





COLLEGE OF BUSINESS ADMINISTRATION

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The undergraduate and graduate programs of the College of Business Administration are accredited by AACSB — The International Association for Management Education. AACSB accreditation assures quality and promotes excellence and continuous improvement in undergraduate and graduate education for business administration.

The College of Business Administration provides seven options leading to the Bachelor of Science degree in Business Administration. It also provides curricula leading to the Master of Business Administration and the Master of Science in Business Administration. The Master of Science degree offers two options: Entrepreneurship, Creativity, and Innovative Management and Information Systems Audit. Information concerning the master's curricula may be found in the graduate listings.

The undergraduate programs of study give the student an understanding of the social and economic environment in which we live and provide a common body of knowledge for all students who specialize in any business field. In addition, each option emphasizes, with additional course-work, specific areas of knowledge useful for the career paths served by that option. All students are encouraged to experiment and broaden their interests by selection of electives. It is the purpose of the College of Business Administration to develop in students the people, technical, and managerial competence necessary for successful performance in business, industry, government, and education.

The student assumes primary responsibility for meeting the educational requirements of the program. Through early studies in the Business Administration core courses, the student has an opportunity to evaluate a career decision and to adjust goals, if necessary. Undergraduate courses in business fundamentals and skills equip the student with marketable entry skills. The student may augment on-campus education through job experiences in business senior projects, and internship programs for which the student will receive academic credit. General education courses are integrated throughout each program. Co-curricular opportunities related to the course of study include the Cal Poly Pomona Society of Accountants; American Marketing Association; American Production and Inventory Control Society; Delta Sigma Pi, a professional business fraternity; Finance Society; Latino Business Students Association; Law Society; M.B.A. Association; Management Information Systems Student Association; Personnel and Industrial Relations Association; Pi Sigma Epsilon; Real Estate and Development Network; American Society for Quality; International Facility Management Association; Society for Advancement of Management; Society for Contracts Administration; United Shareholders Association Research Group; World Traders; Alpha Iota Delta, and Mu Kappa Tau, business honorary societies.

MISSION OF THE COLLEGE OF BUSINESS ADMINISTRATION

The mission of the College of Business Administration is to provide quality undergraduate and graduate management education for a diverse student population. The major responsibility of the College is undergraduate education. The College also supports a quality graduate program designed primarily for working professionals. The faculty, which has both professional experience and appropriate advanced degrees, provides practical, career-oriented education.

The College seeks to instill in students the values of life-long learning, pursuing excellence, and making ethical choices. The College also seeks to cultivate in its students the capacity for critical thinking, willingness to accept challenges, skills for working with people, commitment to social responsibility, understanding of technology, and ability to respond creatively to changes in the domestic and international business environments.

The primary emphasis of the College is teaching. To promote quality teaching and the intellectual growth of the faculty, the College encourages and supports faculty involvement in research and other scholarly activities. These activities include basic or discovery research, applied research, and instructional development, with the primary focus on applied research and instructional development.

The College of Business Administration prepares its graduates for personal and professional development in business careers. Its graduates can approach business problems from a global perspective, and can apply the theories and concepts learned in their educational experiences to design practical and innovative solutions.

The College recognizes its responsibilities to develop communications with and to provide professional services to the constituencies in the region it serves. The College will work with its constituencies to provide opportunities for its students, graduates, and faculty to enhance the educational environment.

INDUSTRIAL RESEARCH INSTITUTE FOR PACIFIC NATIONS (IRIPAC)

The Industrial Research Institute for Pacific Nations is a non-profit organization engaged in industrial and trade development research with a focus on Pacific Rim nations. The Institute is administered as the international research division of the College of Business Administration. Designed to support the advanced study of international business and to provide specialized educational opportunities for management personnel involved in the Pacific marketplace, the program offers the generation and coordination of research projects for university faculty and students, management and economic development seminars directed at better understanding of those doing business in the Pacific Rim, establishment of a reference and resource center, and publication of research papers.

THE REAL ESTATE RESEARCH COUNCIL (RERC)

The Real Estate Research Council of Southern California is the oldest non-profit real estate data organization in the United States. Founded in 1939, the RERC produces a quarterly publication, The Real Estate and Construction Report, which includes data on the economy and real estate markets in the seven urban Southern California counties, and presents the report at a quarterly luncheon. The senior real estate faculty direct students who participate in the data-gathering and analyses for the preparation of the quarterly report. Members of the RERC include major development companies, financial institutions, appraisers, investors, mortgage bankers, and other firms and individuals interested in Southern California real estate. RERC is coordinated by faculty in the Finance, Real Estate, and Law Department.

CENTER FOR ENTREPRENEURSHIP AND INNOVATION

The Center for Entrepreneurship and Innovation was formally established at the College of Business Administration in May 1996. CEI seeks to foster entrepreneurship in both the local and global community; to provide increasing entrepreneurial opportunities for Cal Poly Pomona students; and to deliver innovative entrepreneurship courses to graduate, undergraduate, and extension students. It provides a dynamic combination of education, research, and outreach programs to address the developing needs of entrepreneurs and growth companies. Entrepreneurial ventures and emerging firms are a leading source of new jobs in the United States.

CEI is currently administered by Cal Poly Pomona faculty members from the Management and Human Resources Department (MHR) including Dr. Bill Relf, CEIDirector, Dr. Stan Abraham, Dr. Jeanne A. Almaraz, Dr. Deborah Brazeal, Dr. Sandra W. King, and Dr. Gail R. Waters. CEI is located at the College of Business Administration, Building 6, Room 120, its telephone number is (909) 869-2359, and its e-mail address is <cei@csupomona.edu>

CENTER FOR ADVANCED COMPUTER TECHNOLOGY (CACT)

The Center for Advanced Computer Technology is a cooperative endeavor between the College of Business Administration and the College of the Extended University. The Center's programs target professionals who require in-depth coverage of complex and challenging topics in a broad and intensive series of offerings. For computer professionals, holistic coverage of Internet and client-server technologies and certifications in critical areas of programming, database administration, networking and systems security are provided. For professionals in other fields requiring intensive use of computer software, focused programs supporting specialized certifications in their areas of interest are offered.

The Center and its partners are committed to helping professionals stay abreast of advancing technologies and trends, and to insure that they remain productive members of the next century's workforce. The Center provides on-campus as well as on-site training for its corporate clients.

DEGREE PROGRAMS**MASTER OF BUSINESS ADMINISTRATION (MBA)**

Emphases in:

- Accounting
- Contract Management
- Entrepreneurship
- Finance
- Management and Human Resources
- Information Management
- International Business
- Marketing
- Operations Management
- Real Estate

MASTER OF SCIENCE IN BUSINESS ADMINISTRATION

Options in:

- Entrepreneurship, Creativity, and Innovative Management
- Information Systems Audit

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Options in:

- Accounting
- Business Law and Contract Management
- Computer Information Systems
- Finance

- International Business
- Management and Human Resources
- Marketing Management
- Technology and Operations Management
- Real Estate

Options offered by the following departments:

ACCOUNTING

- Accounting Department

BUSINESS LAW AND CONTRACT MANAGEMENT

- Finance, Real Estate, and Law Department

COMPUTER INFORMATION SYSTEMS

- Computer Information Systems Department

FINANCE

- Finance, Real Estate, and Law Department

INTERNATIONAL BUSINESS

- International Business and Marketing Department

MANAGEMENT AND HUMAN RESOURCES

- Management and Human Resources Department

MARKETING MANAGEMENT

- International Business and Marketing Department

TECHNOLOGY AND OPERATIONS MANAGEMENT

- Technology and Operations Management Department

REAL ESTATE

- Finance, Real Estate, and Law Department

MINORS

- Accounting
- Business
- Business Computer Programming
- Business Law
- Entrepreneurship and Small Business Management
- Fashion Merchandising
- Finance
- Financial Analysis
- Financial Management of Public and Private Contracts
- General Management
- Human Resources Management
- International Business
- Logistics
- Managerial Computing
- Marketing Management
- Operations Management
- Quantitative Research
- Real Estate
- Total Quality Management

COURSES REQUIRED OF ALL BUSINESS ADMINISTRATION MAJORS

Each student who enrolls for a Bachelor of Science degree in Business Administration is required to select one of the nine options listed above. For all business majors, each student will be required to take the following courses:

CORE COURSES FOR MAJOR

Required of all students. A 2.0 cumulative GPA is required in core courses including option courses in order to receive a degree in Business Administration.

REQUIRED OF ALL BUSINESS MAJORS

Principles of Economics	EC	201	(4)
Principles of Economics	EC	202	(4)
Statistics with Applications	STA	120	(4)
Legal Environment of Business Transactions	FRL	201	(4)
Financial Accounting for Decision-Making	ACC	207	(5)
Managerial Accounting for Decision-Making	ACC	208	(5)
Principles of Management	MHR	301	(4)
Principles of Marketing Management	IBM	301	(4)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)
Management Information Systems	CIS	310	(4)
Operations Management	TOM	301	(4)
Managerial Statistics	TOM	302	(4)
Strategic Management	MHR	410	(4)
or Strategic Management	TOM	411	

MICROCOMPUTER PROFICIENCY

All students in any College of Business Administration option, and all other students taking certain business courses, must demonstrate proficiency with specific microcomputer software packages. The proficiency must be demonstrated prior to taking any business course with the term "microcomputer proficiency" in the prerequisite list. Some business courses identify specific microcomputer packages in their prerequisite lists. In these cases, proficiency in the noted packages must be demonstrated prior to taking the course.

Microcomputer proficiency must be demonstrated by satisfying one of the following three alternatives: 1) CIS 101; 2) microcomputer proficiency skills tests in word processing and spreadsheet; or 3) an approved college course.

COLLEGE-WIDE COURSES**COURSE DESCRIPTIONS****BUS 112 Success Strategies for Business Majors (4)**

Learning techniques for freshmen and new transfer students in the business major to achieve academic and professional success. Emphasizes interaction with faculty advisors, the business community, and student organizations, career planning, and campus resources. 4 lectures/ problem-solving.

BUS 299/299A/299L Special Topics for Lower Division Students (1-4)

Individual or group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.

BUS 461, 462 Senior Project (2) (2)

Selection and completion of a project under faculty supervision. Projects are designed to be individual or group efforts toward solving real-life problems in the community, such as Small Business Institute cases. Formal report is required. Prerequisite: senior standing. Required minimum of 120 hours.

BUS 499/499A/499L Special Topics for Upper Division Students (1-4)

Individual or group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: consent of instructor.

BUSINESS MINOR

Many non-business students have expressed an interest in business courses that will better prepare them to enhance their non-business education in a business or government environment. The College of Business Administration has designed, in addition to the minors available within concentrations, a broad-based schoolwide minor to meet these needs. The minor in Business provides a solid foundation in accounting and finance, and complements these with coverage of management, marketing, production, and business computer information systems. Non-business students desiring more information should contact the Student Advising Center of the College of Business Administration. The student should formally enroll in the minor before taking courses. A Minor Advisor is available to assist students.

The student must complete the prerequisite and required courses to fulfill the requirements for a minor in Business.

Prerequisite Courses:

Microcomputer proficiency

Freshman English 1	ENG	104	(4)
Elementary Statistics With Applications	STA	120	(4)
Principles of Economics	EC	201	(4)
Principles of Economics	EC	202	(4)

Required Courses:

Financial Accounting for Decision-Making	ACC	207	(5)
Managerial Accounting for Decision-Making	ACC	208	(5)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)
Principles of Management	MHR	301	(4)
Management Information Systems	CIS	310	(4)
Principles of Marketing Management	IBM	301	(4)
Operations Management	TOM	301	(4)
Multicultural Organizational Behavior	MHR	318	(4)

MINOR IN INTERNATIONAL BUSINESS

The College of Business Administration offers a Minor in International Business for students specializing in other fields within the College of Business Administration and students from other Colleges of the University who have an interest in pursuing careers that are related to international business. The purpose of the minor is to provide sufficient knowledge and expertise in International Business for students to successfully apply the specialties of their fields to international careers.

More specific information regarding the Minor in International Business is found in the section on the International Business option.

INTERNATIONAL STUDY OPPORTUNITIES**International Summer Study Tour**

Every summer Cal Poly Pomona provides an opportunity for students to live and study abroad for six weeks. Students study in English the cultural, economic and political systems of the country and have an opportunity to visit business, technical, cultural and scenic locations in the various regions of the country.

Students earn 12 units of credit from the following courses: BUS 362 International Field Studies (4 units); BUS 432 The Use and Role of Technology in International Destinations (4 units); BUS 452 Political

Economy and Business Practices in International Destinations (4 units); BUS 482 International Destinations and the United States: Cross-Cultural Analysis (4 units). Units may be used to satisfy major course requirements or to satisfy the General Education Area 5 requirement.

BUS 362 International Field Studies (4)

Direct field investigation and academic study of an international destination with attention to the central issues confronting a complex society. These issues include relationship and influence of the international destination's history on the present dynamics of its contemporary culture. 4 lectures/problems-solving. Instructional materials, activities, and facilities charges. Prerequisite: consent of instructor. (Also listed as CLS 362.)

BUS 432 The Use and Role of Technology in International Destinations (4)

Direct field investigation and academic study of productive processes and application of technology within an international destination. Barriers and incentives for new technology; decision-making; industry specific technology; and role of foreign countries as providers. Technology tradeoff: environment, employment, and currency reserves. Instructional materials, activities, and facilities charges. 4 lectures/problem solving. Prerequisite: consent of instructor. (Also listed as CLS 432.)

BUS 452 Political Economy and Business Practices in International Destinations (4)

Direct field investigation and academic study of historical and current productive/political organization of an international destination. Economic objectives and planning. Business organization; incentives and decision making; and management. 4 lectures/problem-solving. Instructional materials, activities, and facilities charges. Prerequisite: consent of instructor. (Also listed as CLS 452.)

BUS 482 International Destinations and the United States: Cross-Cultural Analysis (4)

Examination of critical areas of U. S. and international cultures that provide insights and understanding of the comparative differences of these two civilizations; historical and contemporary differences. 4 lectures/problem solving. Instructional materials, activities, and facilities charges. Prerequisite: consent of instructor. (Also listed as CLS 482.)

Semester or Year Abroad

The College of Business Administration supports the concept of international education and encourages students to investigate opportunities for overseas study. Certain courses taken at CSU International Program study centers in foreign countries are equivalent to courses in the College of Business Administration and may be used to fulfill some of the degree requirements offered by the College and/or certain general education requirements. Students should consult the International Programs Bulletin, available at the International Center, a departmental advisor, or the campus International Programs Coordinator for more information.

CONTINUING EDUCATION IN BUSINESS

Many individual courses offered in the College of Business Administration provide practical learning opportunities to persons now employed in various career fields. By selecting courses that apply directly to a specific career, a person can enhance his or her professional capabilities, even though he or she may not be seeking a degree. Often, experience on-the-job is an adequate substitute for prerequisite courses so the student can enter upper division courses without completing preliminary courses. Courses that include in the description the prerequisite: "...or with the consent of the instructor" normally fall in this category. Many such courses are available in the evening. Information about the Open University and Extended University courses in business can be obtained by contacting the office of the Dean of the College of the Extended University at Kellogg West on campus. The College of Business Administration also provides credit or non-credit programs for business organizations on-site. Further information can be obtained by contacting the Student Advising Center of the College of Business Administration.

To be eligible to take undergraduate courses in the College of Business Administration for degree credit, a person must be formally admitted to the University. Admission requirements are found in the front section of this catalog. Graduate courses and entrance requirements are listed in the graduate section of this catalog.



ACCOUNTING

Anwar Y. Salimi, Interim Chair

Bill Adamson
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Antoine G. Jabbour
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Rochelle A. Kellner
Rose M. Martin
Hong S. Pak
Vicki S. Peden
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VISION STATEMENT

Our vision is to continue to be recognized as a center of outstanding accounting education.

MISSION STATEMENT

Our mission is excellence in accounting education through teaching, enhanced by research and service. We lead and encourage students and working professionals in developing their abilities to use and integrate accounting information with other information to make better decisions, to thrive in their careers, and to continue life-long learning.

ACCOUNTING EDUCATION PROGRAM

The Accounting Department provides an education for students who wish to be management professionals with a thorough knowledge of the essential concepts of accounting and a strong background for students desiring professional careers in public, private, government, and not-for-profit accounting. The students specializing in accounting may select courses which will prepare them specifically for one or more of these career fields.

The accounting courses are taught in the framework of modern business complexity so that the students develop their decision-making skills in realistic environments and learn the wide range of ways in which the accountant's skills are used to effectively manage an enterprise.

PREREQUISITE CORE FOR UPPER DIVISION ACCOUNTING PROGRAM

Before enrolling in the upper-division courses in the Accounting Program, students in the accounting option are expected to have completed college-level courses in English, mathematics/statistics, economics, computers, business law, and introductory accounting.

Students must have earned a grade of "C" (2.0) or better in each of the 11 identified lower-division courses before registering for any upper-division accounting course. The identified courses are as follows:

ENG 104 and 105; CIS 101 or microcomputer proficiency
STA 120; FRL 201
MAT 125
EC 201 and 202
ACC 207, 208, and 295

Students in non-accounting majors/options are expected to have met the above requirements to the extent that the cited courses or their equivalents are included in the requirements of their major/option.

DEPARTMENT POLICY ON ACADEMIC DISQUALIFICATION

The Accounting Department may disqualify students at the end of any quarter if either: (1) their overall GPA, Cal Poly Pomona GPA, or their option GPA is below a 2.0 by 7 grade points or more, or (2) more than one-third of the units taken during the past twelve-month period do not satisfy the degree requirements.

Determination of the GPA in the option and proportion of courses taken to satisfy the degree requirements is the responsibility of the department.

MICROCOMPUTER PROFICIENCY REQUIREMENT (see policy statement in College of Business Administration introductory section)

CORE COURSES FOR MAJOR

Required of all business majors. A 2.0 cumulative GPA is required in core courses including option courses for the major in order to receive a degree in the major.

