8.
GRADUATE PROGRAM REQUIREMENTS AND COURSE DESCRIPTIONS
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COLLEGE OF BUSINESS
COLLEGE OF BUSINESS

Mission Statement

The mission of the College of Business is to offer graduate and undergraduate programs of high quality which meet the needs of students, both in terms of their general education as well as in their preparation for productive and rewarding professional careers. This focus requires that the College be alert and responsive to local, regional, and national issues and to the needs of business, government, and the community at large. Its faculty approach the challenge of education not only through their classroom and advising efforts but by active scholarship in their respective disciplines and through service to the University, their profession, and the community.

Master of Business Administration Degree

The Master of Business Administration degree is accredited by the American Assembly of Collegiate Schools of Business and conforms to its recommended guidelines.

The Master of Business Administration degree is designed to offer the opportunity for intensive education to qualified graduate students and is available to individuals with undergraduate degrees in the business administration areas, as well as to those with specializations outside the business field.

Students whose previous training has been in nonbusiness fields may be admitted to the M.B.A. program but are required as a condition of admission to complete (in total or in part, depending upon the background of each student) the M.B.A. core courses. Students whose background is in business but who have completed the M.B.A. core courses five or more years before entering the program may be required by the Admissions Subcommittee of the Graduate Studies Committee to complete successfully or test out of the M.B.A. core courses. The courses of the M.B.A. core are open only to graduate students and are in addition to degree requirements of the M.B.A.

All students who enter the M.B.A. degree program should have a familiarity with commonly used computer programs for spreadsheets and word processing. Special not-for-credit courses are commonly offered in the College of Business and elsewhere to address this need.

Program Admission Requirements. For admission to the M.B.A. program, applicants must meet University-wide graduate admission requirements and the following College of Business requirements:

1. An approximate overall grade-point average of 3.0 in all work completed at the undergraduate level.
2. An approximate composite score of 500 with no component less than the 20th percentile on the Graduate Management Admission Test (GMAT); the results must be submitted to the Office of Admissions and Registrar before being
considered for admission. The GMAT test results will only be accepted if the test was taken no more than five years before the date of application. Applications for the GMAT or information on the test may be obtained from GMAT, Educational Testing Service, P.O. Box 6103, Princeton, New Jersey, 08541-6103, (609) 771-7330.

3. Favorable recommendation by the M.B.A. Admissions Subcommittee of the Graduate Studies Committee and approval by the Provost and Vice President for Academic Affairs.

Those who do not meet the admissions requirements may be considered on an individual basis by the M.B.A. Admissions Subcommittee of the Graduate Studies Committee.

**M.B.A. Core Courses.** The following courses constitute the M.B.A. core and are required for students who do not have credit for equivalent undergraduate courses. However, no credit for these courses may count toward degree requirements of the M.B.A.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 5003</td>
<td>Financial Accounting Concepts</td>
</tr>
<tr>
<td>BLW 5003</td>
<td>Legal Environment of Business</td>
</tr>
<tr>
<td>ECO 5003</td>
<td>Economic Theory and Policy</td>
</tr>
<tr>
<td>FIN 5003</td>
<td>Business Finance</td>
</tr>
<tr>
<td>IS 5003</td>
<td>Introduction to Information Systems</td>
</tr>
<tr>
<td>MGT 5003</td>
<td>Conceptual Foundations of Management</td>
</tr>
<tr>
<td>MKT 5003</td>
<td>Introduction to Marketing</td>
</tr>
<tr>
<td>MS 5003</td>
<td>Quantitative Methods for Business Analysis</td>
</tr>
</tbody>
</table>

**Degree Requirements.** The M.B.A. program requires 33 semester credit hours of work beyond any hours acquired in the M.B.A. core courses.

All candidates for the M.B.A. degree are required to complete successfully the foundations of knowledge which are included in the following 21 semester credit hours:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 5023</td>
<td>Accounting Analysis for Decision Making</td>
</tr>
<tr>
<td>ECO 5023</td>
<td>Managerial Economics</td>
</tr>
<tr>
<td>FIN 5023</td>
<td>Financial Management</td>
</tr>
<tr>
<td>MGT 5043</td>
<td>Management and Behavior in Organizations</td>
</tr>
<tr>
<td>MGT 5903</td>
<td>Strategic Management and Policy</td>
</tr>
<tr>
<td>MKT 5023</td>
<td>Marketing Management</td>
</tr>
<tr>
<td>MS 5023</td>
<td>Decision Analysis and Production Management</td>
</tr>
</tbody>
</table>

Students seeking the M.B.A. degree may elect one of three options to complete the required 33 semester credit hours.

**Option One: General M.B.A., Nonthesis Option.** Under Option One students are required to complete the 21 semester credit hours above and 12 semester credit hours of electives. These electives may be taken either within the business divisions (Accounting and Information Systems, Economics and Finance, or Management and

Students who earn a grade of “B” or better in the course will satisfy the comprehensive examination requirement. A student who receives a grade of “C” may still satisfy the requirement by successfully passing a comprehensive examination as set out in this catalog.
Master of Business Administration / 145

Marketing) and include courses listed in the M.B.A. concentrations, or in areas outside of business as approved by the Graduate Studies Committee.

Option Two: General M.B.A., Thesis Option. Under Option Two students are required to complete the 21 semester credit hours above, 6 semester credit hours of electives as approved by the Graduate Studies Committee, and 6 semester credit hours of Master's Thesis. See the University's requirements for a thesis on pages 122 and 123.

Option Three: Nonthesis M.B.A., Concentration Option. Under Option Three students are afforded the opportunity to concentrate in a particular area. Areas of concentration are Business Economics, Finance, Employee Relations, Information Systems, Management of Technology, Management Science, Management Accounting, and Taxation.

Specific requirements for each concentration are discussed under the divisions of the College of Business.

Master of Business Administration Degree in International Business

In response to the geographical, commercial, and ethnic environments of UTSA, the College of Business offers the Master of Business Administration degree in International Business. The fundamental objective of this degree program is to offer students an opportunity to gain perspective on commercial activities in a setting which is bilingual, transnational, and cross-cultural. This program is designed to offer students from the United States or foreign countries the opportunity to study business administration while developing special expertise in its international aspects. To achieve this end, specific international content courses have been developed in the disciplines of management, marketing, economics, business law, and finance. There may be opportunities to study outside the United States and to apply the credit earned to the degree program at UTSA. The international content courses and possibilities for foreign study are supplemented by research and workshop opportunities in the area of international business.

Students entering the degree program must meet the normal admission requirements for UTSA and the College of Business.

Students pursuing this degree must either demonstrate proficiency in one of the modern languages or take 6 semester credit hours of culture courses that have been approved by the graduate advisor. The proficiency in language may be demonstrated either by completion of 6 hours of courses in the same language or by an examination measuring proficiency at the 6-hour level.

Program Admission Requirements. Applicants for admission to the Master of Business Administration program in International Business are required to meet the same general program admission requirements set out for the Master of Business Administration degree (see pp. 143–44).

Degree Requirements. The M.B.A. program in International Business requires 33 semester credit hours of work beyond any hours acquired in the M.B.A. core courses.

UTSA 1997–99 Graduate Catalog
All candidates for the M.B.A. degree in International Business must complete the 21 hours of courses containing the foundations of knowledge (see page 144).

