

## EG 6334 **Software Quality Assurance** (3)

Quality: How to assure it and verify it? Avoidance of errors and other quality problems. Inspections and formal technical reviews. Testing, verification, and validation techniques. Process assurance versus product assurance. Quality work product attributes. Software quality measurements and metrics. Quality process standards and formal approaches to SQA. Product and process assurance. Problem analysis and reporting. Statistical approach to quality control. Software configuration management: baselines, version control, change control, configuration audits, and SCM standards. CASE tools for SQA.

## EG 7155, 7255, 7355 **Internship** 1, 2, 3 semester hour(s)

An experimental approach to advanced engineering topics through work in a company or organization. Industry/University cooperation is required. Topics vary depending on the needs of the sponsoring company or organization and the academic needs of the student. Students may start an internship projects anytime after enrolling in any Engineering program. A minimum of three credit hours is required. Credit hours may be completed in increments of 1, 2, or 3 credit hours per semester. Prerequisite: Consent of the Graduate Program Director.

## EG 7304 **Requirement Engineering** (3)

Domain engineering. Techniques for discovering and eliciting requirements. Languages and models for representing requirements. Analysis and validation techniques, including need, goal, and use case analysis. Requirements in the context of system engineering. Specifying and measuring external qualities: performance, reliability, availability, safety, security, etc. Specifying and analyzing requirements for various types of systems: embedded systems, consumer systems, web-based systems, business systems, systems for scientists and other engineers. Resolving feature interactions. Requirements documentation standards. Requirement traceability. Human factors. Requirements in the context of agile processes. Requirements management: Handling requirements changes. CASE tools for requirement engineering.

## EG 7305 **Object-Oriented Analysis and Design Methodologies** (3)

Review of object oriented concepts: objects, classes, instances, inheritance, and entity relationship diagrams. Object-oriented analysis methodologies and their role in the software development process. Object-oriented modeling and prototyping using UML. Software reuse. Design patterns, frameworks, architectures. Component design. Measures of design attributes. Component and system interface design.

## EG 7308 **Software Verification and Validation** (3)

Testing techniques and principles: defects versus failures, equivalence classes, boundary testing. Types of defects. Black-box versus structural testing. Testing categories: Unit testing, integration testing, profiling, test driven development. State-based testing, configuration testing, compatibility testing. Website testing. Alpha, beta, and acceptance testing. Coverage criteria. Test instrumentation and tools. Developing a test plan. Managing the test process. Problem reporting, tracking, and analysis. Testing metrics. Software safety. Debugging and fault isolation techniques. Defect analysis.

## EG 7309 **Formal Methods in Software Engineering** (3)

Review of mathematical foundation for formal methods. Formal languages and techniques for specification and design, including specifying syntax using grammars and finite state machines. Analysis

# SOFTWARE ENGINEERING (M.S.)

and verification of specification and designs. Use of assertion and proofs. Automated program and design transformation.

## EG 7310 **Software Maintenance, Evolution, and Reengineering** (3)

Introduction to software maintenance, defect management, corrective, adaptive and perfective maintenance. Evolution of legacy software systems. Program comprehension techniques, reverse engineering, restructuring, refactoring of software systems. Software re-engineering, data reverse engineering. Software reuse. Impact analysis, regression testing.

## EG 7311 **User Interface Design** (3)

Psychological principles of human-computer interaction. Evaluation of user interfaces. Usability engineering. Task analysis, user-centered design, and prototyping. Conceptual models and metaphors. Software design rationale. Design of windows, menus, and commands. Voice and natural language I/O. Response time and feedback. Color, icons, and sound. Internationalization and localization. User interface architectures and APIs. Case studies and project.

## EG 7312 **Software Design and Architecture** (3)

Modeling and design of flexible software at the architectural level. Basics of model-driven architecture. Architectural styles and patterns. Middleware and application frameworks. An in-depth look at software design. Survey of current middleware architectures. Design of distributed systems using middleware. Component based design. Measurement theory and appropriate use of metrics in design. Designing for qualities such as performance, safety, security, reusability, reliability, etc. Measuring internal qualities and complexity of software. Evaluation and evolution of designs.

## EG 7313 **Web Engineering** (3)

Concepts, principles, techniques, and methods of Web engineering. Topics include requirement engineering for Web applications, modeling Web applications, Web application architectures, Web application design, technologies for Web applications, testing Web applications, operation and maintenance of Web applications, web project management, web application development process, usability of Web applications, performance of Web applications, and security of Web applications. Quality characteristic and attributes for websites.

## EG 7314 **Software Security** (3)

Theory and practice of software security. Identification of potential threats and vulnerabilities early in the design cycle. Methodologies and tools for identifying and eliminating security vulnerabilities. Techniques to prove the absence of vulnerabilities and ways to avoid security holes in new software. Essential guidelines for building secure software: how to design software with security in mind from the ground up and to integrate analysis and risk management throughout the software life cycle.

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# THEOLOGY (M.A.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [at Tyler@stmarytx.edu](mailto:at Tyler@stmarytx.edu)

## Department

Theology

## Program Director

Andrew Getz, Ph.D. [agetz@stmarytx.edu](mailto:agetz@stmarytx.edu)

## Program Specific Admission Requirements

Admission into the program for the M.A. in Theology may be granted to those who have completed an undergraduate degree and show high promise for success in graduate study. Applying for the program requires submitting an application, undergraduate transcripts, and a departmental writing sample. Students are expected to demonstrate sufficient background knowledge and academic skills in order to be admitted to graduate course work. Generally, those without a prior degree in theology must earn at least an A- in a total of three prerequisite courses (nine hours) in undergraduate theology from courses at St. Mary's University. Like the graduate courses, the undergraduate prerequisite courses are available to distance learning students. Equivalence for a portion of these hours may be awarded for work and ministry experience, or high potential for academic success based on previous academic work in a closely related field such as religious studies, literature, history, or philosophy.

Prerequisite courses may be taken in three ways: 1) Enroll in any undergraduate TH course on campus, 2) Enroll in any 5000/6000 level TH course for undergraduate credit on campus or via distance learning, or 3) If the student is in the distance learning program he or she may enroll in a DL section of any undergraduate TH Course. It may be possible for students to attend some of these courses via Skype or other appropriate technology.

Contact the Graduate Program Director for more information.

## Nature and Purpose of the Program

The Master of Arts in Theology is a 36 semester-hour thesis or non-thesis program that produces a broad foundation in the academic study of theology, particularly in the three areas of scripture, systematic theology, and Christian life and practice within the context of a constructive analysis of the Catholic faith,

# THEOLOGY (M.A.)

informed by Marianist principles of education, and contextualized by a world of religious pluralism. The Department of Theology at St. Mary's University seeks to educate students to meet the high academic standards that prepare them for both further academic study and for service to the Church and community.

## Degree Requirements

### Theology (36 hrs)

Area of Study	Hours Required	Fulfilled by:
Scripture	9 hrs	<p>One course in Hebrew Bible/Old Testament (TH6311, 6314, 6317)</p> <p>One course in Christian Bible/New Testament (TH6320, 6321)</p> <p>One second-level course in Scripture (TH6312, 6313, 6322, 6323, 6324, 6325, 6326) (prerequisite: One first-level course in Scripture)</p>
Systematic Theology	9 hrs	<p>God Triune and Incarnate (TH6333)</p> <p>One course chosen from:</p> <ul style="list-style-type: none"> <li>i Sacraments and Liturgy (TH6337)</li> <li>ii Church and the Human Person (TH6336)</li> </ul> <p>One course chosen from:</p> <ul style="list-style-type: none"> <li>i Faith, Reason, and Theology (TH6334)</li> <li>ii Survey in Systematic Theology (TH7382)</li> </ul>
Christian Life and Practice	9 hrs	<p>One course from the following:</p> <ul style="list-style-type: none"> <li>i Christian Social Ethics (TH6352)</li> <li>ii Sin, Conscience, and Conversion (TH6354)</li> </ul> <p>One course from the following:</p> <ul style="list-style-type: none"> <li>i Christian Medical Ethics (TH6356)</li> <li>ii Theology of Human Sexuality, Marriage, and the Family (TH6355)</li> <li>iii Contemporary Issues in Christian Ethics (TH6359)</li> </ul>



# THEOLOGY (M.A.)

Area of Study	Hours Required	Fulfilled by:
		One course from the following:  i.Spirituality and Christian Practice (TH6357) ii.Theology in the Southwest United States (TH6360) iii.Theology and Lay Ministry (TH6361) iv.Theology and Catechesis (TH6362)
Electives	6 hrs	Fulfilled by any TH63xx or TH73xx not fulfilling another requirement
Capstone	3 hrs	Fulfilled by Capstone (TH7391)

## Candidacy

Once admitted into the program, students must submit a written application for candidacy after completing 9 hours of coursework for graduate credit. The student's application for candidacy must be approved in order to continue course work past 12 credit hours. The procedures regarding candidacy are located in the Academic Policies and Regulation for the Graduate School.

## Thesis

Students choosing to write a thesis must follow the guidelines set out in the Manual of Standards and Policies of St. Mary's University Graduate School. They must complete TH 7390 Research Practicum as well as TH 7399. The thesis and defense will substitute for the general examination requirements (both written and oral) in the subject area most closely associated with its topic.

## General Examination

In addition to the goals set out by the Graduate School for general examinations, the student earning the M.A. in Theology is expected to demonstrate the skills, knowledge, and habits of the program. These objectives emphasize the academic abilities a student will need to pursue advanced study as well as professional skills needed for careers and service in theological and ecclesiastical areas. Generally, students must have completed 33 graduate credit hours before taking the general examination. Students wishing to take the examination shall request permission to do so from the Graduate Director. The request should be submitted in writing a semester prior the one in which the student wishes to take the exam.

# THEOLOGY (M.A.)

## The Graduate Learning Community Experience

All students graduating with the M.A. in Theology will have participated in interactions with their peers and professors outside of normal course requirements. The minimum requirement will be 10 clock hours over the course of the degree program. These requirements may be fulfilled in a variety of ways such as attending academic lectures that have been approved by the Department, participating in academic gatherings of the graduate students sponsored by the faculty, or by attending gatherings on or off campus as facilitated by course instructors and approved by the Graduate Director.

## Department Courses and Descriptions

### TH 6311 **The Pentateuch** (3 hrs)

This course surveys the first five books of the Bible, known as the Pentateuch, in the historical contexts of their composition, and through the history of interpretation in Judaism and Christianity. Special attention is paid to the variety of methods of interpretation, including historical-critical (modern), traditional theological (pre-modern), and contemporary-critical (post modern) methods.

### TH 6312 **Prophets and Visionaries** (3 hrs)

This course studies the theology of revelation as understood in ancient Israel and the early Jewish and Christian traditions, in the context of the ancient Near East and Mediterranean. In addition to the three major and twelve minor prophets, the course considers other prophets, claims of prophecy, and views of prophecy in the Hebrew and Greek Bibles, apocalypses, Dead Sea Scrolls, New Testament, early church, and rabbinic literature. Prerequisite: one first-level Hebrew Bible or New Testament course.

### TH 6313 **Wisdom Literature** (3 hrs)

This course examines the wisdom literature of the Hebrew Bible (Proverbs, Job, and Ecclesiastes) and the Greek Bible (Sirach, Wisdom of Solomon). The course also considers the context of wisdom in Ancient Israel, the Ancient Near East, and the Hellenistic world. Additional concerns include the relationship of the conventional wisdom books with the pedagogic exhortations in Psalms, and revealed wisdom in apocalyptic literature. The primary focus is the literary study of each book on its own and in conversation with the tradition. Additional foci include the historical and social context of the composition of each book, the influence of the literature on Jewish and Christian thought, and the relevance of the literature in the life of the church today, including personal spirituality and social concerns. Prerequisite: one first-level Hebrew Bible or New Testament course.

### TH 6314 **Law of Moses** (3 hrs)

This course focuses on the Torah, the first five books of the Hebrew Bible / Old Testament from the perspective of law and government. This course seeks appreciation of the Law of Moses in four contexts: the original context of its development in the Ancient Near East, the history of interpretation in Judaism and Christianity, contemporary ethical and religious questions, and the relationship between the principles of biblical law and American law. The course will encounter specific legal issues and underlying questions of how a society orders itself around common understandings of national identity, duty to God and neighbor, and principles of justice inherent in tradition. While much of the Torah is recognizable as “law” in the modern sense, the entire Torah, including narratives and exhortations, is studied with respect to underlying questions of how a society orders itself around common understandings of national identity, duty to God and neighbor, and principles of justice inherent in creation.

# THEOLOGY (M.A.)

## TH 6317 **The Interpretation of the History of Israel** (3 hrs)

This course studies the history of how Israelites and their successors have articulated understandings of the meaning of history and particularly the role of God in salvation history. The period from the national origin of Israel through the Babylonian exile is studied from a wide variety of viewpoints. These viewpoints include early national hymns, the Deuteronomists' retelling, the Chroniclers' retelling, apocalyptic retellings, Midrashic retellings, the modern history of religions school, archaeology, other historical-critical methods, and postmodern contemporary-critical methods such as post-colonial interpretation.

## TH 6320 **The Gospel of Matthew** (3 hrs)

This course introduces students to the Gospel according to Matthew through an exegesis of select texts and an application of various hermeneutical methods of understanding to the gospel. It will cover topics that are especially distinctive to Matthew such as the Jewishness of Jesus, the Sermon on the Mount, discipleship, ecclesiology and eschatology. Special attention is paid to a variety of methods of interpretation including historical, literary, social-scientific and feminist criticisms.

## TH 6321 **The Gospel of Mark** (3 hrs)

This course introduces students to the Gospel according to Mark through exegesis of select texts and an application of various hermeneutical methods of understanding to the gospel. It will cover topics that are especially distinctive to Mark such as the messianic secret, the reign of God, the suffering servant, eschatology and the theology of the cross. Special attention is paid to a variety of methods of interpretation including historical, literary, social-scientific and feminist criticisms.

## TH 6322 **The Gospel of Luke and the Acts** (3 hrs)

Drawing on a variety of methods of interpretation and approaches to scripture, this course studies Luke-Acts with a view to distilling Luke's theology and his message for the world today. It will cover topics that are especially distinctive to Luke-Acts such as the infancy narratives, the Holy Spirit, women, the poor, prayer, the journey to Jerusalem, ecclesiology, Saul/Paul, and mission. Prerequisite: one first-level Hebrew Bible or New Testament course

## TH 6323 **Johannine Literature** (3 hrs)

Drawing on a variety of methods of interpretation and approaches to scripture, this course studies the Gospel according to John, the Letters of John and the Book of Revelation, with emphasis on discerning the relevance of these different works for the world today. It will cover topics that are especially distinctive to this corpus such as higher Christology, signs, the Advocate, the glorification of Jesus on the cross, the birth of the new household of God, the theology of love and suffering, realized and future eschatology, and worship. Prerequisite: one first-level Hebrew Bible or New Testament course.

## TH 6324 **Theology of Paul** (3 hrs)

This course draws on a variety of methods of interpretation and approaches to scripture for an intensive study of the life of Paul and the Pauline literature in its approximate historical sequence in its relevance to the world today. It will cover topics that are especially distinctive to this corpus such as Christology, the body of Christ, justice and justification, the cross and resurrection, redemption, salvation, spiritual growth, and the cosmic Christ. Prerequisite: one first-level Hebrew Bible or New Testament course.

# THEOLOGY (M.A.)

## TH 6325 **Original Language Tools for Biblical Studies** (3 hrs)

This course builds toward a general knowledge of the Greek and Hebrew languages necessary to understand brief quotations and distinctions common among biblical commentaries and scholarship. The course emphasizes how to quickly find information, rather than memorization. Students learn how to use electronic tools to identify forms, definitions, and other occurrences of the root. Select examples illustrate the significance of philology for biblical interpretation.

## TH 6326 **Psalms and Passion Narratives** (3 hrs)

This course builds around the center of the way the early Christian evangelists used the Psalms to understand and articulate the significance and resolution of the death of Jesus of Nazareth. Toward this end, the course studies the context of Israelite and Jewish understandings of the messiahs, sons of God, sons of David, sons of man, and eschatological prophets. The course, as did early interpreters, draws from diverse passages in canonical and traditional literature. The course traces the historical development of ideas and interpretations across historical circumstances. Prerequisite: one first-level Hebrew Bible or New Testament course.

## TH 6327 **Advanced Special Topics in Scripture and Antiquity** (3 hrs)

These courses build on special areas of expertise among the scripture faculty and have a solid foundation in the academic study of biblical literature and its contexts. Prerequisite: one first-level Hebrew Bible or New Testament course.

## TH 6331 **Biblical Hebrew** (3 hrs)

This course builds toward a reading knowledge of the Hebrew Bible through memorization of the vocabulary, grammar, and syntax of classical Hebrew.

## TH 6332 **Biblical Greek** (3 hrs)

This course builds toward reading knowledge of the Septuagint and New Testament through memorization of the vocabulary, grammar, and syntax of common Greek.

## TH 6333 **God Triune and Incarnate: Historical and Contemporary Theology** (3 hrs)

The central theological claim of Christianity is that the creative source, ground and end of all reality is revealed as the Triune God of love through the person and work of Jesus of Nazareth and the ongoing work of the Holy Spirit. This course examines the historical development of this claim, especially in the first five centuries of church history. The course also examines in detail some of the major questions raised about the plausibility and significance of this claim in the modern period and some representative Christian theological responses to these questions. This course is required of all students.

## TH 6334 **Faith, Reason, and Theology: Historical and Contemporary Models** (3 hrs)

This course introduces students to the discipline of theology, with a particular emphasis on what has come to be called systematic theology in the contemporary academy. To this end, students study both historical and contemporary examples of systematic theology in order to understand more clearly how theology 1) is related to ecclesial and personal faith in God's revelation; 2) calls upon human capacities for reason; 3) utilizes texts, traditions, experiences, and practices as sources, and 4) serves the church, academy, and society by presenting a plausible description of Christian faith and practice in response to contemporary questions and problems.

# THEOLOGY (M.A.)

## TH 6336 **Church and the Human Person: Historical and Contemporary Theology** (3 hrs)

This course focuses on two important and interrelated Christian theological claims, particularly as they have been understood in the Roman Catholic tradition. First, that human beings are created in God's image and destined for complete fulfilment in relationship to their divine ground. Second, that the church is the historical community through which God brings human beings toward this fulfilment. The course examines the historical development of these key theological ideas, with a particular emphasis on the Catholic theology of sin, grace and sacraments. The course also examines in detail contemporary questions in ecclesiology and theological anthropology, with a particular emphasis on the teaching of the Second Vatican Council and the Catholic understanding of person and church in today's complex cultural situation.

## TH 6337 **Sacraments and Liturgy** (3 hrs)

This course examines Sacramental and Liturgical Theology and their practices, from biblical, doctrinal and pastoral perspectives. It examines biblical and historical roots and developments, and is especially attentive to the texts for the Second Vatican Council.