Statistics with Applications	STA	120	(4)
Principles of Economics	EC	201	(4)
Principles of Economics	EC	202	(4)
Legal Environment of Business Transactions	FRL	201	(4)
Financial Accounting for Decision Making	ACC	207	(5)
Managerial Accounting for Decision Making	ACC	208	(5)
Principles of Management	MHR	301	(4)
Principles of Marketing Management	IBM	301	(4)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)
Management Information Systems	CIS	310	(4)
Operations Management	TOM	301	(4)
Managerial Statistics	TOM	302	(4)
Strategic Management	MHR	410	(4)
or Strategic Management	TOM	411	

ACCOUNTING REQUIRED COURSES

Orientation to Professional Accounting	ACC	295	(4)
Cost Accounting	ACC	300	(4)
Intermediate Accounting I	ACC	301	(4)
Intermediate Accounting II	ACC	302	(4)
Intermediate Accounting III	ACC	303	(4)
Accounting Information Systems	ACC	305	(4)
Auditing Theory	ACC	419	(4)
Federal Tax I	ACC	431	(4)
Accounting Theory and Research	ACC	465	(4)

OTHER COURSES TO COMPLETE OPTION

Law for Accountants	FRL	408	(4)
Career Tracks			(12)

(See Department for list of career tracks and electives)

SUPPORT COURSES

The number of restricted elective units depends on whether or not ENG 105, STA 120 or MAT 125, and EC 201 or EC 202 are used for General Education (see curriculum sheet for the option). If any of these courses are used for General Education, Restricted Electives will be increased by four units per course up to the unit maximum of 8.

Money and Banking	EC	308	(4)
Freshman English II	ENG	105	(4)
Writing for the Professions	ENG	301	(4)
Restricted Electives: (cannot include courses in Business, Economics, Statistics, PLS 314, or PLS 318)			(2-10)
Unrestricted Electives			(4)

GENERAL EDUCATION COURSES

(Required of all students)

A total of 72 quarter units of General Education courses are required for all majors in the College of Business Administration. See the list of approved courses under General Education Requirements in this catalog.

Areas 1 through 4

Select courses from approved list. (64)

Area 5

Multicultural Organizational BehaviorMHR 318 (4)
 Select one course from approved list (cannot include courses in Business, Economics, Statistics or PLS 318) (4)

MINOR IN ACCOUNTING

The Accounting Department provides non-Accounting, undergraduate students with the opportunity to acquire accounting knowledge and skills by completing the requirements for the Minor in Accounting as outlined below. The purpose of the minor is (1) to develop marketable skills for persons with majors/options other than Accounting, (2) for those students majoring in technical fields that involve the direct or indirect use of the knowledge and skills of accounting, and (3) for those students who wish to gain a better understanding of accounting for personal use.

It is possible for students in most non-Accounting fields to complete the minor within the normal requirements of their degrees through careful planning and scheduling of their required and elective courses.

No courses in the minor program may be waived or substituted. The student is responsible for meeting the requirements of the minor program that are in effect at the date of signing the formal contract for the minor in Accounting. It is recommended that the contract be signed by the student before beginning the minor program.

For more information or to enroll in the minor, contact the Minor Coordinator of the Accounting Department.

COURSES IN MINOR

Required of all students.

CORE (28 Units):

Financial Accounting for Decision MakingACC	207	(5)
Managerial Accounting for Decision MakingACC	208	(5)
Orientation to Professional AccountingACC	295	(4)
Cost AccountingACC	300	(4)
Intermediate AccountingACC	301	(4)
Intermediate AccountingACC	302	(4)
Intermediate AccountingACC	303	(4)

DIRECTED ELECTIVES (8 Units):

Select 8 units from one of the following area combinations (each course 4 units):

- Financial: ACC 401, ACC 403, ACC 404 or ACC 465
- Managerial: ACC 412 and ACC 413
- Auditing: ACC 419 and ACC 420, ACC 424, or CIS 433
- Taxation: ACC 431 and ACC 432
- Auditing/Taxation: ACC 419 and ACC 431
- Not-For-Profit: ACC 426 and ACC 428

(Other combinations require special approval by the Minor Coordinator and the Chair of the Accounting Department, depending upon the student's completion of the required course prerequisites.)

MINOR IN FINANCIAL ANALYSIS

The Accounting Department provides non-Accounting undergraduate students with the opportunity to acquire skills to qualify for positions

such as cost/budget analyst and project control analyst. The program will greatly benefit students in the Finance option interested in careers as bankers and financial planners. Technology and Operations Management students will be able to combine their skills in quantitative methods, especially forecasting, with the ability to work with accounting records.

It is possible for students majoring in most non-accounting fields to complete the minor within the normal requirements of their degrees through careful planning and scheduling of required and elective courses.

No courses in the minor program may be waived or substituted. The student is responsible for meeting the requirements of the minor program that are in effect at the date of signing the formal contract for the minor in Financial Analysis. It is recommended that the contract be signed by the student before beginning the minor program. For more information or to enroll in the minor, contact the Minor Coordinator of the Accounting Department.

COURSES IN MINOR

CORE (24 units):

Financial Accounting for Decision MakingACC	207	(5)
Managerial Accounting for Decision MakingACC	208	(5)
Financial Statement AnalysisACC	226	(4)
Managerial Finance IFRL	300	(2)
Managerial Finance IIFRL	301	(3)
Management ScienceTOM	315	(3)

DIRECTED ELECTIVES (12 units):

Business Forecasting and Financial PlanningFRL	363	(4)
or Forecasting Methods for ManagementTOM	415	
Financial Spreadsheet AnalysisFRL	308	(4)
or Decision Support SystemsTOM	350	

Upper-Division Accounting (4 units):

Accounting Information SystemsACC	305	(4)
or ControllershipACC	413	
or Management Control in Not-For-Profit OrganizationsACC	428	

Other upper-division accounting courses may be selected with the concurrence of the Minor Coordinator and Chair of the Accounting Department, depending upon the student's completion of the required prerequisite courses.

COURSE DESCRIPTIONS

ACC 200 Special Study for Lower Division Students (1-2)

Individual or group investigation, research, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

ACC 207 Financial Accounting for Decision Making (5)

Introduction to financial accounting and accounting information systems (AIS), including basic concepts, limitations, tools and methods. Use of AIS-generated information, including financial statements in decision making by investors, creditors, and other users external to the organization. 4-lecture problem solving and 1 self-paced activity. For credit, both segments are to be successfully completed. Prerequisite: microcomputer proficiency.

ACC 208 Managerial Accounting for Decision Making (5)

Introduction to managerial accounting and accounting information systems (AIS), including basic concepts, limitations, tools and methods. Use of AIS-generated information to support the internal decision-making functions of an organization. 4-lecture-problem solving and 1 self-paced activity. For credit, both segments are to be successfully completed. Prerequisites: ACC 207 and microcomputer proficiency.

ACC 226 Financial Statement Analysis (4)

Analysis and use of financial reports. Emphasis on interpretation of end result to prepare student to better understand and analyze actual financial reports. Statements used extensively in illustrations, problems, cases, and analysis. 4 lectures/problem-solving. Not open to accounting majors. Prerequisites: ACC 207, and Math 125 or TOM 315.

ACC 231 Personal Taxation and Planning (4)

Basic principles of taxation and their application to personal financial planning, including tax return preparation. Not open to Accounting majors. Credit will not be granted for both ACC 231 and ACC 431. 4 lectures/problem-solving.

ACC 295 Orientation to Professional Accounting (4)

Accounting cycle. How transactions are presented in the financial process, including preparation of financial statements. Exposure to breadth of accounting profession, career choices available, and what accountants actually do at work. Required skills in accounting profession. 4 lectures/problem-solving. Prerequisites: ACC 208, EC 202 and ENG 104. For Accounting majors a minimum grade of "C" (2.0) in ACC 208 is required.

ACC 299/299A/299L Special Topics for Lower Division Students (1-4)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.

ACC 300 Cost Accounting (4)

Cost accounting fundamentals; cost allocation; budget and standards; cost information for decision and control; decision models; cost information; cost behavior and analysis. 4 lectures/problem-solving. Prerequisites: minimum grade of C (2.0) in ACC 305.

ACC 301 Intermediate Accounting I (4)

FASB Conceptual Framework of Accounting from both conceptual and application perspectives. Decision-making skills in articulating accounting policies in business organizations. Researching accounting questions, problems, and cases using the FASB Conceptual Framework. 4-lecture problem-solving. Prerequisites: minimum grade of C (2.0) in ACC 305.

ACC 302, 303 Intermediate Accounting II and III (4) (4)

Applications of FASB Conceptual Framework of Accounting to specific topics in financial accounting. Decision-making and problem-solving skills. ACC 301, 302, and 303 are to be taken in sequential order. 4 lectures/problem-solving. Prerequisites: for ACC 302, a minimum grade of C (2.0) in ACC 301. For ACC 303, a minimum grade of C (2.0) in ACC 305.

ACC 305 Accounting Information Systems (4)

Role, design, implementation, and management of the accounting

information system as a subset of the management information system. Interface between accountants and computer specialists. Short case studies. 4 lectures/problem-solving. Prerequisites: Minimum grade of C in ACC 207, ACC 208, ACC 295, ENG 105, STA 120, FRL 201, MAT 125, EC201, and EC 202; plus satisfactory completion of CIS 310 and microcomputer proficiency..

ACC 400 Special Study for Upper-Division Students (1-2)

Individual or group investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

ACC 401 Advanced Accounting (4)

Miscellaneous advanced financial accounting topics, including leases, interim reporting, discontinued operations, segmental reporting, partnerships, and accounting for effects of changing prices. Heavy reliance upon official pronouncements to determine proper footnote disclosures. 4 lectures/problem-solving. Prerequisite: minimum grade of C (2.0) in ACC 303.

ACC 403 Consolidation and Foreign Currency Accounting (4)

Analytical study and application of principles of consolidation and foreign currency translation. 4 lectures/problem-solving. Prerequisite: Minimum grade of C (2.0) in ACC 302.

ACC 404 International Accounting (4)

Examination and discussion of accounting theories, techniques, procedures, accounting standards and regulations used in other nations. Examination of contemporary practices prevailing in different parts of the world. Emphasis on multinational corporations, and their needs and practices. 4 lectures/problem-solving. Prerequisite: For Accounting majors, minimum grade of C (2.0) in ACC 302. (Also listed as IB 404.)

ACC 412 Advanced Cost Accounting (4)

Advanced cost accounting techniques focusing on mathematical models and contemporary technology in cost accounting, including decision-making under uncertainty, use of linear regression in cost estimates, service department cost allocations using simultaneous equations, and stochastic cost-volume-profit analysis. 4 lectures/problem-solving. Prerequisite: minimum grade of C (2.0) in ACC 300.

ACC 413 Controllership (4)

Analysis of controllership function in a business organization, and general problems of accounting controls. Cases and/or problems. 4 lectures/problem-solving. Prerequisite: minimum grade of C (2.0) in ACC 300.

ACC 419 Auditing Theory (4)

Theory of auditing and its objectives; procedures and techniques to attain objectives; types of reports issued by auditors; professional responsibilities and ethics of auditors. 4 lectures/problem-solving. Prerequisites: minimum grade of C (2.0) in ACC 303, and TOM 302.

ACC 420 Advanced Auditing (4)

Extensive procedures and techniques in carrying out audit objectives; working paper development and preparation; preparation of opinion and report rendered by auditors; application of Electronic Data Processing to auditing. Current literature. Major project. 4 lectures/problem-solving. Prerequisite: minimum grade of C (2.0) in ACC 419.

ACC 424 Internal Auditing (4)

Objectives, principles, and methods of internal and operational auditing with special emphasis on examination and appraisal of internal controls in the various reporting systems. Problems of communication, delegation of authority, or organization. 4 lectures/problem-solving. Prerequisite: minimum grade of C (2.0) in ACC 419.

ACC 426 Accounting for Not-for-Profit Entities (4)

Study of current tax and auditing issues of not-for-profit entities. Review and apply not-for-profit financial and governmental standards. Case studies, lectures, and group projects. 4 lectures/problem-solving. Prerequisite: ACC 207 or ABM 324, and one upper-division course in the student's major.

ACC 428 Management Control in Not-for-Profit Organizations (4)

In-depth study of processes of budgeting, planning, and controlling in governmental, hospital, and educational institutions. 4 lectures/problem-solving. Prerequisites: minimum grade of C (2.0) in ACC 300.

ACC 431 Introduction to Taxation (4)

Fundamental concepts of taxation with an emphasis on their application to tax planning for the largest sector of the economy, sole proprietorships and employees. 4 lectures/problem-solving. Prerequisites: minimum grade of C (2.0) in ACC 300 or ACC 305.

ACC 432 Taxation of Legal Entities (4)

Principles of taxation, with an emphasis on their application to tax planning for legal entities, such as corporations, partnerships, and limited liability companies, and real estate transactions. 4 lectures/problem-solving. Prerequisite: minimum grade of C (2.0) in ACC 431.

ACC 434 Service Learning in Taxation (2)

Tax return preparation under supervision for elderly and low income taxpayers, such as through the Internal Revenue Service Voluntary Income Tax Assistance Program. One 4 hour activity.

ACC 435 Tax Research and Communication (4)

Development of Web based tax research and ethical decision making capabilities, interpreting statutory, administrative, judicial, and international law, administrative and judicial resolution of controversies, and communicating research results within an environment of planning and analysis. 4 seminars. Prerequisite: minimum grade of C (2.0) in ACC 431.

ACC 441, 442 Internship in Accounting (1-8) (1-8)

On-the-job training in accounting involving new university-level learning experiences. Experiences may be useful as a basis for senior projects. Total credit limited to 8 units each. Maximum of 4 units of Specialty Options may be satisfied by internship. Prerequisite: permission of the Director of the Internship Program, Accounting Department.

ACC 443 Internship in Public Accounting (4)

On-the-job training with a CPA firm in phases of auditing or public accounting. The experience must be new to the student. Analytical reports of work accomplished by each student are made periodically to the faculty coordinator. Units of college credit granted are dependent on departmental approval. Maximum of 4 units of Specialty Options may be satisfied by internship. Prerequisite:

minimum grade of C (2.0) in ACC 419, and consent of the Director of the Internship Program, Accounting Department.

ACC 461 Senior Project (2)

Familiarization with probable sources of data and information for research-oriented projects. Problem identification and analysis. Research methodology. Application of report writing tools and techniques. Project(s) must involve research and writing. Prerequisites: minimum grade of C (2.0) in ACC 302 and ENG 301.

ACC 462 Senior Project (2)

Selection and completion in formal report form of one or more project(s) under faculty supervision. Project(s) are research-oriented and typical of problems which graduates may be required to solve in future occupations. Project(s) must involve library research and/or field study and writing. Prerequisite: Minimum grade of "C" (2.0) in ACC 461.

ACC 465 Accounting Theory and Research (4)

Study of the general frame of reference for the evaluation and development of sound managerial and financial accounting practices. Emphasis on the normative rather than the descriptive approach. Not a review of accounting professional pronouncements. Enhances analytical, research, judgmental, and communication skills of students. 4 seminars. Prerequisite: minimum grade of "C" (2.0) in ACC 303 and ACC 419.

ACC 499/499A/499L Special Topics for Upper Division Students (1-4)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.

COMPUTER INFORMATION SYSTEMS

Daniel P. Manson, Chair

Thomas H. Athey
Donald L. Bell
Steven S. Curl
Vijay D. Deokar
Ronald W. Eaves
Fred Gallegos
Rand Guthrie
Ruth Guthrie
Drew C. Hwang
Koichiro R. Isshiki

Verna Klosky
Ida W. Mousouris
Larisa Preiser-Huoy
Steven R. Powell
Louise L. Soe
Robert V. Stumpf
Lavette C. Teague
Ward D. Testerman
Ralph Westfall
Susan J. Wilkins

MISSION STATEMENT

The Computer Information Systems Department views its mission as complementary to those of the College of Business Administration and the University. The Department is committed to providing opportunities to a diverse and multicultural student body for quality education in Computer Information Systems at the undergraduate and graduate levels, with particular emphasis on undergraduate preparation. This commitment also extends to the provision of support courses for other departments of the College of Business Administration so as to enhance their understanding of the increasingly critical role of information systems and information technology in organizations.

The Department's academic programs enable students to obtain an in-depth specialization in one of several critical areas of the Information Systems field, and also to achieve a broad understanding of the general knowledge necessary to become an effective practitioner in this field. Both the areas of specialization and general information systems knowledge are oriented towards the cutting edge of technology as practiced by and implemented in industry. The commitment of the department to master's level education provides quality support in both general and specialized areas of the field. At both the graduate and undergraduate levels, our programs seek to emphasize the effective and practical application of the principles of Computer Information Systems to support the operational, tactical, and strategic objectives of the organizations with which our students will be associated and to emphasize the quality professional communication skills which permit our students to attain a mastery of group dynamics in professional settings.

In support of the essential aspects of the Department's mission, the Department strives for a strong practical orientation for its faculty and students which is based upon and promoted by access to state-of-the-art hardware and software for use by students and faculty in the classroom and for research. The Department also strives to retain the technical currency of faculty through links with industry and continued research and consulting. To ensure that faculty have strong skills in working with industry, all new faculty are required to have substantial business experience in the profession prior to employment with the Department. The student body also is afforded this technical currency through aggressive and continuous monitoring and upgrading of course offerings to reflect the dynamics of the information systems field.

The Cal Poly Pomona approach to computer information systems is unique in the field of computer education in several ways. First, the computer information systems courses are integrated with a fundamental core of business administration courses to meet the needs of the major job markets, business, and government. Second, the program concentrates on the practical application of how to use the

computer to help solve management problems, rather than the engineering aspects of how to design the internal workings of a computer. Third, the program is designed with the students in mind—they are prepared not only for well-paid employment but also a lifetime of learning and professional growth.

A student specializing in computer information systems will become prepared to seek employment in a variety of computer-related positions such as programmer, systems analyst, database administrator, telecommunications analyst, project leader, data processing manager, and information center manager, consultant, or product specialist.

The Computer Information Systems Department offers two minors: Business Computer Programming and Managerial Computing. The purpose of these minors is to develop marketable skills for a person not able to find immediate employment in his or her chosen field. Also those students majoring in technical fields that involve the use of the computer may wish to develop adjunct skills that may prove to be complementary to their major course of study. Those interested in enrolling in either of these minors should see the Department Chair, Building 98, Room C4-11, (909) 869-3235.

Supplementary Admission Criteria and Process

The Computer Information Systems program at California State Polytechnic University, Pomona is impacted due to a large number of eligible student applicants and the limited number of available positions. Therefore, the CIS Department requires a supplementary admissions process. Applications are accepted for entry into the program during the month of November for admission in the fall quarter of the following year. Furthermore, due to impactation, applications are accepted from California residents only.

Department Policy on Taking CIS Courses

CIS courses at the level of CIS 234 or higher are restricted to students in CIS programs (option or minor), or students whose curriculum requires CIS courses. The only exception is CIS 310 which is a core requirement for business administration majors.