In addition to the above courses, students must complete 12 semester credit hours from the following list of courses:

**International Content Elective Courses:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>6203 Seminar in International Accounting</td>
</tr>
<tr>
<td>BLW</td>
<td>5173 Legal Environment of International Business</td>
</tr>
<tr>
<td>ECO</td>
<td>5303 International Trade and Finance</td>
</tr>
<tr>
<td>ECO</td>
<td>6103 Economic and Business Forecasting: National and International Applications</td>
</tr>
<tr>
<td>FIN</td>
<td>5833 International Financial Management</td>
</tr>
<tr>
<td>MGT</td>
<td>5183 Global Management</td>
</tr>
<tr>
<td>MGT</td>
<td>5663 International Human Resources Management</td>
</tr>
<tr>
<td>MKT</td>
<td>5673 International Marketing</td>
</tr>
</tbody>
</table>

Foreign coursework may be taken as the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN</td>
<td>5963 International Business Internship</td>
</tr>
<tr>
<td>MKT</td>
<td>5963 International Business Internship</td>
</tr>
<tr>
<td>FIN</td>
<td>5983 International Business Essay</td>
</tr>
<tr>
<td>MKT</td>
<td>5983 International Business Essay</td>
</tr>
</tbody>
</table>

Students choose either an elective program of 12 semester credit hours in international content courses as listed above or a combination of elective international content courses and foreign study as approved by the Graduate Studies Committee. Normally the foreign study will be taken at a cooperating foreign institution. Foreign study is encouraged, and efforts will be made to assist students to complete a portion of their work outside the United States.
DIVISION OF ACCOUNTING
AND INFORMATION SYSTEMS

Mission Statement

The mission of the accounting programs within the Division of Accounting and Information Systems is to offer graduate and undergraduate accounting programs of high quality which meet the needs of the students in preparing those students for professional careers in accounting. This mission includes providing a broad-based education as well as education in current business and accounting topics. The Division is responsive to the needs of employers and other constituents of its programs. The Division is also alert to the current issues in the local, regional, and national environment and plans and implements changes in the educational process to respond to those issues when needed. The faculty of the accounting programs assist in accomplishing this mission through a planned integration of their teaching, intellectual, and service contribution.

Master of Business Administration Degree
Management Accounting Concentration

This concentration is designed to provide added preparation in management accounting subjects for graduate business students who do not have extensive prior coursework in accounting.

All students choosing to concentrate in management accounting must complete the 21 semester credit hours of courses containing the foundations of knowledge (see page 144) and must successfully complete 12 semester credit hours as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 5033</td>
<td>Controllership</td>
</tr>
<tr>
<td>ACC 5073</td>
<td>Cost Management and Control</td>
</tr>
<tr>
<td>ACC 5123</td>
<td>Advanced Managerial Accounting Topics</td>
</tr>
<tr>
<td>ACC 5143</td>
<td>Budgeting and Forecasting</td>
</tr>
</tbody>
</table>

Master of Business Administration Degree
Taxation Concentration

This concentration is designed to offer the opportunity for qualified graduate students to study business administration while developing special expertise in taxation. To achieve this end, students can focus their elective courses on developing an understanding of tax problems and opportunities in business planning.

All students choosing to concentrate in taxation must complete the 21 semester credit hours of courses containing the foundations of knowledge (see page 144) and must successfully complete 12 semester credit hours as follows:

UTSA 1997-99 Graduate Catalog
ACC 6043 Tax Research
and 9 hours from the following:

ACC 6053 Estate, Trust, and Gift Taxation
ACC 6073 Corporate Taxation
ACC 6083 Tax Practice and Procedure
ACC 6113 Taxation of Partnerships and S Corporations
ACC 6123 Advanced Corporate Taxation
ACC 6143 Tax Planning
ACC 6163 International Taxation

Master of Science in Accounting Degree

The Master of Science in Accounting (M.S.A.) degree is designed to accommodate applicants with a degree in any field. Such applicants must complete the equivalent of a B.B.A. degree in Accounting from an accredited institution or must enroll in the courses of the M.S.A. core plus certain accounting courses set out by the Coordinator of Graduate Programs in Accounting. The courses of the M.S.A. core may be taken simultaneously with the M.S.A. requirements, subject to course prerequisites and approval of the Coordinator of Graduate Programs in Accounting.

Program Admission Requirements. In addition to satisfying the University-wide graduate admission requirements for unconditional admission, an applicant seeking unconditional admission to the M.S.A. program must meet the following requirements:

1. An approximate overall grade-point average of 3.0 in all work completed at the undergraduate level.
2. An approximate composite score of 500 with no component less than the 20th percentile on the Graduate Management Admission Test (GMAT); the results must be submitted to the Office of Admissions and Registrar before being considered for admission. The GMAT test results will only be accepted if the test was taken no more than five years before the date of application. Applications for the GMAT or information on the test may be obtained from GMAT, Educational Testing Service, P.O. Box 6103, Princeton, New Jersey, 08541-6103, (609) 771-7330.
3. Favorable recommendation by the M.S.A. Admissions Committee and approval by the Provost and Vice President for Academic Affairs.

Those who do not meet all of the admission requirements stated above may be considered for admission on a conditional basis. All admission deficiencies must be removed before enrolling for the last semester before graduation and will be in addition to degree requirements.

The following M.S.A. core courses or their equivalents are required for students with undergraduate curriculum deficiencies; however, no credit for these courses may be counted toward the M.S.A. degree requirements:

ACC 5003 Financial Accounting Concepts
ACC 5023 Accounting Analysis for Decision Making
ACC 3023 Intermediate Financial Accounting I
Degree Requirements. The minimum number of semester credit hours required for this degree, exclusive of coursework or other study required to remove admission deficiencies, is 30 hours.

All candidates must complete the following:

A. 15 semester credit hours of required graduate courses:

ACC 3033 Intermediate Financial Accounting II
ACC 3043 Federal Income Tax Accounting
ACC 3113 Accounting Information Systems
ACC 4013 Principles of Auditing
ACC 4153 Corporate and Partnership Taxation
BLW 5003 Legal Environment of Business
ECO 5003 Economic Theory and Policy
FIN 5003 Business Finance
IS 5003 Introduction to Information Systems
MGT 5003 Conceptual Foundations of Management
MKT 5003 Introduction to Marketing
MS 5003 Quantitative Methods for Business Analysis

B. 6 semester credit hours of graduate electives in accounting or taxation

C. 9 semester credit hours of graduate non-ACC electives, approved by the Coordinator of Graduate Programs in Accounting

Master of Taxation Degree

The Master of Taxation (M.T.) degree is designed to accommodate applicants with a degree in any field. Such applicants must complete the equivalent of a B.B.A. degree in Accounting from an accredited institution or must enroll in the courses of the M.T. core. The courses of the M.T. core may be taken simultaneously with the M.T. requirements, subject to course prerequisites.

Program Admission Requirements. In addition to satisfying the University-wide graduate admission requirements for unconditional admission, an applicant seeking unconditional admission to the M.T. program must meet the following requirements:

1. An approximate overall grade-point average of 3.0 in all work completed at the undergraduate level.
2. An approximate composite score of 500 with no component less than the 20th percentile on the Graduate Management Admission Test (GMAT); the results must be submitted to the Office of Admissions and Registrar before being considered for admission. The GMAT test results will only be accepted if the test
was taken no more than five years before the date of application. Applications for the GMAT or information on the test may be obtained from GMAT, Educational Testing Service, P.O. Box 6103, Princeton, New Jersey, 08541-6103, (609) 771-7330.

3. Favorable recommendation by the M.T. Admissions Committee and approval by the Provost and Vice President for Academic Affairs.

Those who do not meet all of the admission requirements stated above may be considered for admission on a conditional basis. All admission deficiencies must be removed before enrolling for the last semester before graduation and will be in addition to degree requirements.