## TH 6352 **Christian Social Ethics** (3 hrs)

This course deals with the question of how Christian faith relates to the economic, social and political dimensions of human life. It addresses fundamental issues, examples of which could be: the church's relationship to the world and role in the public sphere, the relationship between church and state, and Catholic social theory, economic justice, and peacemaking in a violent world. The course surveys the methods and content of the discipline of Christian social ethics, and makes connections to social ministry. The development of the modern tradition of Catholic social teaching receives special emphasis.

## TH 6354 **Sin, Conscience and Conversion** (3 hrs)

This course is an in-depth study of the theological realities of sin, conscience, and conversion with an analysis of their ethical implications. The course examines original sin, personal sin, social sin, conscience as moral development and the concept of conversion in both a religious and a moral sense.

## TH 6355 **Theology of Human Sexuality, Marriage and the Family** (3 hrs)

In this course students explore the theological understanding of the nature of human sexuality; the biblical, theological, and psychological dimensions of marriage; and the Christian understanding of family. The course concentrates on the following topics: human sexuality as a fundamental element of human existence, marriage as a sacramental and social reality, God and marriage, and the theological and social significance of family.

## TH 6356 **Christian Medical Ethics** (3 hrs)

This course explores methods of moral theology and how they impact the praxis of ethical evaluation and moral judgement in the realm of medicine. This includes a focused consideration of health care in general as well as the relation of Christian faith to certain selected moral issues of a medical nature.

## TH 6357 **Spirituality and Christian Practice** (3 hrs)

This course introduces students to the discipline of Christian Spirituality and the practice of Christian life in community. It examines how biblical spirituality formed the basis of Christian Spirituality during one or more periods of Christian history by making an in-depth study of how spirituality was influenced by and/or influenced some of the main theological movements of the period. It includes a consideration of

# THEOLOGY (M.A.)

living a life in faith in Christian community and initiates students into methodologies and research techniques appropriate to this interdisciplinary field.

## TH 6359 **Contemporary Issues in Christian Ethics** (3 hrs)

This course is an in-depth consideration of how Christian faith and belief impact ethical evaluations regarding selected moral issues in contemporary society. This includes a survey of the historical foundations of Roman Catholic moral theology, the role of scripture and natural law, moral norms, conscience, moral responsibility, sin, and contemporary approaches to moral development as they pertain to the specific issues identified.

## TH 6360 **Theology in the Southwest United States** (3 hrs)

This course examines the theological questions arising from the experience of Christian life and worship in the Southwest. The sources of this study are directly applicable to this unique region and, in addition to theology, may include cultural and sociological studies related to identity formation, practices that uniquely manifest faith and worship, and a study of the historical development of the Christian tradition in this area.

## TH 6361 **Theology and Lay Ministry** (3 hrs)

In this course students explore the role of lay ministers in the Catholic Church by examining the biblical and theological understandings of ministry and their relation to various interpretations of the Church's mission. Topics may include the roles played by ecclesiology, pneumatology, culture, and interdisciplinary models of leadership.

## TH 6362 **Theology and Catechesis** (3 hrs)

This course examines the relationships of theology to catechesis and of catechesis to the Church's understanding of its mission and identity. It explores the biblical and theological foundations for catechesis, a critical and constructive reading of Church documents, and a theological exploration of the relationship of catechesis to Christian salvation. Additional topics may include the distinctions between evangelization and catechesis, the role of culture, educational theory, or parish structures on catechesis. Additionally, students may be asked to reflect on the practical application of theology to the ministry of catechesis.

## TH 7382 **Survey in Systematic Theology** (3 hrs)

This survey investigates a doctrine or topic in systematic theology and shows the interpretation(s) it has received as a result of varied theological methods and historical context. The course is explicitly both historical in its approach and demonstrative of the critical role played by the interaction of faith, reason, and theology. Topics may vary. Students may repeat the course for credit when topics differ.

## TH 7391 **Capstone** (3 hrs)

This seminar is designed to be the culminating experience of a student's courses. As such it seeks to integrate learning in different areas of theology and prepare the student to continue theological inquiry and application after coursework. Specific topics vary with the expertise of the instructor.

## TH 7388 **Special Topics in Religious Studies** (3 hrs)

Topics vary from semester to semester.

# COUNSELOR EDUCATION AND SUPERVISION (PH.D.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [at Tyler@stmarytx.edu](mailto:at Tyler@stmarytx.edu)

## Department

Counseling & Human Services

## Program Director

Julie A. Strentzsch, Ph.D. [jstrentzsch@stmarytx.edu](mailto:jstrentzsch@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted only to those who show high promise of success in doctoral study. Generally, students must meet the following minimum criteria to be considered for admission:

1. Have a Bachelor's Degree (for non-Master's entry) or Master's Degree in Counseling or a related area (for Master's entry) from an accredited college or university.
2. Have the equivalent of two years full-time work experience as a professional counselor (post-Master's degree). This may be waived under exceptional circumstances.
3. Satisfactory scores on the General Test of the GRE are required.
4. Have positive recommendations from past employers relating to professional counseling experience, as well as from faculties of previous undergraduate/graduate studies.
5. Have a positive recommendation from the Graduate Admissions Committee of the Department of Counseling.
6. A successful interview with department faculty.
7. Show potential in the area of research and writing, as evidenced by previous coursework and/or experience.
8. Students who meet the minimum criteria are not guaranteed admission. Enrollment is limited to approximately ten full-time equivalent students per year, and each individual's application is evaluated as a whole, taking into account his or her strengths, weaknesses, background, and personal goals. The faculty also attempts to assess the personal characteristics of applicants and to admit for study those individuals who are judged to have the greatest potential for success in the academic program and as professional practitioners after graduation. Generally, the selection process involves choosing among highly qualified applicants, rather than qualified and unqualified applicants.

# COUNSELOR EDUCATION AND SUPERVISION (PH.D.)

## Degree Requirements

### PhD Counselor Education and Supervision (65hrs)

Course #	Course Title	Hours
<u>Core Courses (34hrs):</u>		
CN8381	Advanced Research I	3
CN8382	Advanced Research II	3
CN7385	Process & Outcome Research	3
CN8355	Advanced Theories of Counseling	3
CN8393	Leadership, Advocacy, and Service	3
CN8350	Philosophical Foundations of Counseling	3
CN8324	Process of Supervision in Counselor Education	3
CN8194	Professional Identity in Counselor Education and Supervision	1
CN8341	Advanced Multicultural Assessment	3
CN8309	Theory and Practice of Teaching	3
CN6341	Introduction to Neural Anatomy and Physiology	3
CN8373	Gender & Ethnicity Through the Life Cycle OR	
CN7368	Relational Cultural Theory and Social Justice	3
<u>Clinical Courses (13hrs):</u>		
CN7140	Advance Clinical Practicum	1
CN8314	Supervision Practicum	3
CN8359	Doctoral Internship I	3
CN8360	Doctoral Internship II	3
CN8361	Doctoral Internship III	3
<u>Electives (9hrs):</u>		
<u>Dissertation (9hrs):</u>		
CN8390	Dissertation Research	3
CN8391	Doctoral Proposal	3
CN8392	Doctoral Defense	3
<b>Total hours</b>		<b>65</b>



# COUNSELOR EDUCATION AND SUPERVISION (PH.D.)

Course #	Course Title	Hours
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## **PhD Counselor Education and Supervision (68hrs) NeuroFeedback Focus**

Course #	Course Title	Hours
<u>Core Courses (34hrs):</u>		
CN8381	Advanced Research I	3
CN8382	Advanced Research II	3
CN7385	Process & Outcome Research	3
CN8355	Advanced Theories of Counseling	3
CN8393	Leadership, Advocacy, and Service	3
CN8350	Philosophical Foundations of Counseling	3
CN8324	Process of Supervision in Counselor Education	3
CN8194	Professional Identity in Counselor Education and Supervision	1
CN8341	Advanced Multicultural Assessment	3
CN8309	Theory and Practice of Teaching	3
CN6341	Introduction to Neural Anatomy and Physiology	3
CN8373	Gender & Ethnicity Through the Life Cycle OR	3
CN7368	Relational Cultural Theory and Social Justice	
<u>Clinical Courses (13hrs):</u>		
CN7140	Advance Clinical Practicum	1
CN8314	Supervision Practicum	3
CN8359	Doctoral Internship I	3
CN8360	Doctoral Internship II	3
CN8361	Doctoral Internship III	3
<u>Neurofeedback Courses (12hrs):</u>		
CN6341	Introduction to Neural Anatomy and Physiology	3
CN8317	Therapy & Practice of Neurofeedback Therapy	3
CN8118	Practicum I	1

# COUNSELOR EDUCATION AND SUPERVISION (PH.D.)

Course #	Course Title	Hours
CN8218	Practicum II	2
CN8318	Practicum	3
<u>Dissertation (9hrs):</u>		
CN8390	Doctoral Proposal	3
CN8391	Doctoral Proposal	3
CN8392	Doctoral Defense	3
<b>Total hours</b>		<b>68</b>

## **PhD Counselor Education and Supervision (66hrs) Play Therapy Concentration**

Course #	Course Title	Hours
<u>Core Courses (34hrs):</u>		
CN8381	Advanced Research I	3
CN8382	Advanced Research II	3
CN7385	Process & Outcome Research	3
CN8355	Advanced Theories of Counseling	3
CN8393	Leadership, Advocacy, and Service	3
CN8350	Philosophical Foundations of Counseling	3
CN8324	Process of Supervision in Counselor Education	3
CN8194	Professional Identity in Counselor Education and Supervision	1
CN8341	Advanced Multicultural Assessment	3
CN8309	Theory and Practice of Teaching	3
CN6341	Introduction to Neural Anatomy and Physiology	3
CN8373	Gender & Ethnicity Through the Life Cycle OR	
CN7368	Relational Cultural Theory and Social Justice	3
<u>Clinical Courses (13hrs):</u>		
CN7140	Advance Clinical Practicum	1

# COUNSELOR EDUCATION AND SUPERVISION (PH.D.)

Course #	Course Title	Hours
CN8314	Supervision Practicum	3
CN8359	Doctoral Internship I	3
CN8360	Doctoral Internship II	3
CN8361	Doctoral Internship III	3
<u>Play Therapy Courses (10hrs):</u>		
CN7375	Advanced Child Development	3
CN7386	Methods & Techniques of Play Therapy	3
CN7187	Expressive Modalities of Play Therapy	1
CN7188	Family Play Therapy	1
CN7189	Special Topics in Play Therapy	1
CN7190	Field Experience in Play Therapy	1
<u>Dissertation (9hrs):</u>		
CN8390	Doctoral Research	3
CN8391	Doctoral Proposal	3
CN8392	Doctoral Defense	3
<b>Total hours</b>		<b>66</b>

## **PhD Counselor Education and Supervision (65hrs) Relational-Cultural Theory & Social Justice Concentration**

Course #	Course Title	Hours
<u>Core Courses (34hrs):</u>		
CN8381	Advanced Research I	3
CN8382	Advanced Research II	3
CN7385	Process & Outcome Research	3
CN8355	Advanced Theories of Counseling	3
CN8393	Leadership, Advocacy, and Service	3
CN8350	Philosophical Foundations of Counseling	3

# COUNSELOR EDUCATION AND SUPERVISION (PH.D.)

Course #	Course Title	Hours
CN8324	Process of Supervision in Counselor Education	3
CN8194	Professional Identity in Counselor Education and Supervision	1
CN8341	Advanced Multicultural Assessment	3
CN8309	Theory and Practice of Teaching	3
CN6341	Introduction to Neural Anatomy and Physiology	3
CN8373	Gender & Ethnicity Through the Life Cycle OR	
CN7368	Relational Cultural Theory and Social Justice	3
<u>Clinical Courses (13hrs):</u>		
CN7140	Advance Clinical Practicum	1
CN8314	Supervision Practicum	3
CN8359	Doctoral Internship I	3
CN8360	Doctoral Internship II	3
CN8361	Doctoral Internship III	3
<u>Relational-Cultural Theory &amp; Social Justice Courses (9hrs):</u>		
CN8373	Gender & Ethnicity Through the Life Cycle	3
CN7368	Relational Approaches to Counseling	3
CN7369	Field Placement Social Justice Practicum	3
<u>Dissertation (9hrs):</u>		
CN8390	Doctoral Research	3
CN8391	Doctoral Proposal	3
CN8392	Doctoral Defense	3
<b>Total hours</b>		<b>65</b>

## Department Courses and Descriptions

# MARRIAGE AND FAMILY THERAPY (PH.D.)

## Academic Year

2014-2015

## School

Graduate School [School Web site](#)

## School Dean

Aaron M. Tyler, Ph.D. [at Tyler@stmarytx.edu](mailto:at Tyler@stmarytx.edu)

## Department

Counseling and Human Services

## Program Director

Carolyn Tubbs, Ph.D. [ctubbs@stmarytx.edu](mailto:ctubbs@stmarytx.edu)

## Program Specific Admission Requirements

Admission is granted only to those who show high promise of success in doctoral study. Generally, students must meet the following minimum criteria to be considered for admission:

1. Have a Bachelor's Degree (for non-Master's entry) or Master's Degree in Counseling or a related area (for Master's entry) from an accredited college or university.
2. Have the equivalent of two years full-time work experience as a professional counselor (post-Master's degree). This may be waived under exceptional circumstances.
3. Satisfactory scores on the General Test of the GRE are required.
4. Have positive recommendations from past employers relating to professional counseling experience, as well as from faculties of previous undergraduate/graduate studies.
5. Have a positive recommendation from the Graduate Admissions Committee of the Department of Counseling.
6. A successful interview with department faculty.
7. Show potential in the area of research and writing, as evidenced by previous coursework and/or experience.
8. Students who meet the minimum criteria are not guaranteed admission. Enrollment is limited to approximately ten full-time equivalent students per year, and each individual's application is evaluated as a whole, taking into account his or her strengths, weaknesses, background, and personal goals. The faculty also attempts to assess the personal characteristics of applicants and to admit for study those individuals who are judged to have the greatest potential for success in the academic program and as professional practitioners after graduation. Generally, the selection process involves choosing among highly qualified applicants, rather than qualified and unqualified

# MARRIAGE AND FAMILY THERAPY (PH.D.)

applicants.

## Degree Requirements

### MFT Doctoral Course Schedule (74 hrs)

Course #	Course Title	Hours
<u>Research Courses (9 hrs):</u>		
CN8377	Qualitative Research	3
CN8381	Adv. Research I	3
CN8382	Adv. Research II	3
<u>Specialization Courses (37 hrs)</u>		
CN6283P	MFT Seminar-POTT	4
CN7385	MFT Outcome Research	3
CN8223	Research Seminar	6
CN8315	Sup of Sup Practicum	3
CN8325	Supervision of Supervision	3
CN8351	Family Social Science	3
CN8352	Family Systems of Care	3
CN8356	Adv. MFT Theories I	3
CN8357	Adv. MFT Theories II	3
CN8374	Critical Theory	3
CN8375	Working with Latino Families	3
<u>Clinical/Internship Courses (13 hrs)</u>		
CN7141	Special Practicum in MFT	4
CN8363	Doc Internship	3
CN8364	Doc Internship	3
CN8365	Doc Internship	3
CN8376	Qualitative Research	3
CN8375	Working With Latino Families	3
<u>Elective Courses (6 hrs)</u>		

# MARRIAGE AND FAMILY THERAPY (PH.D.)

Course #	Course Title	Hours
Elective #1		3
Elective #2		3
<u>Dissertation (9 hrs)</u>		
CN8390	Dissertation Research	3
CN8391	Dissertation Proposal	3
CN8392	Dissertation Defense	3
<b>Total hours</b>		<b>74</b>

## Department Courses and Descriptions

# CERTIFICATE PROGRAMS

## Certificate Programs

### Academic Certificate Program in Conflict Transformation

#### Program Specific Admission Requirements

This is a post-baccalaureate certificate. To be admitted student must earn an undergraduate degree or equivalent from an accredited institution prior to admission into the certificate program. An undergraduate grade point average of 3.0 (letter grade of B) or higher is necessary for regular admission consideration. The certificate director may consider conditional admission under extenuating circumstances.

#### Admissions Requirements:

##### 1) Personal Statement

Applicant should provide a 700-900 word statement indicating reasons for personal and/or vocational interest in pursuing a certificate in conflict transformation. Statement should include a description of any life experiences or professional work pertinent to the field of conflict transformation and how knowledge and experience gained from this certificate may be utilized.

##### 2) Official Transcripts

(Note: Admission can be determined with unofficial copies of transcript. However, official transcripts must be on file with university registrar before beginning the program.

##### 3) Resume

**Please note:** Admission into the certificate program does not guarantee admission into St. Mary's master's degree in International Relations and Conflict Resolution. Students interested in pursuing the master's degree program must meet the normal admission requirements outlined by the graduate international relations department. See [www.stmarytx.edu/grad/ir](http://www.stmarytx.edu/grad/ir)

Language Requirements: The language of instruction for the academic certificate in conflict transformation is English. All applicants who are citizens of countries where English is not an official language must demonstrate competency in English by submitting test scores from either the Test of English as a Foreign Language (TOEFL) or the academic IELTS. The minimum TOEFL score for admission is 550 on the paper exam or 213 on the computer exam. The minimum IELTS score is an overall band of 6.0, with no individual band score below 5.0. TOEFL and IELTS scores may not be more than two years old.

Exceptions may be made for applicants who hold a degree from a university where English is the



# CERTIFICATE PROGRAMS

language of instruction. Exceptions may also be made by the director of the certificate program.

**Academic/Candidacy Requirements:** In order 1) to ensure high academic and professional standards, 2) to reach candidacy for participation in the Fourth Unit Capstone Field Study, and 3) to complete successfully the academic certificate, each student must:

- 1) Earn a minimum 3.0 or letter grade of B in each of the first three units of the certificate course
- 2) Remain in good standing throughout the program, demonstrating consistent, proactive, and prompt participation through and across each course unit
- 3) Demonstrate a positive attitude and mutual respect in learning through and across each course unit

*The certificate program director and unit faculty will meet immediately following completion of Unit Three to evaluate and determine candidacy.*

## **Certificate Requirements**

### **Unit One: IR8305 Conflict Transformation: Theory and Practice**

This course offers an educational exploration of the structures and processes of conflict transformation, introducing established and emerging theories, strategies, and applications within this dynamic field. Participants will conduct an interdisciplinary, multilevel investigation into the underlying attitudinal, behavioral, and structural causes of violent conflict and the theoretical and practical approaches for empowering people and reconciling communities in conflict and post-conflict situations. Students will also explore the diverse range of actors and institutions participating in the multidimensional work of conflict transformation.