Department Policy on Academic Disqualification

The Computer Information Systems Department may disqualify students with an option in Computer Information Systems at the end of any quarter if either of the following requirements are not met: (1) their overall GPA, Cal Poly Pomona GPA, or their option GPA is below 2.0 by 7 grade points or more or (2) more than one-third of the units taken during the past twelve-month period do not satisfy the degree requirement. Determination of the GPA in the option and proportion of courses taken to satisfy the degree requirements is the responsibility of the department.

Further, the department has an additional policy on satisfactory progress. Specifically, if students fail to complete a Computer Information Systems course required of all CIS students with a grade of C or better, they will have an advising hold placed on their records. For this purpose, a "W" does not count as a try, but a "U" does. To release the hold, students must see the Department's Chair (i.e., Probationary student advisor). Students who do not achieve a grade of C or better in a required CIS course in two attempts will be strongly counseled to seek a more suitable option.

MICROCOMPUTER PROFICIENCY REQUIREMENT (see policy statement in College of Business Administration introductory section)

CORE COURSES FOR MAJOR

Required of all business majors. A 2.0 cumulative GPA is required in core

courses including option courses for the major in order to receive a degree in the major.

Statistics with Applications	STA	120	(4)
Principles of Economics	EC	201	(4)
Principles of Economics	EC	202	(4)
Legal Environment of Business Transactions	FRL	201	(4)
Financial Accounting for Decision-Making I	ACC	207	(5)
Managerial Accounting for Decision-Making	ACC	208	(5)
Principles of Management	MHR	301	(4)
Principles of Marketing Management	IBM	301	(4)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)
Management Information Systems	CIS	310	(4)
Operations Management	TOM	301	(4)
Managerial Statistics	TOM	302	(4)
Strategic Management	MHR	410	(4)
or Strategic Management	TOM	411	

CIS REQUIRED COURSES

Object-Oriented Programming	CIS	234	(4)
or Object-Oriented Programming	CIS	214	(2)
Introduction to Object-Oriented			
Systems Analysis and Design	CIS	235	(4)
or Systems Analysis and Design	CIS	215	(2)
Database Design and Development	CIS	305	(4)
Business Telecommunications	CIS	267	(4)
Interactive Web Development	CIS	311	(4)
Information Systems Careers	CIS	328	(2)
Systems Development Project	CIS	466	(4)

EACH STUDENT WILL SELECT 28 UNITS FROM THE FOLLOWING: SELECTION DEPENDS ON CAREER TRACK SELECTED AND ADVISOR CONSULTATION (28)

Programming with C++	CIS	284	(4)
Structured Systems Analysis	CIS	335	(4)
Client/Server Applications Development			
with Visual Basic	CIS	338	(4)
Data Modeling	CIS	345	(4)
Local/Metro Area Networks	CIS	347	(4)
Object COBOL Programming	CIS	364	(4)
Rapid Systems Development	CIS	406	(4)
Advanced Object-Oriented			
Systems Analysis and Design	CIS	415	(4)
Wide Area and Voice Networks	CIS	417	(4)
Multimedia Applications on the Web	CIS	421	(4)
JAVA Programming for Business	CIS	424	(4)
Mobile Communications and Wireless			
Networks	CIS	427	(4)
Network Analysis and Design	CIS	457	(4)
Workgroup Computing	CIS	431	(4)
Information Systems Auditing	CIS	433	(4)
Managing Business Networks	CIS	437	(4)
Multivendor Inter/Intra Networking	CIS	447	(4)
Executive Information Systems	CIS	451	(4)
Advanced C++ Programming	CIS	454	(4)
Network Analysis and Design	CIS	457	(4)
Web Site Development	CIS	461	(4)

SUPPORT AND ELECTIVE COURSES

CAREER TRACK SUPPORT COURSES

4 units from Business or Economics, with Career Track advisor approval.
 4 units from other than Business, Economics, Public Administration, and Statistics with Career Track advisor approval.

BUSINESS AND ECONOMICS SUPPORT COURSES

The number of restricted elective units depends on whether or not STA 120 and EC 201 or EC 202 are used for General Education (see curriculum sheet for the option). If STA 120 is used for General Education, Restricted Electives will be increased by four units. If EC 201 or EC 202 is used for General Education, Restricted Electives will be increased by four units.

Restricted Electives (cannot include courses in Business, Economics, Statistics, PLS 314, or PLS 318). (4-16)

GENERAL EDUCATION COURSES

Required of all students)

A total of 72 quarter units of General Education courses, are required for all majors in the College of Business Administration. See the list of approved courses under General Education Requirements in this catalog.

Areas 1 through 4

Select courses from approved list. (64)

Area 5

Multicultural Organizational BehaviorMHR 318 (4)

Select one course from approved list (cannot include courses in Business, Economics, Statistics, or PLS 318) (4)

CAREER TRACKS IN CIS

The Computer Information Systems Department has established four career tracks. These are: (1) Applications Software Development, (2) Business Systems Analysis, (3) Interactive Web Development, and (4) Telecommunications Analysis. Every CIS student must select one of these career tracks after taking CIS 328, and after having consulted with a CIS faculty advisor. The career track selected will dictate which upper division CIS electives the student will take, with the courses specified in a written contract with the CIS faculty advisor. The contract terms must be met in order for the student to graduate with an option in CIS.

Also, as noted above in the list of support courses, a total of two support courses (8 units) must be selected during consultation with a CIS career track faculty advisor. These two courses will also be itemized in the career track contract and must be taken in order to graduate with an option in CIS.

Prerequisites for CIS Career Track Courses

Students must have earned a grade of "C" (2.0) or better in each of the courses listed below before registering for any career track course. The courses are: CIS 234 or CIS 214, CIS 235 or CIS 215, CIS 267, CIS 305, CIS 311, CIS 328

MINOR IN BUSINESS COMPUTER PROGRAMMING

The Computer Information Systems Department provides non-CIS students with the opportunity to acquire programming expertise in the area of business applications program development by completing the requirements for Minor in Business Computer Programming as outlined below. The purpose of this minor is (1) to develop marketable skills for people with majors/options other than Computer Information Systems, (2) for those students majoring in technical fields that involve the use of the computer, and (3) for those students who wish to gain a much better understanding of the computer for personal use.

Students completing the Minor in Business Computer Programming are excused from taking Information Systems Careers (CIS 328) for courses in their minor that require CIS 328 as a prerequisite.

For more information or to enroll in the minor, please contact the CIS

department Secretary in Building 98, Room C4-11, (909) 869-3235.

COURSES FOR MINOR (24 units)

Prerequisite Courses:

Introduction to Microcomputing	CIS	101	(4)
Principles of Economics	EC	201	(4)
Financial Accounting for Decision-Making	ACC	207	(5)
Principles of Management	MHR	301	(4)
Management Information Systems	CIS	310	(4)

Required Courses:

Object-Oriented Programming	CIS	234	(4)
Systems Analysis and Design	CIS	235	(4)
Business Telecommunications	CIS	267	(4)
Interactive Web Development	CIS	311	(4)

Elective Courses (select two courses from the following):

Programming with C++	CIS	284	(4)
Client/Server Application Development with Visual Basic	CIS	338	(4)
Object COBOL Programming	CIS	364	(4)
Rapid Systems Development	CIS	406	(4)
JAVA Programming for Business	CIS	424	(4)
Advanced C++ Programming	CIS	454	(4)

MINOR IN MANAGERIAL COMPUTING

The Computer Information Systems Department provides non-CIS students with the opportunity to acquire expertise in object-oriented analysis and programming concepts as they are applied in managerial World Wide Web application development. Students need to complete the requirements for a Minor in Managerial Computing as outlined below. The purpose of the minor is (1) to develop marketable skills for people with majors/options other than Computer Information Systems and (2) to give students a much better understanding of World Wide Web application development.

Students completing the Minor in Managerial Computing are excused from taking Information Systems Careers (CIS 328) for courses in their minor that require CIS 328 as a prerequisite.

For more information or to enroll in this minor, please contact the CIS Department Secretary in Building 98, 4th floor, Room 11, (909) 869-3235.

COURSES FOR MINOR (24 units)

Prerequisite Courses:

Introduction to Microcomputing	CIS	101	(4)
Principles of Economics	EC	201	(4)
Financial Accounting for Decision-Making	ACC	207	(5)
Principles of Management	MHR	301	(4)
Management Information Systems	CIS	310	(4)

Required Courses:

Object Oriented Programming	CIS	234	(4)
Introduction to Object-Oriented Systems Analysis and Design	CIS	235	(4)
Business Telecommunications	CIS	267	(4)
Interactive Web Development	CIS	311	(4)

Elective Courses (select two courses from the following list):

Multimedia Applications on the Web	CIS	421	(4)
Workgroup Computing	CIS	431	(4)
Executive Information Systems	CIS	451	(4)
Web Site Development	CIS	461	(4)

COURSE DESCRIPTIONS

CIS 101 Introduction to Microcomputing (4)

Introduction to Microcomputing using personal computers and personal productivity software; (1) Windows environment, (2) Word processing, (3) Spreadsheet, (4) Internet and World Wide Web. Problem solving using software packages adopted by the College of Business Administration. Credit/No Credit; 4 lectures/problem-solving.

CIS 200 Special Study for Lower Division Students (1-2)

Individual or group investigation, research, studies or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter. May be graded on CR/NC basis.

CIS 234 Object-oriented Programming (4)

Introduction to computer programming of business information systems. Object concepts, programming, the Java language, and an integrated development environment. Business application projects. 4 lectures/problem-solving. Prerequisites: microcomputer proficiency and a minimum grade of C (2.0) in STA 120 and ENG 104.

CIS 235 Introduction to Object-Oriented Systems Analysis and Design (4)

Introduction to object-oriented systems analysis and design using an object-oriented case tool. Determination of user system requirements. User/computer interface design. Class hierarchies, structures, and collaborations of objects. Class and interaction diagrams. 4 lectures/problem-solving. Prerequisite: A minimum of C (2.0) in CIS 234, STA 120 and ENG 104.

CIS 267 Business Telecommunications (4)

Telecommunications link components and functions, concentrators, multiplexors, telecom protocols, OSI model, telecom regulations, integrated traffic on WAN's and LAN's, network applications. 4 lectures/problem-solving. Prerequisites: A minimum grade of C (2.0) in CIS 234.

CIS 284 Programming with C++ (4)

Foundations of C and C++. Language constructs emphasizing classes and object concepts. Operators, functions, arrays, structures, files, and classes. Business application projects. 4 lectures/problem-solving. Prerequisite: CIS 235, CIS 328.

CIS 299/299A/299L Special Topics for Lower Division Students (1-4)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.

CIS 305 Database Design and Development

Data modeling and normalization. Relational database design and development using entity relationship diagrams and CASE tools. Accessing and updating databases with SQL. Integrity and security issues. 4 lecture/problem solving. Prerequisite: A minimum grade of C (2.0) in CIS 234 and CIS 235, completion of GE Area 1.

CIS 310 Management Information Systems (4)

Management and development of information systems in modern businesses from the customer and the MIS perspective. Information as a strategic asset. Acquisition, analysis, integration, presentation of internal and external information. Information management in

international and multinational enterprises. Ethical, social impacts. 4 lectures/problem-solving. Prerequisites: ACC 207, MHR 301, and Microcomputer proficiency.

CIS 311 Interactive Web Development (4)

Design and development of business applications to use information on organizational intranets and the Internet. Event-driven programming to control external database/spreadsheet objects from the web. Design considerations for interactive user interfaces. Principles governing critical analysis of web-based content and graphical design. 4 lectures/problem-solving. Prerequisites: CIS 310 and a minimum grade of C (2.0) in (CIS 215 or CIS 235).

CIS 328 Information Systems Careers (2)

Career opportunities and specialties within Computer Information Systems. Job search preparation, strategies and techniques. Making good impressions during interviews and on the job. Career planning and enhancement. Individual or group investigation, research, studies, or surveys of selected problems. 2 units. Prerequisites: A minimum grade of C (2.0) in CIS 267, CIS 305, and CIS 311. Corequisites: CIS 305 or CIS 338 or CIS 347 may be taken concurrently with CIS 328.

CIS 335 Structured Systems Analysis (4)

Application of structured analysis and design methods and tools to the development of information systems. Systems development using nonprocedural tools. 4 lectures/problem-solving. Prerequisites: microcomputer proficiency, CIS 328.

CIS 338 Client/Server Applications Development with Visual Basic (4)

Distributed Database Architectures, design and implementation. Transaction processing, two-phase, time-stamp, optimistic concurrency control mechanisms. Client/Server architectures, applications development using GUI front ends. Distributed Database management. 4 lectures/problem-solving. Prerequisite: CIS 254 and CIS 267

CIS 345 Data Modeling (4)

Designing large databases using advanced data modeling concepts. Producing quality data models which follow corporate business plans, policies, and strategies of the enterprise. Analyzing data components for effective utilization. Extracting from the database to create data warehouses. Use of data mining for decision-making. 4 lectures/problem-solving. Prerequisites: CIS 305 and CIS 328.

CIS 347 Local Area Networks (4)

Analysis of hardware and software used in the design of local area networks. Analysis of transmission media, systems architectures, and cost/benefit tradeoffs. Analysis of specific vendor LAN's. Inter-connectivity issues. 4 lectures/problem-solving. Prerequisite: CIS 328.

+CIS 400 Special Study for Upper Division Students (1-2)

Individual or group investigation, research, studies or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter. May be graded on CR/NC basis.

CIS 406 Rapid Systems Development (4)

Rapid systems development methods and tools. Emphasis on the prototyping approach to systems development and human/ergonomic factors in designing user interfaces. Use of 4GLs, front/back-end CASE

tools, code generators and similar rapid development tools. 4 lectures/problem-solving. Prerequisites: CIS 328 and CIS 338.

CIS 415 Advanced Object-oriented Systems Analysis and Design (4)

Applying Unified Modeling Language to Model Complex Business Systems. Application of use cases in analysis and of patterns in design. Use of modeling tools and code generation. Written reports and case studies. 4 lectures/problem-solving. Written reports and case studies. 4 lecture/problem-solving. Prerequisite: A minimum grade of C (2.0) in CIS 234, CIS 235, CIS 267, CIS 305, CIS 311, CIS 328.

CIS 417 Wide Area/Voice Networks in Business (4)

Hardware and software concepts regarding wide area and voice networks. Analog and digital systems and their interconnection. 4 lectures/problem-solving. Prerequisite: CIS 328.

CIS 421 Multimedia Applications on the Web (4)

Design, development, publishing multimedia applications for business. Considerations for creation of graphical, photographic, video, sound, animation, multimedia authoring, virtual reality applications suitable for publication on WWW or other electronic media. Principles supporting critical analysis of multimedia design and content. 4 lectures/problem-solving. Prerequisite: CIS 328.

CIS 424 Advanced Java Programming for Business (4)

Java programming, review of language structure, typical development platform, and library of classes. Building applications for windows as well as applets and servlets for the web. Accessing web sites and databases using JDBC. 4 lecture/problem-solving. Prerequisite: A minimum grade of C (2.0) in CIS 234, CIS 235, CIS 267, CIS 305, CIS 311, CIS 328.

CIS 427 Mobile Communications and Wireless Networks

Fundamentals of mobile telecommunications and wireless network technology, regulation, standards, and management. Analysis of wireless local and wide area networks. Evaluation of service alternatives. Examination of emerging issues. 4 lecture/problem-solving. Prerequisite: A minimum grade of "C" (2.0) in CIS 267, CIS 347.

CIS 431 Workgroup Computing (4)

Design and management of inter- and intraorganizational group work through networked and WWW-based technologies. Design workgroup applications for social and task communication, collaboration and coordination, using current technologies. Critical analysis of effects of workgroup technologies on group interaction. 4 lectures/problem-solving. Prerequisites: CIS 428.

CIS 433 Information Systems Auditing (4)

Fundamentals of Information Systems (IS) auditing. Understanding IS Audits, risk assessment and concepts, and techniques used in IS audits. Includes case studies. 4 lectures. Prerequisite: ACC 419 or (CIS 328 and CIS 406).

CIS 437 Network Management (4)

Administering and tuning telecommunications networks. Analysis of network components, traffic, security, and failures in the network. An examination of regulatory and legal issues in the field. Analyzing and directing a telecommunications project. 4 lectures/problem-solving. Prerequisites: CIS 347 and CIS 417.

CIS 441, 442 Internship in Information Systems (1-8) (1-8)

Faculty-supervised on-the-job educational experiences in a real world data processing environment. Allocation of credit is dependent on the nature of the work done and the number of hours worked. Students usually receive pay for participation. Total credit limited to 8 units each. Prerequisite: permission of the internship coordinator.

CIS 447 Multivendor Inter/Intra Networking

Fundamentals of multivendor network standards. Hardware and software technologies, design, installation, types of services, performance monitoring and management of Intra and Extranets. Integrating heterogeneous networks, securing them with the firewalls and emerging issues. 4 lecture/problem-solving. Prerequisite: A minimum grade of C (2.0) in CIS 267, and CIS 347.

CIS 451 E-commerce Application Development (4)

Analysis of e-commerce architecture, practice, technology, and trends. Hands-on design and development of e-commerce solutions for business. Internet marketing and management for e-commerce applications. 4 lectures/problem-solving. Prerequisites: CIS328 and CIS 338.

CIS 454 Advanced C++ Programming (4)

Using c++ to solve complex business problems that interact with relational databases. Use of c++ workbench to build a complete Windows application. 4 lectures/problem-solving. Prerequisite: CIS 284.

CIS 457 Network Analysis and Design (4)

Analysis of telecommunications networks by building network models, simulating the models, analyzing the results of the simulation, evaluating model costs, and selecting the best model within given constraints. 4 lectures/problem-solving. Prerequisites: CIS 347 and CIS 417.

CIS 461 Web Site Development (4)

Design of WWW sites with consistent graphical interface and business content. Requirements analysis, use of client and server-side web development software to develop interfaces to business databases. Programming script development, application implementation, incorporation of authoring tools and document viewing methodologies. 4 lectures/problem-solving. Prerequisites: CIS 328 and CIS 421.

CIS 466 Systems Development Project (4)

Application of computer programming and implementation concepts to a comprehensive group project. Management planning, scheduling, and reporting required. Documentation to include programming, testing and users manuals. Oral and written presentations required for all team members. 4 lectures/problem-solving. Prerequisites: 3 track courses.

CIS 499 Special Topics for Upper Division Students (1-4)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.