The following M.T. core courses or their equivalents are required for students with undergraduate curriculum deficiencies; however, no credit for these courses may be counted toward the M.T. degree requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>5003 Financial Accounting Concepts</td>
</tr>
<tr>
<td>ACC</td>
<td>5023 Accounting Analysis for Decision Making</td>
</tr>
<tr>
<td>ACC</td>
<td>3023 Intermediate Financial Accounting I</td>
</tr>
<tr>
<td>ACC</td>
<td>3033 Intermediate Financial Accounting II</td>
</tr>
<tr>
<td>ACC</td>
<td>3043 Federal Income Tax Accounting</td>
</tr>
<tr>
<td>ACC</td>
<td>3113 Accounting Information Systems</td>
</tr>
<tr>
<td>ACC</td>
<td>4013 Principles of Auditing</td>
</tr>
<tr>
<td>ACC</td>
<td>4153 Corporate and Partnership Taxation</td>
</tr>
<tr>
<td>BLW</td>
<td>5003 Legal Environment of Business</td>
</tr>
<tr>
<td>ECO</td>
<td>5003 Economic Theory and Policy</td>
</tr>
<tr>
<td>FIN</td>
<td>5003 Business Finance</td>
</tr>
<tr>
<td>IS</td>
<td>5003 Introduction to Information Systems</td>
</tr>
<tr>
<td>MGT</td>
<td>5003 Conceptual Foundations of Management</td>
</tr>
<tr>
<td>MKT</td>
<td>5003 Introduction to Marketing</td>
</tr>
<tr>
<td>MS</td>
<td>5003 Quantitative Methods for Business Analysis</td>
</tr>
</tbody>
</table>

Degree Requirements. All candidates must complete the following:

A. 15 semester credit hours of required graduate tax courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>6043 Tax Research</td>
</tr>
<tr>
<td>ACC</td>
<td>6053 Estate, Trust, and Gift Taxation</td>
</tr>
<tr>
<td>ACC</td>
<td>6073 Corporate Taxation</td>
</tr>
<tr>
<td>ACC</td>
<td>6083 Tax Practice and Procedure</td>
</tr>
<tr>
<td>ACC</td>
<td>6113 Taxation of Partnerships and S Corporations</td>
</tr>
</tbody>
</table>

B. 6 semester credit hours of graduate tax electives

C. 6 semester credit hours of graduate tax or accounting electives

D. 3 semester credit hours of graduate business electives

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COURSE DESCRIPTIONS
ACCOUNTING
(ACC)

5003  Financial Accounting Concepts
(3-0) 3 hours credit.
An intensive study of accounting as a tool to communicate financial information for planning, analyzing, and controlling business enterprises directed toward decision making.

5023  Accounting Analysis for Decision Making
(3-0) 3 hours credit. Prerequisite: ACC 5003 or an equivalent.
The study of accounting and its uses by management in the decision-making process.

5033  Controllership
(3-0) 3 hours credit. Prerequisite: ACC 5023 or an equivalent.
A study of the accounting executive’s role in the management of a business enterprise; case studies of the use of accounting information to management.

5043  Advanced Auditing
(3-0) 3 hours credit. Prerequisite: ACC 4013 or an equivalent.
Specialized study of complex auditing problems, including statistical sampling techniques, auditing techniques through the computer, auditor’s reports, S.E.C. regulations, and interim reporting.

5053  Nonprofit Accounting
(3-0) 3 hours credit. Prerequisite: ACC 3033 or an equivalent.
A study of accounting principles and practices of not-for-profit organizations, including federal, state, and local governments.

5073  Cost Management and Control
(3-0) 3 hours credit. Prerequisite: ACC 5023 or an equivalent.
Study of contemporary issues, cost concepts, and procedures in managerial accounting, to include analysis and application of techniques in the generation of data for management information systems.

5083  Seminar in Internal Auditing
(3-0) 3 hours credit. Prerequisite: ACC 4013 or an equivalent.
Case study course involving (1) in-depth study of internal control, (2) operation auditing, and (3) field studies in the San Antonio environment.

5123  Advanced Managerial Accounting Topics
(3-0) 3 hours credit. Prerequisite: ACC 5023 or an equivalent.
Advanced study of the applications of managerial accounting, including cost analysis, variance analysis, pricing decisions, transfer pricing, and budgeting.

UTSA 1997–99 Graduate Catalog
5133 Advanced Financial Accounting
(3-0) 3 hours credit. Prerequisite: ACC 3033 or an equivalent.
A study of specialized areas of financial accounting. Topics may vary depending upon current professional controversies.

5143 Budgeting and Forecasting
(3-0) 3 hours credit. Prerequisite: ACC 5023 or an equivalent.
Examines the accountant's role in budgeting and forecasting. Study of advanced forecasting techniques and applications of microcomputers and forecasting.

6013 Seminar in Current Accounting Theory
(3-0) 3 hours credit. Prerequisite: ACC 3033 or an equivalent.
A study of the nature of accounting, the nature of theory, and an explanation of the history of the development of "generally accepted accounting principles." A critical analysis of the validity of such principles. Research into the field of current accounting literature, with the objective of critically evaluating the present status and future course of accounting thought.

6043 Tax Research
(3-0) 3 hours credit. Prerequisite: ACC 4153 or 5013, or an equivalent.
An in-depth study of how to find answers to tax questions. Students will become acquainted with various tax materials in the library and their use, including tax services, case reports, and IRS publications.

6053 Estate, Trust, and Gift Taxation
(3-0) 3 hours credit. Prerequisite: ACC 4153 or 5013, or an equivalent.
Emphasis on estate and gift planning and income taxation of trusts and estates. Taxation of gratuitous transfers under the federal Estate and Gift Tax Codes including inter vivos gifts, marital deduction, powers of appointment, retained interest, the concept of distributable net income, fiduciary taxation, and the concept of an estate.

6073 Corporate Taxation
(3-0) 3 hours credit. Prerequisite: ACC 4153 or 5013, or an equivalent.
Study of federal income taxation of corporations and shareholders, with emphasis on formation, distributions, personal holding companies, accumulated earnings tax, capital gains and losses, net operating losses, and capital and debt structure.

6083 Tax Practice and Procedure
(3-0) 3 hours credit. Prerequisites: ACC 4153 or 5013, or an equivalent.
Advanced case studies of tax audits, administrative appeals, settlement technique, appellate jurisdiction, choosing forums, ruling and technical requests, civil litigation, collection process, offers in compromise, interest and civil penalties, indirect methods of proof, and criminal penalties.
6113 **Taxation of Partnerships and S Corporations**
(3-0) 3 hours credit. Prerequisite: ACC 4153 or 5013, or an equivalent.
A study of the special tax attributes of partnerships and Subchapter S corporations, with a comparison of these forms of doing business. Formation, operation, and dissolution of partnerships and Subchapter S corporations.

6123 **Advanced Corporate Taxation**
(3-0) 3 hours credit. Prerequisites: ACC 6043 and 6073, or their equivalents.
Corporate liquidations, divisions, and reorganizations, and consolidated tax returns.

6143 **Tax Planning**
(3-0) 3 hours credit. Prerequisite: ACC 4153 or 5013, or an equivalent.
A study of tax planning topics and techniques for individual taxpayers. Conducted in a seminar format, the course includes such issues as disposition of assets; the realization and recognition of gains and losses, including passive activities; and business profit-oriented expenses.

6163 **International Taxation**
(3-0) 3 hours credit. Prerequisite: ACC 4153 or 5013, or an equivalent.
Study of tax problems and planning with respect to international transactions of individuals and corporations. Topics include U.S. taxation of foreign individual and corporate investments in the United States; U.S. taxation of export transactions, foreign investments, and U.S. persons living abroad; and analysis of applicable tax treaties.

6203 **Seminar in International Accounting**
(3-0) 3 hours credit. Prerequisite: 9 semester credit hours of accounting.
An analysis of the issues involved in accounting for multinational corporations, including environmental influences, foreign currency translation, management accounting, and international accounting standard setting. A brief study of accounting history is included in the course. (Formerly ACC 6133. Credit cannot be earned for both ACC 6203 and ACC 6133.)

6943 **Accounting Internship**
3 hours credit. Prerequisites: Graduate standing; 15 semester credit hours of upper-division accounting or an equivalent.
Internship must be approved in advance by the Internship Coordinator and the Graduate Advisor of Record. Supervised full- or part-time off-campus training in public accounting, industry, or government. Individual conferences and written reports required. Note: semester credit hours may not be counted toward the M.S.A. degree.