#### Participant Learning Objectives:

- Develop a working knowledge of established and emerging theories and methodologies in the field of conflict transformation
- Study and acknowledge the significant challenges associated with "peace-building" language and terminology in the expansive field of conflict transformation
- Explore a wide-range of innovative and creative academic thinking in how to conceptualize and analyze twenty-first-century violent conflicts within transformative and non-conventional learning frameworks
- Learn and develop approaches for integrating research, theory, and practice

### **Unit Two: IR8351 Identity, Religion, and Violent Conflict**

Understanding the complex tectonics of identity, religious, ethnic, tribal, etc..is necessary for

# CERTIFICATE PROGRAMS

policymakers and academics wanting to grasp more fully the underlying causes of violent conflict between communities. This course examines identity construction in the diverging contexts of conflict and coexistence. It explores the relationship between identity and conflict transformation. In particular, it focuses in on the paradoxical role of religion, religious ritual, and religious identity in escalating violence and building peace.

## Participant Learning Objectives:

- Engage in literary and narrative analysis of how religious, ethnic, and political communities construct collective ideologies, identity, and memory
- Explore religion and its paradoxical role in escalating violence and building peace:
  - To understand and confront the tendency of religious systems to justify the violent use of their holy writ against other systems and communities of belief
  - To understand how religion, religious institutions, and religious affiliated organizations are contributing constructively to transforming conflict and building sustainable peace
- Consider imaginative and alternative ways for engaging "faith" and "identity" constructively

## **Unit Three: IR8352 Models for Engagement and Encounter**

This course introduces participants to established and emerging peace-building methodologies used to help transform conflict in positive ways and heal divisions in divided and traumatized societies. From thematic interventions (i.e., religious, ethnic, political, etc.), interface work, and trust-building workshops to creative writing, remembering, and storytelling methodologies, participants are exposed to a variety of imaginative and relevant conflict transformation techniques used by practitioners working with divided communities.

As an exercise in reflective practice, course participants will be tasked to work alongside the course instructor to create a tailored and integrated set of methodologies for peace-building that are potentially beneficial to their unique historical and/or vocational contexts.

## Participant Learning Objectives:

- Explore and evaluate creative and constructive strategies for encountering and learning from the "Other"
- Learn practical skills for peace-building and inter-communal reconciliation
- Learn and cultivate constructive approaches for facilitating and evaluating models for intervention
- Participate in a constructive forum for mutual learning and reflective practice in the development and application of peace-building methodologies

## **Unit Four: IR9302 Conflict Transformation Capstone: Field Study**

The capstone course gives students the opportunity to demonstrate their competency in the learning objectives set out in the conflict transformation curriculum. In this capstone course students will apply curricular objectives through a field study project in Northern Ireland. Following a four-week period of

# CERTIFICATE PROGRAMS

online and independent field study preparation (reading/writing exercises), learners will travel to Northern Ireland for a two-week series of practitioner workshops, creative and critical thinking sessions, field-based experience, and reflective practice. The course will conclude with a summative evaluation by faculty of participant.s ability to comprehend and integrate the strategies, concepts, and practices of conflict transformation.

## Capstone Learning Outcomes:

- Provide participants an opportunity to learn from and work within an active and pertinent peace-building organization participating in local and global conflict transformation initiatives
- Offer Northern Ireland.s story as a learning parallel to each participant.s vocational journey, providing unique peace-building methodologies and practices to consider
- Create and reinforce a community of practice, building a network of positive relationships beneficial for the dynamic work of transforming conflict in constructive and creative ways

## **Department Courses and Descriptions**

IR8351 **Identity, Religion, and Violent Conflict** (3 credit hours . Unit 2 certification course)

Understanding the complex tectonics of identity . religious, ethnic, tribal, etc. . is necessary for policymakers and academics wanting to grasp more fully the underlying causes of violent conflict between communities. This course examines identity construction in the diverging contexts of conflict and coexistence. It explores the relationship between identity and conflict transformation. In particular, it focuses in on the paradoxical role of religion, religious ritual, and religious identity in escalating violence and building peace.

IR8352 **Models for Engagement and Encounter** (3 credit hours . Unit 3 certification course)

This course introduces participants to established and emerging peace-building methodologies used to help transform conflict in positive ways and heal divisions in divided and traumatized societies. From thematic interventions, interface work, and trust-building workshops to creative writing, remembering, and story-telling methodologies, participants are exposed to a variety of imaginative and relevant conflict transformation techniques used by practitioners working with divided communities.

IR9302 **Capstone Field Study Course** (3 credit hours . Unit 4 certification course)

The capstone course gives students the opportunity to demonstrate their competency in the learning objectives set out in the conflict transformation curriculum. In this capstone course students will apply curricular objectives through a field study project in Northern Ireland. The course will conclude with a summative evaluation by faculty of the participant's ability to comprehend and integrate the strategies, concepts, and practices of conflict transformation.

## **Department Faculty**

[Academic Certificate Program in Conflict Transformation Faculty Website](#)

## **Department Website**

# CERTIFICATE PROGRAMS

[Academic Certificate Program in Conflict Transformation Website](#)

## Certificate in Educational Computer Gaming

### Academic Year

2014-2015

### Program Specific Admission Requirements

In this graduate certificate program, you will learn to evaluate, design and create educational computer games. These games can be developed to target any population, circumstance or situation to teach, train or practice any skill or topic. You may be an educator who wants to make some games for your classes, or a parent who may make some for your children, or just interested in how games can help someone learn.

To participate in this graduate certificate, students must have an undergraduate degree in a technology-related field (or equivalent experience) and have completed at least two computer programming classes with a B- or better. Students need computer programming as a skill they already have.

### Certificate Requirements

The certificate requires four classes (12 credit hours) that can also be used toward a Master's of Computer Science or Computer Information Systems.

Required classes (two courses; 6 hours)

- CS6335 Game Development
- CS6375 Special Topics: E-Learning

Elective classes – select two (two courses; 6 hours)

- CS6315 Artificial Intelligence \*
- CS6320 Files and Database \*
- CS6325 Computer Graphics \*
- CS6330 Network & Data Communications \*
- CS6350 Hardware and Operating Systems \*
- CS6375 Special Topics \*

\*Any research work in these classes must be in related to educational computer gaming.

### Department Courses and Descriptions

# CERTIFICATE PROGRAMS

## Department Faculty

[Certificate in Educational Computer Gaming Faculty Website](#)

## Department Website

[Certificate in Educational Computer Gaming Website](#)

## Certificate in Public Communication, Public Policy, and Public Leadership

### Academic Year

2014-2015

### Program Specific Admission Requirements

A graduate-advanced undergraduate program for students seeking to engage the traditions and strengths of St. Mary's University in policy, public service, communication, and community leadership to advance the public interest in the 21st century.

The 15-hour certification program is intended to support graduate students wishing to advance the public interest, locally and globally, through policy analysis and formulation, the focusing and articulation of public issues, and leadership.

Public administration graduate students take 2 Public Affairs (PA) courses (policy emphasis) and 3 Communication courses (Communication emphasis).

Communication graduate students take 2 CM courses and 3 PA courses.

The 12-hour certification program is intended for advanced undergraduates; juniors and seniors take 2 PA core courses and 2 CM core courses. (Five-year, undergraduate students pay the undergraduate rate).

The program, at the grad and undergrad levels, is intended to supplement students' regular degree courses by offering an additional certification. No pre-requisites are required for undergraduate students already majoring in political science or communication.

### PA Courses

Graduate students choose 2 courses from this list of required core options

#### **PA 6301 Public Administration and Policy**

A survey of the field of public administration and public policy including politics and policy process, organization theory, management principles, human resource management, fiscal policy, program design and evaluation and ethics.

# CERTIFICATE PROGRAMS

## **PA 6302 Policy Formulation and Implementation**

This course examines how public issues are addressed through the formulation of public policy proposals, how policy proposals succeed and fail in the political and legislative processes (federal and state), and how political institutions, context and processes shape the implementation of public policies.

## **PA 6304 Public Policy Analysis**

Seminars examine the core component of policy making—the examination, comparison and choice of policy alternatives. The values, assumptions, and tools associated with welfare economics, as well as alternative approaches to analysis. Key issues such as information capacity, public input, rhetorical tools of argument and ethical obligations of the policy analyst may also be covered. Policy analysis is systematic thinking about public issues or decisions leading to effective, efficient and equitable responses that can be broadly communicated.

Graduate students choose 1 course from this list of required core options:

**PA 7302 Leadership and Organization Culture** This is a course that offers a comparative study of organizations and how different types of organizations affect the nature and style of leadership. The environment, structure and culture of public, non-profit and private sector organizations and leadership will be compared and contrasted. The purpose of this course is to give the future public leader insight and understanding into the differences and similarities of organizations that comprise public life and affect public policy.

**PA7303 Ethics, Values, & Public Service** This course engages the student in thinking systematically about morals and conduct and making judgments about right and wrong as a public official. Three primary questions are addressed: 1) What counts? 2) What is at stake? And 3) How can public officials ensure professional success and ethical survival?

## **CM Courses**

Graduate students choose 1-3 courses from this list of required core options (one is required):

### **CM 7350: Trends in News and Public Affairs: the Articulation of Public Issues -**

Examines the theory, practice, and role of news and news products in shaping the public dialog. Includes consideration of the news as input in politics and policy making, and practical uses of news to shape and articulate public issues.

### **CM 7345: Applied Persuasion**

Explores the theory, practice, and research methodology of persuasion with the dual purpose of providing a scholarly understanding of persuasion and practical knowledge of the principles and tools of persuasion.

### **CM 7332: Public Relations Writing and Campaigns**

Studies, analyzes, and applies principles used in public relations communication to consumers.

Participants collect, prepare and distribute information through the mass media, reports, and other forms

# CERTIFICATE PROGRAMS

of public information campaigns. Includes preparation and execution of campaign strategies, position papers, and scenarios to work out solutions to communication/public relations problems.

Once 3-hour required core is fulfilled, choose from the remaining courses (above) or from the following electives:

## **CM 7302 Electronic Publishing and Presentations I**

Provides experience in Internet electronic publishing and basic Web design through manipulation of Hypertext Markup Language (HTML), Extensible Hypertext Markup Language (XHTML), and Cascading Style Sheets (CSS). Includes basic graphic manipulation techniques and basic use of a Web building application.

## **CM 7303 Electronic Publishing and Presentations II**

Explores the role of communication professional as both web content creator and as program manager. Helps students to hone writing skills for the medium, to manage development of web team and clients, and to make disparate pieces cohere into a quality product.

## **CM 7311 Media Script Writing**

Explores various approaches and conventions of film, television, motion picture, and audio visual script writing, with special emphasis on narrative and documentary production.

## **CM 7313 Video Design and Production**

Gives participants an opportunity to explore the techniques employed in lighting, camera work, and audio manipulation for a full range of television presentations.

## **CM 7341 Interpersonal Communication Skills**

Explores the theory and research pertaining to interpersonal communication skills in dyadic, group, and organizational contexts with emphasis on developing the skills necessary for effective personal and professional relationship building and maintenance, listening, problem solving, and conflict management.

## **CM 9300 Foundations in Communication Theory**

Introduces students to seminal and current literature on the various approaches to communication theory, to give participants an overview of the scholarship in the area.

## **CM 9311 Survey of Rhetorical Theory**

Traces the evolution of rhetorical theory through its major eras, starting with the Sophists and pre-Socratics. Participants trace rhetorical theory from the ancients into medieval times, from the modern era into the post-modern.

## **CM 9324 The Law and Ethics of Mass Communication**

Studies historical development of the First Amendment and discusses the moral reasoning which informs a responsible exercise of press freedom. Participants will pay special attention to areas of law essential for mass communication practitioners, such as libel, invasion of privacy, copyright, and information access. Discusses the convergence between information delivery systems and ensuing patterns of regulation and

# CERTIFICATE PROGRAMS

deregulation.

## **Department Faculty**

[Certificate in Public Communication, Public Policy, and Public Leadership Faculty Website](#)

## **Department Website**

[Certificate in Public Communication, Public Policy, and Public Leadership Website](#)

## **Certificate in Software Engineering**

### **Academic Year**

2014-2015

### **Department**

Software Engineering

### **Program Director**

Djaffer Ibaroudene, Ph.D. [dibaroudene@stmarytx.edu](mailto:dibaroudene@stmarytx.edu)

### **About the Certificate**

The certificate program in Software Engineering provides students with the knowledge and the skills necessary to apply sound engineering theory, principles, tools and processes, as well as principles of computer science and mathematics, to the evaluation, design, development, testing and maintenance of complex software systems. This program is designed to serve the needs of individuals who would like to increase their knowledge and skill levels in the field of software engineering in a short time frame.

It is important to note that this certificate program does not focus on providing students with a large repertoire of programming skills that emphasize particular language syntax. Coding is only one phase of the software life cycle. Instead, the program gives students the knowledge and skills necessary to develop and manage large-scale software systems with a primary focus on quality, reliability, and maintainability. It emphasizes the organizational structures, development processes, analysis and modeling techniques, design methodologies, documentation standards, and quality controls. The student will learn all aspects of software development; namely, software project management, system specifications, requirement analysis, design techniques, documentation, coding, testing, maintenance, quality assurance, and configuration management.

Students who successfully complete the certificate program are highly encouraged to continue and earn their Master of Science degree in Software Engineering by taking six additional courses and complete a capstone project or five additional courses and a thesis.



# CERTIFICATE PROGRAMS

## Admission Requirements

Applicants must have a Bachelor of Science degree in Software Engineering, Computer Science, Computer Engineering or a closely related discipline.

Applicants whose Bachelor of Science degree is not in Software Engineering, Computer Science or Computer Engineering are required to demonstrate proficiency in the following subjects or take the corresponding prerequisite courses at St. Mary's University or other institutions:

### Prerequisite (one of the following languages)

C/C++ Programming

Java

Other programming languages may be acceptable

Data Structure and Algorithms

### Corresponding Course at St. Mary's

EG1302 – C Programming for Engineers

EG3392 – Java and Applications

CS1310 – Programming 1

E2342 – Data Structures and Algorithms Or CS1311  
– Programming 11 and CS2315 – Algorithms

## Certificate Requirements

The certificate program in Software Engineering is a four-course (12 hour) program. Students will choose four courses from this list of three-hour courses:

- EG6306 Software Project Planning and Management
- EG7304 Requirement Engineering
- EG7312 Software Design and Architecture
- EG6334 Software Quality Assurance
- EG7308 Software Validation and Verification
- EG7310 Software Maintenance Evolution and Reengineering

## Department Courses and Descriptions

### EG 6306 **Software Project Planning and Management** (3)

Planning and control of software project. Cost factors and cost estimation. Project scheduling, staffing, setting milestones. Role of project manager and organization of project team. Project management tools. Factors influencing productivity and success. Productivity metrics. Software project economics. Metrics for software quality, schedule, budget, and progress. Analysis of options and risks. Planning for change. Management of expectations. Release and configuration management. Software process standards and process implementation. Software contracts and intellectual property. Approaches to maintenance and long-term software development. Case studies of real industrial projects. CASE tools for project planning, cost estimation, and project management

### EG 6328 **Software Engineering** (3)

This course surveys the entire software engineering field. It presents the management and technical

# CERTIFICATE PROGRAMS

aspects of the software development process. Software architectures, paradigms, and life-cycles are briefly discussed and compared. It covers topics in software management, problem specification and analysis, system design techniques, documentation, system testing and performance evaluation, and system maintenance. The technical aspects include software requirement analysis, design methodologies, system implementation, and testing techniques. Software verification and validation, quality assurance, and configuration management are also introduced.

## EG 6334 **Software Quality Assurance** (3)

Quality: How to assure it and verify it? Avoidance of errors and other quality problems. Inspections and formal technical reviews. Testing, verification, and validation techniques. Process assurance versus product assurance. Quality work product attributes. Software quality measurements and metrics. Quality process standards and formal approaches to SQA. Product and process assurance. Problem analysis and reporting. Statistical approach to quality control. Software configuration management: baselines, version control, change control, configuration audits, and SCM standards. CASE tools for SQA.

## EG 7155, 7255, 7355 **Internship** 1, 2, 3 semester hour(s)

An experimental approach to advanced engineering topics through work in a company or organization. Industry/University cooperation is required. Topics vary depending on the needs of the sponsoring company or organization and the academic needs of the student. Students may start an internship projects anytime after enrolling in any Engineering program. A minimum of three credit hours is required. Credit hours may be completed in increments of 1, 2, or 3 credit hours per semester. Prerequisite: Consent of the Graduate Program Director.

## EG 7304 **Requirement Engineering** (3)

Domain engineering. Techniques for discovering and eliciting requirements. Languages and models for representing requirements. Analysis and validation techniques, including need, goal, and use case analysis. Requirements in the context of system engineering. Specifying and measuring external qualities: performance, reliability, availability, safety, security, etc. Specifying and analyzing requirements for various types of systems: embedded systems, consumer systems, web-based systems, business systems, systems for scientists and other engineers. Resolving feature interactions. Requirements documentation standards. Requirement traceability. Human factors. Requirements in the context of agile processes. Requirements management: Handling requirements changes. CASE tools for requirement engineering.

## EG 7305 **Object-Oriented Analysis and Design Methodologies** (3)

Review of object oriented concepts: objects, classes, instances, inheritance, and entity relationship diagrams. Object-oriented analysis methodologies and their role in the software development process. Object-oriented modeling and prototyping using UML. Software reuse. Design patterns, frameworks, architectures. Component design. Measures of design attributes. Component and system interface design.

## EG 7308 **Software Verification and Validation** (3)

Testing techniques and principles: defects versus failures, equivalence classes, boundary testing. Types of defects. Black-box versus structural testing. Testing categories: Unit testing, integration testing, profiling, test driven development. State-based testing, configuration testing, compatibility testing. Website testing. Alpha, beta, and acceptance testing. Coverage criteria. Test instrumentation and tools.

# CERTIFICATE PROGRAMS

Developing a test plan. Managing the test process. Problem reporting, tracking, and analysis. Testing metrics. Software safety. Debugging and fault isolation techniques. Defect analysis.

## EG 7309 **Formal Methods in Software Engineering** (3)

Review of mathematical foundation for formal methods. Formal languages and techniques for specification and design, including specifying syntax using grammars and finite state machines. Analysis and verification of specification and designs. Use of assertion and proofs. Automated program and design transformation.

## EG 7310 **Software Maintenance, Evolution, and Reengineering** (3)

Introduction to software maintenance, defect management, corrective, adaptive and perfective maintenance. Evolution of legacy software systems. Program comprehension techniques, reverse engineering, restructuring, refactoring of software systems. Software re-engineering, data reverse engineering. Software reuse. Impact analysis, regression testing.

## EG 7311 **User Interface Design** (3)

Psychological principles of human-computer interaction. Evaluation of user interfaces. Usability engineering. Task analysis, user-centered design, and prototyping. Conceptual models and metaphors. Software design rationale. Design of windows, menus, and commands. Voice and natural language I/O. Response time and feedback. Color, icons, and sound. Internationalization and localization. User interface architectures and APIs. Case studies and project.

## EG 7312 **Software Design and Architecture** (3)

Modeling and design of flexible software at the architectural level. Basics of model-driven architecture. Architectural styles and patterns. Middleware and application frameworks. An in-depth look at software design. Survey of current middleware architectures. Design of distributed systems using middleware. Component based design. Measurement theory and appropriate use of metrics in design. Designing for qualities such as performance, safety, security, reusability, reliability, etc. Measuring internal qualities and complexity of software. Evaluation and evolution of designs.