FINANCE, REAL ESTATE, AND LAW

Javad Kashefi, Chair

Richard J. Bergstrom
 Michael Carney
 Michelle Chu
 Robert Enders
 "Phillip" F. Ghazanfari
 Hyung Ki Jin
 Shady Kholdy
 George H. Lentz
 Gilbert J. McKee

Eric J. McLaughlin
 Jeanne Lunsford
 Majed Muhtaseb
 David L. Parry (Emeriti)
 Paul Sarmas
 Ahmad Sohrabian
 John B. Wyatt III
 N. Gregory Young

MISSION STATEMENT

The FRL Department seeks to prepare undergraduate students in Finance, Real Estate, and Law and MBA students for careers in finance, real estate, and contract management with up-to-date curricula and instructional methods. In addition, the FRL Department provides all other students within the College of Business Administration and throughout the university with a variety of introductory and specialized courses in finance, real estate, business law, and contract management. The department is also committed to enhancing the intellectual capital of its faculty and maintaining strong links with business/government through research, writing, consulting, and participation in academic and professional meetings, and other development activities.

Students select one of the three emphasis areas that best meets their career objectives: Finance, Real Estate, or Business Law and Contract Management.

The Finance emphasis offers courses on the theory and methods of financial analysis and valuation, corporate financial management, the management of financial institutions, securities analysis, and multinational finance.

The Real Estate emphasis focuses on real estate brokerage, mortgage lending, residential and commercial appraising, and real property investment/development.

The Business Law and Contract Management emphasis helps prepare students for law school and for careers as contract administrators and contract cost/price analysts.

The Department offers four minors: Finance, Real Estate, Business Law, and Financial Management of Public and Private Contracts to both non-FRL students and FRL students. FRL students may not count courses taken in group A of the concentration toward the minor.

The minor in real estate is formulated to qualify the student with the requisite courses to sit for the real estate broker's examination.

The minor in business law encompasses the study of the legal environment of business.

The minor in financial management of public and private contracts provides sufficient skills and understanding of the principles to enable students to successfully manage commercial contracts, apply contract cost/price techniques, and undertake contract negotiations.

Please contact the Department Chair in Building 66, Room 211 (909) 869-2350, or an FRL faculty advisor if you wish to explore any of the course offerings.

COURSE REQUIREMENT FOR THE FINANCE, REAL ESTATE, AND LAW PROGRAM

Before registering for any upper division non-core FRL courses, FRL students must have earned a grade of "C" (2.0) or better in each of the prerequisite courses:

ENG 104, EC 201 and 202, ACC 207, 208, STA 120, FRL 201, 300, and 301.

MICROCOMPUTER PROFICIENCY REQUIREMENT (policy statement in College of Business Administration introductory section)

CORE COURSES FOR BUSINESS ADMINISTRATION MAJOR

Required of all business majors. A 2.0 cumulative GPA is required in core courses including option courses for the major in order to receive a degree in the major.

Statistics with Applications	STA	120	(4)
Principles of Economics	EC	201	(4)
Principles of Economics	EC	202	(4)
Legal Environment of Business Transactions	FRL	201	(4)
Financial Accounting for Decision-Making	ACC	207	(5)
Managerial Accounting for Decision-Making	ACC	208	(5)
Principles of Management	MHR	301	(4)
Principles of Marketing Management	IBM	301	(4)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)
Management Information Systems	CIS	310	(4)
Operations Management	TOM	301	(4)
Managerial Statistics	TOM	302	(4)
Strategic Management	MHR	410	(4)
or Strategic Management	TOM	411	

REQUIRED COURSES INFROPTION

Real Estate Principles	FRL	106	(4)
Financial Institutions	FRL	315	(4)
Investment Analysis	FRL	330	(4)
Corporate Finance Theory	FRL	367	(4)
Evaluation of Financial Policy	FRL	440	(4)
Undergraduate Seminar	FRL	463	(2)

REQUIRED EMPHASIS COURSES (Choose one)

Finance

Legal Environment of Business Organizations	FRL	302	(4)
Business Forecasting and Financial Planning	FRL	363	(4)
Multinational Financial Management	FRL	453	(4)

Real Estate

Real Estate Appraisal	FRL	380	(4)
Real Estate Finance	FRL	383	(4)
Real Estate Law	FRL	384	(4)

Business Law and Contract Management

Legal Environment of Business Organizations	FRL	302	(4)
Contract Administration	FRL	325	(4)
Government Regulation of Business	FRL	401	(4)

Other Courses to Complete Emphasis

Select 16 units from GROUP A 16
 Select 4 units from GROUP B 4

GROUP A (16 units):

Asset Protection and Insurance	FRL	270	(4)
Legal Environment of Business Organizations	FRL	302	(4)
Financial Spreadsheet Analysis	FRL	308	(4)

Contract Administration	FRL	325	(4)
Contract Aspects Uniform Commercial Code	FRL	326	(4)
Contract Case Study	FRL	327	(4)
Contract Cost/Price	FRL	328	(4)
International Financial Markets	FRL	353	(4)
Business Forecasting and Financial Planning	FRL	363	(4)
Real Estate Appraisal	FRL	380	(4)
Real Estate Economics and Institutions	FRL	381	(4)
Real Estate Finance	FRL	383	(4)
Real Estate Law	FRL	384	(4)
Real Estate Practices	FRL	385	(4)
Real Estate Property Management	FRL	386	(4)
Government Regulation of Business	FRL	401	(4)
Legal Implications of Financial Transactions	FRL	403	(4)
Legal Environment of Labor Relations	FRL	406	(4)
Entrepreneurial Law	FRL	407	(4)
Law for Accountants	FRL	408	(4)
Legal Environment of Marketing	FRL	419	(4)
Financing Small Business	FRL	420	(4)
Legal Aspects of International Business	FRL	426	(4)
Security Options	FRL	431	(4)
Futures Markets	FRL	432	(4)
Seminar in Portfolio Management	FRL	433	(4)
Internship in Finance	FRL	441-442	(1-4)
Multinational Financial Management	FRL	453	(4)
Commercial Banking	FRL	460	(4)
Senior Project	FRL	461-462	(2)(2)
Risk Management and Insurance	FRL	470	(4)
Real Estate Market Analysis	FRL	483	(4)
Real Estate Investment Analysis	FRL	486	(4)
Urban Land Development	FRL	490	(4)

GROUP B: (4 units)

Intermediate Microeconomic Theory	EC	311	(4)
Intermediate Macroeconomic Theory	EC	313	(4)
International Trade Theory	EC	404	(4)
International Finance	EC	405	(4)
Introduction to Mathematical Economics	EC	406	(4)
Public Finance	EC	410	(4)
Comparative Economic Systems	EC	412	(4)
Economic History of Europe	EC	413	(4)
Labor Economics	EC	414	(4)
Land Economics	EC	419	(4)
Managerial Economics	EC	424	(4)
Urban Economics	EC	432	(4)

SUPPORT AND ELECTIVE COURSES

The number of restricted elective units depends on whether or not ENG 105, STA 120 or MAT 125, and EC 201 or EC 202 are used for General Education (see curriculum sheet for the option). If any of these courses are used for General Education, Restricted Electives will be increased by four units per course up to the unit maximum of 8.

Freshman English II	ENG	105	(4)
Introduction to Calculus for Business	MAT	125	(4)
Restricted Electives: [cannot include courses in Business, Economics, Statistics, PLS 314, or PLS 318]			(8-20)

GENERAL EDUCATION COURSES

(Required of all students)

A total of 72 quarter units of General Education courses, Track B, are required for all majors in the College of Business Administration. See the list of approved courses under General Education Requirements in this catalog.

Areas 1 through 4

Select courses from approved list (64)

Area 5

Multicultural Organizational Behavior MHR 318 (4)
 Select one course from approved list [cannot include courses in Business, Economics, Public Administration, Statistics, or PLS 318]. (4)

MINORS

Four minors are offered to both non-FRL students and to FRL students. FRL students may not count courses taken in group A for the option toward the minor. Please contact the minor coordinator for more information.

MINOR IN FINANCE

Financial affairs play an important role in the efficiency and effectiveness of any organization. Knowledge and skill in finance enhance an individual's ability to function as a productive member of any organization and assist the organization to achieve its goals. Augmenting the skills of a non-finance business major/option with a minor in finance creates a synergetic effect. A Finance Minor complements the skills of a non-Finance student, and thus improves an individual's potential in the job market. The Finance, Real Estate, and Law Department offers a Minor in Finance that is available to non-Finance students. The requirements are listed below:

Prerequisite Courses:

Financial Accounting for Decision-Making	ACC	207	(5)
Managerial Accounting for Decision-Making	ACC	208	(5)
Principles of Economics	EC	201	(4)
Principles of Economics	EC	202	(4)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)
Statistics with Applications	STA	120	(4)
Microcomputer Proficiency			(4)

Required Courses:

Financial Institutions	FRL	315	(4)
Investment Analysis	FRL	330	(4)
International Financial Markets	FRL	353	(4)

Directed Electives:

Select 3 of the following courses:

Financial Spreadsheet Analysis	FRL	308	(4)
Business Forecasting and Financial Planning	FRL	363	(4)
Corporate Finance Theory	FRL	367	(4)
Real Estate Finance	FRL	383	(4)
Legal Implications of Financial Transactions	FRL	403	(4)
Financing Small Business	FRL	420	(4)
Security Options	FRL	431	(4)
Futures Markets	FRL	432	(4)
Seminar in Portfolio Management	FRL	433	(4)
Evaluation of Financial Policy	FRL	440	(4)
Commercial Banking	FRL	460	(4)

Please see one of the Finance Advisors to sign up for a Minor in Finance. Non-business students should consult with an advisor to discuss prerequisites for the above courses.

Microcomputer proficiency must be demonstrated by satisfying one of the following three alternatives: (1) CIS 101; (2) microcomputer proficiency skills tests in word processing and spreadsheet; or (3) an approved college course.

MINOR IN REAL ESTATE

This minor prepares the student for a real estate career and for the real estate broker's examination course requirements. The minor requires 28 units (7 courses) for non-FRL Business students.

Prerequisite Courses:

Principles of Economics	EC	201,202	(8)
Financial Accounting for Decision-Making	ACC	207	(5)
Managerial Accounting for Decision-Making	ACC	208	(5)
Legal Environment of Business Transactions	FRL	201	(4)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)

Required Courses:

Real Estate Principles	FRL	106	(4)
Real Estate Appraisal	FRL	380	(4)
Real Estate Finance	FRL	383	(4)
Real Estate Law	FRL	384	(4)
Real Estate Practices	FRL	385	(4)

Select at least one of the following courses with approval of an advisor:

Real Estate Economics and Institutions	FRL	381	(4)
Real Property Management	FRL	386	(4)
Real Estate Market Analysis	FRL	483	(4)
Real Estate Investment Analysis	FRL	486	(4)
Urban Land Development	FRL	490	(4)

MINOR IN BUSINESS LAW

This minor provides the student with an orientation of business and the law.

Required:

Legal Environment of Business Transactions	FRL	201	(4)
Legal Environment of Business Organizations	FRL	302	(4)

Select 4 courses from the following:

Law for Everyday Living	FRL	101	(4)
Government Regulation of Business	FRL	401	(4)
Legal Environment of Labor Relations	FRL	406	(4)
Entrepreneurial Law	FRL	407	(4)
Law for Accountants	FRL	408	(4)
Legal Aspects of International Business	FRL	426	(4)
Real Estate Law (FRL 106)*	FRL	384	(4)
Legal Environment of Marketing (IBM 301)*	FRL	419	(4)
Legal Implications of Financial Transactions	FRL	403	(4)
Contract Administration	FRL	325	(4)
Practices and Applications of Real Estate Law (FRL 380, FRL 384)*	FRL	385	(4)

*Course prerequisite

MINOR IN FINANCIAL MANAGEMENT OF PUBLIC AND PRIVATE CONTRACTS

This minor provides the student with a concept of contract administration. Prerequisites: FRL 301 and TOM 301.

Contract Administration	FRL	325	(4)
Contract Aspects of Uniform Commercial Code	FRL	326	(4)
Contract Case Study	FRL	327	(4)
Contract Cost Price	FRL	328	(4)
Legal Environment of Marketing	FRL	419	(4)
Purchasing Management	TOM	434	(4)

COURSE DESCRIPTIONS

FRL 100 Personal Money Management (4)

Major financial problems of the household in allocating resources and planning expenditures. Budgeting, housing, consumer protection, insurance, the use of credit, savings, and investments. Not open to finance majors. 4 lecture discussions.

FRL 101 Law for Everyday Living (4)

Legal principles which underlie ordinary transactions such as buying a house or a television, writing a check, getting married, taking out an insurance policy, joining a union, lending a car to a friend, signing a lease, and hundreds of everyday activities. 4 lecture discussions.

FRL 106 Real Estate Principles (4)

This course satisfies educational requirements for real estate broker's license. Introduction to real estate brokerage and investments; the nature and classification of real property, and fundamental theories of urban growth, land utilization and property valuation. An overview of real estate finance, property management, and the development process. 4 lecture discussions. Prerequisite: ENG 104.

FRL 200 Special Study for Lower Division Students (1-2)

Individual or group investigation, research, studies or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

FRL 201 Legal Environment of Business Transactions (4)

Study of the adversary system, principles of American law, coverage of business-related torts and contracts, product liability, and real and personal property. Case analysis. 4 lecture presentations. Prerequisite: ENG 104.

FRL 270 Asset Protection and Insurance (4)

Introduction to corporate risk management and insurance. Institutional framework and analytical techniques for managing property and personnel loss exposures. Use of risk control and risk financing methods, including insurance, from viewpoint of business and family risk managers. 4 lectures/problem-solving.

FRL 299/299A/299L Special Topics for Lower Division Students (4)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.

FRL 300 Managerial Finance I (3)

First of the two-course sequence in finance for College of Business Administration majors. Topics include the role of a financial manager; financial statement analysis; financial planning; time value of money, bond and stock valuation; investment analysis techniques; and methods of raising long-term funds. 3 units lecture/problem-solving. Prerequisites: ACC 207, EC 201 and microcomputer proficiency.

FRL 301 Managerial Finance II (3)

Second of the two-courses in finance for College of Business Administration majors. Topics include the risk-return tradeoff, methods of measuring risk, cash flow estimation, capital budgeting under uncertainty, capital structure, dividend policy; short-term financial management, derivatives and risk management, and international finance. 3 lecture/problem-solving. Prerequisites: ACC 208, EC 202, FRL 300, and STA 120.

FRL 302 Legal Environment of Business Organizations (4)

Legal requirements of formation, operation and financing of partnerships, corporations and other business organizations. Consideration of the agency relationships and responsibilities of involved parties. Discussion of the economic, political, and regulatory environment. Case analysis. 4 lectures/problem-solving. Prerequisite: FRL 201.

FRL 308 Financial Spreadsheet Analysis (4)

Financial modeling techniques and analysis using electronic spreadsheets. Emphasis on corporate financial management: capital budgeting, debt capacity, financial planning, credit management. Case discussion. Individual projects. 4 lectures/problem-solving. Prerequisite: FRL 301.

FRL 315 Financial Institutions and Markets (4)

Focuses on financial markets and institutional management from a microeconomics perspective. Relationship between financial institutions and financial markets and impact of government regulation and monetary policy. 4 lectures/problem-solving. Prerequisites: FRL 301 and EC 202.

FRL 325 Contract Administration (4)

Organization, procedures, and areas of application in contract administration. Designed to provide the student with knowledge and skills essential to accomplish the responsibility of contract administration. Provides a comprehensive approach to the interrelationship between contract administration and various functional disciplines. 4 lectures/problem-solving. Prerequisites: FRL 201 and FRL 301.

FRL 326 Contract Aspects of the Uniform Commercial Code (4)

Transition from common law background to statutory contract law. Formation of sales contract under the UCC. Insight regarding policy considerations, legal remedies, and the mechanical requirements. 4 lectures/problem-solving. Prerequisite: FRL 201.

FRL 327 Contract Case Study/Practical Application (4)

Review of current and past cases in government and private contracting, using the case study method. Combined class textbook and library assignments. Cases, selected by areas briefed, discussed and reviewed. 4 lectures/problem-solving. Prerequisites: FRL 201 and FRL 301.

FRL 328 Contract Cost/Price Techniques-Negotiation (4)

Cost/price techniques applicable to public and private prime/sub contracts including RFQ-RFP-IFB analysis, proposal preparation, estimating methodology, and pricing strategies. Analytical and econometric techniques in preparing contracts. 4 lectures/problem-solving. Prerequisites: FRL 201 and FRL 301.

FRL 330 Investment Analysis (4)

Introduction to the behavior of security markets and individual investment policy. Quantitative and qualitative aspects of risk and return associated with investment decisions. Fundamental, technical, and random-walk approaches to valuation. 4 lectures/problem-solving. Prerequisites: FRL 301 and EC 202.

FRL 353 International Financial Markets (4)

Institutional overview of structure and application function of international financial markets and their applications. International financial systems, capital flows, foreign exchange risk measurement and management, Eurocurrency markets, Asian currency markets,

international capital markets, international banking, international debt crisis, and export-import financing. 4 lectures/problem-solving. Prerequisite: FRL 301.

FRL 363 Business Forecasting and Financial Planning (4)

Various forecasting techniques as they relate to finance and real estate issues. Smoothing methods, decomposition methods, correlation analysis, regression analysis, seasonal models, Box-Jenkins methodology, and managing the forecasting process. Use of microcomputer to aid calculations. Individual projects. 4 lectures/problem-solving. Prerequisites: FRL 301, TOM 302, and MAT 125.

FRL 367 Corporate Finance Theory (4)

Capital budgeting under uncertainty, capital structure, cost of capital, and specialized financial decision tools. Emphasis on operational techniques through cases, problems, and computer applications. 4 lectures/problem-solving. Prerequisites: FRL 301.

FRL 380 Real Estate Appraisal (4)

Examines principles and techniques of real property valuation, emphasizing urban properties. Applications via specific problem-solving assignments and the preparation of appraisal reports and market analyses. Satisfies educational requirement for the real estate broker's license. 4 lecture/problem-solving. Prerequisites: FRL 106, and one of the following: FRL 301, CE 301, or ETT 305.

FRL 381 Real Estate Economics and Institutions (4)

Economies of real estate markets, developments and operations. Foundations of private institutions that operate within and government institutions that oversee and control real estate marketing, financing, development and research. Satisfies educational requirement for real estate broker's license. 4 lecture discussions. Prerequisites: FRL 106, FRL 301.

FRL 383 Real Estate Finance (4)

Instruments of real estate financing and their use; analytic factors in financing and investment decision-making; analysis of the various institutions which are sources of real estate financing. Satisfies educational requirement for the real estate broker's license. Case analyses. 4 lectures/problem-solving. Prerequisites: FRL 106 and FRL 301.