6951-3 **Independent Study**
1 to 3 hours credit. Prerequisites: Graduate standing and permission in writing (form available) of the instructor and the student’s graduate advisor of record.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not
normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the master’s degree.

6961 Comprehensive Examination
1 hour credit. Prerequisite: Approval of the appropriate committee on graduate studies to take the Comprehensive Examination. Independent study course for the purpose of taking the Comprehensive Examination. May be repeated as many times as approved by the Committee on Graduate Studies. Enrollment is required each term in which the Comprehensive Examination is taken if no other courses are being taken that term. The grade report for the course is either CR (satisfactory performance on the Comprehensive Examination) or NC (unsatisfactory performance on the Comprehensive Examination).

6973 Special Problems
(3-0) 3 hours credit. Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems courses may be repeated for credit when the topics vary, but not more than 6 hours, regardless of discipline, will apply to a master’s degree.

6983 Master’s Thesis
3 hours credit. Prerequisite: Permission of the Graduate Advisor of Record and thesis director (form available). Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the master’s degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress.

Master of Business Administration Degree
Information Systems Concentration

This concentration is designed to offer the opportunity for qualified graduate students to study business administration while developing special expertise in information systems. To achieve this end, students can focus their elective courses on developing general managerial knowledge in the design and implementation of information systems, management of communication technologies, and principles of data base management systems. Some of the course offerings require previous academic credit or professional experience in information systems.

All students choosing to concentrate in information systems must complete the 21 semester credit hours of courses containing the foundations of knowledge courses (see page 144) and 12 semester credit hours from the following:

| IS   | 6103 | Information Systems Design and Implementation |
| IS   | 6203 | Data Communication and Network Management    |
| IS   | 6403 | Information Resource Management              |
| IS   | 6503 | Principles of Data Base Management          |

UTSA 1997–99 Graduate Catalog
Introduction to Information Systems
(3-0) 3 hours credit.
A conceptual study of information systems in organizations. A survey of information systems concepts will be presented, including a historical perspective of information systems, the structure of the information systems function, an introduction to information systems technologies (hardware and software), application planning, system development, end user computing, decision support systems, and the management of information systems resources. Small cases and application problems which illustrate the concepts studied will be assigned.

Information Systems Design and Implementation
(3-0) 3 hours credit. Prerequisite: IS 4053 or consent of instructor.
The course integrates the areas of computer technology, systems analysis, and systems design in designing large-scale application or decision support systems. A strong introduction to the formalization of the information systems design process is provided. The course explores state-of-the-art systems design and specification techniques. The course stresses the frontiers of knowledge in the specification, design, implementation, and testing of information systems.

Data Communication and Network Management
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Emphasis is on the impact of communications technology on information systems and the firm. Major topics include communication concepts, network architectures, data communications software and hardware, distributed information systems, and communication services. Network management and managing the new technologies are also emphasized.

Information Resource Management
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.
Study of the problems and techniques associated with managing information resources. Topics analyzed include information systems project planning and control, staffing, and costing alternatives. The role of the information systems function in relation to the business firm will also be studied.

Principles of Data Base Management
(3-0) 3 hours credit. Prerequisite: IS 3063 or consent of instructor.
Discussion and in-depth analysis of topics associated with the definition, creation, and management of data bases for business-oriented applications. Topics will include current developments in the field of data base
management systems. Design of a data base system and implementation of the design will be done as a major project in the course.

6603 Seminar in Computer Security and Internal Control
(3-0) 3 hours credit. Prerequisite: IS 5003 or consent of instructor.
In-depth analysis of topics related to control and security during system development and operation of information systems. Emphasis will be on techniques associated with control and security requirements in information systems.

6703 Advanced Business Information Systems
(3-0) 3 hours credit. Prerequisite: IS 3073 or consent of instructor.
Study of computer-based technologies for facilitating the analysis and evaluation of complex problems. Topics include a review of decision analysis and a discussion of representations and the modeling process. General concepts of artificial intelligence will be examined as the foundation for designing computer-based information systems which support strategic planning and managerial control. Methods and principles of knowledge engineering will be explored.

6951-3 Independent Study
1 to 3 hours credit. Prerequisites: Graduate standing and permission in writing (form available) of the instructor and the student’s graduate advisor of record.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the master’s degree.

6973 Special Problems
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems may be repeated for credit when the topics vary, but not more than 6 hours, regardless of discipline, will apply to a master’s degree.
DIVISION OF ECONOMICS AND FINANCE

Master of Business Administration Degree
Business Economics Concentration

This concentration is designed to offer the opportunity for qualified graduate students to study business administration at the graduate level with particular emphasis in business economics. It will particularly assist students in preparing for economics-related careers in the business environment and government or for graduate study in economics at the doctoral level.

All students choosing to concentrate in business economics must complete the 21 semester credit hours of courses containing the foundations of knowledge (see page 144) and 12 semester credit hours as follows:

ECO 5033 Economic Policy and Business Issues
ECO 6103 Economic and Business Forecasting
6 semester credit hours of graduate economics elective courses

COURSE DESCRIPTIONS
ECONOMICS
(EO)

5003 Economic Theory and Policy
(3-0) 3 hours credit.
The opportunity for intensive study of micro- and macro-economic concepts; the price system as it functions under competition, monopoly, and partial monopoly; national income measurement and determination; business cycles; money and banking; monetary policy; and fiscal policy and economic stabilization.

5023 Managerial Economics
(3-0) 3 hours credit. Prerequisites: ECO 5003 and MS 5003, or their equivalents.
Application of price theory to economic decisions of the firm. A problem-oriented approach emphasizing demand, production, and profit-maximizing conditions and their implications for output and pricing strategies under various market structures and types of organization.

5033 Economic Policy and Business Issues
(3-0) 3 hours credit. Prerequisite: ECO 5003 or an equivalent.
A study of fluctuations in overall economic activity and their impact on optimal business and government economic decisions. Contemporary issues regarding the Federal Reserve's monetary policy and the government's tax and spending policies are evaluated in static and dynamic settings in terms of implications for inflation, unemployment, the government budget deficit, and the trade deficit.
5303 **International Trade and Finance**  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
Survey of international trade theory and policy, balance of payments, and exchange rates, with applications to current issues.

5603 **Public Finance and Fiscal Policy**  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
Theoretical rationale for collective action; incidence, equity, and efficiency of taxation methods; externalities and property rights; and fiscal management and debt financing.

5913 **Antitrust–Legal and Economic Analysis**  
(3-0) 3 hours credit. Prerequisite: ECO 5003 or an equivalent.  
An analysis of promoting and protecting competition through law. Antitrust implications of the managerial process are to be examined and evaluated.

6103 **Economic and Business Forecasting: National and International Applications**  
(3-0) 3 hours credit. Prerequisite: ECO 5003, an equivalent, or consent of instructor.  
Study of traditional and advanced forecasting techniques. Application of computer-assisted forecasting methods to national and international business forecasting problems.

6203 **Government and Business**  
(3-0) 3 hours credit. Prerequisite: ECO 5003 or an equivalent.  

6313 **Managerial Labor Economics**  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
Survey of wage theory; wage determination and structure of labor markets; employment opportunities, economic security, leisure, and technological change; and labor organizations and collective bargaining.

6553 **Urban and Regional Economics**  
(3-0) 3 hours credit. Prerequisite: ECO 5003, an equivalent, or consent of instructor.  
Economic aspects of regions and their cities, including growth and development processes; data sources and analytical methods; and analysis of urban issues such as transportation, land use, pollution, and public sector service delivery.

6953 **Independent Study**  
3 hours credit. Prerequisites: Graduate standing and permission in writing (form available) of the instructor and the student's graduate advisor of record.  
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May
be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the master's degree.

6973 Special Problems
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems courses may be repeated for credit when the topics vary, but not more than 6 hours, regardless of discipline, will apply to the master's degree.