## EG 7313 **Web Engineering** (3)

Concepts, principles, techniques, and methods of Web engineering. Topics include requirement engineering for Web applications, modeling Web applications, Web application architectures, Web application design, technologies for Web applications, testing Web applications, operation and maintenance of Web applications, web project management, web application development process, usability of Web applications, performance of Web applications, and security of Web applications. Quality characteristic and attributes for websites.

## EG 7314 **Software Security** (3)

Theory and practice of software security. Identification of potential threats and vulnerabilities early in the design cycle. Methodologies and tools for identifying and eliminating security vulnerabilities. Techniques to prove the absence of vulnerabilities and ways to avoid security holes in new software. Essential guidelines for building secure software: how to design software with security in mind from the ground up and to integrate analysis and risk management throughout the software life cycle.

# CERTIFICATE PROGRAMS

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### **Department Faculty**

[Certificate in Software Engineering Faculty Website](#)

### **Department Website**

[Certificate in Software Engineering Website](#)

# JOINT DEGREE PROGRAMS

## Joint Degree Programs

In addition to separate graduate and law degrees, the Law School and the Graduate School also offer a joint program of studies leading to degrees of Doctor of Jurisprudence (J.D.) and Master of Arts/Masters in Business Administration/Masters in Public Administration/Master of Science. The joint degree program allows a student to complete the requirements for both degrees in three to four years. This is accomplished by twelve hours of law credit being transferred as elective credit to the appropriate masters degree and six hours of masters credit being transferred as elective credit toward the J.D. degree. Student must complete a minimum of 24 semester hours of master courses at St. Mary's University, exclusive of prerequisites.

The first year of study consists of law courses. During the second and third years, the student completes the remaining law and appropriate master courses.

Admission to the joint program requires application to both Schools although application to the Graduate School need not be made until the student begins law School.

For more information, please visit the [Law School Joint Degree Program Website](#).

# COMBINED BACHELOR'S/MASTER'S DEGREE PROGRAMS

## Combined Bachelor's/Master's Degree Programs

The Graduate School offers 12 Combined Bachelors and Masters Degree Programs offering undergraduate students the opportunity to begin graduate studies during their senior year. All interested and qualified students must apply during their junior year and, if accepted, begin their graduate studies as "Conditionally Accepted" graduate students. The conditional status is lifted and regular status conferred upon the student completing his or her undergraduate work. Students are limited to taking no more than 12 graduate hours during their senior year and, for financial aid purposes, are charged the undergraduate tuition fixed rate for all work undertaken during this year. This tuition scholarship is applicable to no more than the first 12 hours of graduate study regardless of whether the student has completed all required hours toward their Bachelor's Degree. If the student takes more than the allotted 12 graduate hours during their senior year, which can only be accomplished with special permission of the Graduate Director and Dean, then the student will be charged the graduate credit hourly rate for the excess hours. Also, once the student is admitted as a regular graduate student and is taking solely graduate courses then they will be charged at the graduate tuition rate. All university discounts and scholarships are also in effect.

The combined degree program does not allow for "double counting" of credit hours. The student must complete all required hours for both the undergraduate as well as the Master's Degree. Each student participating in this program must complete all hours required to obtain their Bachelor's as well as their Master's Degree. For instance, if the undergraduate program in a specific discipline requires that the student must complete 128 hours to obtain their Bachelor's Degree and 36 hours to obtain their Master's Degree then they must complete all hours for both degrees for a grand total of 164 hours.

Below is a list of the currently approved Combined Degree programs. Students wishing to pursue a combined degree should consult with the Program Director of the specific program.

- BA/MA Communications Studies
- BA/MA English Literature and Language
- BA/MA International Relations
- BA/MA Political Science
- BA/MPA Public Administration
- BS/MS Computer Science
- BS/MS Computer Information Systems
- BS/MS Electrical Engineering
- BS/MS Engineering Management Systems
- BS/MS Industrial Engineering
- BS/MS Software Engineering
- BBA/MBA (4 + 1 Program) Business and Administration

For more information in eligibility and requirements, contact Graduate School Admission at (210)

# COMBINED BACHELOR'S/MASTER'S DEGREE PROGRAMS

436-3101 or email [graduate@stmarytx.edu](mailto:graduate@stmarytx.edu).

# About the Catalog

The St. Mary's University Graduate Catalog online is the comprehensive single source of University-wide information related to academic programs, course descriptions, degree programs, and policies that govern progress towards completion of an Graduate degree. On many subjects, more detailed information is available from school and department webpages for various programs and services. Students should seek information from these sources as needed.

The Graduate Catalog is available exclusively online; printed copies are not available.

## **The catalog is organized into the following sections:**

### **Search Programs**

A search interface is provided for searching programs.

### **About Graduate School**

This section contains general, as well as historical information about the University.

### **Admission**

This section contains introductory information pertaining to admission process and philosophy.

### **Financial Planning**

This section contains introductory information concerning tuition, payments, and financial aid.

### **Academic Policies and Procedures**

This section includes current University academic policies: graduation requirements, grade appeal, academic integrity, change of major, grades, and other policies that bear directly on progress towards completion of an Graduate degree.

### **Student Services**

This section includes information on services available to students.

### **Master's Programs**

Programs are organized alphabetically. For each program the following information is provided:



- Academic year for the program
- School name for the program
- School dean's name and e-mail for the program
- Department name for the program
- Program Director name and e-mail for the program
- Admission Requirements
- Degree requirements
- Department courses and descriptions
- Department faculty website link
- Department website link

## **PDF Versions**

This section contains menu links to PDF versions of the Graduate Catalog.

## **Downloading and Printing Catalog Pages**

- Program only: You can download and print a PDF for a single program by clicking on the PDF icon next to the program title.
- Level only: You can download and print a PDF for all master's programs or all Ph.D programs.

### **Printing only a portion of catalog web content:**

Copy the critical text that you want to print, and then paste it into another program, like Word or Notepad, and print from that program.

## **Previous Catalogs**

- [2013-2014](#)
- [2012-2013](#)
- [2011-2012](#)
- [2010-2011](#)
- [2009-2010](#)
- [2008-2009](#)
- [2007-2008](#)
- [2006-2007](#)
- [2005-2006](#)

## **Disclaimer**

The University reserves the right at any time to delete, amend, or alter any of the customs, rules, regulations, and requirements of the University, such as required courses, credit hours and weeks in resident study to graduate even though the same may not be expressly set out in this online catalog. Information contained herein is not to be regarded as creating a binding contract between the applicant or the student and the University. This disclaimer is necessitated by the fact that the Catalog is an accurate compilation of the customs, rules, regulations, and requirements of the University as of the time it is published. During the year a Catalog is in effect, the continuing responsibility of operating the

school may require changes by the University administration of those customs, rules, regulations, and requirements. Students should be aware, therefore, of the need to determine the current status of any rule stated in this Catalog.

# About Graduate School

## Mission Statement

St. Mary's University, as a Catholic Marianist University, fosters the formation of people in faith and educates leaders for the common good through community, integrated liberal arts and professional education, and academic excellence.

Our mission statement is a reflection of the Characteristics of Marianist Universities. There are five elements that characterize the Marianist approach to education: educate for formation in faith, provide an integral quality education, educate in the family spirit, educate for service, justice and peace, and educate for adaptation and change. The three Marianist universities have published a book called [Characteristics of Marianist Universities](#) to fully describe the Marianist approach to education at the university level.

Graduate education is especially crucial to our society because it is at the pinnacle of all education, cultural, economic and political development. Graduate education influences the world in far reaching ways due to the basic research conducted by its faculty and students. The quality of our civilization and its continuity, and the witness of the Catholic Marianist tradition, depends upon its highest intellectual achievements gained through graduate education. At St. Mary's we insure that graduate education is strong, vibrant, and healthy – capable of discharging its mission of intellectual development and leadership.

As the Graduate School of a Catholic Marianist university, this school strives to integrate a rigorous intellectual experience, a zeal for the search for knowledge and truth, and a commitment to leadership and service.

## Institutional Memberships

Association of Texas Graduate Schools  
Conference of Southern Graduate Schools  
American Bar Association  
Association of American Law Schools  
The National Catholic Educational Association  
American Association of Colleges for Teacher Education  
American Association of Higher Education  
American Association of University Women  
American Council on Education  
American Schools of Oriental Research  
Association of Catholic Colleges and Universities  
Association of Governing Boards of Colleges and Universities  
Association of Texas Colleges and Universities

College Board  
Council for Higher Education Accreditation  
Greater San Antonio Chamber of Commerce  
Higher Education Council of San Antonio  
Hispanic Association of Colleges and Universities  
Independent Colleges and Universities of Texas  
International Association of Counseling Services  
National Association of Colleges and Universities  
National Association of Independent Colleges and Universities  
National Association of Schools of Music  
North San Antonio Chamber of Commerce  
National Catholic Educational Association  
National Collegiate Athletic Association  
National Collegiate Honors Council  
Southern Association of Colleges and Schools  
Texas Campus Compact  
Texas Humanities Alliance  
World Affairs Council of San Antonio

## **GRADUATE SCHOOL GOVERNANCE**

All matters of the Graduate School are under the authority of the Graduate Council of which the Dean of the Graduate School is Chairperson. The faculty of the Graduate School consists of University faculty members who teach at the undergraduate and graduate level. Most of these faculty members are housed in the constituent undergraduate schools and function under the shared authority and in cooperation with the undergraduate schools and deans and the Graduate School and Graduate Dean.

## **GRADUATE EDUCATION**

### **Definition**

The words graduate and undergraduate are universal terms that are not always well defined. The aim of undergraduate instruction is to give the student knowledge of the history, tradition, and values of a particular society. The intent is to make the recipient a literate and articulate participant in the life of the nation and the world. Included in such instruction are the basic skills of communication and computation by which one functions effectively as an educated and responsible citizen and steward of the nation as well as of the world.

Graduate education is at a level of complexity and generalization that extends the knowledge and intellectual maturity of the student. Graduate study requires students to analyze, explore, question, reconsider, and synthesize old and new knowledge and skills. It affords a greater depth, intensity, specialized skills, and sense of creative independence that allows the graduate to practice in and contribute to a profession or field of scholarship.

Admission to graduate programs is more selective, class size is smaller, and the lecture is often replaced by seminar and laboratory. The learning experience is more self-directed and interactive between faculty and students, and among the students themselves. Faculty members are often more experienced and more highly specialized.

Master's degree programs provide an understanding of the subject matter, bibliography, and theory and methodology of the field. They also provide an understanding of research and the manner in which research is conducted. A non-research-oriented professional master's degree requires an understanding of the accepted professional practices in the field. Finally, master's programs provide a means for the candidates to demonstrate the knowledge and skills acquired.

A doctoral degree program, in addition to the skills of a master's candidate, provides a period of residency, substantial mastery of the subject matter, theory, bibliography, research and methodology of a significant part of the field. A dissertation evidences competence in the special language, other and independent research skills competence in pursuit of the doctoral degree. The dissertation must augment or reinterpret the knowledge of the field. Finally, the doctoral program provides a means for the candidate to demonstrate the knowledge and skills acquired.

## **Goals and Objectives**

Students completing a graduate degree at St. Mary's University will have achieved the following goals and objectives:

1. Graduates will have completed courses characterized by advanced disciplinary content and intellectual rigor.
2. Graduates will demonstrate currency in the discipline.
3. Graduates will be able to demonstrate mastery of specified knowledge and skills that includes an integration of knowledge and disciplinary specialization.
4. Graduates will comprehend the discipline and understand research that aids in actual practice of the education acquired.
5. Graduates will understand how knowledge is created and how to experiment and discover new knowledge.
6. Graduates will demonstrate mastery of how to think, act, and perform independently in their discipline.
7. Graduates will have acquired a broad, coherent, academic experience.
8. Graduates will be able to apply knowledge learned in course work.
9. Graduates will be able to demonstrate mastery of communication skills in a manner appropriate to their degree and discipline.
10. Graduates will be able to execute practices and skills associated with their degree.
11. Graduates will be able to demonstrate breadth of knowledge in the discipline, depth in specific areas, and the ability to integrate what has been learned.

## **Standards of Excellence**

The following criteria are considered standards of excellence which are adhered to by graduate programs at St. Mary's University:

1. Admission - Acceptance is limited to those with high promise for success in graduate study to ensure a high quality-learning environment.
2. Level of Sophistication - Graduate courses are characterized by advanced disciplinary content and intellectual rigor. An appropriate number of graduate courses are offered to provide a balanced program. Students are required to have a significant percentage of graduate-level (distinct from combined undergraduate and graduate) courses in their degree programs.
3. Continuity/Intensity - Graduate courses are offered frequently enough to allow students to proceed through their programs in a timely and efficient manner. The program has a critical mass of students enrolled, so that they are part of a coherent group of peers. Time limits are necessary for continuity of the graduate experience and to ensure that the student is current in the discipline when the degree is awarded.
4. Core of Planned Course work - In a graduate program there is a core of planned course work appropriate to the major, as opposed to a mere collection of courses and credits. The program is coherent, to assure mastery of specified knowledge and skills through interrelated courses. The course work fosters an integration of knowledge as well as disciplinary specialization.
5. Tool/Technique/Methodology Requirements - Components which enable students to acquire tools, techniques, or methodologies for the discipline are an important part of the program. These include statistics, computer technology, research methodology, and, in some instances, foreign languages. Their function is to help the student comprehend the discipline, understand research, and aid in actual practice of the education acquired.
6. Research Component - Research is fundamental to graduate study. Students learn how new knowledge is created, how experimentation and discovery are carried out, and how to think, act, and perform independently in the discipline. Depending upon the program's applied orientation, the student can demonstrate mastery through research papers, literature reviews, artistic performance, oral and written presentations, or case studies.
7. Extra-Disciplinary Experience - Some academic exposure outside of the immediate major or discipline is common. This is necessary when a single discipline does not convey all of the knowledge and experience an individual student may need from a Master's degree program. Accordingly, students may be given an opportunity to broaden the academic experience in a coherent way, through related course work outside the major and through other experiences such as internship or practica.
8. Application of Knowledge - A graduate program requires the student to develop and demonstrate the ability to apply knowledge learned in course work. This is accomplished through examinations, field problems, theses, papers in lieu of theses, practica, internships or assistantships. An evaluation of the student's performance in these areas is a part of the student's permanent record.
9. Communication Skills - Students demonstrate mastery of verbal and written communication in a manner appropriate to the degree and discipline. Such skills may be gained through study of specific concepts and methodology, written assignments, oral reports, and examinations. These skills are evaluated in the culminating experience.
10. Culminating Experience - A capstone or integrating activity, such as an advanced seminar, thesis, recital, exhibit, practicum, or internship provides a culminating experience. This allows students to demonstrate the writing, organizational, and applied performance skills associated with the particular degree. It also provides a record of the student's achievement, which can be consulted for references and program evaluation.
11. Comprehensive Examination - The graduate degree includes a comprehensive examination at the end of all course work for the degree. Students are required to demonstrate breadth of

knowledge in the discipline, depth in specific areas, and the ability to integrate what has been learned. The examination is conducted in written and/or oral form.

## **Academic Accreditation**

Accreditation is a status awarded to an educational institution or a program that has been found to meet or exceed stated standards of excellence and quality in educational practices. St. Mary's University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award B.A., B.B.A., B.S., L.L.M., M.A., M.B.A., M.P.A., M.S., J.D., and Ph.D. degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of St. Mary's University.

Contact the Commission on Colleges to file a public complaint against the University.

## **Specialized Accreditation**

### **Business Administration**

**Bill Greehey School of Business:** AACSB International – Association to Advance Collegiate Schools of Business.

**Master of Business Administration (MBA):** AACSB – International Association of Management Education

### **Counseling**

**Clinical Mental Health Counseling (M.A.):** CACREP – Council for Accreditation of Counseling and Related Educational Programs

**Marriage and Family Therapy (M.A.):** COAMFTE – Commission on Accreditation for Marriage and Family Therapy Education

**Counselor Education and Supervision (Ph.D.):** CACREP – Council for Accreditation of Counseling and Related Educational Programs

**Marriage and Family Therapy (Ph.D.):** COAMFTE – Commission on Accreditation for Marriage and Family Therapy Education

### **Education**

**Catholic School Leadership (M.A.):** Approved by The Texas State Board for Educator Certification

**Education (M.A.):** Approved by The Texas State Board for Educator Certification

**Educational Leadership (M.A.):** Approved by The Texas State Board for Educator Certification

**Reading (M.A.):** Approved by The Texas State Board for Educator Certification

**Teacher Education Program:** Approved by the Texas State Board for Educator Certification

**B.A. Degree Program:** Accredited by the National Association of Schools of Music

## **Engineering**

**Computer Engineering (B.S.):** Accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>

**Electrical Engineering (B.S.):** Accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>

**Industrial Engineering (B.S.) :** Accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>

## **Law**

**Juris Doctorate (J.D.):** Approved by The American Bar Association

## **Institutional Memberships**

The American Association of Higher Education  
The American Association of University Women  
The American Council on Education  
The American Association of Colleges for Teacher Education  
The American Bar Association  
The American Schools of Oriental Research  
The National Association of Schools of Music  
The Association of American Colleges and Universities  
The Association of American Law Schools  
The Association of Governing Boards of Colleges and Universities  
The Association of Texas Colleges and Universities  
The Association of Texas Graduate Schools  
The Conference of Southern Graduate Schools  
The Council of Colleges of Arts and Sciences  
The Hispanic Association of Colleges and Universities  
The International Association of Counseling Services  
The Independent Colleges and Universities of Texas  
The National Association of Independent Colleges and Universities  
The National Catholic Educational Association  
The Association of Catholic Colleges and Universities



The National Collegiate Honors Council  
The Southern Association of Colleges and Schools  
The Texas Humanities Alliance  
Council of Undergraduate Research

# Admission

## General

Generally, admission is granted only to individuals with high promise for success in graduate study. Applicants demonstrate this potential through previous schooling and testing. All applicants must have a bachelor's degree or the equivalent from an accredited college or university. As an exception, auditors are not required to have a degree. Applicants should refer to degree programs for specific requirements.

## Entrance Exams

The Aptitude Test of the Graduate Record Examination (GRE), the Graduate Management Admissions Test (GMAT), or the Miller Analogies Test (MAT) is required of most applicants. As an exception, the admission's test may be waived for students who already have a graduate degree, or is not required for ONLY the following programs: Public Administration, Political Science and Theology. Applicants should refer to specific degree programs for the appropriate entrance requirements. Also, see Application Procedures below. The test should be taken before registration, but it may be taken during the first semester of enrollment for some degree programs with further enrollment contingent upon test results. Students from foreign countries must submit test scores prior to admission.