FRL 384 Real Estate Law (4)

Rights and liabilities surrounding the acquisition, possession, and transfer of real property: easements, deeds, zoning, mortgages, foreclosure, landlord and tenant relationships. Satisfies educational requirement for the real estate broker's license. 4 lecture discussions. Prerequisites: FRL 106 and 201.

FRL 385 Practices and Applications of Real Estate Law (4)

Ethical and legal responsibilities of the real estate broker: listing agreements, structuring of transaction and escrow requirements. Analysis of common agreements, documents, and disclosure statements. Satisfies educational requirement for real estate broker's license. 4 lecture discussions. Prerequisites: FRL 380 and FRL 384.

FRL 386 Real Property Management (4)

General practices and legal aspects of property management. Establishing rental schedules, tenant billing, rent collection, lease clauses, lease negotiations, purchasing procedures related to repairs and maintenance, and property management accounts for apartments, office buildings, industrial properties, and shopping centers. 4 lecture discussions. Prerequisite: FRL 380.

FRL 400 Special Study for Upper Division Students (1-2)

Individual or group investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter. May be taken on a CR/NC basis.

FRL 401 Government Regulation of Business (4)

The study of the regulation of business, government. Antitrust, trade regulation, labor and employment law, privacy, safety, environmental and consumer legislation. 4 lectures/problem-solving. Prerequisite: FRL 201.

FRL 403 Legal Implications of Financial Transactions (4)

An analysis of the legal structure, rationale, and implication of commercial transactions involving secured transactions, negotiable instruments and credit. 4 lectures. Prerequisite: FRL 201.

FRL 406 Legal Environment of Labor Relations (4)

Application of labor and employment law in the United States. Legal rights and remedies available to labor unions, employees, and management. 4 lectures. Prerequisite: FRL 201.

FRL 407 Entrepreneurial Law (4)

A practical preventive law course emphasizing the legal consideration involved in small business planning, operation, and dissolution. Particular attention to liability of small business owners and managers, and the legal alternatives available to a financially-distressed business. 4 lectures. Prerequisite: FRL 302.

FRL 408 Law for Accountants (4)

Legal responsibilities of accountants; fundamental business law principles as applied in commercial transactions. The law of commercial paper, secured transactions, bankruptcy, agency, partnerships, corporations and securities. 4 lectures/problem-solving. Prerequisites: ACC 208 and FRL 201.

FRL 419 Legal Environment of Marketing (4)

Application of laws relevant to the marketing process and assessment of the legal problems growing out of marketing strategies. Hypothetical case analyses. 4 lecture discussions. Prerequisite: FRL 201 or IBM 301.

FRL 420 Financing Small Business (4)

Financial problems and strategies paramount to small firms. Various financing sources including venture capitals. Funding techniques and financial package evaluation. 4 lectures/problem-solving. Prerequisite: FRL 301.

FRL 426 Legal Aspects of International Business (4)

Legal factors affecting organizations involved in international business transactions. Sales, bills of exchange, patents, obligations and liabilities of cargo carriers, political risks, and credit insurance. 4 lecture discussions. Prerequisite: FRL 201.

FRL 431 Security Options (4)

Options market and the mechanics of options investing. Valuation models, conservative and aggressive strategies for different market environments, and their risk-reward characteristics, portfolio management, and computer simulation. 4 lectures/problem-solving. Prerequisite: FRL 330 and FRL 363.

FRL 432 Futures Markets (4)

Futures contracts on financial instruments such as government bonds, commercial paper, GNMA, foreign currencies, and market index futures contracts. Trading aspects and future markets of agricultural and industrial commodities. 4 lectures/problem-solving. Prerequisites: FRL 330 and FRL 363.

FRL 433 Seminar in Portfolio Management and Capital Markets (4)

Developing and valuing alternative portfolio selection models for individual and institutional use. Examination of non-traditional investments. 4 seminars. Prerequisites: FRL 330, FRL 363, FRL 431, and FRL 432.

FRL 440 Evaluation of Financial Policy (4)

A seminar course in finance utilizing comprehensive cases to simulate the role of the financial manager. 4 seminars. Prerequisite: FRL 301 and FRL 367.

FRL 441, 442 Internship in Finance (1-4) (1-4)

On-the-job training or internship with a business to gain new learning experience. Student submits periodic reports to faculty coordinator and receives one unit of credit for 120 hours of training. Four units of Internship in Finance can be applied to Group A. Total credit limited to 8 units in both classes. Prerequisite: permission of the FRL coordinator of internships.

FRL 453 Multinational Financial Management (4)

Foreign exchange markets, foreign exchange risk management, multinational working capital management, foreign investment analysis and multinational capital budgeting, international diversification, cost of capital and capital structure of the multinational firm, political risk management, and international taxation. 4 lectures/problem-solving. Prerequisite: FRL 301.

FRL 460 Commercial Banking (4)

Functional and operational aspects of commercial banks. Emphasis on the principles and practices used in asset management, liability management, and liquidity management. Group analysis using case problems and/or computer simulations. 4 lecture discussions. Prerequisite: FRL 315.

FRL 461, 462 Senior Project (2) (2)

Selection and completion of a project under faculty supervision. Projects typical of problems which graduates must solve in their fields of employment. Formal report is required. Prerequisite: senior standing. Required minimum of 120 hours.

FRL 463 Undergraduate Seminar (2)

Study and discussion by students of recent developments in the student's major field. 2 lectures. Prerequisites: FRL 106, 315, 330, and senior standing.

FRL 470 Risk Management and Insurance (4)

Insurance and risk management for corporations, government, and individuals. Application of risk retention, loss control and insurance methods to life, health, liability, and property risks. Social insurance, auto and workers compensation, employment benefits, and pensions. 4 lectures/problem-solving.

FRL 483 Real Estate Market Analysis (4)

Analyze and collect urban economic and real estate data to prepare market demand studies for use in real estate investment analysis and feasibility studies for development projects. Satisfies educational requirement for the real estate broker's license. 4 lectures/problem-solving. Prerequisites: EC 201, EC 202, and FRL 380.

FRL 486 Real Estate Investment Analysis (4)

Techniques for analyzing real estate investments in post-development phase projects. Integration of market analyses, appraisal methods, real estate tax law and traditional financial analysis techniques to evaluate the risk-return characteristics of investment positions in real properties. Satisfies educational requirement for real estate broker's license. 4 lectures/problem-solving. Prerequisites: FRL 106 and FRL 383.

FRL 490 Urban Land Development (4)

Examines processes of developing real properties of various types, emphasizing the approval process, site selection, market and feasibility studies, financial analysis, and project/building design. Applications through cases and/or other assignments. Satisfies educational requirement for the real estate broker's license. 4 lectures/problem-solving. Prerequisites: FRL 380 and FRL 383.

FRL 499/499A/499L Special Topics for Upper Division Students (1-4)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.



INTERNATIONAL BUSINESS AND MARKETING

Two options are offered in the International Business and Marketing Department, International Business and Marketing Management.

Vernon R. Stauble, Chair, International Business and Marketing Department

Helena Czepiec, Coordinator, International Business Option

Delores A. Barsellotti
W. R. Berdine
Frederick L. Capossela
Stephen C. Cosmas
James R. Hill
Patricia M. Hopkins
Jerry L. Kirkpatrick
Edwin D. Klewer

Sharyne Merritt
Juanita P. Roxas
Robert W. Schaffer
James E. Swartz
Charles L. Taylor
Andrew J. Thacker
Donna Tillman
Debbora T. A. Whitson

MISSION STATEMENT

The mission of the International Business and Marketing Department is to prepare students for specialized careers in either international business or marketing management. This preparation gives both undergraduate and graduate students practical learning experiences in such courses as international marketing, marketing management, professional selling, advertising, buyer behavior, market research, retailing, industrial marketing, brand management, and transportation and distribution management. In addition, the mission of the Department is to give non-majors a solid foundation in the application of business principles to the marketing of goods and services in international and domestic markets. To achieve excellence in both teaching and course content for an increasingly diverse and multinational student body, the Department's faculty undertakes programs of basic research, applied scholarship, and instructional development; it also forges and maintains strong links with the business community, both local and global.

INTERNATIONAL BUSINESS OPTION

The International Business option provides students a solid grounding in the principles of business management as well as interdisciplinary specialization in areas required to understand and react to today's globalized markets. The objectives of this option are twofold: to provide students with the business knowledge and skills essential for careers in international business; and to provide them with an understanding and appreciation of the culture, language, economics, politics, and history of other parts of the world, with particular emphasis on a geographic area in which the student has a special career interest. The curriculum requires completion of the business core which provides to all business majors a foundation in the theory and practice of modern business management. In addition, the International Business option requires completion of a minor in a functional area of business (e.g. accounting, finance, management, etc.) or, as an alternative to a minor in business, an option in International Studies directed electives or a foreign language. Each student completes a specialization in a geographic area of the world, and must demonstrate proficiency in a related foreign language. Each student is expected to complete at least one quarter of practical experience in international business through the internship program.

Each student should work closely with the program advisor in identifying career goals and selecting course work most appropriate for goal attainment. The International Business option involves the completion of requirements in each of the following seven areas:

1. Core Courses in Major required of all Business majors

2. International Business required courses
3. Support and Elective courses
4. Functional Specialization
5. Regional Area of Emphasis directed electives
6. General Education
7. Foreign Language

MICROCOMPUTER PROFICIENCY REQUIREMENT (see policy statement in College of Business Administration introductory section)

CORE COURSES FOR MAJOR

Required of all business majors. A 2.0 cumulative GPA is required in core courses including option courses for the major in order to receive a degree in the major.

Statistics with Applications	STA	120	(4)
Principles of Economics	EC	201	(4)
Principles of Economics	EC	202	(4)
Legal Environment of Business Transactions	FRL	201	(4)
Financial Accounting for Decision-Making	ACC	207	(5)
Managerial Accounting for Decision-Making	ACC	208	(5)
Principles of Management	MHR	301	(4)
Principles of Marketing Management	IBM	301	(4)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)
Management Information Systems	CIS	310	(3)
Operations Management	TOM	301	(4)
Managerial Statistics	TOM	302	(4)
Strategic Management	MHR	410	(4)
or Strategic Management	TOM	411	

Required for International Business:

Special Study for Lower Division Students	IBM	200	(2)
Global Business Perspectives	IBM	210	(4)
Introduction to International Business	IBM/MHR	322	(4)
Principles of Economics	EC	202	(4)
Economic Geography	GEO	312	(4)
International Financial Markets	FRL	353	(4)
International Marketing	IBM	414	(4)
Legal Aspects of International Business	FRL	426	(4)
International Business Agreements and Negotiation	IBM	436	(4)
Internship in International Business	IBM	441	(4)

SUPPORT AND ELECTIVE COURSES

The number of restricted elective units depends on whether or not STA 120 and EC 201 or EC 202 are used for General Education (see curriculum sheet for the option). If STA 120 is used for General Education, Restricted Electives will be increased by four units. If EC 201 or EC 202 is used for General Education, Restricted Electives will be increased by four units.

Restricted Electives [cannot include courses in Business, Economics, Statistics, PLS 314, or PLS 318] (0-4)

Select 4 units not used in Functional Specialization: 4

Market Analysis and Control	IBM	320	(4)
International Accounting	IBM/ACC	404	(4)
Assessing International Business Environments	IB/MHR	332	(4)
Strategy in International Marketing	IBM	415	(4)

International Exporting	IBM	416	(4)
Policy for International Management	IBM/MHR422		(4)
International Business Cases: Operations	IBM/TOM437		(4)
Money and Banking	EC	308	(4)
International Trade Theory and Policy	EC	404	(4)
Economic Development	EC	411	(4)
Comparative Economic Systems	EC	412	(4)

FUNCTIONAL SPECIALIZATION

Students may complete any minor or at least 20 units within an approved minor in the College of Business Administration or in a foreign language, international agricultural business management, economics, geography, anthropology, history, Latin American Studies, political science, or public administration. If a minor in a particular language is not available, students may complete 20 units in one foreign language, at least 12 of which must be at or above the 200 level.

REGIONAL AREA OF EMPHASIS

Students must take 12 units of courses outside of the College of Business Administration in International Studies, with advisor approval.

GENERAL EDUCATION COURSES

(Required of all students)

A total of 72 quarter units of General Education courses are required for all majors in the College of Business Administration. See the list of approved courses under General Education Requirements in this catalog.

Areas 1 through 4

Select courses from approved list. (64)

Area 5

Multicultural Organizational Behavior MHR 318 (4)
 Select one course from approved list [cannot include courses in Business, Economics, Statistics, or PLS 318] (4)

FOREIGN LANGUAGE (Proficiency)

The student must demonstrate proficiency in reading, writing, and speaking a foreign language. Students can satisfy the foreign language requirements by any of the following ways:

- completing two years of high school courses in the same language and passing them with a "C" or better AND passing with a "C" or better 4 units of college of university language study in the language studied in high school OR
- by earning a "C" or better in four college level foreign language courses, OR
- by completing a commercially offered standardized test (e.g. Berlitz), OR
- by showing a high school diploma and transcript from a non-English speaking high school, OR
- by earning a minor in a foreign language

MINOR IN INTERNATIONAL BUSINESS

Students from both business and non-business majors/options who have an interest in pursuing careers related to international business may complete the Minor in International Business. The purpose of the minor is to provide sufficient knowledge and expertise in international business for students to successfully apply the specialties of their fields to international careers.

To enroll in the minor or for more information about it, see the International Business Minor Advisor. Students are responsible for meeting the requirements of the minor program in effect when the formal Contract for the Minor in International Business is signed. The contract should be signed before coursework in the minor is begun.

The minor is comprised of required and directed elective courses. Most students already in the College of Business Administration will be able to take the required courses with at most one additional prerequisite course in addition to those required in their fields. Students from outside the College of Business Administration must complete a number of courses in Business and Economics before courses required in the International Business Minor can be taken, but may have satisfied the directed elective requirements through their degree major coursework.

Required Courses:

Global Business Perspectives	IBM	210	(4)
Introduction to International Business	IBM/MHR322		(4)
International Financial Markets	FRL	353	(4)
International Marketing Management	IBM	414	(4)
Legal Aspects of International Business	FRL	426	(4)

Select 4 units from the following:

Strategy in International Marketing	IBM	415	
International Exporting	IBM	416	
International Business Agreements and Negotiation	IBM	436	
Assessing International Business Environments	MHR	332	
Policy for International Management	MHR	422	
International Business Cases: Operations	IBM/TOM 437		
International Trade Theory and Practice	EC	404	

Directed Electives:

Select 12 units from the approved list in one of the following groups, or develop an individualized program with the approval of the International Business Minor Advisor.

(Group A) Language Skills (French, German, Russian, Spanish or other modern language)

(Group B) Regional Area of Emphasis (Area studies in Africa, Asia, Europe, Latin America, or the Middle East)

(Group C) Appropriate Theme or Depth Group (Note: Some of these also satisfy General Education Area 5 requirements)

(Group D) Survey of International Development (wide range of courses in development studies, anthropology, international agriculture, economic development, international relations, law, and international management)

MARKETING MANAGEMENT OPTION

The marketing management option is designed to give students an understanding of the factors both within the firm and in the external environment that affect the development and implementation of plans to serve the firm's markets and to attain the firm's economic goals. Emphasis is placed on determining market needs and decision-making concerning the product, pricing, promotion and distribution strategies required to meet those market needs.

Through proper selection of courses, with advisor approval, each student will develop and complete an individualized program of courses that will prepare him or her for a specialized career field within the field of marketing management. The specialized fields from which the student will choose are: (1) advertising, (2) international marketing, (3) marketing

research, (4) marketing to professional buyers, (5) retail management, (6) transportation and distribution management, (7) product/brand management, and (8) industrial marketing.

MICROCOMPUTER PROFICIENCY REQUIREMENT (see policy statement in College of Business Administration introductory section)

CORE COURSES FOR MAJOR

Required of all business majors. A 2.0 cumulative GPA is required in core courses including option courses for the major in order to receive a degree in the major.

Statistics with Applications	STA	120	(4)
Principles of Economics	EC	201	(4)
Principles of Economics	EC	202	(4)
Legal Environment of Business Transactions	FRL	201	(4)
Financial Accounting for Decision-Making	ACC	207	(5)
Managerial Accounting for Decision-Making	ACC	208	(5)
Principles of Management	MHR	301	(4)
Principles of Marketing Management	IBM	301	(4)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)
Management Information Systems	CIS	310	(4)
Operations Management	TOM	301	(4)
Managerial Statistics	TOM	302	(4)
Strategic Management	MHR	410	(4)
or Strategic Management	TOM	411	

MARKETING OPTION REQUIRED COURSES

Career Analysis	IBM	200	(2)
Marketing Strategy	IBM	302	(4)
Marketing Analysis and Control	IBM	320	(4)
Marketing Research I	IBM	408	(4)
International Marketing	IBM	414	(4)
Buyer Behavior	IBM	411	(4)
Marketing Problems	IBM	421	(4)
Undergraduate Seminar	IBM	463	(2)

Plus a minimum of 28 units of courses with advisor approval (28)

SUPPORT AND ELECTIVE COURSES

The number of restricted elective units depends on whether or not STA 120 and EC 201 or EC 202 are used for General Education (see curriculum sheet for the option). If STA 120 is used for General Education, Restricted Electives will be increased by four units. If EC 201 or EC 202 is used for General Education, Restricted Electives will be increased by four units.

Restricted electives (cannot include courses in Business, Economics, Statistics, PLS 314, or PLS 318) (14-22)

GENERAL EDUCATION COURSES

(Required of all students)

A total of 72 quarter units of General Education courses, are required for all majors in the College of Business Administration. See the list of approved courses in the "General Education Requirements" section of this catalog.

Areas 1 through 4

Select courses from approved list. (64)

Area 5

Multicultural Organizational Behavior MHR 318 (4)
 Select one course from approved list (cannot include

courses in Business, Economics, Statistics, or PLS 318) (4)

QUANTITATIVE RESEARCH MINOR

The Quantitative Research Minor is an interdisciplinary program which can be taken by students majoring in any field other than Mathematics. Its purpose is to prepare students to conduct quantitative analyses in their chosen discipline. Students acquire practical experience using statistics, principles of experimental design, survey and data analysis techniques. This minor is particularly suited for students in the Marketing option. A full description of this minor is included in the "University Programs" section of this catalog.

Minor in International Marketing

The International Marketing minor is for students outside the College of Business who have an interest in learning the fundamentals of marketing goods and services in the international arena. This minor could also be useful for College of Business students with options in areas outside the IBM department. The program is designed to provide students of other majors an overview of the factors involved in marketing products and services outside the United States. By packaging the courses into the International Marketing minor students will acquire expertise as well as credentials in international business that will enhance their opportunities for employment. This minor is not open to students in the International Business or Marketing Management options.