6983 Master's Thesis
3 hours credit. Prerequisite: Permission of the Graduate Advisor of Record and thesis director.
Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress.

Master of Business Administration Degree
Finance Concentration

This concentration is designed to offer the opportunity for qualified graduate students to study business administration at the graduate level with particular emphasis in the area of finance. It will particularly assist students in preparing for finance-related careers in the business environment or for graduate study in finance at the doctoral level.

All students choosing to concentrate in finance must complete the 21 semester credit hours of courses containing the foundations of knowledge (see page 144) and 12 semester credit hours as follows:

- FIN 5633 Investment Theory and Problems
  9 semester credit hours of graduate finance elective courses

COURSE DESCRIPTIONS
FINANCE
(FIN)

5003 Business Finance
(3-0) 3 hours credit. Prerequisite: ACC 5003 or an equivalent.
The framework, tools, and basic concepts of financial management. Specific areas of inquiry include taxation, forecasting, working capital management, external financing, capital budgeting, and dividend policy.
5023 **Financial Management**  
(3-0) 3 hours credit. Prerequisites: ECO 5003, FIN 5003, and ACC 5003, or their equivalents. Completion of or concurrent enrollment in ACC 5023 is recommended.  
The study of concepts related to the financial management of the firm. Topics include asset and liability management, capital investment analysis and valuation, risk and uncertainty, sources and costs of financial alternatives, and corporate financial policy. (Credit cannot be earned for both FIN 5023 and FIN 5043.)

5033 **Cases in Financial Management**  
(3-0) 3 hours credit. Prerequisite: FIN 5023 or an equivalent.  
A case approach will be used to illustrate the applications of financial management to actual business situations as well as to integrate the different topical areas. The primary areas of focus will include planning, current asset management, capital budgeting, mergers and acquisitions, and financing alternatives.

5043 **Budgeting and Finance in the Public Sector**  
(3-0) 3 hours credit.  
An examination of public finance and budgeting. Concepts of public goods, analysis of public expenditures, concepts of capital budgeting, public budgeting techniques, assessment of taxation structures and other revenue sources, and intergovernmental fiscal relations. (Credit cannot be earned for both FIN 5023 and FIN 5043.)

5633 **Investment Theory and Problems**  
(3-0) 3 hours credit. Prerequisite: FIN 5023 or an equivalent.  
A study of investment analysis and decision making with regard to financial instruments traded in organized markets. Topics include descriptions and functions of markets; impact of market structure on market efficiency and security pricing; valuation of stocks, bonds, and options; analysis of risk and return characteristics of investment alternatives; and selection and management of bond and stock portfolios.

5713 **Financial Markets**  
(3-0) 3 hours credit. Prerequisite: FIN 5023 or an equivalent.  
An examination of major financial markets with emphasis on current trends and developments. Topics include markets used for risk management, such as financial futures, listed options, and SWAPS.

5733 **Banking and the Financial Services Industry**  
(3-0) 3 hours credit. Prerequisite: FIN 5023 or an equivalent.  
The study of management practices applicable to banks and other firms operating in the financial services industry. Bank management practices using an asset/liability management approach are emphasized. Topics include major trends and developments having an impact on the financial services industry.
5813 Capital Formation and Budgeting
(3-0) 3 hours credit. Prerequisite: FIN 5023 or an equivalent.
The techniques and issues involved in making long-term capital investment
decisions. Topics include the concepts of the cost of capital and financial
structure and how they relate to the capital budgeting decision, dividend
policy, risk assessment and management, forecasting, and cash flow analysis.

5833 International Financial Management
(3-0) 3 hours credit. Prerequisite: FIN 5023 or an equivalent.
The theory of business finance as applied to the operations of multinational
firms. The determinants of exchange rates and the management of exchange
rate risk are analyzed in terms of their impact on how a multinational
corporation functions in the international setting. Topics include the
financial analysis and control of foreign investment decisions, management
of working capital, participation in the international capital markets,
financing of international trade, and management of corporate risk.

5913 Portfolio Theory and Efficient Capital Markets
(3-0) 3 hours credit. Prerequisite: FIN 5633 or an equivalent.
A comprehensive survey of the classical and contemporary theories of
optimum portfolio construction; a study of the determinants of risk-return
trade-offs in the selection of securities; and emphasis on the theory and
evidence of efficient markets and its implications on the analysis of securities
and portfolio management.

5963 International Business Internship
3 hours credit. Prerequisites: Consent of instructor and the Graduate Advisor
of Record.
Opportunity for work experience in international business or a public agency.

5983 International Business Essay
3 hours credit. Prerequisites: Consent of instructor and the Graduate Advisor
of Record.
Original research report on an international management topic.

6213 Speculative Markets and Securities
(3-0) 3 hours credit. Prerequisite: FIN 5633 or an equivalent.
An examination of derivative financial instruments such as options and
futures and their potential role in controlling portfolio risk. Valuation and
the risk and return characteristics of these instruments, as well as trading
and portfolio strategies, will be developed.

6313 Modeling of Financial Decision Making
(3-0) 3 hours credit. Prerequisite: FIN 5023 or an equivalent.
Computer models of financial problems commonly encountered in industry
are developed. Topics include financial statement analysis, financial
planning and forecasting, capital investment analysis, and financing
decisions. Applications to investment analysis include security and options
valuations, performance analysis, and portfolio management. Decision
making under uncertainty is examined through various techniques including
simulation.
**Independent Study**
3 hours credit. Prerequisites: Graduate standing and permission in writing (form available) of the instructor and the student's graduate advisor of record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the master's degree.

**Special Problems**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems courses may be repeated for credit when the topics vary, but not more than 6 hours, regardless of discipline, will apply to a master's degree.

**Master's Thesis**
3 hours credit. Prerequisite: Permission of the Graduate Advisor of Record and thesis director.
Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress.

**COURSE DESCRIPTIONS**

**BUSINESS LAW**

**BLW**

**5003 Legal Environment of Business**
(3-0) 3 hours credit.
Study of the socioeconomic, political, ethical, and legal environments of business. Topics include the development of law, court systems, business torts and crimes; corporate social responsibilities to the consuming public, employees, and competitors; real and personal property transactions; and the governmental regulations of business.

**5033 Commercial Law**
(3-0) 3 hours credit.
Offers the opportunity for thorough study of the Uniform Commercial Code and related business transactions, including Bankruptcy and Federal Securities Regulations.

**5173 Legal Environment of International Business**
(3-0) 3 hours credit. Prerequisite: BLW 5003 or an equivalent.
Essentials of international commercial law; recognized forms of business organization; corporate structure and liability; government regulation and antitrust policy; and the law of international commerce.
6973  **Special Problems**  
(3-0) 3 hours credit.  
Specialized study of the theory and the application of contemporary laws and court decisions. Possible topics include intellectual property law, environmental law, antitrust, and securities law. May be repeated for credit when the topics vary, to a maximum of 6 hours.
DIVISION OF MANAGEMENT AND MARKETING

Master of Business Administration Degree
Employee Relations Concentration

This concentration is designed to offer qualified graduate students the opportunity to study business administration while developing special expertise in employee relations management. To achieve this end, students can focus their elective courses on developing managerial skills applicable to the management of the human resources function of organizations in a field that is continually changing due to technology, internationalization, and the social and legislative environment.

All students choosing to concentrate in employee relations management must complete the 21 semester credit hours of courses containing the foundations of knowledge (see page 144) and 12 semester credit hours as follows:

MGT 5623 Employee Relations
MGT 5643 Personnel Management Process

6 hours from the following:

ECO 6313 Managerial Labor Economics
MGT 5663 International Human Resources Management
MGT 5723 Labor Relations in the Public Sector
MGT 5733 Employment Law and Legislation
MGT 5813 Strategic Human Resources Management
MGT 6943 Management Internship
MGT 6973 Special Problems
PAD 5343 Personnel Management in the Public Sector

Additionally, a student may petition the faculty coordinating this concentration to substitute one other College of Business graduate elective in lieu of the above courses.