## Test Requirements for Programs

<b>Program</b>	<b>Required Exam</b>
Business Administration	GMAT or GRE
Communication Studies	
Clinical Mental Health	GRE or MAT
Marriage and Family Therapy	
Catholic School Leadership	
Computer Engineering	
Computer Information Systems	
Computer Science	
Counselor Education and Supervision (Ph.D.)	
Education	GRE
Educational Leadership	
Electrical Engineering	
Engineering Systems Management	
English Literature and Language	
Industrial Engineering	

Industrial/Organizational Psychology  
International Relations  
Marriage and Family Therapy (PhD)  
Software Engineering

## Admission Categories

**Regular:** Regular admission is granted to applicants who have demonstrated the potential for success.

**Conditional:** Students may enroll in a maximum of nine hours. They must earn a B or better in all graduate courses taken as a conditional student (*for Domestic students ONLY*).

**Special:** Special admission may be granted to applicants not intending to work toward a degree or who are registered at another graduate school and have permission of the Dean of that school to take specific courses at St. Mary's University. Special admission may also be granted to those applicants seeking certification in appropriate programs. Students in certification programs wishing to pursue a complete Master's Degree from St. Mary's and who have been admitted as Special students must complete all requirements for Regular Admission of the intended program.

**Auditors:** Auditors may be admitted to graduate courses with the permission of the instructor of such courses and the Graduate Program Director. No credit is given for such work.

## Time Limits for Completing Conditions

Conditions that must be satisfied before enrollment will be specified in acceptance letters. Others must be satisfied during the first semester of enrollment unless otherwise specified.

## Application Procedures

1. Early application submissions are encouraged and may be completed online via the university's Graduate School web site.
2. There is no application fee required.
3. Submit the appropriate test scores required for the applicable degree program – the Graduate Management Admissions Test (GMAT), Aptitude Test for the Graduate Record Exam (GRE), or the Miller Analogies Test (MAT).
4. Include one complete and official transcripts showing previous college work and degree or arrange to have them sent to the Dean of the Graduate School. Transcripts must be evaluated by an approved third party provider for international students.
5. Include two letters of recommendation from individuals well acquainted with your academic/professional ability. Students who have graduated from St. Mary's University are exempt from this requirement.
6. Specific programs may require an interview.

## **Admission to Graduate School**

The Graduate Program Director, representing the academic department or school of the applicant's field of study, reviews the application and recommends final disposition to the Graduate Council.

The Graduate Council approves or denies admission of the applicant. The Council reserves the right to refuse admission to any applicant without assignment of reasons. Admission to graduate study does not imply admission to candidacy for a graduate degree.

The successful applicant will receive a letter of admission from the Dean of the Graduate School. The letter will contain instructions for registration and other important information.

All new full and part-time students must complete the Health and Immunization Form and return it to the Student Health Center no later than the first day of class.

*Note: Requirement of Meningitis Vaccine – As of January 2, 2012, all entering college and university students (under the age of 30) are required to show proof of an initial meningococcal vaccination or a booster dose during the five-year period before enrolling. Students must get the vaccine at least 10 days before the semester begins.*

## **International Student Graduate Admissions**

Admission to the Graduate School is granted to individuals with high promise for success in graduate study, as demonstrated through previous schooling and testing. All applicants must have a bachelor's degree or the equivalent from an accredited college or university. Please refer to degree programs for specific requirements. In accordance with SEVIS I17 regulations, conditional admittance can no longer be offered to International Students.

The Aptitude Test of the Graduate Record Examination (GRE), the Graduate Management Admissions Test (GMAT), and the Miller Analogies Test (MAT) requirements will vary according to program. Students from foreign countries must submit test scores prior to admission. Tests may be waived for students who have completed a graduate degree or who are seeking admission into the Public Administration, Theology or Political Science programs. Requests for waivers or exemptions are reviewed on a case-by-case basis and subject to the discretion of the Program Directors and Graduate School Dean.

All International Student applicants whose first language is not English must demonstrate proficiency in English by submitting the results of TOEFL or IELTS exams. Test scores may not pre-date the student's application by more than six months. Official scores must be sent directly to St. Mary's University from the testing agency (school code 6637).

The minimum score for admission to a graduate program is 6.0 on the IELTS exam. Minimum scores for admission to a graduate program on the TOEFL exam is 80. Students who score 6.0 on the IELTS exam or 80-82 on the internet based TOEFL exam will be required to complete English coursework.

English courses must be completed within the first semester(s) of attendance. Students who score a 6.0 on the IELTS or 80-82 on the TOEFL must complete EN 6301 during their first FA/SP semester. If necessary, the graduate program director may require a student with minimum scores to complete EN 6300 during their first FA/SP semester and EN 6301 in the subsequent FA/SP semester. Students who fail to comply may have their admission rescinded. A Designated School Official (DSO) may also cancel/terminate the student's I20 or DS2019.

**Policy change effective October 2013:**

**International students who do not meet the Graduate School's English proficiency minimum are required to enroll in EN6300 (Introduction to Academic Writing for International Students) and EN6301 (Academic Writing for International Students). While a grade of B or higher must be earned in the course(s), the course(s) will not count toward the student's graduate grade point average (GPA).**

All students required to complete English courses and seeking a reduced course load must visit the Office of International Students and Services to receive permission. Failure to receive permission for a reduced course load may jeopardize I20 or DS2019 status.

Graduates of U.S. colleges or universities are not required to submit TOEFL or IELTS scores, or demonstrate written competency in English. English language proficiency exams are not required for students who have earned a bachelor's degree or equivalent from a non-U.S. university in a country where the primary language of instruction is English. Requests for waivers or exemptions are reviewed on a case-by-case basis, and are subject to the discretion of the Graduate School Dean.

*\*Exempt Countries – Australia, Bahamas, Barbados, Belize, Botswana, Cameroon-Anglophone, Canada (all provinces except Quebec), Dominica, Fiji, Gambia, Ghana, Guyana, Ireland, Jamaica, Kenya, Lesotho, Liberia, Malta, Mauritius, New Zealand, Nigeria, Papua New Guinea, Philippines, Samoa, Scotland, Sierra Leone, Singapore, South Africa, Swaziland, Tanzania, Trinidad & Tobago, Uganda, United Kingdom, Zambia and Zimbabwe.*

## **Admission Requirements**

- Apply Online (No Fee)
- Official Transcript Evaluation
- 2 Letters of Recommendation
- Statement of Purpose
- GRE/GMAT/MAT Scores (School Code: 6637)
- Essay (Public Administration, Political Science and Theology programs ONLY.)
- TOEFL/IELTS Scores or IEP Certificate of Completion (School Code: 6637)
- Financial Guarantee

## **Minimum English Language Proficiency Scores**

TOEFL - 80 Internet Based, 213 Computer Based, 550 Paper Based  
IELTS – 6.0

## **Mailing Address:**

Graduate Admissions  
St. Mary's University  
One Camino Santa Maria  
San Antonio, TX 78228

## **New International Students**

Students seeking admission to St. Mary's University Graduate School must submit all paperwork no later than six weeks prior to the start of the semester. Please include a financial guarantee (bank statement, scholarship letter, etc.) with admission documents for I20 or DS2019 processing. Financial guarantees must not be more than six months old at the time of I20 or DS2019 issuance. Students whose funding is contingent upon admission (i.e.: Saudi Arabian Cultural Mission Scholarship) may present the financial guarantee after admission has been granted. Immigration paperwork will be issued to regularly admitted students who have provided proper financial documentation.

The estimated cost of attendance may vary from semester to semester, as the figures are subject to review. For specific information regarding cost of attendance, students should contact Graduate Admissions at 210-436-3101 or [gradsch@stmarytx.edu](mailto:gradsch@stmarytx.edu).

## **Transfer International Students**

Students seeking admission to St. Mary's University Graduate School must submit all paperwork no later than three weeks prior to the start of the semester. Please include a financial guarantee (bank statement, scholarship letter, etc.) with admission documents for I20 or DS2019 processing. Financial guarantees must not be more than three months old at the time of I20 or DS2019 issuance. Students whose funding is contingent upon admission (i.e.: Saudi Arabian Cultural Mission Scholarship) may present the financial guarantee after admission has been granted. Immigration paperwork will be issued to regularly admitted students who have provided proper financial documentation and transfer forms.

The estimated cost of attendance may vary from semester to semester, as the figures are subject to review. For specific information regarding cost of attendance, students should contact Graduate Admissions at 210-436-3101 or [gradsch@stmarytx.edu](mailto:gradsch@stmarytx.edu).

## **Health Insurance and Immunizations**

All International Students attending St. Mary's University must have health insurance. A waiver may be requested for St. Mary's University student health insurance if a student submits proof of additional insurance. If a student pays for health insurance in the spring semester, they are covered through the summer semester. If a student starts classes in the summer semester, then they are responsible for the summer cost in addition to any further semester(s) of study.

All International Students attending St. Mary's University are required to provide proof of Tuberculosis Screening prior to starting classes. Students who are younger than 30 years old must also be vaccinated for Meningitis at least 10 days prior to the start of classes. Please contact the Student Health Center 210-436-3506 or [healthcenter@stmarytx.edu](mailto:healthcenter@stmarytx.edu) for more information regarding Tuberculosis Screening, Meningitis Vaccinations and required health forms.

For additional information on admission to the Graduate School, [click here to access the admission website](#).

# Financial Planning

## Graduate School

## Business Office

The Business Office serves the University community as a whole. Students are the largest segment of our valued clientele, and this section is for providing important information pertaining to student financial transactions.

The Business Office is the center for all student financial transactions during a student's enrollment at St. Mary's University. Our office assist with billing, collection of tuition/fees payments, financial arrangements, and also process refunds checks.

- [Tuition & Fees](#)
- [Payment Policy](#)
- [Forms for Download](#)
- [Frequently Asked Questions](#)

## Financial Aid

St. Mary's University desires to assist all qualified students who seek financial assistance in order to continue their education. Thus the University has established a complete student aid program which includes scholarships, grants, loans, tuition reductions and part-time employment. The allocation of financial assistance is usually related to the student's need. Financial need is the difference between the expense of attending college and the financial resources available to the student and the student's family to meet expenses. It is the basic policy of most colleges to expect that the student's family will make a reasonable effort to assist with the student's college expenses from the family's resources.

The student is also expected to make a contribution from savings and employment. To assure the most equitable distribution of financial assistance, the University uses the financial need analysis information provided by the students and their families on the Free Application for Federal Student Aid (i.e. FAFSA) form. The expected family contribution to the educational expense is determined by considering the family's resources and factors influencing the use of these re sources -- number of dependents, number in college, retirement needs, assets, investments, and other special problems which deserve consideration. Financial assistance from the University must be viewed as supplemental to all other resources (parent's and/or student's expected contribution, percentage of student's savings, student's summer earnings, etc.) available to meet the expenses of attending the University.

For additional information on Financial Assistance, click here to access the [Office of Financial Assistance website](#).



# Academic Policies and Regulations

## Application for Degree

Students should complete an Application for Graduation online via Gateway, when registering for their final semester. The application is due the semester prior to graduation.

## Attendance Policy

Class attendance is related to academic success and class participation contributes to the synergism of the educational process. Students are expected to attend all classes, including laboratories, practica, and attendance at events associated with the course or program.

The professor keeps the roll, may record a zero for any work missed due to an unexcused absence, and may drop a student for missing an equivalent of two weeks of classes. One absence in a laboratory will be the equivalent of two 50-minute absences or one 75-minute absence. "Two weeks" are computed as follows:

Fall and Spring Semesters:

1. Six unexcused absences in a 50-minute class period (e.g., MWF day class).
2. Four Monday and Wednesday or Tuesday and Thursday classes (75 minutes)
3. Two evening classes which are 165 minutes per meeting

Summer Sessions:

1. Four day class meetings
2. Two evening class meetings

Absences for reasons other than University-sanctioned events (which must be approved by the Graduate Dean or the Academic Vice President) will be determined to be "excused" or "not excused" by the professor.

An excessive number of absences, even if they are excused, can severely compromise the quality of the students' learning experience. Therefore, if the professor judges that the student has missed excessive material due to absences (excused, unexcused or a combination of the two), that professor may initiate action for withdrawal of the student from the class. The professor shall notify a student one class prior to initiating action for a student's withdrawal.

Grades assigned for withdrawals initiated by the professor or by the student are "W" (withdrawal) or "WF" (withdrawal with failure). The grades "W" or "WF" will be assigned according to the dates published by the Registrar's Office in the Fall and Spring Schedule of Courses and Academic Calendar. The grade "WF" is calculated in a student's grade point average as an "F."

It is the responsibility of the student to contact the professor before an absence, if possible, or, in the case of an emergency, as soon after the absence as possible. It is also the responsibility of the student to make up any work missed to the satisfaction of the professor on the basis of guidelines stated in that professor's course syllabus.

Appeals from decisions made concerning this attendance policy may be brought to the attention of the Program Director who, in turn, will file the appeal with the department chair. If the results of an appeal are not satisfactory at the department chair level, an appeal may be brought to the attention of the Dean of the Graduate School who will commence the appeal process.

## **Auditing of Graduate Courses**

Auditors may be admitted to graduate courses with the permission of the instructor and the Graduate Program Director for that discipline. No credit is given. Eligibility, the number of courses an individual may audit, and the number of auditors permitted in a class is established by the Graduate Program Director in consultation with the course instructor. Auditor enrollment may not count toward the minimum class enrollment, exceed the class cap, or be of sufficient number as to affect the quality of the instruction. The tuition for an audit is 1/3 of the regular tuition in effect at the time of enrollment, regardless of degree program or status as a base student.

Employees receiving tuition rebate may audit a graduate course.

## **Candidacy**

Students who expect to earn a degree must apply for candidacy for the degree. To qualify, students must have (1) completed 12 graduate hours, (2) maintained a B average in all course work, (3) acceptable GRE, GMAT, LSAT or MAT scores on file in the Graduate Office, (4) satisfied specific program requirements.

Once students have met all requirements, notification will be sent to the student and program director from the Office of the Registrar

## **Change in Program or Concentration**

Students wishing to change their program of study after being admitted must complete a Change of Major/Minor/Concentration form request to the Office of the Registrar. The request form is available on Gateway. Students will be notified by the Graduate Program Director after a decision is reached.

## **Change of Courses**

Adding or dropping courses after registration requires the approval of the Graduate Program Director by means of forms provided for that purpose. The refund of fees for dropped courses is regulated by the general rules of the University.

## **ACADEMIC HONESTY**

Based upon its philosophy of education, St. Mary's University is strongly committed to academic excellence, truth, honesty, and person of integrity. The university expects all students to adhere to the following:

### **St. Mary's University Honor Code**

"As a member of the St. Mary's University Community and Marianist Family, I promise not to participate in academic dishonesty, including cheating, plagiarism, fabrication, or other academic misconduct which deliberately infringes upon university policy. I will not tolerate these activities from my fellow classmates."

Academic dishonesty is clearly outlined in the Honor Code of Student Conduct. Students of St. Mary's University Community who willfully choose to violate the Honor Code understand that the Dean of the Graduate School will adjudicate infractions according to Article V: Judicial Charges and Hearings of the Honor Code Student Conduct. If deemed guilty, the consequences may include removal from St. Mary's University.

Sanctions for a student's academic dishonesty vary according to the seriousness of the offense and its nature. Teachers may require a student to redo a class/laboratory assignment; may record an F grade for the test or assignment in question; or, may record an F grade for the entire course. Any student appeal of a teacher-imposed sanction must be made in writing to the Graduate Dean within fourteen (14) days of the student being notified of the offense by the teacher.

Teachers inform the Graduate Program Director in writing, with a copy to the Graduate Dean, concerning any sanctions imposed upon a student for academic dishonesty. More serious sanctions such as academic suspension or dismissal from the university or other appropriate actions are reserved to the Dean upon appeal. The Dean subsequently will convene a formal inquiry and then make a formal ruling in the matter.

## **Charges and Hearings for Academic Dishonesty**

Hence, any form of academic dishonesty is considered a serious matter.

Any student who is guilty of academic dishonesty is subject to disciplinary sanctions. Academic dishonesty includes but is not limited to:

1. Cheating: an act or attempted act of deception by which a student seeks to misrepresent information. Examples include but are not limited to:

- a. Copying from another student's test paper.
  - b. Allowing another student to copy from your test paper.
  - c. Using textbooks, notes, and other unauthorized materials during a test.
  - d. Collaborating with others during a test or on a project where collaboration is not permitted.
  - e. Taking a test for someone else or permitting someone else to take a test for you.
2. Plagiarism: the inclusion of someone else's words, ideas, or data as one's own work. Examples of plagiarism include but are not limited to:
    - a. Quoting another person's words, complete sentences or paragraphs, or whole works without acknowledgement of the source.
    - b. Using another person's ideas, opinions, or theories without acknowledgement of the source.
    - c. Borrowing facts, statistics, or other illustrating material without acknowledgement of the source.
    - d. Copying another person's essay test answer.
    - e. Copying or allowing another person to copy computer files that contain another student's assignments and submitting it either in part or in full as one's own work.
    - f. Working together on an assignment or sharing computer files and submitting that assignment as one's own individual work.
    - g. Refer to the MLA Handbook for Writers of Research Papers if further clarification of plagiarism is needed.
  3. Fabrication: the intentional use of invented information or the falsification of research or other findings. Examples of fabrication include but are not limited to:
    - a. Citations of information not taken from the source listed.
    - b. Listing sources in the bibliography that were not directly used in the exercise.
    - c. Submitting a paper, lab report, or research activity that is falsified, invented, or fictitious data or evidence.
    - d. Submitting work prepared totally or in part by another and representing it as your own.
  4. Academic Misconduct: the intentional violation of university policies, tampering with grades, or taking part in obtaining and/or distributing any part of an unadministered test. Examples of academic misconduct include but are not limited to:
    - a. Stealing, buying, or obtaining all or part of an unadministered test (including answers).
    - b. Selling or giving away all or part of an unadministered test (including answers).
    - c. Bribing another person to obtain an unadministered test (including answers).
    - d. Entering a building or office for the purpose of changing a grade.
    - e. Changing, altering, or supporting another student in the changing or altering of grade or other academic records.
    - f. Forging signatures or changing information on class authorization forms.
    - g. Continuing to work on a test or project after the time allowed has elapsed.
  5. Violation of Federal Copyright Law, i.e., photocopying without authorization, etc.
  6. Misuse of academic computing time and equipment.

A faculty member who finds a student guilty of academic dishonesty may impose the following sanctions:

1. Require a student to redo a class/laboratory assignment.
2. Record an F (failure) for a particular test, examination, or class/laboratory assignment that involves dishonesty.

3. Record an F (failure) for a final course grade.

Faculty members will inform, in writing, the director of their graduate program (Graduate Program Director), with a copy to the Graduate Dean, of any sanctions imposed upon graduate students for academic dishonesty.

In those instances where assignment or grade sanctions are considered insufficient, a faculty member may recommend to the Graduate Dean, in writing, that the student be suspended or permanently dismissed from the University.

Processes to be followed in incidents of a student's alleged academic dishonesty when referred to the Graduate Dean for action are outlined below.