Required Courses:

Principles of Microeconomics	EC	201	
or Principles of Macroeconomics	EC	202	(4)
Principles of Marketing	IBM	301	(4)
International Marketing	IBM	414	(4)

Electives: (Select 16 units)

Strategy in International Marketing	IBM	415	(4)
International Exporting	IBM	416	(4)
International Logistics	IBM	429	(4)
International Negotiations and Agreements	IBM	436	(4)
Special topics for Upper Division Students	IBM	499	(4-8)

Total. 28

MINOR IN MARKETING MANAGEMENT

Students enrolled in other academic programs, especially those outside of the College of Business Administration, may broaden their intellectual base and increase their opportunities for employment by completing an academic minor in Marketing Management. This minor is designed to supplement student studies in other major fields. Many non-business majors find opportunities for application of the knowledge and academic preparation they have obtained in their major field in the marketing of goods, services, and ideas where a knowledge and understanding of marketing principles and practices is a prerequisite for success.

It is possible for students majoring in most other fields to complete the minor in marketing management within the normal requirements of their degree through careful planning and scheduling of their required courses.

The attainment of a minor in Marketing Management is accomplished by appropriate selection, timely scheduling and satisfactory completion of specifically designated courses and electives totaling a minimum of 32 quarter units as outlined below:

Completion of the following courses is required:

Principles of Marketing Management	IBM	301	(4)
Marketing Strategy	IBM	302	(4)
Buyer Behavior	IBM	411	(4)
Financial Accounting for Decision-Making	ACC	207	(5)
Principles of Economics	EC	201	(4)

Select 12 additional units from the following list of courses:

Professional Selling	IBM	306	(4)
Promotional Strategies	IBM	307	(4)
Retail Management	IBM	308	(4)
Business Logistics	IBM	309	(4)
Field Sales Management	IBM	310	(4)
Transportation Systems and Traffic Management	IBM	319	(4)
Marketing Analysis and Control	IBM	320	(4)
Marketing of Services	IBM	316	(4)
Interactive Marketing	IBM	326	(4)
Sales Promotion	IBM	327	(4)
Special Study for Upper Division Students	IBM	400	(2)
Product and Brand Management	IBM	402	(4)
Electronic Commerce	IBM	403	(4)
Advertising Management	IBM	405	(4)
Ethical Issues in Marketing	IBM	406	(4)
Industrial Marketing	IBM	407	(4)
Marketing Research I	IBM	408	(4)
Marketing Research II	IBM	409	(4)
Marketing for Small Business Organizations	IBM	410	(4)
International Marketing	IBM	414	(4)
Strategy in International Marketing	IBM	415	(4)
International Exporting	IBM	416	(4)
Legal Environment of Marketing	FRL	419	(4)
Marketing Problems	IBM	421	(4)
Management of Marketing Channels	IBM	431	(4)
Evaluating Advertising Effectiveness	IBM	433	(4)
Advanced Professional Selling	IBM	435	(4)
International Business Agreements and Negotiations	IBM	436	(4)
Competitive Marketing Simulation	IBM	438	(4)
Supply Chain Management	IBM	439	(4)
Advertising Media Analysis and Planning	IBM	443	(4)
Retailing Problems	IBM	447	(4)
Industrial Marketing Problems	IBM	449	(4)

MINOR IN FASHION MERCHANDISING

This interdisciplinary minor is designed for students who seek careers in the fashion industry. The minor provides students with a background in both fashion and business to better prepare them to seek employment in manufacturing or retailing. The minor in Fashion Merchandising is administered jointly by the Department of International Business and Marketing and the College of Agriculture.

The attainment of a minor in Fashion Merchandising is accomplished by appropriate selection, timely scheduling and satisfactory completion of specifically designated courses and electives totaling a minimum of 36 quarter units as follows:

Completion of the following courses is required:

Apparel Design Analysis	AMM	210	(4)
Fashion Industry	AMM	101	(4)
Apparel Importing and Exporting	ABM	331	(4)

Principles of Marketing Management	IBM	301	(4)
Marketing Internship	IBM	441/2	(4)
Select two courses from Group A			(8)
Select two courses from Group B or C			(8)

GROUP A

Culture, People, and Dress	AMM	108	(4)
Fashion Promotion	AMM	230	(4)
Apparel Product Analysis	AMM	301/301A(2/2)	

GROUP B

Professional Selling	IBM	306	(4)
Retail Management	IBM	308	(4)
Retailing Problems	IBM	447	(4)

GROUP C

Introduction to International Business	MHR	332	(4)
International Marketing Management	IBM	414	(4)
International Marketing of Food and Fiber Products	IA/ABM	330	(4)
Strategy in International Marketing	IBM	415	(4)

MINOR IN LOGISTICS

The Logistics Minor, offered by the International Business and Marketing Department, is the only program of its kind in the California State University system. The Logistics Minor was developed to allow Business Administration majors or students majoring in non-business programs to gain the knowledge and skills needed to gain entry-level employment in the field of transportation, warehousing, logistics, planning, materials management, and physical distribution. In addition to the job opportunities that are available in the domestic arena, openings also exist in the international arena. Demand greatly exceeds supply both nationally and internationally for logistics managers.

Students from any major may participate in the minor in Logistics. Core courses in a student's major (Column 1 of the Degree Requirements Evaluation Worksheet) which are required in this minor must be replaced with substitute courses on the basis of individual petitions. For example, a Technology and Operations Management student would have to substitute another course for TOM 332 in order to complete a Minor in Logistics because TOM 332 is a required core course for all Technology and Operations Management students.

For more information, students should contact the chair of the International Business and Marketing Department, Building 94, Room 236, Extension 2436.

Completion of the following courses is required:

Prerequisites:

Elementary Statistics with Applications	STA	120	(4)
Principles of Marketing Management	IBM	301	(4)
Operations Management	TOM	301	(4)
Managerial Statistics	TOM	302	(4)

Core Requirements (16 units)

Business Logistics	IBM	309	(4)
Transportation Systems and Traffic Management	IBM	319	(4)
Production Management	TOM	332	(4)
Supply Chain Management	IBM	439	(4)

Select 12 additional units from the following list of courses:

Each elective must be outside the student's concentration department.

Management Science	TOM	315	(4)
Decision Support and Expert Systems	TOM	350	(4)
Advanced Managerial Statistics	TOM	380	(4)
Total Quality Management	TOM	401	(4)
Forecasting Methods for Management	TOM	415	(4)
Material Requirements Planning	TOM	430	(4)
Materials and Inventory Management	TOM	433	(4)
Purchasing Management	TOM	434	(4)
Facilities Planning for Managers	TOM	450	(4)
Operations Management in Services	TOM	453	(4)
Industrial Marketing	IBM	407	(4)
International Marketing	IBM	414	(4)
International Exporting	IBM	416	(4)
Management of Marketing Channels	IBM	431	(4)
Total core and elective units required:		28	

COURSE DESCRIPTIONS

*The following IBM courses were formerly offered under the marketing (MKT) prefix:

*IBM 200 Special Study for Lower Division Students (1-2)

Individual or group investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

*IBM 201 Consumer Survival Skills (4)

Critical analysis of business/economic institutions, policies, and marketing practices as they affect consumer needs. Assisting individuals to become informed and effective buyers/consumers. Historical development of political and economic institutions as they impact individual consumers in multicultural environments. 4 lecture discussions.

IBM 210 Global Business Perspectives (4)

Overview of global business decision-making with an emphasis on cultural differences. Social, cultural, environmental, and technological trends in international business and the effects of geography, history, language, and education on the performance of foreign operations. Case studies. 4 lecture discussions.

*IBM 299/299A/299L Special Topics for Lower Division Students (1-4)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: Permission of instructor.

*IBM 301 Principles of Marketing Management (4)

Principles, concepts, and institutions involved in facilitating the exchange of goods and services. Analysis of markets, the marketing environment, and the marketing variables of product, price, promotion, and distribution. Introduction to marketing strategy and international marketing. Ethical issues. Computer applications. 4 lecture discussions.

*IBM 302 Marketing Strategy (4)

Analysis, planning, implementation and control of marketing strategy. Target market, product, distribution, promotion, and pricing decisions necessary to accomplish the firm's objectives. Emphasis on application of analytical techniques to improve decision-making in a dynamic marketplace. 4 lecture discussions. Prerequisite: IBM 200, 301.

*IBM 306 Professional Selling (4)

Focus on professional selling within the context of relationship marketing. Emphasis on precision selling process. Team presentations. 4 lecture/problem-solving. Prerequisite: IBM 301.

*IBM 307 Promotional Strategies (4)

Fundamentals of marketing communication. Promotional strategy development: advertising messages and media, personal selling, sales promotion, publicity, packaging, branding, and display. Promotional budgets. Development of communication strategies for new product, industrial, retail, and services marketing. 4 lecture discussions. Prerequisite: IBM 301.

*IBM 308 Retail Management (4)

Examination and evaluation of changing concepts of retailing from a management viewpoint. Philosophy of modern management and measures of retail productivity. Individual student field projects. 4 lectures/problem-solving. Prerequisite: IBM 301.

*IBM 309 Business Logistics (4)

Coordination and administration of materials management and physical distribution activities for optimum logistical performance relative to cost and customer service. Integration of transportation, warehousing, inventory, and related logistical activities. Case analysis and discussion of problems in logistical support. 4 lecture discussions.

*IBM 310 Field Sales Management (4)

Analysis of the field sales manager as a professional marketing tactician in a marketing-oriented firm. Emphasis on both theoretical and applied approaches to effectively managing a field sales force. 4 lecture discussions.

*IBM 316 Marketing of Services (4)

Concepts, practices, and development of strategies involved in marketing of services. External environmental and internal control factors as applied to professional, financial, educational, entertainment, health care, governmental, religious, research, media, and other organizations, institutions, and/or agencies. 4 lecture discussions. Prerequisite: IBM 301.

*IBM 319 Transportation Systems and Traffic Management (4)

Analysis of competitive alternative modes, systems, rates, services, and regulations as prerequisite to transport purchase decisions. Organization, operations, and management of the firm's traffic department. Impact of present and proposed transportation and environmental developments on industrial and carrier operations. 4 lecture discussions..

*IBM 320 Market Analysis and Control (4)

Market identification and diagnosis. Market analysis based on available data; applications for planning and control. Extensive use of computer models, with emphasis on current microcomputer software application packages. 4 lectures/problem-solving. Prerequisites: IBM 301, STA 120.

IBM/MHR 322 Introduction to International Business (4)

Introduction to international business, trade, and foreign investment. Survey of cultural, political, social, and economic aspects of doing business abroad. Theories of international trade and economic development. 4 lecture discussions. (Also listed as MHR 322.)

***IBM 326 Interactive Marketing (4)**

Role of interactive marketing in marketing strategy to gain a competitive advantage. Exploration of all forms and uses by entrepreneurs, manufacturers, wholesalers, retailers, politicians, not-for-profit and service organizations. 4 lecture discussions. Prerequisite: IBM 307.

***IBM 327 Sales Promotion (4)**

Role of sales promotion in marketing strategy. Study of numerous incentives designed to increase sales or achieve other specific marketing objectives directed toward sales force, intermediaries, and consumers. Design of sales promotion plans. 4 lecture discussions. Prerequisite: IBM 307.

IBM/MHR 332 Assessing International Business Environment (4)

Analysis of cultural, political, social, and economic aspects of doing business abroad. Study and application of methods in conducting risk vs. opportunity analysis of countries, investments, projects, and trade. Case studies, student research projects, and presentations. 4 lectures/problem-solving. Prerequisite: IBM 322, also listed as MHR 332.

***IBM 400 Special Study for Upper Division Students (1-2)**

Individual or group investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

***IBM 402 Product and Brand Management (4)**

Planning, implementation, and control of marketing strategy for a specific product, product line, or brand. Analysis of market needs and the macro-environment; developing marketing plans involving product, price, promotion, and distribution decisions to market a specific product or brand. 4 lecture discussions. Prerequisite: IBM 302.

***IBM 403 Electronic Commerce (4)**

Study of the Internet, its culture and procedures from a marketing perspective. Using the Internet for customer contact, customer service, order-taking, and marketing research. Promotion and distribution considerations. Issues in the creation of successful WWWsites. On-line experience and projects with real organizations. 4 lectures/problem-solving. Prerequisite: IBM 301.

IBM/ACC 404 International Accounting (4)

Examination and discussion of accounting theories, techniques, procedures, accounting standards, regulations used in other nations. Examination of contemporary practices prevailing in different parts of the world. Emphasis on multinational corporations, and their needs and practices. 4 lectures/problem-solving. Prerequisite: ACC 302, also listed as ACC 404.

***IBM 405 Advertising Management (4)**

Strategic aspects of planning, implementing, and controlling advertising programs from the perspectives of producers and distributors of goods, services, and nonprofit organizations. Study of socioeconomic, legal, and consumer issues affecting advertising decisions in a marketing context. 4 lecture discussions. Prerequisite: IBM 307.

***IBM 406 Ethical Issues in Marketing (4)**

The morality and immorality of modern marketing practices. Ethical theories as applied to such marketing-related issues as bribery, marketing to countries engaging in morally questionable practices, deceptive advertising, and invasion of privacy. 4 lectures/problem-solving. Prerequisites: IBM 301.

***IBM 407 Industrial Marketing (4)**

Study of the environment in which industrial products are marketed to industrial firms, governments and institutions. Emphasis on industry structure, government and industrial buying behavior as each affects product, pricing, promotion and distribution decisions. Analysis of specific case problems. 4 lectures/problem-solving. Prerequisite: IBM 301.

***IBM 408 Marketing Research I (4)**

Theoretical and analytical foundations of marketing research. Topics covered include analysis of internal and external secondary data, marketing software packages, approaches to primary research, and research applications to marketing problems. 4 lectures/problem-solving. Prerequisites: IBM 320 and TOM 302.

***IBM 409 Marketing Research II (4)**

The research process as an aid to decision-making in marketing. Application of techniques in research design, data collection, sampling, computer-aided data analysis, and report writing to contemporary marketing research problems. 4 lectures/problem-solving. Prerequisite: IBM 408.

***IBM 410 Marketing for Small Business Organizations (4) (formerly MKT 404)**

Methods by which a small business organization with limited resources can analyze the profit opportunities within its market area. Special emphasis on developing and evaluating a written marketing plan for a small business organization. 4 lectures/problem-solving. Prerequisite: IBM 301.

***IBM 411 Buyer Behavior (4)**

Various factors that affect the consumer during the pre-purchase, purchase, and post-purchase decision-making process. Emphasis upon a thorough understanding of the consumer to facilitate the development of effective marketing strategy. 4 lecture discussions. Prerequisite: IBM 301.

***IBM 414 International Marketing Management (4)**

Planning and organizing for international marketing operations. Distinctive characteristics, environmental influences, and emerging trends in overseas markets. Management practices and problems of adapting American marketing concepts and methods. 4 lecture discussions.. Prerequisite: IBM 301.

***IBM 415 Strategy in International Marketing (4)**

Alternative methods and strategies in the decision areas of product development, promotional programs, distribution channel determination, and pricing. Opportunities, key issues, and applications to ensure a firm's survival and success in the international arena. 4 lectures/problem-solving. Prerequisite: IBM 414.

***IBM 416 International Exporting (4)**

Principles, strategies, and mechanics of exporting to foreign nations. Political, legal, cultural, and economic environments affecting export operations. Corporate programs and policies, involvement levels, financing, pricing, promotion, and distribution strategies. Latin America, European Community, Pacific Rim specifics. Import trade mechanics. 4 lecture discussions. Prerequisite: IBM 414.

***IBM 421 Marketing Problems (4)**

Application of marketing theory to contemporary marketing problems. Emphasis on the techniques of successful marketing decision-making. A

problems approach to developing student's ability to integrate all major areas of marketing. 4 lectures/problem-solving. Prerequisites: IBM 408.

IBM/MHR 422 Policy for International Management (4)

Seminar in the application and development of policy for international business management. Analysis of international management practices and problems utilizing the case study approach. 4 seminars. Prerequisite: IBM 322 (MHR 322) or consent of instructor. (Also listed as MHR 422.)

***IBM 429 International Logistics (4)**

Integration of cultural, functional and strategic aspects of global logistics. Ocean, air and surface carriers and systems, international sourcing, financial aspects of sales and payments, roles of government and intermediaries, infrastructure issues. Logistics as a tool for integrative international operations. 4 lecture discussions. Prerequisite: IBM 301

***IBM 431 Management of Marketing Channels (4)**

Development, design, selection, and administration of marketing channel systems. Sources and resolution of channel conflicts. Channel relationships, communication, functional performance, and strategy planning. Analysis of selected case problems. 4 lecture discussions. Prerequisites: IBM 302.

***IBM 433 Evaluating Advertising Effectiveness (4)**

Development of criteria to analyze the strategic and creative elements of advertising campaigns. Application of criteria to judge effective versus ineffective advertising in all major media: magazine, newspaper, outdoor, radio, and television. Production of a 30-second television commercial. 4 lectures/problem-solving. Prerequisites: IBM 307, IBM 411.

***IBM 435 Advanced Professional Selling (4)**

Analysis of the sales representative as a professional marketing tactician in a market-oriented firm. Emphasis on applied and theoretical approaches utilized to effectively manage a sales territory. Analysis of sales representatives in different industries. 4 lectures/problem-solving.

***IBM 436 International Business Agreements and Negotiation (4)**

Integrating perspectives from various fields of study contributing to international agreements and the negotiating process. Exploring insights and applications related to business agreements, diplomacy, and negotiation of strategies in marketing/selling situations. 4 lectures/problem-solving. Prerequisite: IBM414.

IBM/TOM 437 International Business Cases: Operations (4)

Case studies in international operations management; manpower and work flow, production planning and control, operations management strategy, cultural considerations, and ethics. Use of computer software. 4 lectures/problem-solving. Prerequisites: TOM 301 (Also listed as TOM 437.)

***IBM 438 Competitive Marketing Simulation (4) - (Formerly MKT 437)**

Interactive computer marketing simulation designed to reflect business situations and provide practice in making managerial decisions in marketing strategy. Competitive approach requires development of marketing strategy, implementation of marketing tactics, and design of an advertising program. 4 lectures/problem-solving. Prerequisite: IBM 301.

***IBM 439 Supply Chain Management (4)**

Logistical operations integration, value-added customer services, supply chain relationships, logistical processes and resources, re-engineering

and systems design planning methodology and techniques. Organizational development, performance measurement and control will be discussed. Developing logistical strategies to supply chain management. 4 lectures/problem-solving. Prerequisite: IBM 309.