COURSE DESCRIPTIONS
MANAGEMENT
(MGT)

5003 Conceptual Foundations of Management
(3-0) 3 hours credit.
This course examines the evolution and development of conceptual frameworks for understanding managerial work and organizational processes within the context of changing environments. An integrated strategic management perspective is emphasized.

5043 Management and Behavior in Organizations
(3-0) 3 hours credit. Prerequisite: MGT 5003 or an equivalent.
This course examines the processes and techniques used to get work done through others in an organization. These processes include a study of individual differences, motivation, leadership, group behavior, interpersonal communication, decision making, and change. Cross-cultural applications are considered.
5053 Organizational Communication
(3-0) 3 hours credit. Prerequisite: MGT 5043.
A survey of theoretical and functional aspects of organizational communication, stressing interpersonal, intra- and interorganizational, and intercultural communication.

5073 Interpersonal Communication in Organizations
(3-0) 3 hours credit. Prerequisite: MGT 5043.
Specific focus will be placed on problems resulting from status differentiation in superior, subordinate, and peer relationships. Topics will include negative feedback, information distortion, interviewing, transactional analysis, and interpersonal perception.

5093 Leadership
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.
An advanced course in organizational behavior that examines traditional and contemporary perspectives on leadership and the group process toward which leadership is directed. The course includes applications of leadership theory to contemporary organizational problems.

5133 Organizational Decision Making
(3-0) 3 hours credit. Prerequisites: MS 5003 and MGT 5043, or consent of instructor.
An advanced course in organizational behavior focusing on the behavioral elements of the decision-making process. Drawing on theory and research in several disciplines, the course examines individual decision-making models, group decision-making models, and organizational decision-making models. Emphasis on prescriptive models for effective decision making.

5153 Social Issues in Business
(3-0) 3 hours credit. Prerequisite: MGT 5043.
Focuses on the forces surrounding the secularly oriented, technologically energized, and scientifically administered business sector of Western society. Develops an understanding of the underlying and basic forces that have fostered and shaped business. Emergence of the social responsibility ethic is examined.

5183 Global Management
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.
Examination of management challenges facing multinational and international business. Includes the study of organization options, staffing, communication, multicultural negotiations, and political risk. Emphasis on different countries' approaches to competing, notably East Asia, Mexico, and Europe.

5333 Small Business Development and Operation
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.
Includes the development of new business organizations, joint ventures, mergers and acquisition, and new products and services. Conceptualization of the managerial role in emerging enterprises.
5623 **Employee Relations**  
(3-0) 3 hours credit. Prerequisite: MGT 5003 or consent of instructor.  
An analysis of various employee relations systems in organizations. Emphasis will be given to various discipline, grievance, and appeals systems in union, nonunion, and governmental organizations, as well as group and individual negotiation processes.

5643 **Personnel Management Process**  
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.  
Management's approach to and the techniques for handling the human factor in an enterprise to maximize the productive efficiency of the firm through sound procurement, development, utilization, and maintenance of its human resources. Focus on behavioral and social sciences findings as they relate to work and their implications for personnel philosophy, policy, and practice.

5663 **International Human Resources Management**  
(3-0) 3 hours credit. Prerequisite: MGT 5643 or consent of instructor.  
A comprehensive analysis of the functions of personnel administration, including employee benefits, labor and employee relations, compensation, staffing, and training practices among multinational firms. Special emphasis is placed on the regulation of human resources in foreign nations.

5723 **Labor Relations in the Public Sector**  
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.  
An analysis of the unique role of labor relations at the federal, state, and local levels. Consideration will be given to relevant legislation and how and why public employees organize for collective bargaining. Emphasis will be placed on the practical aspects of bargaining and contract administration and how they relate to the public in general.

5733 **Employment Law and Legislation**  
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.  
An analysis of the various laws and administrative rulings having an impact on the employment process of organizations. Focus will be on the law as it affects various administrative decisions in recruiting, selection, training, promoting, and other employment areas, including benefits and labor relations.

5803 **Contemporary Issues in Management**  
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.  
An examination of current events or emerging topics that have an impact on managerial and organizational performance in today's dynamic environment. May be repeated for credit when topics vary.

5813 **Strategic Human Resources Management**  
(3-0) 3 hours credit. Prerequisites: MGT 5643 and consent of instructor.  
An analysis of the overall role and function of human resources management with respect to an organization's overall strategic goals. Emphasis will be placed on the ethical and public policy trends in the field as well as current trends in the area.
5903 Strategic Management and Policy  
(3-0) 3 hours credit. Prerequisite: Completion of the courses containing the foundations of knowledge (see page 144) or consent of the instructor. A course intended to integrate material taken in the M.B.A. program, as well as to broaden the horizons of the student beyond the focus on the firm. The macroeconomic aspects of the economy and contemporary problems and trends of business are covered. Students who earn a grade of "B" or better in this course will satisfy the comprehensive examination requirement. A student who receives a grade of "C" may still satisfy this requirement by successfully passing a comprehensive examination as set out in this catalog.

6943 Management Internship  
3 hours credit. Prerequisites: Graduate standing, 15 semester credit hours of graduate work, and consent of instructor. Internship must be approved in advance by the Internship Coordinator and the student's graduate advisor of record. Supervised full- or part-time off-campus work experience and training in management. Individual conferences and written reports required.

6953 Independent Study  
3 hours credit. Prerequisites: Graduate standing and permission in writing (form available) of the instructor and the student's graduate advisor of record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the master's degree.

6961 Comprehensive Examination  
1 hour credit. Prerequisite: Approval of the appropriate graduate studies committee to take the Comprehensive Examination. Independent study course for the purpose of taking the Comprehensive Examination. May be repeated as many times as approved by the Graduate Studies Committee. Enrollment is required each term in which the Comprehensive Examination is taken if no other courses are being taken that term. The grade report for the course is either CR (satisfactory performance on the Comprehensive Examination) or NC (unsatisfactory performance on the Comprehensive Examination).

6973 Special Problems  
(3-0) 3 hours credit. Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems courses may be repeated for credit when the topics vary, but not more than 6 hours, regardless of discipline, will apply to a master's degree.
6983 Master's Thesis
3 hours credit. Prerequisite: Permission of the Graduate Advisor and thesis director.
Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress.

COURSE DESCRIPTIONS
MARKETING
(MKT)

5003 Introduction to Marketing
(3-0) 3 hours credit.
Examination of marketing in society and the firm. Functions, institutions, processes, methods, and issues will be examined. Emphasis will be on marketing decision making.

5023 Marketing Management
(3-0) 3 hours credit. Prerequisites: ACC 5003, ECO 5003, FIN 5003, and MKT 5003, or their equivalents. Completion of or concurrent enrollment in ACC 5023 is recommended.
An analysis of marketing management processes within organizations. Focus is on the use of strategic planning and market analysis to design marketing programs in competitive environments.

5043 Consumer Behavior in Marketing Strategy
(3-0) 3 hours credit. Prerequisite: MKT 5023 or an equivalent.
The study of consumer behavior as the basis for marketing opportunities. Analyzes and evaluates contemporary models of consumer behavior as a guide to organizational decision making.

5063 Marketing Research Design and Application
(3-0) 3 hours credit. Prerequisites: MKT 5023 and MS 5003, or their equivalents.
Analysis of the research function as the means to fulfill marketing's role of satisfying consumer wants. Reviews methodology used for conducting, analyzing, and reporting marketing research.

5083 Promotion Management
(3-0) 3 hours credit. Prerequisite: MKT 5023 or an equivalent.
Use of communication processes and programs to attain promotional goals; examination of mass and interpersonal forms of communication and the uses of sales promotion tools.