1. Formal Inquiry by the Dean or his/her designated representative:
  - a. Secure from the faculty/staff member alleging the student dishonesty a written statement describing the nature and circumstances of the alleged offense.
  - b. Interview the respective faculty/staff member to clarify and to elaborate upon his/her written statement.
  - c. Secure from the accused student a written statement describing the incident.
  - d. Interview the accused student to clarify and to elaborate upon the student's written statement.
  - e. Interview any witness or other person identified as having or claiming firsthand knowledge of the incident.
  - f. Secure, examine, and retain any physical evidence related to the incident.
2. Determination of Validity of the Alleged Academic Dishonesty: In light of written statements, interviews, and available physical evidence, the dean decides the validity of the alleged violation of the academic dishonesty.
3. Informing the Student and the Accusing Party: No later than 21 days after receiving a referral concerning academic dishonesty, the dean completes the processes listed above, and informs in writing, the accusing faculty/staff member and the student of the judgment concerning the validity or non-validity of the alleged academic violation and of the sanction to be imposed.
4. Student's Rights to Appeal: If the student wishes to appeal the Dean's decision to the Academic Council, the student exercises this right to request an appeal by writing to the Provost within 14 days of the date the Dean's letter which informs the Student of the Dean's decision and stating the reason the student feels the decision should be changed.
5. A Hearing Before the Academic Council: The Academic Council is free to accept or reject the student's request for a personal hearing before the Academic Council. Within 14 days of receipt of the student's written request for an appeal, the Academic Council will inform the student, in writing, whether or not the appeal will be heard. Only those matters raised in the official appeal will be considered.
6. Final Decision and Judgment: Regardless of whether the student receives a personal hearing before the Academic Council, the decision of the Academic Council is final in all academic instances.

## **Commencement Participation Policy**

St. Mary's University offers a Fall and a Spring commencement. Students completing degree requirements and meeting all graduation checklist obligations in the Summer One, Summer Two, or Fall semesters are invited to participate in the Fall Commencement. Students completing degree requirements in the Spring semester are invited to participate in the Spring commencement.

If a student is unable to attend the appropriate commencement due to a medical reason or to participation in a St. Mary's University-sponsored activity, a request to participate in the immediate subsequent ceremony may be granted. The following items must be adhered to:

- a. Students wishing to attend a subsequent commencement ceremony due to a health-related reason or to participation in a St. Mary's University-sponsored activity must provide proper documentation to the Office of the Vice President for Academic Affairs.
- b. If approved, students are eligible to participate only in the immediately subsequent commencement ceremony.
- c. The desire to participate in the immediate subsequent commencement must be communicated to the Office of the Registrar at least 30 days in advance of the ceremony.
- d. Students will be listed in the Graduation Program appropriate to the semester in which degree requirements are completed.
- e. Names of those attending subsequent ceremonies will be read on stage, but will not appear on the printed Graduation Program for that graduation.

## **Communication Skills**

Graduate students are expected to demonstrate mastery of verbal and written communications. As communication skills are among the most important that students acquire, instructors are encouraged to evaluate communication as part of the students' course grade. If students demonstrate serious communication deficiencies through written assignments, oral reports, or examinations, the instructor may assign an Incomplete (IC) grade and refer the student to the Graduate Program Director. The Graduate Program Director will assign the student to the Learning Assistance Center for remedial work or enroll the student in one or more writing or verbal communication classes as appropriate. When the remedial assignment is completed, the student may reaccomplish or complete the assignment leading to the referral, enabling the instructor to submit a change of grade for the IP.

## **Conferring of Degrees**

Degrees are conferred during the University Commencement at the end of the Spring and Fall Semesters. Students who have completed all degree requirements at the close of the Summer term receive their diplomas by mail as soon as practical thereafter. Students graduating in the Summer also are invited to participate in December commencement.

A student on suspension may not graduate.

## **Course Load**

Graduate students are categorized as full time or part time based on their credit hour enrollment and length of semester or term. Part time students are considered half time or less than half time.

### **Length of**

Credit Hours Semester or Term Status

8 or more	16 weeks	Full Time
6 or more	8 weeks	Full Time
3 or more	5 weeks or less	Full Time
4 -7	16 weeks	Half Time
3-5	8 weeks	Half Time
2	5 weeks	Half Time
1-3	16 weeks	Less Than Half Time
1-2	8 weeks	Less Than Half Time
1	5 weeks	Less Than Half Time

Students working for the University may not carry more than nine hours without the specific permission of the Graduate Council. Staff members of the University may enroll in six hours per semester. Upon request, the Registrar will certify students as "full time" during the semester in which they intend to graduate if they are enrolled in the number of hours required to complete the degree, irrespective of the number of hours involved. Students enrolled in 3 hours of dissertation are full time students.

## **Comprehensive or General Examinations**

While certain requirements are stated in terms of credit, the emphasis is always on the acquisition of knowledge and the ability to use it. Mere accumulation of credits is not sufficient to entitle a student to receive a graduate degree.

In addition to the regular course examinations, each candidate must pass a general or comprehensive examination in his/her major field before the degree is conferred. Students are required to demonstrate breadth of knowledge in the discipline, depth in specific areas, and the ability to integrate what has been learned. This examination, however, does not measure simply what is covered in the course work rather it is intended to be "comprehensive" in that it may cover information that is discipline specific. Each program will develop reading lists and study guides to insure that students can adequately prepare for the general examination. Students are responsible for obtaining these study materials from the Graduate Program Director at a date determined by the Director.

To be eligible to take the examination the student must:

1. be maintaining registration or enrolled during the semester during which the exam is attempted;;
2. not be on suspension;
3. have a cumulative grade point average of 3.0 or higher;
4. have completed all prerequisites; and,
5. have completed all course work, or be enrolled in last semester, exclusive of practica and internships.
6. be advanced to candidacy.

For programs requiring a thesis or a final degree project, the examination must be partly oral and may be wholly so. Thesis students are examined over the thesis and the course work. Ordinarily one-half of the exam is over the thesis and one-half over the course work. For non-thesis programs the examination must be partly written and may be wholly so.

The examining committee may permit the student who fails the examination to repeat the examination or may deny this permission. Normally the repeat examination will take place at the end of the same or following semester depending upon the program's policies. A student failing the comprehensive examination may be permitted to repeat the examination only once.

Under certain circumstances and on an individual basis, if a student does not pass the second examination, the Graduate Program Director and General Examination Committee may approve remedial work such as taking additional courses or the research and writing of one or more papers, or some combination of academic remedies, as a condition of passing the exam.

## Grades

Students are evaluated for all work leading to academic credit. High quality performance is expected from all students. Grades assigned will reflect actual performance while simultaneously maintaining the integrity of the grading system.

The grade of A is superior, B is good, and C is marginal. Grades D and F are unsatisfactory. Grades of S, satisfactory, or U, unsatisfactory, are given for dissertations, theses, internships, and practica.

Graduate credit at St. Mary's University will be given for grades A through C and S, according to the scale and restrictions listed below. Grades A - F affect grade point average.

Grade	Grade Points Per Semester Hour
A	4.00
B	3.00
C	2.00



D 0

F 0

### **Effective Summer 1999**

95-100 A 4.0

90-94 A- 3.67

87-89 B+ 3.33

84-86 B 3.0

80-83 B- 2.67

77-79 C+ 2.33

70-76 C 2.0

60-69 D 0

0-59 F 0

1. Students must achieve a cumulative GPA of 3.0 for all graduate work in order to graduate.
2. No more than six semester hours of grades below B- will be accepted toward a degree.
3. The grade of C will be accepted only if balanced by a grade of A.
4. All graduate work in the major field must have a B average.
5. All graduate work in the minor field must have a B average.
6. A minimum grade of B- is required for all core courses in the following majors: Computer Information Systems.
7. S or U grades are not calculated in the grade point average.

## **Change of Grade**

Once an instructor has submitted a grade to the Registrar's Office, it may only be changed if there has been a recording or computation error or it is changed as a result of the grade appeal process.

## **Incomplete**

An instructor may submit an IP or IC in lieu of a grade when a student has been unable to complete all of the assignments in a course, providing the student's work was otherwise satisfactory. An IP, given only for theses, practica, and internships, remains in effect until the work is completed. An IC is given for a regular course in which the work has not been completed. An IC which is not completed within six (6) months from the ending date of the semester may be assigned a grade, as appropriate. If no grade is assigned, the incomplete will remain on the transcript permanently as IC. As an exception the Dean of

the Graduate School may extend the six-month period upon request of the Program Director. Generally, an extension for completion of an IC will not exceed six months.

## **Graduate Assistantship**

Graduate assistantships are offered each academic year beginning in the Fall semester and ending the following Spring semester. Application for an assistantship is made through the Dean of the Graduate School's office. Students awarded a graduate assistantship must enroll in a minimum of 6 hours each semester. The number of assistantships is limited. The amount of the stipend is announced annually.

Responsibilities include research and/or other departmental activities, with teaching or laboratory assignments considered viable options. Students work approximately an average of 15 hours per week. All appointments carry the possibility of renewal. Individuals may request consideration for a graduate assistantship when they complete the Application for Graduate Studies. Those students who did not request consideration on the Application for Graduate Studies may submit a letter to the Graduate Dean explaining the reason for seeking the position.

To be considered the following criteria must be met:

1. The request for consideration, indicated on the Application for Graduate Studies or letter, must be on file in the office of Graduate Admissions prior to March 1, preceding the year of the Assistantship.
2. The Application for Graduate Studies must be complete; i.e., all supporting documents must be included: transcripts, admission test scores (GRE, GMAT, MAT, as applicable), TOEFL scores and financial statement (for international students), and two academic references.
3. Other materials the applicant deems appropriate.

## **Graduate Credit**

Courses beginning with numerals 1 or 2 are not applicable for graduate credit. Certain courses beginning with 3, 4, or 5, referred to as G courses, may be taken for graduate credit; however, if these courses have been taken for undergraduate credit, they may not be repeated for graduate credit.

Graduate credit is not granted for correspondence courses, CLEP examinations, or Special Examinations.

## **Grade Appeal Procedures**

A student who wishes to appeal a sanction imposed for academic dishonesty should refer to the section in this publication pertaining to Charges and Hearings for Academic Dishonesty.

The following process for appeal shall be followed in the event that a graduate student receives a final course grade that is believed to be inaccurately and/or unfairly awarded other than for grades involving sanctions for academic dishonesty:

- a. The student must meet with the instructor within three weeks after receiving the final course grade in dispute to present substantial proof, and where possible, to justify the appeal. If the instructor does not agree with the student's request, the student may forward the appeal, as presented to the instructor, to the Graduate Program Director of the department through which the course is offered. The student shall inform the instructor of the appeal to the Graduate Program Director and of the basis on which it has been taken. The instructor may inform the student and the Graduate Program Director of the instructor's position.
- b. The Graduate Program Director shall convene a review committee consisting of at least two tenure track department faculty members other than the instructor to whom the original appeal was directed. In the event that the Graduate Program Director is the object of the original appeal, the Graduate Program Director will ask the Department Chair, where possible, to convene the committee. In cases where there are an insufficient number of tenure track department faculty members eligible to review the appeal, tenure track faculty members from associated disciplines within the same school may be appointed to the committee. The faculty committee should complete its review of the appeal within thirty (30) days of the original request to the course instructor.

The task of the appeal review committee is to consider the basis of the appeal, whether it pertains to:

1. the intellectual content and requirements of the course,
  2. procedural aspects of the course as described in the course syllabus, other general instructions provided by the instructor to all students in the course, and their conformity to university policy, or
  3. evidence of bias against the appellant. If the committee finds that the student's appeal is without substantial merit, the Graduate Program Director will inform the appellant in writing. No further action will be taken on the appeal.
- c. The review committee may not overrule the decision of the instructor to whom the original appeal was directed. After appropriate consultation with both instructor and appellant, it may suggest reconsideration of the instructor's decision on the appeal. If the instructor is unwilling to change a decision that is in substantial conflict with the committee's findings the committee may then:
    1. refer the appeal to the Dean of the Graduate School with a recommendation; or
    2. refer the appeal to the Dean of the Graduate School as an unresolved matter with no recommendation.
  - d. The dean may not ordinarily change a grade decision that is based on the intellectual content of the course, unless the departmental committee has first recommended a change on that basis. The dean may grant relief in cases involving a procedural error in the conduct of the course, flagrant violation of the student appeal process, or evidence of bias against the student.

The dean's decision is final, and should be rendered within thirty (30) working days of the date of the original notice of appeal to the course instructor. The dean shall inform the student in writing of the decision.

## **G-Level Courses**

No more than 6 hours of G courses may be applied toward a degree. Courses beginning with the numerals 6 or above are open only to graduate students and are all of the same level. In those rare

instances where a graduate section numbered 6000 or above is combined with a section numbered 5000 or less, not more than 6 hours of such work may be applied toward the degree.

The syllabus for G-Level courses will indicate how the graduate student's educational experience is characterized by advanced disciplinary content and intellectual rigor. The description will include how the instruction and assignments for the graduate student reflect greater depth, intensity, and specialization than those for undergraduates in the class.

## **Dean's Honor Roll**

Students who meet the following criteria are listed on the Dean's Honor Roll:

1. cumulative G.P.A. of 3.9 or higher;
2. completed a minimum of 8 hours, which affect the G.P.A.;
3. completed a minimum of 6 hours which affect the G.P.A. during the semester of honors; and/or
4. have no IC at the time of consideration

The Dean's List is published each Summer, Fall, and Spring.

## **Distinguished Graduates**

Students with an exemplary record of scholarship in earning the graduate degree are designated as distinguished graduates. Distinguished graduates are students who:

1. graduate with a cumulative G.P.A. of 3.9 or higher; and,
2. have not received a grade of U or a grade below B, even if they have repeated the course with a grade of S, B, or A.

The Graduate School sets high standards for graduate study to ensure that graduates are capable of the highest intellectual achievements. All graduate students are honor students because of the requirement to maintain a minimum G.P.A. of 3.0. Within this highly select group are those who gain special distinction for superior scholarship. Students with an exemplary record of scholarship in earning the graduate degree are designated as distinguished graduates. Distinguished graduates are:

1. students who receive a favorable recommendation from their Graduate Program Director;
2. students who graduate with a cumulative G.P.A. of 3.9 or higher; and,
3. students who have not received a grade of U or a grade below B, even if they have repeated the course with a grade of S, B, or A.

## **Independent Studies and Directed Readings**

Independent studies and directed readings are available to graduate students on a very limited basis. Students wishing to enroll in an independent study must obtain an application in the Registrar's Office and must seek the approval of the Instructor, Graduate Program Director, and appropriate Dean. The

application for independent study and directed readings must include justification, a syllabus, course assignments, project, or information for which the student is responsible, process of gathering information, scheduled meeting times, and other relevant information.

Students will not be early registered in an independent study course without the Dean's approval.

A student enrolled in an independent study is required to meet with the professor 6 hours weekly or 30 hours total during a Summer Session, or 2 hours weekly or 30 hours total during the Fall or Spring Semesters. The purpose of this requirement is to ensure that tutorials achieve the graduate level scope, depth, and intellectual rigor of regular graduate courses. Because of the demands placed on the instructor for tutorial instruction and because tutorials are usually conducted as an overload, enrollments are extremely limited in order to maintain standards of quality.

## **Information Technology Proficiency**

Graduate students must be proficient in information technology. To be proficient, graduate students must know and be able to use the applications, software, and technologies appropriate for the program in which they are enrolled.

Requirements and proficiencies are determined by the Graduate Program Director. It is the responsibility of the graduate student to be proficient in information technology. Students should consult their Graduate Program Director to determine how to meet this requirement.

## **Maintaining Registration**

Any student working on a thesis must register each semester by registering for Thesis Extension until the thesis is approved. All students must be enrolled in course(s) during the semester in which the General Examination is taken or registered by Maintaining Matriculation. A Theology or Pastoral Administration student must be enrolled in courses or Practicum or Project Extension until his/her project, requirement of three major papers, or practicum is approved. The student maintains matriculation by registering for a course numbered 6000GX. The respective department's prefix would be added: e.g., PA6000GX.

## **Prerequisites**

1. Prerequisites for an academic program are listed in the section containing the description and requirements for the program. Prerequisites, for purposes of financial aid, are considered part of a student's degree program. However, prerequisite hours cannot be credited toward or substitute for any graduate degree program course requirements
2. It is desirable that students complete prerequisites before beginning work on the graduate core.
3. Full time students must complete prerequisites by the end of the third semester.
4. Part time students must complete prerequisites by the end of the fourth semester.
5. Ordinarily, students with deficiencies complete the required undergraduate or graduate prerequisites by taking the courses at St. Mary's University.

6. Undergraduate prerequisites may also be completed by examination provided the student has not taken the course and received a grade less than C:
  - a. An undergraduate prerequisite may be satisfied by CLEP or DANTES administered by the University Testing Center when it is equivalent to the prerequisite course. The Registrar maintains the minimum standard score. A department may set higher standards. An administrative fee is charged by the Testing Center. A record of the test score is maintained in the student's file in the Graduate Admissions Office. If the exam is failed, the student must take the course.
  - b. An undergraduate prerequisite may also be satisfied by Special Examination when there is no equivalent CLEP or DANTES. The minimum passing score is 70%. A department may set higher standards. There normally is a fee for these exams unless the student fails the exam. If the exam is failed, the student must take the course. A record of the test and the test score is maintained in the student's file in the Graduate Admissions Office.
7. If the student takes the graduate course prior to completing the prerequisite, the prerequisite is still required. Prerequisites are required for two reasons:
  - a. to ensure that those earning the degree have acquired a certain common body of knowledge; and,
  - b. to provide the foundation for optimizing learning in the graduate course
8. Graduate level prerequisites must be completed with a grade of either A or B. **Graduate Level prerequisites may not be counted as core or elective requirements for the degree.**
9. For course work already completed elsewhere:
  1. a. Credit from four year institutions:

An undergraduate prerequisite may be satisfied by a specific course or its equivalent if completed with a grade of C or better while a graduate level prerequisite must be completed with a grade of B- or better.
  2. b. Credit from two year institutions:

A prerequisite may be satisfied by a specific course or its equivalent if:  
1) completed with a grade of C or better, and if the St. Mary's prerequisite is a lower division course, i.e. 1000 or 2000 level course. 2) An upper division prerequisite, 3000-5000 level course may be accepted for credit only if validated by an exam over the St. Mary's 3000-5000 level course. The minimum passing score is 70%. A record of the test and the test score is maintained in the student's file in the Graduate Admissions Office.
10. Prerequisites may be waived by the Dean upon recommendation by the Program Director.

## Probation and Suspension

### Master's Program Students

#### Probation

If the student fails to achieve at least a B- average for any semester of resident study, the Graduate Program Director concerned will be notified in writing by the Office of the Registrar that the student's work is unsatisfactory and the student is automatically put on probation.

In order to be removed from probation a student must achieve a grade point average of 3.0 or higher

during the subsequent semester of matriculation. This can only be achieved by attempting graduate level courses required by the student's degree program.