IBM 441, 442 Internship in Marketing (1-8) (1-8)

Faculty-supervised on-the-job educational experience in the real-world marketing management environment. Allocation of unit credit is dependent upon the nature of the work done, the level of responsibility, and the number of hours worked. Total internship credit limited to 16 units. Prerequisite: permission of departmental internship coordinator.

***IBM 443 Advertising Media Analysis and Planning (4)**

Principles and practices of advertising and media analysis and planning. Strengths and weaknesses of media alternatives, budgeting procedures, media-client planning, and buying interaction, negotiation with media sales personnel. 4 lectures/problem-solving. Prerequisites: STA 120 and IBM 307.

***IBM 447 Retailing Problems (4)**

Application of marketing theory to contemporary retailing problems. Identification of potential markets and development of effective research techniques in retail organizations. Integration of current marketing plans and strategies with the techniques of successful retail decision-making. 4 lectures/problem-solving. Prerequisite: IBM 308.

***IBM 449 Industrial Marketing Problems (4)**

Application of marketing theory to contemporary industrial/organizational marketing problems. Integration of the techniques of successful decision-making. 4 lectures/problem-solving. Prerequisite: IBM 407.

IBM/TOM 455 Just-In-Time Production (4)

Comparison of different production environments. Detailed coverage of successful techniques used in world class manufacturing: just-in-time, total quality management, total preventive maintenance, group technology, plant layout, and time and motion study. 4 lectures/problem-solving. Prerequisite: TOM 301, also listed as TOM 455.

IBM 461, 462 Senior Project (2) (2)

Selection and completion of a project under faculty supervision. Projects typical of problems which graduates must solve in their fields of employment. Formal report is required. Prerequisite: senior standing. Required minimum of 120 hours. Non-Marketing majors only.

***IBM 463 Undergraduate Seminar (2)**

Development and refinement of skills and strategies necessary to obtain and enhance employment. Student presentation and discussion of problems and opportunities pertinent to career growth and success as related to personal and family life. 2 meetings. Prerequisite: senior standing.

***IBM 499/499A/499L Special Topics for Upper Division Students (1-4)**

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.

For a complete list of remaining courses in the International Business concentration, please refer to the catalog listings under the appropriate departments.

MANAGEMENT AND HUMAN RESOURCES

Shanthi Srinivas, Chair

Stanley C. Abraham	Christian F. Poulson, II
Robert W. Allen	William B. Relf
Jeanne A. Almaraz	Percy G. "Jerry" Rogers
James C. Bassett	R. Richard Sabo
Deborah V. Brazeal	Shiori Sakamoto
Lady A. Hanson	Nirmal K. Sethia
Kathleen Harcharik	Mansour Sharifzadeh
Stephen C. Iman	Lynn H. Turner
Carol L. Jones	Gail R. Waters
Sandra W. King	Warren C. Weber
LianLian Lin	Cheryl R. Wyrick
Thomas H. Patten, Jr.	

MISSION STATEMENT

The department's mission is consonant with and supportive of the College of Business Administration mission statement. With its special emphases on teaching undergraduates and focusing on applied research and instructional development, the MHR Department also seeks prominence within domestic and international communities in teaching and life-long learning.

The teaching strengths of the department's faculty, which are embedded in the courses, include the capacity for critical thinking, skills for working with people, ability to respond creatively to changes, making ethical choices, managing diversity, strategic management, and applying the theories and concepts learned to design practical and innovative solutions. These strengths address leading-edge knowledge and education.

This option provides students with a sound background in general management and the opportunity for emphasis in one of several areas: general management, entrepreneurship and small business management, human resources management, and not-for-profit management.

Department advisors strive to provide programs that meet the educational needs of students who have the following career goals:

1. General manager in a private or public organization of any size.
2. Manager of a small or medium-sized business. (This program is designed specifically for people who plan to own and operate their own businesses.)
3. Human resources or personnel manager in a private or public organization.
4. Manager of a not-for-profit organization.

All department programs are designed to provide maximum flexibility in selecting an area of specialty. For example, a freshman can pursue the department curriculum for two years before making a career goal decision. In fact, after two years of study, the student can change to any of the business administration options without loss of academic credits. It is important that students entering Cal Poly Pomona for the first time seek the help of an advisor to ensure that their individual programs are in their own best interest.

Students interested in fulfilling California State credential requirements for secondary school teachers of business subjects must also coordinate their curriculum with a College of Education advisor.

MICROCOMPUTER PROFICIENCY REQUIREMENT (see policy statement in College of Business Administration introductory section)

CORE COURSES FOR MAJOR

Required of all business majors. A 2.0 cumulative GPA is required in core courses including concentration courses for the major in order to receive a degree in the major.

Statistics with Applications	STA	120	(4)
Principles of Economics	EC	201	(4)
Principles of Economics	EC	202	(4)
Legal Environment of Business Transactions	FRL	201	(4)
Financial Accounting for Decision-Making	ACC	207	(5)
Managerial Accounting for Decision-Making	ACC	208	(5)
Principles of Management	MHR	301	(4)
Principles of Marketing Management	IBM	301	(4)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)
Management Information Systems	CIS	310	(4)
Operations Management	TOM	301	(4)
Managerial Statistics	TOM	302	(4)
Strategic Management	MHR	410	(4)
or Strategic Management	TOM	411	

MHR REQUIRED COURSES

Entrepreneurship and Intrapreneurship	MHR	306	(4)
Human Resources Management	MHR	311	(4)
Multicultural Organizational Behavior	MHR	318	(4)
Communication for Management	MHR	324	(4)
Emerging Issues in Management	MHR	452	(4)

Select four (4) units from:

Internship in Business Management	MHR	441-2	(1-4)
OR Senior Project	MHR	461-2	(2+2)

OTHER COURSES TO COMPLETE OPTION

One career-goal elective program selected with approval of advisor. (32)

SUPPORT COURSES

The number of restricted elective units depends on whether or not STA 120 and EC 201 or EC 202 are used for General Education (see curriculum sheet for the option). If STA 120 is used for General Education, Restricted Electives or Unrestricted Electives will be increased by four units. If EC 201 or EC 202 is used for General Education, Restricted Electives or Unrestricted Electives will be increased by four units.

Non-Business courses in support of career-goal restricted elective program, selected with approval of advisor. Cannot include courses in Business, Economics, Statistics or PLS 314, PLS318 (14-18)

GENERAL EDUCATION COURSES

(Required of all students)

A total of 72 quarter units of General Education courses are required for all majors in the College of Business Administration. See the list of approved courses under General Education Requirements in this catalog.

Areas 1 through 4

Select courses from approved list. (64)

Area 5

Select two courses from approved list cannot include courses in Business, Economics, Statistics, or PLS 318. (8)

MINORS IN MANAGEMENT AND HUMAN RESOURCES

The Management and Human Resources Department offers the following minors. The purpose of these minors is to develop marketable skills in one's chosen field. Also, those students majoring in fields such as engineering or science may wish to develop adjunct skills that may prove to be complementary to their major course of study. Please see the Minors Coordinator, Management and Human Resources Department, if you are interested in enrolling in one of these minors. Students should formally enroll in the minor before taking any courses in the minor. See Department Chair for details.

MINOR IN GENERAL MANAGEMENT

This minor provides non-MHR students with an orientation to management in organizations. Students must complete required courses before taking electives.

Required Courses (21 units)

Financial Accounting for Decision-Making	ACC	207	(5)
Principles of Management	MHR	301	(4)
Multicultural Organizational Behavior	MHR	318	(4)
Introduction to International Business	MHR	322	(4)
Leadership	MHR	450	(4)

Electives—Select one course (4 units) from the following:

New Venture Creation	MHR	306	(4)
First-line Management	MHR	313	(4)
Management for Non-for-Profit Organizations	MHR	319	(4)
Communication for Management	MHR	324	(4)
Training and Development	MHR	405	(4)
Strategies for Men and Women in Management	MHR	406	(4)
Managing Career Development	MHR	412	(4)
Advanced Organizational Behavior	MHR	438	(4)
Emerging Issues in Management	MHR	452	(4)

MINOR IN HUMAN RESOURCES MANAGEMENT

This minor provides non-MHR students with an opportunity to develop their capability to manage other employees and provides introductory background in the human resource/personnel field. Students must complete required courses before taking electives.

Required Courses (20 units):

Human Resources Management	MHR	311	(4)
Staffing-Planning, Recruiting & Selection	MHR	411	(4)
Employee Compensation Plans	MHR	413	(4)
Management Union Relations	MHR	421	(4)
Employee Benefits and Services	MHR	416	(4)

Electives--Select one course (4 units) from the following:

Principles of Management	MHR	301	(4)
Organizational Behavior	MHR	318	(4)
Training and Development	MHR	405	(4)
Strategies for Men and Women in Management	MHR	406	(4)
Managing Career Development	MHR	412	(4)
Human Resources Information Mgmt	MHR	415	(4)
Emerging Issues in Management	MHR	452	(4)

MINOR IN ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT

This minor is to provide non-MHR students with an introductory background needed to start and operate a small business. Students must complete required courses before proceeding to take electives.

Required Courses (20 units):

New Venture Creation	MHR	306	(4)
Entrepreneur and Business Growth	MHR	308	(4)
Entrepreneurial Strategies	MHR	408	(4)
Entrepreneurship in a Changing Society	MHR	414	(4)
Creativity and Innovation	MHR	426	(4)

and any three courses (12 Units) from the following:

Electives--Select one course (4 units) from the following:

Real Estate Principles	FRL	106	(4)
Legal Environment of Business Transactions	FRL	201	(4)
Professional Selling	IBM	208	(4)
Principles of Marketing Management	IBM	301	(4)
Marketing for Small Business Organizations	IBM	410	(4)
Principles of Management	MHR	301	(4)
Organizational Behavior	MHR	318	(4)
Management for Not-for-profit Organizations	MHR	319	(4)
Introduction to International Business	MHR	322	(4)
Advanced Organizational Behavior	MHR	438	(4)
Leadership	MHR	450	(4)
Special Topics: Web-Based Small Business	MHR	499	(4)
Financial Accounting for Decision-Making	ACC	207	(5)
Managerial Accounting for Decision-Making II	ACC	208	(5)

COURSE DESCRIPTIONS

MHR 200 Special Study for Lower Division Students (1-2)

Individual or group investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

MHR 299/299A/299L Special Topics for Lower Division Students (1-4)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.

MHR 301 Principles of Management (4)

Survey of the history of management and review of significant management literature. Practical applications of management theories to problems in planning, organizing, and controlling business activity. Ethical considerations. 4 lecture discussions.

MHR 306 New Venture Creation (4)

New venture creation and entrepreneurship as viable career options. Entrepreneurial management in emergent companies. Ethics and value-based corporate cultures. Learning to be entrepreneurial and start a business. Recognizing and developing business ideas and opportunities. Creating a business plan. 4 lecture presentations.

MHR 308 Entrepreneur and Business Growth (4)

Managerial philosophies and capabilities needed for rapidly developing a business. Identifying the growth industries of the nineties, with special attention to the Southern California economy. Finding and developing new products and services. Managing the problems of growing companies. 4 lecture presentations.

MHR 311 Human Resources Management (4)

Establishment of human resources objectives and requirements in the organization. Recruiting, testing, interviewing, screening, and selection of employees. Employee counseling, training, development, promotion, recreation, insurance, and retirement programs. Case studies. 4 lecture discussions. Prerequisite: MHR 301.

MHR 313 First-line Management (4)

Analysis of the unique position of the supervisor in complex organizations; the application of theory and practice in solving problems and ethical considerations at the first level of management. 4 lectures/problem-solving.

MHR 318 Multicultural Organizational Behavior (4)

Introductory experiences in the basics of organizational behavior. Organizational socialization, teamwork leadership, group dynamics, problem-solving, and ethics as they apply to the manager in a multi-cultural economic and political environment. 4 lecture discussions. Prerequisite: upper division standing.

MHR 319 Management of Not-for-Profit Organizations (4)

Methods, theory, and institutional knowledge for managing not-for-profit organizations. Problems and issues in policy, organization, program, personnel, and budget unique to not-for-profit organizations. 4 lecture discussions. Prerequisite: MHR 318.

MHR 322 Introduction to International Business (4)

Introduction to international business and foreign investment. Survey of cultural, political, social, and economic aspects of doing business abroad. Theories of international trade and economic development. 4 lecture discussions. (Also listed as IBM 322.)

MHR 324 Communication for Management (4)

Basic communications objectives of organizations. Types of communication used for decision-making, their nature, capabilities, and limitations. Using computers for communications. Practice in improving written communications, using the approved style manual. Presentations. 4 lectures/problem-solving. Prerequisite: ENG 104 and microcomputer proficiency Level 1.

MHR 325 Advanced Communication for Management (4)

Advanced communications applications for managers. Practice in writing situational letters/reports. Conducting meetings and conferences. Interpersonal techniques of listening, interviewing. Advanced use of computers for presentations. Case studies. Employee and media interviews. Multicultural and ethical considerations. Research methods. 4 lectures/problem-solving. Prerequisite: MHR 324

MHR 332 Assessing International Business Environments (4)

Analysis of cultural, political, social, and economic aspects of doing business abroad. Study and application of risk-versus-opportunity analysis of countries, investments, projects, and trade. Case studies, student research projects, and presentations. 4 lectures/problem-solving. Prerequisite: MHR 322, also listed as IBM 332.

MHR 400 Special Study for Upper Division Students (1-2)

Individual or group investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

MHR 405 Training and Development (4)

Theory and applications of employee training and development. How rapid changes in technology, market conditions, and business practices make training a growing management function. Determining training needs, selecting methods, planning programs, and evaluating results. 4 lectures/problem-solving.

MHR 406 Men, Women, and Management (4)

Attitudes regarding male/female roles in management positions discussed in seminar and small group format. Current literature, popular and scholarly, reviewed and evaluated. Three short papers required on current issues. 4 seminars.

MHR 408 Entrepreneurial Strategies (4)

Unique strategies of the entrepreneur in mid-sized venture companies. Structuring venture deals, spin-offs, turnaround or "starting anew," valuation, merger-acquisition criteria, the search and acquisition processes, negotiation, business consolidation, and cash-flow management. 4 lectures/problem-solving.

MHR 409 Business Education Management (4)

Methods and techniques for stimulating enthusiasm for learning in teaching business courses. Course and lesson design, and presentations for office education courses in keyboarding, word processing, computer applications, etc. Preparation for becoming professional business educators. 4 lectures/problem-solving.

MHR 410 Strategic Management (4)

Seminar in strategy formulation and implementation. A capstone experience integrating all business functions and requiring evaluation of strategic outcomes from ethical as well as economic viewpoints. Consideration of Total Quality Management. Case and computer simulation analysis. 4 seminars. Prerequisite: completion of College of Business Administration core.

MHR 411 Human Resources Staffing, Planning, Recruiting and Selection

Theory and practical applications in organizational planning, recruiting and selection processes and systems used in staffing organizations. This course will cover multiple tools, techniques and activities important to matching organizational human resources requirements and specifications with applicant abilities and motivations. 4 lecture presentations. Prerequisites: MHR 311.

MHR 412 Managing Career Development (4)

Career development issues such as the assessment of potential career tracks, transition from academia, career strategies and obstacles, personal and organizational value conflicts, dual career marriage and the price of success. 4 lecture presentations. Prerequisites: MHR 318

MHR 413 Employee Compensation Plans (4)

The goals and external/internal organizational considerations that affect planning and administering compensation in organizations. Evaluation of race and sex discrimination in pay, and comparable job worth. Job evaluation, performance appraisal systems, and gainsharing. 4 lecture presentations. Prerequisite: MHR 311.

MHR 414 Entrepreneurship in a Changing Society (4)

The unique position of the entrepreneur with regard to government regulation, economics, politics, the environment, and other external

forces. Anticipating changes in such regulations and policies and spotting the entrepreneurial opportunities and niches that are inevitably created. 4 lectures/problem-solving.

MHR 415 Human Resource Information Management (4)

Emerging approaches to the management of human resources information in hiring, compensation/benefits, skills inventory, employee records, and training. Automated and manual systems compared. Student presentations on proposed and operational human resource information systems. Microcomputer exercises and 4 lectures/problem-solving. Prerequisite: MHR 311.

MHR 416 Employee Benefits and Services (4)

In-depth examination of policy and design of important economic security plans for protecting employees against on-the-job accidents; prepayment, health maintenance, and preferred provider coverages; structure and implementation of pre-retirement and retirement plans administered by human resource managers. 4 lecture presentations. Prerequisite: MHR 311.

MHR 417 Total Quality Management Implementation

Implementing continuous improvement of processes and systems in organizations. Strategies for developing management and employee commitment to involvement. Developing and maintaining team-based improvement efforts. Case studies, small group projects, and presentations. 4 lectures/problem-solving. Prerequisite: TOM 401.

MHR 421 Management Union Relations (4)

Development of management-union relations in the United States: the continuously changing roles and relationships of labor, management, and government through collective bargaining, arbitration, and legislation. Review of trends affecting productivity and the labor force. 4 lecture discussions. Prerequisite: senior standing.

MHR 422 Policy for International Management (4)

Seminar in the application and development of policy for international business management. Analysis of international management practices and problems using the case study approach. 4 seminars. Prerequisite: MHR 322, also listed as IBM 422.

MHR 426 Creativity and Innovation (4)

Exploring and increasing creativity and innovation in individuals and in groups. Managing technology and research. The role of creativity and innovation in entrepreneurial, growth, and high-tech organizations. Organizational structures/cultures as inhibitors and facilitators of innovation. 4 seminars. Prerequisite: junior standing.

MHR 438 Advanced Organizational Behavior (4)

Application of human processes used to achieve goals in the organization. Group experiences whereby students gain insights into their own leadership styles, integrate their styles with managerial functions and the organization. Case studies, problem-solving exercises, and complex organizational simulations. 4 lectures/problem-solving. Prerequisite: MHR 318.

MHR 441, 442 Internship in Business Management (1-8) (1-8)

On-the-job training in business management involving new, collegiate-level learning experiences. Experiences as possible basis for senior projects. Prerequisite: consent of internship coordinator.

MHR 450 Leadership

Experiences and discussions involving the complexity of leadership. A study and survey of the history and progression of leadership research for gaining awareness of the challenges of leadership. A non-traditional approach to learning leadership concepts by simulating actual experiences. 4 lecture discussions.

MHR 452 Emerging Issues in Management (4)

Exploration of contemporary issues; cases and problems facing management in multicultural and international environments. Examination of the environment of business in a global economy with specific emphasis on business-government relations, ethics, and managing for the future. 4 lecture presentations. Prerequisite: senior standing.