5123 Management of the Sales Force
(3-0) 3 hours credit. Prerequisite: MKT 5023 or an equivalent.
Examination of current and relevant issues regarding the role of selling in the firm; discussion of communication concepts and managerial processes in goal selection and attainment for sales activities.
5673  **International Marketing**  
(3-0) 3 hours credit. Prerequisite: MKT 5023 or an equivalent.  
Analysis of global marketing strategies, including an examination of the cultural, economic, and political dimensions. Focus is on developing alternative market entry strategies as well as managing longer term competitive marketing adjustments.

5963  **International Business Internship**  
3 hours credit. Prerequisites: Consent of instructor and the student’s graduate advisor of record.  
Work experience in international business or a public agency.

5983  **International Business Essay**  
3 hours credit. Prerequisites: Consent of instructor and the student’s graduate advisor of record.  
Original research report on an international management topic.

6951-3  **Independent Study**  
1 to 3 hours credit. Prerequisites: Graduate standing and permission in writing (form available) of the instructor and the student’s graduate advisor of record.  
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but no more than 6 hours, regardless of discipline, will apply to the master’s degree.

6973  **Special Problems**  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems courses may be repeated for credit when the topics vary, but not more than 6 hours, regardless of discipline, will apply to the master’s degree.

6983  **Master’s Thesis**  
3 hours credit. Prerequisite: Permission of the Graduate Advisor of Record and thesis director.  
Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the master’s degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress.

**Master of Business Administration Degree Management Science Concentration**

This concentration is designed to offer the opportunity for qualified graduate students to study business administration while developing special expertise in management science and to synthesize the theory and fundamentals of decision analysis with a study of current applicable technology. To achieve this end, students can focus their elective courses on the use of modern-day methodologies and techniques in the analysis
and support of managerial decision-making activities, including the application of computer hardware and software.

All students choosing to concentrate in management science must complete the 21 semester credit hours of courses containing the foundations of knowledge (see page 144) and 12 semester credit hours of electives from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MS 5303</td>
<td>Decision Support Systems</td>
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<tr>
<td>MS 5323</td>
<td>Statistical Methods for Business Analysis</td>
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<tr>
<td>MS 5363</td>
<td>Computer Graphics/Multimedia for Management</td>
</tr>
<tr>
<td>MS 5373</td>
<td>Simulation Analysis of Business Systems</td>
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<tr>
<td>MS 5383</td>
<td>Microcomputer Applications in Business</td>
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<tr>
<td>MS 5393</td>
<td>Production Management</td>
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<td>MS 5443</td>
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Additionally, a student may petition the faculty coordinating this concentration to substitute one other College of Business graduate elective in lieu of one of the above courses.

**COURSE DESCRIPTIONS**

**MANAGEMENT SCIENCE (MS)**

**5003**  Quantitative Methods for Business Analysis  
(3-0) 3 hours credit. Prerequisites: MAT 1033 and STA 1063, their equivalents, or consent of instructor.  
Introduction to managerial decision analysis using quantitative and statistical tools. Topics include a general framework for decision analysis, decision tables and trees, simulation, linear programming and related techniques, classical optimization, forecasting, and statistical techniques. Uses applicable decision support software. (Formerly MGT 5013. Credit cannot be earned for both MS 5003 and MGT 5013.)

**5023**  Decision Analysis and Production Management  
(3-0) 3 hours credit. Prerequisite: MS 5003 or an equivalent.  
Study of applications of quantitative approaches (such as probabilistic, programming, and simulation) to business decision analysis. Emphasis is given to production management applications (such as resource allocation, scheduling, inventory control, capital budgeting, etc.) and the use of computerized decision support systems. (Formerly MGT 5023. Credit cannot be earned for both MS 5023 and MGT 5023.)

**5303**  Decision Support Systems  
(3-0) 3 hours credit. Prerequisite: MS 5023.  
Study of systems for supporting managerial and personal/professional decision processes. Topics include review of sample decision support
systems, methodologies for identifying decision needs, exploration of analysis tools and related computer technologies and software, survey of expert systems and artificial intelligence applications, and hands-on building of systems. (Formerly MGT 5033. Credit cannot be earned for both MS 5303 and MGT 5033.)

5323  **Statistical Methods for Business Analysis**  
(3-0) 3 hours of credit. Prerequisite: MS 5003.  
Introduction to multivariate statistical analysis. Topics include multiple regression, analysis of variance, discriminant analysis, conjoint analysis, and factor analysis. Emphasizes the use of computer statistical packages. (Formerly MGT 5323. Credit cannot be earned for both MS 5323 and MGT 5323.)

5363  **Computer Graphics/Multimedia for Management**  
(3-0) 3 hours credit. Prerequisite: MS 5023.  
Survey of the hardware and software available for computer graphics/multimedia applications in business and industry. Study of business graphics, presentation graphics, and special purpose graphics (CAD, simulation animation, illustration, desktop publishing, graphic interfaces, etc.), together with video and audio technologies. Emphasis is given to managerial applications of graphic and multimedia technologies. (Formerly MGT 5363. Credit cannot be earned for both MS 5363 and MGT 5363.)

5373  **Simulation Analysis of Business Systems**  
(3-0) 3 hours credit. Prerequisite: MS 5023.  
Study of computer simulation techniques in the analysis of business decision situations. Currently available tools, including general purpose simulation languages, spreadsheets, and graphics programs, will be explored. Applications from a wide spectrum of areas will be discussed. (Formerly MGT 5373. Credit cannot be earned for both MS 5373 and MGT 5373.)

5383  **Microcomputer Applications in Business**  
(3-0) 3 hours credit. Prerequisite: MS 5003 or an equivalent.  
Survey of microcomputer hardware, software, and applications. Emphasis on available financial planning, word processing, graphics, desktop publishing, networking, program generation, data base systems, expert systems, communications, multimedia, and their applications in business. (Formerly MGT 5383. Credit cannot be earned for both MS 5383 and MGT 5383.)

5393  **Production Management**  
(3-0) 3 hours credit. Prerequisite: MS 5023.  
An analysis of the management functions related to production: planning, design, construction control, and operational control. Special topics will include forecasting, project management via CPM/PERT, plant location and layout, production scheduling, quality control, job design and analysis, and inventory management. (Formerly MGT 5393. Credit cannot be earned for both MS 5393 and MGT 5393.)
5443 **Software Entrepreneurship**  
(3-0) 3 hours credit. Prerequisite: MS 5383.  
Study of the business of commercial software development and the processes for moving computer software from design to implementation and subsequently to the marketplace. Topics will include surveying existing software and hardware, legal considerations, packaging and documentation, and economics of software development and marketing alternatives. Emphasis will be given to actual software development during this course. (Formerly MGT 5443. Credit cannot be earned for both MS 5443 and MGT 5443.)

5453 **Management and Control of Quality**  
(3-0) 3 hours credit. Prerequisite: MS 5023.  
An examination of the fundamental nature of quality assurance, its strategic importance in business and industry, and the economic impact of quality. Theoretical and management issues relating to quality problem solving are emphasized. The contribution of the leaders in modern quality management are discussed. (Formerly MGT 5453. Credit cannot be earned for both MS 5453 and MGT 5453.)

6943 **Management Science Internship**  
3 hours credit. Prerequisites: Graduate standing, 15 semester credit hours of graduate work, and consent of instructor. Internship must be approved in advance by the Internship Coordinator and the student's graduate advisor of record. Supervised full- or part-time off-campus work experience and training in management science. Individual conferences and written reports required.

6953 **Independent Study**  
3 hours credit. Prerequisites: Graduate standing and permission in writing (form available) of the instructor and the student's graduate advisor of record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the master's degree.

6973 **Special Problems**  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems courses may be repeated for credit when the topics vary, but not more than 6 hours, regardless of discipline, will apply to a master's degree.