## **Suspension**

If a student is on probation and fails to achieve a B- average in the next semester, he/she is automatically dismissed from the Graduate School. In addition any combination of nine hours of grades below B- will result in dismissal. A student may not graduate while under suspension.

## **Doctoral Students**

### **Probation**

If the student fails to achieve at least a B average (3.0 GPA) for any semester, the Graduate Program Director for Counseling will be notified in writing by the Office of the Registrar that the student's work is unsatisfactory and the student is automatically put on probation.

### **Suspension**

Students receiving a grade of D or F or students on probation and failing to achieve a B (3.0 GPA) average in the next semester are automatically dismissed from the Graduate School. In addition, any combination of nine hours of grades below B will result in dismissal. Students who are dismissed are not matriculated, cannot complete degree requirements, and cannot graduate.

## **Professional Review of Counseling Students**

The full time Counseling Faculty evaluates the performance of students throughout their academic program. A formal review is conducted at the end of each semester. However, if, at any time, the full time Counseling Faculty identifies academic or non-academic weaknesses or problems in a student, and it is the judgment of the full time faculty that the student is not capable of or does not have the potential for rendering the desired counseling or therapeutic care to a client, the Chair of the Department of Counseling and Human Services will notify the student and the student's site supervisor that the student's internship or practicum privileges have been revoked. If the student is not enrolled in an internship or practicum, the Chair of the Department will notify the student that internship or practicum assignments have been restricted and that suspension is imminent.

The Chair of the Department will notify the Dean of the Graduate School within two working days of the student's removal from internship or practicum sites or revocation of internship or practicum privileges. The Dean of the Graduate School will review the decision by the faculty within 10 working days. Unless the Dean remands the decision back to the faculty for further consideration the student will be suspended.

## **Readmission of Suspended Students**

If placed on academic suspension a graduate student must petition the Dean for readmission within thirty days of notification. Ordinarily, students are not readmitted unless there are mitigating circumstances and they can show that conditions have changed so that if they are given another opportunity for graduate study, they will succeed. Students who have been dismissed may be readmitted for further graduate study after one or more semesters have elapsed only if the Dean approves the petition for readmission. The Dean will stipulate the conditions for readmission. A student who reenters under these circumstances, but fails to satisfy the conditions stipulated for readmission or fails to maintain the standards for continuing in Graduate Studies, will be permanently dismissed from the University.

### **Readmission Policy Other Than for Probation and Suspension**

All former graduate students who have been absent from St. Mary's for more than one calendar year must file a formal application for readmission through the Registrar's Office. If students, during their absence from St. Mary's, attended another institution they must submit an official transcript reflecting this attendance. In this case the rules governing transfer credit will apply. Students leaving St. Mary's on academic probation or suspension, if readmitted after filing the requisite application, shall be readmitted on scholastic probation even if they attended another institution during their absence. Students on probation at another university will be admitted under the normal admission standards of the program in question and, if admitted, will enter on probationary status.

Students must also consider that being absent from their graduate studies may also cause them to extend their studies beyond the time limits set for degree completion. If this is the case, then the student (in consultation with their program director) may also wish to request an extension of time to degree. This consultation must also include any implications the extension may have for the contents of the comprehensive examination.

### **Institutional Review Board - Human Subjects (IRB)**

A research proposal involving human subjects must be reviewed by the Institutional Review Board (IRB) unless it has been exempt from review. All research conducted at St. Mary's University, including all theses and dissertations, that uses human subjects must be reviewed and approved by the IRB. The purpose of the review is to ensure that risks are minimized, benefits of research outweigh the risks, ethical principles are operative in all facets of the research, anonymity or confidentiality of the subjects is maintained to the extent possible, and subjects consent to participate in a suitably informed and voluntary manner. Procedures for requesting review and for more specific information concerning the review process can be found in the university's Research and Integrity Policy which is attached as Appendix A to these standards.

Concern for protecting the rights of human subjects of research in a systematic way goes back at least to the post-World War II Nuremberg trials and the Nuremberg Code that subsequently emerged. Any member of the University Community whose research may involve human subjects should understand not only the review requirements, but also the evolution of concern into law and regulation. Equally important is an understanding of the role in review deliberations of ethical judgment, community standards, and the code of ethics of the individual's professional field.



## **Residence**

At least 24 hours of graduate work must be completed at St. Mary's for a 36 hour degree program and 21 for a 30 hour degree program.

## **Short Courses and Workshops**

Short courses and workshops which may be offered during a graduate student's tenure must be consistent with the mission of the University and meet the criteria for graduate education. The purpose of these offerings is to provide qualified students with the opportunity to develop skills and competence in chosen disciplines. In short courses, academic work is undertaken on an intensive basis for a short duration. A workshop is even more attenuated. It focuses on a narrow subject matter and covers theoretical and applied aspects. The workshop model is conducive to certain kinds of learning in areas such as education, music, computer technology, and foreign language. The workshop focuses on specific issues for a specific clientele and is especially useful for those seeking teacher certification and updating professional skills. Because of the extremely abbreviated duration of the short courses and workshops, care is taken to ensure that these courses achieve graduate level scope, depth, and intellectual rigor. The number of such offerings is limited and identified on transcripts, catalogs, and other descriptive materials.

Students must meet the same criteria for admission as other graduate students, including prerequisites and capability to participate in the specialized work offered in these types of courses.

Graduate education, regardless of the time frame, requires intensive, purposeful effort, which builds upon a strong foundation of undergraduate work. Each short course and workshop must be a part of an integrated plan of study. The level of complexity is the same and as thorough as comparable courses offered during the regular semester. Courses require independent effort such as a term paper, case studies, or other creative activity. Courses are of sufficient duration to allow for reflection, assimilation, and independent effort. Student performance is evaluated, consistent with the integrity of the grading system.

Graduate credit is awarded only for experiences, which meet the standards of course content, student performance, and evaluation applied to all other graduate courses. Courses approved only for undergraduate credit will not count for graduate credit. Undergraduate courses will not be offered simultaneously with courses approved for graduate credit. One hour of credit may be given for each week of course work, provided there is at least 15 contact hours, with 30 hours allotted for preparation time. One hour of credit may be given for a weekend seminar, provided the seminar is conducted over a minimum of two weekends.

A maximum of three hours of short courses, workshops, or weekend seminars may be taken for credit for a St. Mary's University graduate degree.

## **Thesis**

The technical and grammatical quality of a thesis is an index of the professional abilities of the author, the supervising professor, and committee members. Moreover, it is representative of the quality of graduate education of the University.

For many, the primary reason for a thesis is the research and writing experience prior to entry into a doctoral program. For some, it is a means of acquiring greater depth of knowledge in a subject of interest, or preparation for employment in a specialized field.

Although reasons for writing a thesis vary, the purpose of the research is to discover new knowledge or enhance existing knowledge in the field of interest. A project that helps solve a practical problem may also be acceptable.

Finally, the thesis is a culminating experience, which provides a record of the student's achievement in the program. This record may be consulted for reference and program evaluation.

Appendix B has more detailed instructions on thesis format and submission process.

## **Student Responsibilities**

The thesis is not simply another research project. It should be undertaken with the knowledge that it requires a substantial investment of the student's time and monetary resources. Only students with good writing skills should undertake a thesis. While some writing skill enhancement may be expected, the thesis is not a vehicle for developing writing competency.

The student who wishes to write a thesis obtains approval from the Graduate Program Director. The student confers with the Graduate Program Director concerning the appointment of a supervising professor and other committee members. Working relationships and faculty competence in the specialty are important considerations.

Research involving human subjects must be conducted in accordance with University policy. See the manual for Policies and Procedures for Research Involving Human Subjects. A thesis based upon human subjects' research, which has not been conducted in accordance with university policy, will not be approved.

The student must submit two copies of the thesis to the Graduate Dean in accordance with "Instructions for Master's Theses," April 30, 1997 or latest edition, free of punctuation, spelling, and other grammatical errors by the deadline established for graduation. The thesis grade and degree will not be approved until this requirement is satisfied. The student must register for thesis extension each semester and summer term until the thesis is approved; e.g. PS6000X. Only one registration is required during the summer, regardless of the number of summer terms offered.

## **Thesis Supervisor**

While the student is responsible for all aspects of the thesis, the Thesis Supervisor directs the research design, data gathering, literature search, and writing of the thesis. Thesis supervision also requires a

substantial amount of time for editing of grammar and style. The supervising professor will not approve the thesis until it is free of research and grammatical errors and meets the Graduate School standards specified in "Instructions for Master's Theses," April 30, 1997, or latest edition.

### **Thesis Committee**

The Thesis Supervisor and a minimum of two other faculty members comprise the thesis committee. The committee members assist the Supervising Professor with suggestions concerning research design, data collection, literature search, and editing of the manuscript.

### **Graduate Program Directors**

The Graduate Program Director approves the student's thesis enrollment, thesis topic, Supervising Professor and committee members, subject to final disposition by the Graduate Council and Dean. The Graduate Program Director ensures that the thesis meets Graduate School standards concerning quality of research and writing and that it is submitted by the date required for graduation.

### **Dean**

The Dean may meet each semester with students electing to write a thesis, as appropriate. These meetings are attended by the Graduate Program Directors and Thesis Supervisors concerned.

The Dean establishes dates for submission of theses. Students are encouraged to submit the thesis to the Dean prior to the final due date. Dates for submission of Theses:

#### Semester Deadline for Graduation

Fall      November 15

Spring    April 1

Summer   July 15

The Dean is the final approval authority for appointment of Thesis Supervisors and completion of theses. The thesis grade and degree will not be approved until the thesis meets the standards specified in Instructions for Master's Theses, St. Mary's University Graduate School. Although the Dean makes a final review to ensure that the thesis conforms to Graduate School standards, it is expected that the thesis will be error free after approval by the Thesis Supervisor.

### **University Librarian**

The Director of the Library, or the Director's representative, ensures that the thesis meets the printing quality and paper specifications.

The library pays for binding the two copies, which are retained by the University. One copy is for use by students and is cataloged and kept in the general collections; the other copy is a permanent archival

copy and is kept in the library's Special Collections.

Students may submit additional copies for binding. The library will have them bound at the student's expense. Consult the librarian for current price. Binding takes approximately four weeks.

### **Time Limit**

All work for the Master's degree must be completed within five consecutive years from its inception. However, it is in the discretion of the Graduate Council to extend this time limitation upon written request of the student. Students are required to pass a question on the General Examination over any course completed five years before graduation. If the question is failed the course must be repeated.

Master's degree students who are registered as Summer School Students Only have seven years to complete degree requirements.

All work for the doctorate must be completed within seven consecutive years from its inception.

### **Transfer Credit**

Courses with grades higher than B- may be considered for transfer.

Graduate course work accepted for credit must have been completed at an institution accredited, at the time the course work was completed, by a regional accrediting commission. Exceptions are allowed for transfer from foreign institutions, course work completed at an institution accredited by an accrediting body recognized by the Council on Postsecondary Accreditation, or credit for military education. In the case of exceptions, graduate course work must be relevant to the degree, with appropriate content and level of instruction resulting in student competencies, at least comparable to students in the St. Mary's University Graduate Studies program; faculty for the course work must meet the criteria for teaching at the graduate level. In assessing and documenting comparable learning and qualified faculty, St. Mary's uses recognized guides such as those published by the American Council on Education, the American Association of Collegiate Registrars and Admissions Officers, and the National Association of Foreign Student Affairs. Students must complete a minimum of 24 hours (for a 36-hour degree program) or a minimum of 21 semester hours (for a 30-hour degree program) in residence at St. Mary's. For all degree plans, exclusive of prerequisites, students must earn at least two-thirds of the credit hours required in the degree granting program at St. Mary's University.

Students enrolled in classes at recognized satellite locations, in University administered on-line classes and programs, and in classes taught at other Catholic Universities having an inter institutional exchange agreement (Oblate School of Theology, University of the Incarnate Word, and Our Lady of the Lake University) with St. Mary's are considered in residence.

### **Credit from Previous Graduate Degree**

Students pursuing a Master's degree in a field related to their other graduate degree may request recognition of up to 12 semester hours from their other graduate degree.

## **Credit From United Colleges of San Antonio**

St. Mary's University, University of the Incarnate Word, Our Lady of the Lake University, and Oblate School of Theology maintain a cooperative enterprise for undergraduate and graduate learning. The consortium is a confederation composed of the independent colleges of liberal arts and sciences, specialized schools for professional training, libraries, and research endeavors, cooperating with each other. Twelve credits may be taken with the approval of the Graduate Program Director and Dean under the Inter-Institutional Agreement.

Any exceptions to the above stated policy can only be approved by the Dean on the recommendation of the Program Director.

## **Undergraduate Enrollment**

An undergraduate who needs not more than 12 hours in one semester to complete all of the requirements for a bachelor's degree may be allowed to register for graduate work and credit provided all undergraduate work will have been completed during that semester and the total in that semester does not exceed 15 semester hours.

# Student Services

## Information Technology Services

Information Technology Services (ITS) provides the University community with high quality technology infrastructure and services in support of its mission to prepare and educate leaders of tomorrow's world. Students coming to St. Mary's University are asked to bring a lap top to campus. All student dorms provide Internet access to residents. Over 80% (58/68) of classrooms are equipped with projection and Internet access, and approximately 1/3 of the classrooms are wired for student connectivity. We support a Web-based course management system allowing students access to course materials, communicating with instructors and fellow students, and submission of coursework and assignments. Wireless access is available in all open areas such as the library, the university center, and Java City. The academic library houses a student computer lab containing 36 Dell desktop computers and two HP LaserJet printers. Various departments and programs support their own specialized computer labs with software tools for students to use.

ITS provides computing support to students, staff, and faculty with its Help Desk staffed with capable and friendly professionals. Additionally, at Academic Media Center, located on the first floor of the library, students can receive training on various applications, check out audio-video equipment for their classes and on-campus activities, or use multimedia stations to develop contents and presentations.

## Academic Advising

### Statement of Philosophy

Consistent with the "Statement of Mission for St. Mary's University", the primary purpose of the academic advising program is to assist students in the development of meaningful educational plans which help shape their values and life goals. Academic advisers assist students by promoting a freshman through senior year academic advising plan, which encourages student participation in career exploration. Academic advising is a continuous process of clarification and evaluation. Academic advisers assist in this process by helping students to identify and assess alternatives and the consequences of their decisions. However, students are ultimately responsible for making decisions about their life goals and educational plans.

Students are advised by a faculty member of their declared academic major. If students have not declared a major, they are advised by a faculty member of the School in which they have an interest in exploring educational opportunities. Undeclared major students are assigned a new academic adviser when they declare a major.

The academic advising program emphasizes the student-adviser relationship. All students are required

to meet with their academic adviser every semester during their Priority Advising days and are encouraged to seek their adviser's assistance throughout the academic year.

## **Library and Instructional Services**

Library and Instructional Services, including the Louis J Blume Library, Academic Imaging and Media Center, and Learning Assistance Center were created to combine all those academic support services which facilitate and enhance individual and group instruction. The individual components of Library and Instructional Services have unique purposes and functions which are listed below:

### **Academic Library**

The Louis J. Blume Library, one of the most attractive and functional academic library buildings in the southwest, offers a wide variety of facilities in print and non-print media. The three-story Texas colonial style building, designed to be used for both individual and group study and research, contains 100,000 square feet of floor space with a seating capacity for 1,200 students. Facilities include 100 individual and group study carrels, designed for laptop computer use, and the university's primary student-use computer lab. The library provides access to online full-text and abstracting databases of journals and books, as well as more than 500,000 print and microform volumes. The Louis J. Blume Library has been a selective depository of U.S. and Texas documents since 1964. Access to information about and the full-text of much of the information is available 24 hours each day via the library's online systems and through the university's computer networks. Librarians in the Louis J. Blume Library provide instruction and workshops in library use, much of it tailored to individual classes, and a full range of reference services.

### **Academic Media Center**

The Academic Media Center (AMC) located on the ground floor of the Louis J. Blume Library serves students and faculty in the development of mediated instruction and learning. AMC is part of ITS division reporting under Academic Technology Services. AMC provides tutorials and workshops in web development, mediated presentations, video and photographic media for academic work. The AMC media professionals assist students with the development of instructional materials, in cooperation with the faculty, for classroom use. The Center is responsible for maintaining audio visual equipment such as laptops, flip cameras, projectors, and screens for student use. The AMC also delivers audio visual equipment to traditional classrooms, for training in its use, and for maintenance. The AMC provides several computer labs with a wide array of media software for student use and a 52-seat MediaView Room.

### **Learning Assistance Center**

Located in the Louis J. Blume Library, the Learning Assistance Center serves St. Mary's University by providing instructional resources for students, staff, and faculty in a learner-oriented environment. The

LAC offers tutorial support and group work in the following academic areas: accounting, biology, chemistry, computer science, economics, English, engineering, foreign languages, mathematics, physics and statistics. website

The Center also supports students needing individualized instruction in English as a Second Language. The Writing Center, housed in the LAC, gives students the opportunity to work with peer-tutors on any writing task from prewriting to finished paper. For students who wish to work independently, the LAC provides programmed instruction, audio/visual materials, computer software and an extensive learning library with textual resources in all subjects.

## **United Colleges of San Antonio**

In 1970, the governing boards of the University of the Incarnate Word, Our Lady of the Lake University, St. Mary's University of San Antonio, and Oblate School of Theology adopted an agreement to develop and maintain a cooperative enterprise for undergraduate and graduate learning in San Antonio. The institutions cooperate with each other through a central coordinating body.

## **Professional Development Programs/Continuing Studies**

Professional Development Programs are designed for the individual in today's society which requires lifelong education. St. Mary's University provides public service programs that are designed to fulfill these lifelong learning opportunities. These noncredit programs are geared to support a specific target population and are developed for the individual who seeks to improve his/her current competencies. They are also developed for those entering a new field, for career enhancement and for retraining. Some examples of some of the certificate programs currently being offered are: Interior Design, Fashion Design, Microsoft Certification Programs, Intensive English Programs, and others. Programs are offered as a certificate program or for required CEU (Continuing Education Unit) in a specific field. Courses for which the CEU is awarded meet the national CEU criteria. All programs are under the sponsorship of an academic unit of the University and require registration and evaluation of participants. They are taught by qualified instructors who are working professionals and who are directly involved in planning each program. Programs are regularly updated to meet the changing needs in each field. Program information and registration requirements may be obtained at the Office of Professional Development Programs/Continuing Studies by calling 210-436-3321 or visiting the website

## **Upward Bound**

Upward Bound is a college preparatory program for high school students who possess strong academic potential. Upward Bound provides (1) academic skill development, (2) counseling and guidance with respect to educational and career opportunities, (3) tutorial services and (4) a comprehensive enrichment program including fieldtrips which stimulate the intellectual, social and cultural development of students. Enrollment is limited to eighty-five students. Participants must attend one of the five target high schools and meet the eligibility criteria determined by the U.S. Department of Education.



## **CANDAX-ME McNair Scholars Program**

The McNair Scholars is a program for undergraduates in order to encourage and assist low-income, first generation students and students from underrepresented groups to continue their studies in graduate school, particularly in academic doctoral programs leading to a Ph.D. During the academic year, McNair scholars will learn about the various aspects of graduate school. A smaller group of McNair scholars will be selected to attend a 8-week summer research internship at the University of Notre Dame, where students perform Faculty Directed Research. Participants must meet the eligibility criteria determined by the U.S. Department of Education.

## **Veterans Affairs**

The VA Certifying Official serves as the liaison between the Department of Veterans Affairs and students of St. Mary's participating in a VA educational training program. The VA Certifying Official at St. Mary's is the training institution's representative responsible for completing all paperwork necessary to certify the enrollment and changes in enrollment for students eligible for VA benefits. All students applying for VA education benefits must complete the request for VA enrollment certification form every semester. VA students are responsible for notifying the VA Certifying Official of changes in their enrollment status. The VA Certifying Official is located in the Office of Financial Assistance.

## **Serviceman's Opportunity College (SOC)**

St. Mary's University is one of the four-year institutions of higher learning in Texas to be designated as a Serviceman's Opportunity College (SOC). SOC provides service personnel an opportunity to pursue educational programs through a variety of traditional and nontraditional means – on-campus and on-base -- in a variety of instructional modes and at times appropriate to their duty assignments. The service is particularly appropriate for the military-service personnel who wish to combine military service with a college education. St. Mary's will provide initiating services such as pre-college counseling, deferred admission, program planning, records of student's work taken during service time and continuing advisement. For further information on this program, contact the Office of Undergraduate Admission.

## **New Student Orientation**

All new students are expected to participate in the New Student Orientation Program. This program assists freshmen in making the transition from high school to university life, and facilitates the transfer of other new students from their previous college to St. Mary's University. Orientation helps students to understand the academic requirements, assists in career exploration, and helps them become acquainted with their fellow students, faculty and staff members. Students are introduced to available services, the advising and registration process, as well as the holistic educational philosophy of St. Mary's University. Parents are encouraged to participate in the Parent Orientation portion of the program. In June, residence accommodations are available for students and parents during the Orientation weekends.

## **Academic Convocation**

All new freshman students are required to participate in this academic ceremony. Academic Convocation will welcome and empower new students to experience fully the academic opportunities that a university education includes at St. Mary's University.

## **International Student Services**

International Student Services serves as a point of contact for international students at St. Mary's University from pre-arrival through post completion of their studies. Immigration services include issuing Form I-20AB needed to obtain an F-1 student visa, recommending and authorizing practical training, and maintaining student information in SEVIS (Student & Exchange Visitor Information System), the government database. Other services include international orientation, serving as a liaison between international students and other campus offices, help obtaining a Social Security Number and Texas Identification card, and offering workshops and cultural events specifically for International Students.

## **Residence Life**

The Office of Residence Life at St. Mary's University is a component of the Student Development Division and is shaped by Marianist traditions. Residence Life provides residence halls that are communities which develop students' life skills and personal responsibility and serve as transitional environments to future roles and service to society.

## **Student Health Center**

The [Student Health Center](#) is an outpatient primary health care clinic located on the first floor of Charles Francis Hall. The clinic is staffed by a board-certified Family Practice physician and a certified physician assistant. All currently enrolled students of St. Mary's University are eligible to receive care at the Student Health Center. Spouses and children of enrolled students must seek care outside of the Student Health Center. Graduating students from St. Mary's University should begin the process of seeking a primary care physician in the community at least 30 days prior to graduation so that there is no interruption in patient care.

## **IMMUNIZATION POLICY**

### **Meningitis Vaccine Requirement**

All new students of St. Mary's University, including transfer and returning students, who are under the age of 22, must submit the [Meningitis Vaccine Requirement Form](#) prior to registering for classes. Please note that a student must show evidence of receipt of an initial bacterial meningitis vaccination dose during the five-year period preceding, and at least 10 days prior to, the first class day of the first semester in which the student initially enrolls at St. Mary's University.

The Student Health Center offers this meningococcal meningitis vaccine at low cost during Zaragoza

Orientation sessions. Please call the Student Health Center at 210-436-3506 for more information. The vaccine may also be obtained from your private doctor, local clinic or pharmacy.

**IMPORTANT:** Students who intend to register for classes during a Zaragoza session must submit the [Meningitis Vaccine Requirement Form](#) at least 1 week prior to a scheduled orientation session. Students cannot register for classes until this information is received by the Student Health Center.

**[MENINGITIS VACCINE EXEMPTION PROCESS:](#)** Students can choose to seek an exemption to the meningitis vaccination by submitting the official Texas Department of State Health Services (DSHS) Vaccine Exemption form to our office. This exemption form will be mailed to you directly from the DSHS office. It may take up to two weeks to receive the DSHS Vaccine Exemption form by mail, so plan accordingly. This form must be submitted to the Student Health Center at least 10 days prior to the first class day or one week prior to a scheduled Zaragoza session. The original form is required in our office. We cannot, by Texas law, accept a photocopy of the form.

The form must be MAILED or HAND-DELIVERED to:

St. Mary's University  
Student Health Center, Box 45  
Attn: Meningitis Vaccine Immunization Officer  
San Antonio, Texas, 78228-8545

For more information on the Texas Meningitis Vaccine mandate or the Texas Vaccine Exemption Process, [click here](#).

### **Tuberculosis (Tb) Screening Requirement of International Students**

All International students must complete the [TB Screening Questionnaire and TB Risk Assessment Form](#) , and mail this form to the Student Health Center PRIOR to the first class day. TB skin testing (Mantoux) must be performed in the United States. TB blood testing, also known as Interferon Gamma Release Assay for Tuberculosis or IGRA TB blood test can be performed in your home country. For more information about this requirement, please click [click here](#). For any questions regarding the TB screening requirement, please call the Student Health Center at 210-436-3506 or email us at [healthcenter@stmarytx.edu](mailto:healthcenter@stmarytx.edu).

### **Recommended Vaccinations for All Students**

All students should review their immunization status with your private doctor. It is important that you update your immunizations PRIOR to attending St. Mary's University. The following vaccinations are recommended:

1. MMR-measles, mumps and rubella
2. Tdap-Tetanus, diphtheria and acellular pertussis
3. Varicella vaccine
4. Polio vaccine series

5. Hepatitis A vaccine
6. Hepatitis B Vaccine
7. Influenza vaccine-seasonal

For information on any of these vaccines, please [click here](#).

## **HEALTH INSURANCE REQUIREMENT**

### **Student Health Insurance**

All students who reside on campus, all international students (on and off campus) and every athlete who meet eligibility criteria will be charged automatically for the StMU-sponsored health insurance plan. To learn more about the health insurance plan, including rates and benefits, please visit [www.ahpcare.com/stmarytx](http://www.ahpcare.com/stmarytx).

All other students who meet eligibility criteria can enroll online for the StMU-sponsored health insurance plan by visiting [www.ahpcare.com/stmarytx](http://www.ahpcare.com/stmarytx). The deadline to have the premium added to your student business account is the 12th class day of the entering semester. For more information about the Student Health Insurance Plan or to view the brochure, please visit [www.ahpcare.com/stmarytx](http://www.ahpcare.com/stmarytx).

### **Health Insurance Waiver Process**

#### **Domestic students:**

Students who carry comparable coverage with their parents or employers, may choose to opt out of the StMU-sponsored health insurance plan by completing the waiver process online at <http://www.ahpcare.com/stmarytx/waiver>.

#### **International students:**

International students who choose to opt out of the StMU-sponsored health insurance plan will be granted a waiver if the alternate health insurance plan meets all the criteria required by St. Mary's University. International students must be familiar with these criteria BEFORE purchasing an alternate health insurance policy. Please [click here](#) to view the criteria that an alternate health insurance policy must meet before a waiver is accepted.

#### **WAIVER PROCESS DEADLINE:**

The waiver process for Domestic and International students must be completed by the 12th class day of the entering semester. No extensions will be made to the deadline. The online waiver process becomes available on December 1st for the Spring semester and on June 1st for the Fall semester.

For any questions regarding Student Health Insurance or the Health Insurance Waiver Process, please call the Student Health Center at 210-436-3506 or email us at [healthcenter@stmarytx.edu](mailto:healthcenter@stmarytx.edu).

## **Student Judicial Affairs**

St. Mary's University's approach to student conduct and behavior is educational rather than punitive. All students matriculating at St. Mary's University are expected to conduct themselves as responsible adults and are held accountable for their behavior.

Judicial authority is vested in the Office of the Vice President for Student Development. The Vice President for Student Development is the principle officer designated by the University for all non-academic discipline and the Vice President for Academic Affairs is the principle office designated by the University for all academic discipline. The Vice President for Student Development has designated the Dean of Students and Judicial Affairs to administer the University's non-academic policies as listed in all University publications including the Student Handbook, here the Code of Student Conduct is outlined.

The Student Conduct Committee assists the Dean of Students and Judicial Affairs in establishing policies for standards of conduct and serves as a formal hearing board for discipline cases.

## **Student Psychological and Testing Center**

### **Counseling**

The Student Psychological and Testing Center offers personal, academic skill building and career counseling for St. Mary's students. The Center is staffed by psychologists and a marriage and family therapist. Psychiatric consultation for medication is available on-site. Students are encouraged to talk with the staff about any concerns that interfere with their progress at the University or their personal effectiveness. The focus in sessions is on assisting students with developmental issues, reduction of symptoms, making positive decisions and implementing changes.

The center offers individual, couples', group, and psychiatric services. Issues handled by the Center range from situational problems such as adjustment to college to ongoing problems such as anxiety, depression, eating disorders, relationship issues, family of origin issues or abuse issues. Crisis intervention is available on a 24-hour basis when the university is in session and can be reached by contacting Campus Police at X3330 after hours. Psycho educational, career, and personality assessment is also available at the Center to aid students in understanding themselves and being successful in their academic career. Groups, workshops and outreach programs are offered to help students build needed skills to succeed.

The Student Psychological and Testing Center is open from 8:00am to 5:00pm on week days and is located in the Center for Life Directions building. All services are confidential to the extent allowed by law, and no record of services is entered on a student's transcript. The services of the Student Psychological and Testing Center are free of charge to students (with the exception of most testing programs). Students may make an appointment by calling (210) 436- 3135. Faculty and staff who desire counseling services should schedule an appointment through the Employee Assistance Program.

### **Services for Students with Disabilities**

St. Mary's University ensures accessibility to its programs, classes, services and activities to all qualified individuals with documented disabilities. This is accomplished through a variety of accommodations and services tailored to meet each individual's strengths and needs. If you are a student with a disability who wishes to be considered for disability related accommodations and services, please contact the Coordinator of Disability Support Services at 210-436-3135.

## **Testing Services**

Testing Services offers a wide variety of testing opportunities, including admissions testing for the Admission and Evening Studies offices, THEA testing for the Teacher Education Dept., Information Technology Proficiency testing, and placement testing during the various Orientations held throughout the year. It also serves as a national test center for a variety of programs, including CLEP, DANES, SAT, ACT, Praxis, PCAT, LSAT, and MPRE, as well as many professional licensure and certification tests, including TCLEOS testing for law enforcement personnel. For more information about testing offered through Resting Services, call (210) 436-3135.

The Testing Services also offers computer-based testing (as part of the ProMetric testing net work). This option gives students greater flexibility in test scheduling, as well as immediate score reporting in many instances. Tests now available through the Prometric Center include the GRE, and TOEFL, as well as many professional licensure and certification exams, including CPA, medical boards, and Texas Department of Insurance. The fees for testing are set by the sponsoring agency or organization and vary by test. The Prometric CBT Center is open six days per week, with a variety of testing times available. Additional information can be obtained by calling (210) 431-5080.

## **Campus Recreation Programs**

Campus Recreation provides students the opportunity to pursue a healthy lifestyle and explore recreational interests through a variety of programs, facilities, and services. The Intramural Sports Program offers students a variety of events annually with leagues, tournaments, and one-day events in men's, women's, and co-recreational divisions. Group fitness and water aerobic classes are offered daily. Informational programs and student trainers are available to assist students with fitness equipment. Indoor rock climbing is an exciting and fun alternative to traditional exercise, the indoor climbing wall is a simulated rock formation affixed with numerous hand and foot holds that provides mental & physical challenges to build strength, endurance, and self-confidence. A popular activity among students, the 40 ft. climbing wall is a unique experience that offers novice to advance climbing routes, an artificial crevice, and a 45 degree overhang.

## **Student Publication**

The school newspaper, The Rattler, is the key student publication. The Student Publications Board under the supervision of the Dean of Students, cooperates with the student editors and staff adviser of all publications in order to maintain the highest journalistic standards.

## **Student Identification Cards**

During the registration processes each student is responsible for obtaining a Rattler Identification Card from the Student Life Office. The Rattler card is necessary for participating in student activities, elections, for purchasing student tickets to athletic and cultural events, for checking out books from St. Mary's library and other college libraries, for use in the Registrar's Office, the Business Office, Bookstore, for use as a meal card in the Dining Facilities, as well as other official uses by the University. All students are required to carry their identification while on campus and must present it upon the request of any University official. ID cards are billed to all first time enrollees. Lost ID cards will be processed for a fee of \$10.00.

## **Recognized Student Organizations**

The University provides students with the means necessary to develop leadership in student, academic, social, and professional organizations. Membership in these organizations provides opportunities for developing the qualities expected of college graduates. The procedure for official University recognition of student groups is outlined in the Student Organization website

## **Intercollegiate Athletic Programs**

St. Mary's University participates in intercollegiate athletic programs for men and women, designed to assist in the over-all development of students. Varsity athletic teams at St. Mary's are rich in history and tradition. School colors are gold and blue and the team name is the Rattlers. St. Mary's is a member of the Heartland Conference, the National Collegiate Athletic Association Division II. St. Mary's teams participate in baseball, basketball, golf, soccer and tennis for men; and basketball, softball, soccer, tennis, volleyball, golf, and cross country for women, and cheerleading for men and women. The Bill Greehey Arena is the home of the basketball and volleyball Rattlers while V.J. Keefe Field, one of the finest collegiate baseball stadiums in the country, is the home of the baseball team. St. Mary's University has four national champions: The 1986 and 2002 women's softball team, 1989 men's basketball team, and the 2001 baseball team.

## **University Ministry**

The mission of University Ministry at St. Mary's University is to assist the University's efforts to provide opportunities for all its members to develop the intellectual, moral, and spiritual principles needed for leading value and God centered lives. Although this is done within the Catholic and Marianist traditions, the University seeks to unite all persons on campus at their deepest level of religious consciousness, and to enrich them through a genuine ecumenical sharing. University Ministry, staffed by religious and laity, fosters a spirit of community and faith. We provide opportunities to strengthen one's spiritual life and, in collaboration with other departments, encourage community members to respond to the needs of others through the celebration of the Eucharist and other Sacraments, prayer, community service, social justice programming, service immersion experiences, pastoral counseling, retreats, Small Faith-Sharing Communities, spiritual direction, faith formation and other activities. The Eucharist is offered daily when classes are in session and on Sundays in the University Chapels. Special all-school Masses and smaller liturgies and prayer services are interspersed throughout the year. The Chapels are open daily for private prayer.

All members of St. Mary's Community are invited to participate in liturgical ministries, retreat planning, Bible study, Sacramental preparation, community service projects, faith sharing groups, and much more. We also welcome the participation of faculty, staff as well as students and Alumni as part of our team effort to integrate a growing sense of ministry and service into the total experience of our academic community.

## **Civic Engagement and Career Development Center**

The Civic Engagement and Career Development Center supports the University mission by providing holistic, strategic and innovative services and programs that challenge and support students to succeed in their career development while serving and engaging in their communities in which they reside and beyond. The Center places emphasis on the importance of becoming life-long active and engaged citizens who use their education and experience to make a difference.

Civic engagement, as a part of a Catholic and Marianist education, encompasses the moral development of the whole person through service, as well as skills, leadership and knowledge needed to build community and work to resolve public problems for the common good.

The phrase "civic engagement" is used throughout scholarly literature to describe actions designed to identify and address issues of public concern. Some of the activities that regularly occur at St. Mary's and serve as a portal to civic engagement include: service-learning course instruction; ongoing volunteer efforts; immersion trips; and student involvement in programs such as the Marianist Leadership Program, the WINGS (Workers Invested in Knowledge and Growth throughout Service) initiative and Continuing the Heritage.

Similarly, the programs and services offered to assist students in their career exploration and planning are designed to move them through the developmental stages of investigation, preparation and maintenance of a successful career and are enhanced by their civic engagement experiences.

The staff work with students to discuss majors and career path options, to explore experiential opportunities such as job shadowing, volunteering, internships, and part-time employment, as well as to execute a successful job search or graduate school admissions process. The goal of educating students on making employment choices that best fit them as individuals and lead to productive and meaningful careers remains a core element of our mission.

The Civic Engagement and Career Development Center will work in partnership with faculty and staff, as well as external agencies and employers, to assist students at all stages of their development and to provide them with the opportunities, training, and education needed to succeed as active, informed and engaged citizens. [www.stmarytx.edu/careerservices](http://www.stmarytx.edu/careerservices)

## **The Service Learning Center**



Founded in 1994, and inspired by the Catholic and Marianist tradition of the University, the Service Learning Center assists the entire university community in fulfilling its mission of extending service to society. In particular, the Center challenges and supports students through the service learning experiences the Center develops.

These curricular and co-curricular experiences engage students in direct service work with the community, addressing systemic and recurrent social problems in their neighborhoods, and around the world. By involving these students in critical reflection on today's complex social realities, students further their academic knowledge, as well as develop life skills and a sense of compassion. This is the Center's role in the University's aspiration that students become responsible citizens and instruments of peace and justice. There are a number of service learning experiences that the Center develops, including: supporting Service Learning courses throughout the University, coordinating service projects for local direct service agencies, conducting service immersion trips within the city and throughout the world, supporting the Marianist Leadership Program, and co-sponsoring the Non-Profit Career Fair and the creation of the San Antonio Service Learning Intercollegiate Collaborative. The Service Learning Center sponsors intensive service and educational programs that center on a single issue for various lengths of time, from a weekend, to a week, to an entire summer.

The United States Conference of Catholic Bishops has stated that "in the Catholic tradition, responsible citizenship is a virtue; participation in the political process is a moral obligation" (*Faithful Citizen ship: Civic Responsibility for a New Millennium*). The Service Learning Center, through its programs that shape students through their interactions with the larger community, teaches them how to become more responsible citizens. The Center also helps to fulfill the mission of the University by assisting the faculty of the University in their efforts to provide a quality education to students, and in their efforts to contribute to the urgent task of extending justice, freedom and dignity to all people.

## **Marianist Leadership Program**

Funded by the Marianist Trust and administered by the Service Learning Center, the Marianist Leadership Program is dedicated to scholastic excellence and the development of the student as a leader through service and spirituality. The Catholic Marianist Spirituality guides members of the program through the development of lifelong habits by integrating faith and culture through leadership and service activities within the university and civic communities. Applications are accepted for entering freshmen, transferring and current students as allowed by current membership size. All majors are considered.