6983 **Master's Thesis**  
3 hours credit. Prerequisite: Permission of the Graduate Advisor and thesis director.  
Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress.
Master of Business Administration Degree  
Management of Technology Concentration

This concentration is designed to offer the opportunity for qualified graduate students, primarily with a nontechnical background, to study business administration while developing special expertise in the management of technology. To achieve this end, students can focus their elective courses on developing general managerial skills applicable to technology-based organizations, leading professional and technical employees, and integrating the various functions of an organization in today's rapidly changing technological environment.

All students choosing to concentrate in the management of technology must complete the 21 semester credit hours of courses containing the foundations of knowledge (see page 144) and 12 semester credit hours as follows:

- MOT 5163 Management of Technology
- MOT 5223 Management of Professional Personnel
- 6 hours from the following:
  - IS 6403 Information Resource Management
  - MOT 5173 Technology Transfer: The Theory and Practice of Knowledge Utilization
  - MOT 5213 Organizational Systems for Management of Technology
  - MOT 6933 Professional Report
  - MOT 6943 Management of Technology Internship
  - MOT 5053 Marketing Innovations
  - MS 5303 Decision Support Systems
  - MS 5373 Simulation Analysis of Business Systems
  - MS 5393 Production Management
  - MS 5453 Management and Control of Quality

Additionally, a student may petition the faculty coordinating this concentration to substitute one other College of Business graduate elective in lieu of one of the above courses.

Master of Science Degree in Management of Technology

The Master of Science in Management of Technology (M.S.MOT) differs significantly from both the M.B.A. and the M.B.A. with a concentration in Management of Technology. The M.S.MOT has a different set of required common body of knowledge courses and focuses on management issues and skills required to help bring into the marketplace and manage advances in technology in the form of ideas, goods, and services. The courses are from both the College of Business and the College of Sciences and Engineering.

Program Admission Requirements. For admission to the M.S.MOT program, applicants must have an undergraduate or graduate degree in a scientific, engineering, or mathematical discipline from an accredited university or college and meet
University-wide graduate admission requirements and the following additional requirements:

1. An approximate overall average of 3.0 in all work completed at the undergraduate level.
2. An approximate composite score of 500 with no component less than the 20th percentile on the Graduate Management Admission Test (GMAT) or equivalent score on other relevant tests, with the results submitted to the Office of Admissions and Registrar before being considered for admission. The GMAT test results will only be accepted if the test was taken no more than five years before the date of application. Applications for the GMAT or information on the test may be obtained from GMAT, Educational Testing Service, P.O. Box 6103, Princeton, New Jersey, 08541-6103, (609) 771-7330.
3. Favorable recommendation by the M.S.MOT Admissions Subcommittee and approval by the Provost and Vice President for Academic Affairs.

Those who do not meet the admissions requirements may be considered on an individual basis by the M.S.MOT Admissions Subcommittee.

The following courses constitute the M.S.MOT core and are required for students with limited exposure to undergraduate business courses; however, the number of M.S.MOT core courses to be taken will be determined on a case-by-case basis depending on background and undergraduate/graduate courses already completed. No credit for these courses may count toward degree requirements for the Master of Science in Management of Technology:

ACC  5003  Financial Accounting Concepts
BLW  5003  Legal Environment of Business
ECO  5003  Economic Theory and Policy
FIN  5003  Business Finance
IS   5003  Introduction to Information Systems
MGT  5003  Conceptual Foundations of Management
MKT  5003  Introduction to Marketing
MS   5003  Quantitative Methods for Business Analysis

Degree Requirements. The M.S.MOT program requires 30 semester credit hours of work beyond any hours acquired in the M.S.MOT core courses.

A. All candidates for the degree of Master of Science in Management of Technology are required to successfully complete the following 18 semester credit hours:

EGR  5613  New and Emerging Technologies
EGR  5623  Issues in Engineering Management
MOT  5163  Management of Technology
MOT  5203  Strategic Management of Technology
MOT  5223  Management of Professional Personnel
MOT  5053  Marketing Innovations

B. All candidates for the degree of Master of Science in Management of Technology must complete an additional 9 semester credit hours as approved by the M.S.MOT Candidacy and Program of Study Subcommittee

UTSA 1997–99 Graduate Catalog
C. All candidates must complete a Professional Report (MOT 6933: Professional Report) under the guidance of a graduate faculty advisor

D. All candidates must pass a comprehensive examination administered by the M.S.MOT Candidacy and Program of Study Subcommittee

COURSE DESCRIPTIONS
MANAGEMENT OF TECHNOLOGY
(MOT)

5053  Marketing Innovations
(3-0) 3 hours credit. Prerequisite: MKT 5023 or consent of instructor.
An analysis of the role of technology and innovation in modern business practice. Emphasis is placed on managing technological change to develop business opportunities and competitive advantage. (Formerly MKT 5053. Credit cannot be earned for both MOT 5053 and MKT 5053.)

5163  Management of Technology
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.
Examines a broad range of topics and issues involved in the management of technology, including the international research and development environment and infrastructure; government, industry, and university roles in technology development; managing the research and development function; technology forecasting and assessment; and new product development. (Formerly MGT 5163. Credit cannot be earned for both MOT 5163 and MGT 5163.)

5173  Technology Transfer: The Theory and Practice of Knowledge Utilization
(3-0) 3 hours credit. Prerequisite: MOT 5053 or consent of instructor.
Technology transfer or diffusion may be defined as the utilization or application of knowledge. The course will examine the organizational, behavioral, and communication challenges involved in transferring technology from the research lab to the marketplace in a cost-effective and timely manner.

5203  Strategic Management of Technology
(3-0) 3 hours credit. Prerequisite: Semester of graduation or consent of the Graduate Advisor of Record.
Development of a conceptual framework for strategy, its definition, elements, and relationships to the basic functions of management of technology. Considers the impact of technology and environmental forces on strategic management of the organization. (Formerly MGT 5203. Credit cannot be earned for both MOT 5203 and MGT 5203.)

5213  Organizational Systems for Management of Technology
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.
Focuses on organizational systems commonly found in modern organizations dealing with technology, innovation, and creativity. Considers alternative organizing concepts, interfacing and integrating considerations, and
decision-making and control systems. (Formerly MGT 5213. Credit cannot be earned for both MOT 5213 and MGT 5213.)

5223 Management of Professional Personnel
(3-0) 3 hours credit. Prerequisite: MGT 5043 or consent of instructor.
The study of behavior in professional and technical organizations. Focuses on the characteristics of professional and technical personnel, status and role systems within the professional organization, and communication and conflict within and among professional groups. (Formerly MGT 5223. Credit cannot be earned for both MOT 5223 and MGT 5223.)

6933 Professional Report
3 hours credit. Prerequisite: Permission of the Graduate Advisor and the Faculty Advisor/Director.
Research and preparation of an in-depth study of a complex business problem. Credit will be awarded upon completion of the written professional report.

6943 Management of Technology Internship
3 hours credit. Prerequisites: Graduate standing, 15 semester credit hours of graduate work, and consent of instructor. Internship must be approved in advance by the Internship Coordinator and the student’s graduate advisor of record.
Supervised full- or part-time off-campus work experience and training in management science. Individual conferences and written reports required.

6953 Independent Study
3 hours credit. Prerequisites: Graduate standing and permission in writing (form available) of the instructor and the student’s graduate advisor of record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the master’s degree.

6961 Comprehensive Examination
1 hour credit. Prerequisite: Approval of the appropriate graduate studies committee to take the Comprehensive Examination.
Independent study course for the purpose of taking the Comprehensive Examination. May be repeated as many times as approved by the Graduate Studies Committee. Enrollment is required each term in which the Comprehensive Examination is taken if no other courses are being taken that term. The grade report for the course is either CR (satisfactory performance on the Comprehensive Examination) or NC (unsatisfactory performance on the Comprehensive Examination).
6973  **Special Problems**  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems courses may be repeated for credit when the topics vary, but not more than 6 hours, regardless of discipline, will apply to a master's degree.