MHR 461, 462 Senior Project (2) (2)

Selection and completion of a project under faculty supervision. Projects typical of problems which graduates must solve in their fields of employment. Formal report required. Prerequisite: senior standing. Required minimum of 135 hours.

MHR 499/499A/499L Special Topics for Upper Division Students (1-4)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: consent of instructor.

TECHNOLOGY AND OPERATIONS MANAGEMENT

Charles E. Pinkus, Chair

Henry C. Co	Mei Qi
William J. Cosgrove	P. Rama Ramalingam
Abolhassan Halati	Rhonda L. Rhodes
John E. Knox	Leonard E. Ross
Joyce I. Kupsh	James M. Salvate
Ralph H. Miller	

The operations function of a business is responsible for planning, coordinating, and supervising the production and distribution of the services and goods provided by the organization. The student in the Technology and Operations Management option will learn the concepts and skills needed to manage the operations function and to help business achieve continuous improvement in productivity and in the quality of services and goods produced.

MISSION STATEMENT

The Technology and Operations Management Department aims to provide an education to its students that will enable them to become successful managers in the business world of the 21st century. Through its curriculum, the department concentrates on helping students develop competencies in critical thinking, technical and business integration skills.

To prepare students for managerial positions in the 21st century, the department focuses on the role of technology and scientific management methods. Heavy emphasis is placed on the study of computer applications for helping managers plan, analyze information, make decisions, and communicate.

SPECIALIZATIONS

The option prepares the graduate for careers managing service and manufacturing operations in small and large companies, national and international businesses, not-for-profit institutions, and government. Students in the Technology and Operations Management option are provided a broad background to the field, after which they choose one of the following areas of specialization:

Production Operations Management

The Production Operations Management area of emphasis focuses on manufacturing operations, although many of the skills learned are applicable in a non-manufacturing environment. The production function of an organization includes a number of career specialties such as: production planning and control, purchasing, materials management, inventory control, project and program management, quality management, facilities design and layout, work methods improvement, production systems analysis, the scheduling of production processes, and the delivery of goods and services.

Service Operations Management

The Service Operations Management area of emphasis focuses on the improvement of service (non-manufacturing) organizations through the understanding of business strategies, processes, technology, and change. The subjects which make up the core of this area are: operations analysis and problem-definition, computer-aided decision-making, project management, quality management, forecasting, capacity planning, and scheduling. Heavy emphasis is placed on the design, presentation, and communication of information using the computer. Through careful selection of electives, this area of emphasis allows the student to combine the study of service operations with a sub-specialization in another area, such as facilities management, financial management, logistics, management science, marketing, production management, project management, small business management, and telecommunications.

Management of Technology

The Management of Technology area of emphasis focuses on the planning, development, and implementation of technological capabilities. Coursework in this area will provide students with an integrated view of the principal aspects of technology management. Students will gain knowledge and skills in the following core areas: identification and evaluation of technological operations, implementation of new technologies, management of information technology, management of collaborative research, and management of technology-transfer activities.

There are elective courses within each of these specializations. A department advisor will help students choose electives that are compatible with their career interests.

The department sponsors student chapters of the American Production and Inventory Control Society, the American Society for Quality, and the International Facilities Management Association. Students are encouraged to join these organizations to learn more about the practice of technology and operations management.

MICROCOMPUTER PROFICIENCY REQUIREMENT (see policy statement in College of Business Administration introductory section)

CORE COURSES FOR MAJOR

Required of all business majors. A 2.0 cumulative GPA is required in core courses including concentration courses for the major in order to receive a degree in the major.

Statistics with Applications	STA	120	(4)
Principles of Economics	EC	201	(4)
Principles of Economics	EC	202	(4)
Legal Environment of Business Transactions	FRL	201	(4)
Financial Accounting for Decision-Making	ACC	207	(5)
Managerial Accounting for Decision-Making	ACC	208	(5)
Principles of Management	MHR	301	(4)
Principles of Marketing Management	IBM	301	(4)
Managerial Finance I	FRL	300	(3)
Managerial Finance II	FRL	301	(3)
Management Information Systems	CIS	310	(4)
Operations Management	TOM	301	(4)
Managerial Statistics	TOM	302	(4)
Strategic Management	MHR	410	(4)
or Strategic Management	TOM	411	

TECHNOLOGY AND OPERATIONS MANAGEMENT COURSES

Required of all Technology and Operations Management students:

Management Science	TOM	315	(4)
Production Management	TOM	332	(4)
Project Design and Development	TOM	460	(4)
Undergraduate Seminar	TOM	463	(2)
Senior Project	TOM	461/462	(2/2)

Specialization Electives

A minimum of nine courses (36 units) are to be selected from the TOM courses listed below. The requirements depend upon the specialization chosen.

The list of approved courses may be obtained from a Technology and Operations Management Department advisor. Upper-division courses from other departments may be selected with the approval of an advisor.

Information Design and Presentation	TOM	310	(4)
Management of Technology	TOM	320	(4)
Telecommunications and Office Automation	TOM	340	(4)
Decision Support and Expert Systems	TOM	350	(4)

Advanced Managerial Statistics	TOM	380	(4)
Total Quality Management	TOM	401	(4)
Forecasting Methods for Management	TOM	415	(4)
Multivariate Business Analysis	TOM	416	(4)
Applied Resource Allocation	TOM	417	(4)
Simulation of Service Operations	TOM	419	(4)
Operations Technologies and Strategies	TOM	420	(4)
Material Requirements Planning	TOM	430	(4)
Production Management	TOM	432	(4)
Materials Management	TOM	433	(4)
Purchasing Management	TOM	434	(4)
Quality Management	TOM	435	(4)
Project Management	TOM	436	(4)
International Business Cases: Operations	TOM	437	(4)
Internship in Operations Management	TOM	441/2	(1-8)
Facilities Planning for Managers	TOM	450	(4)
Operations Management in Services	TOM	453	(4)
Just-in Time Production	TOM	455	(4)

SUPPORT AND ELECTIVE COURSES

The number of restricted elective units depends on whether or not STA 120 and EC 201 or EC 202 are used for General Education (see curriculum sheet for the option). If STA 120 is used for General Education, Restricted Electives will be increased by four units. If EC 201 or EC 202 is used for General Education, Restricted Electives will be increased by four units.

Restricted electives, (cannot include courses in Business, Economics, Statistics, PLS 314, or PLS 318) (16-24)
 Unrestricted electives. (4)

GENERAL EDUCATION COURSES

(Required of all students)

A total of 72 quarter units of General Education courses are required for all majors in the College of Business Administration. See the list of approved courses under General Education requirements in this catalog.

Areas 1 through 4

Select courses from approved list. (64)

Area 5

Multicultural Organizational Behavior MHR 318 (4)
 Select one upper division course from approved list
 (cannot include courses in Business, Economics,
 Statistics, or PLS 318). (4)

SPECIAL POLICIES

Operations Management students are strongly encouraged to complete STA 120 by the end of their sophomore year and to complete TOM 301 and TOM 302 by the end of the first quarter of their junior year because one or more of these courses are prerequisite to each of the department's required or specialization courses.

MINORS

OPERATIONS MANAGEMENT MINOR

The Operations Management Minor was developed to allow other Business Administration students or students majoring in non-business programs to gain the knowledge and skills necessary to effectively use operations management techniques in both manufacturing and service organizations. This program of study should enhance the employment opportunities for students, as well as improve their productivity and career growth potential.

Requirements

Prerequisites (12 units)

Elementary Statistics With Applications	STA	120	(4)
Operations Management	TOM	301	(4)
Managerial Statistics	TOM	302	(4)
Core Requirements			(16 units)

Production Management	TOM	332	(4)
Total Quality Management	TOM	401	(4)
Material Requirements Planning	TOM	430	(4)
Operations Management in Services	TOM	453	(4)

Directed Electives (8 units) (Select 2 Courses):

Production Management	TOM	432	(4)
Materials Management	TOM	433	(4)
Purchasing Management	TOM	434	(4)
Project Management	TOM	436	(4)
Just in Time Production Techniques	TOM	455	(4)
Total Core and Elective Units Required			24

QUANTITATIVE RESEARCH MINOR

The Quantitative Research Minor is an interdisciplinary program which can be taken by students majoring in any field other than Mathematics. Its purpose is to prepare students to conduct quantitative analyses in their chosen discipline. Students acquire practical experience using statistics, principles of experimental design, survey and data analysis techniques. This minor is particularly suited for students in the Technology and Operations Management option. A full description of this minor is included in the "University Programs" section of this catalog.

TOTAL QUALITY MANAGEMENT MINOR

The Total Quality Management (TQM) Minor may be taken by students having any major in the University. It is particularly appropriate for students in Technology and Operations Management. The minor is intended to allow students to gain the knowledge and skills necessary for effective application of quality management techniques in manufacturing, service, and not-for-profit organizations. The Total Quality Management Minor will help fill the need for graduates, especially from business and engineering, who are trained in the concepts, techniques, tools, and methods of analysis used for the continuous improvement of products and services. Computer-based approaches are used wherever they are available and appropriate. A full description of this minor is included in the "University Programs" section of this catalog.

COURSE DESCRIPTIONS

TOM 103 Business and Its Environment (4) (formerly OM 103)

American business system in its economic, social, political, national, and international environment. Coverage of the major activities of business and the key institutions influencing its service to society. Participation in a computerized competitive business simulation. 4 lectures/problem-solving. Prerequisite: passing score on ELM and a score on EPT to qualify for ENG 104.

TOM 200 Special Study for Lower Division Students (1-4) (formerly OM 200)

Individual or group investigation, research, studies, or surveys of selected problems. A variable number of units, from 1 to 4, is allowed in any quarter. Maximum total credit is limited to 4 units.

TOM 299 Special Topics for Lower Division Students (1-4) (formerly OM 299)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.

TOM 301 Operations Management (4) (formerly OM 301 and OM 331)

Fundamental concepts of operations management including: productivity, total quality management (TQM), production planning, forecasting, just-in-time systems, inventory management, scheduling, purchasing and project management. Computer applications in operations management. 4 lectures/problem-solving. Prerequisite: STA 120 or equivalent, and microcomputer proficiency.

TOM 302 Managerial Statistics (4) (formerly OM 302 and OM 314)

Statistical techniques for auditing, analyzing surveys, market analysis, forecasting and risk analysis, using point and confidence interval estimation, one- and two-sample hypothesis testing, Chi square testing, simple and multiple regression, time series analysis, and decision analysis. Use of microcomputers. 4 lectures/problem-solving. Prerequisite: STA 120 or equivalent, and microcomputer proficiency.

TOM 310 Information Design and Presentation (4) (formerly OM 310)

Design and presentation of business information used in decision-making. Using current technology to develop dynamic messages for oral presentations and written reports. Planning, strategy, display diagrams, graphs, designing visuals, color, meeting environment, delivering with confidence, and conducting meetings. 4 lectures/problem-solving. Prerequisite: microcomputer proficiency.

TOM 315 Management Science (4) (formerly OM 315)

Introduction to deterministic and stochastic quantitative decision analysis, modeling, and problem-solving. Model formulation, graphical and computer solutions, sensitivity analysis, and applications of: linear programming, integer linear programming, networks, and simulation. 4 lectures/problem-solving. Prerequisite: STA 120 or equivalent, and microcomputer proficiency.

TOM 320 Management of Technology (4)

The planning, development, and implementation of technological capabilities to shape and accomplish the strategic and operational objectives of a business organization. Topics of study include: dimensions, life cycle, and diffusion of technology; technological forecasting and environmental monitoring, role of technology in strategic management; managing change, assessment, justification, and financing new technology; and management of new technology-based firms. 4 lectures/problem-solving. Prerequisite: MHR 301.

TOM 332 Production Management (4) (formerly OM 332)

Application of quantitative methods to problems in production and operations management, including facility location, design of operations and work systems, job simplification, queuing systems, scheduling, motion and time study. 4 lectures/problem-solving. Prerequisite: TOM 301, or concurrent enrollment in TOM 301.

TOM 340 Telecommunications and Office Automation (4) (formerly OM 340)

Telecommunications in automated office systems. Decision-making in the operations management environment by processing text, data, image, or voice communication. Electronic mail, databases, teleconferencing, facsimile, voice message systems, intelligent copiers, and related areas. Classroom applications involving communication by means of quantitative and qualitative electronic reports. 4 lectures/problem-solving. Prerequisite: TOM 310.

TOM 350 Decision Support and Expert Systems (4) (formerly OM 350)

Computer-based information systems for semi-structured business problems; database, dialogue management, and model-base subsystems; design and implementation of decision support and expert systems; introduction to artificial intelligence and expert systems. 4 lectures/problem-solving. Prerequisite: microcomputer proficiency.

TOM 380 Advanced Managerial Statistics (4) (formerly OM 380)

Application of advanced statistical methods for business problems. Parametric analysis and inference including one- and two-way analysis of variance, post hoc comparisons, multiple regression, dummy variables. Nonparametric techniques, including one-, two-, and three-way chi square. Use of computers. 4 lectures/problem-solving. Prerequisite: TOM 302.

TOM 400 Special Study for Upper Division Students (1-4) (formerly OM 400)

Individual or group research, studies, or surveys, of selected problems. A variable number of units from one to four is allowed in any quarter. Maximum total credit is limited to 4 units.

TOM 401 Total Quality Management (4) (formerly OM 401)

The TQM process, its planning, and implementation. Theories of leading TQM proponents. TQM tools and methods including concurrent engineering, benchmarking, quality function deployment, and statistical process control. Development and implementation of the improvement process. Use of computers. 4 lectures/problem-solving. Prerequisite: STA 120, or STA 309, or equivalent, and microcomputer proficiency.

TOM 411 Strategic Management (4) (formerly OM 411)

Simulated experience in integration of the business functions utilizing computer-based management games; develops concepts of management strategy and policy for competitive excellence and ethical operations; total quality management. Cases in management strategy. Analytical techniques as applied to business cases. 4 seminars. Prerequisite: completion of College of Business Administration core requirements.

TOM 415 Forecasting Methods for Management (4) (formerly OM 415)

Analysis of time series data. Forecasts for use in business decisions. Smoothing, decomposition, multiple regression, Box-Jenkins, autocorrelation, moving average, autoregression, ARMA, and ARIMA methods. Comparison and selection of suitable forecasting methods for a given application. Use of computer packages. 4 lectures/problem-solving. Prerequisite: TOM 302.

TOM 416 Multivariate Business Analysis (4) (formerly OM 416)

Application of multivariate statistical methods to problems in business. Advanced techniques of analysis and inference including multiple regression, multiple discriminant analysis, multivariate analysis of variance, canonical correlation analysis, factor analysis. Use of computer packages. 4 lectures/problem-solving. Prerequisite: TOM 380.

TOM 417 Applied Resource Allocation (4) (formerly OM 417)

Resource allocation and planning models. Applications of linear and nonlinear programming models. Sensitivity analysis, goal programming, integer programming, dynamic programming, parametric programming, quadratic programming. Use of mathematical programming computer software. Applications of models to case studies. 4 lectures/problem-solving. Prerequisite: TOM 315.

TOM 419 Simulation of Service Operations (4) (formerly OM 419)

Computer simulation of service operations, Monte Carlo method, probabilistic simulation modeling, random number generation, model calibration and

validation, output analysis, simulation software languages. 4 lectures/problem-solving. Prerequisite: TOM 302.

TOM 420 Operations Technologies and Strategies (4)

Introduction to innovative use of information and technology in operations management. Operation strategies, managing high technology and innovation, mapping high technology operations environment to business setting, and information technology for integrated enterprise. 4 lectures/problem-solving. Prerequisite: TOM 301.

TOM 430 Material Requirements Planning (4) (formerly OM 430)

Concepts of material requirements planning. Elements, processing logic, lot sizing and updating the system. System records and files, product definition, interfaces, implementation, and operating considerations. Case studies. 4 lectures/problem-solving. Prerequisite: TOM 301.

TOM 432 Production Management (4) (formerly OM 432)

Management of production systems. Techniques of master production scheduling, short- and medium-range planning, aggregate inventory management, distribution resource planning, production activity control, scheduling and sequencing, shop floor control. Priority and input-output control. 4 lectures/problem-solving. Prerequisite: TOM 301.

TOM 433 Materials Management (4) (formerly OM 433)

Materials management in manufacturing and service organizations. Demand forecasting, deterministic and probabilistic inventory systems; Distribution Requirements Planning for multi-level inventory systems; in-process inventory management and inventory simulation. 4 lectures/problem-solving. Prerequisite: TOM 301 and TOM 302.

TOM 434 Purchasing Management (4) (formerly OM 434)

Examines activities directed to securing the materials, supplies, equipment and services required for the proper and efficient functioning of a business, including related planning and policy issues. 4 lectures/problem-solving. Prerequisite: TOM 301.

TOM 435 Quality Management (4) (formerly OM 435)

Organization and economics of the quality assurance function. Analysis of quality management and technical systems. Quantitative techniques of reliability, statistical process control and acceptance sampling for quality control. 4 lectures/problem-solving. Prerequisite: TOM 301 and TOM 302.

TOM 436 Project Management (4) (formerly OM 436)

Study of CPM (critical path method), PERT (program evaluation and review technique) and other techniques for planning sequences of responsibilities to accomplish complex projects. Monitoring allocation of resources within rigid time and cost constraints. Use of computers. 4 lectures/problem-solving. Prerequisite: TOM 301.

TOM 437 International Business Cases: Operations (4) (formerly OM 437)

Case studies in multinational operations management. Manpower and work flow, production planning and control, operations management strategy, cultural considerations and ethics. Use of computer software. 4 lectures/problem-solving. Prerequisite: TOM 301. (Also listed as IBM 437.)

TOM 441, 442 Internship in Operations Management (1-8) (formerly OM 441, 442)

On-the-job training in business management involving new, collegiate-level learning experiences. Experiences may be useful as a basis for senior projects. A maximum of 8 units may be applied to the 44 unit directed elective

requirement. Total credit limited to 8 units each course. Prerequisite: consent of internship coordinator.

TOM 450 Facilities Planning for Managers (4) (formerly OM 450)

Principles and methods of facilities planning as applied to the selection and location of facilities, equipment, and work stations. Includes both industrial and service applications. 4 lectures/problem-solving.

TOM 453 Operations Management in Services (4) (formerly OM 453)

Introduction to fundamental concepts of operations management in services. Design and scheduling of personnel activities. Service location problems. Vehicle scheduling and routing. Utilization of service capacity. Quality control in service operations. Management information systems. 4 lectures/problem-solving. Prerequisite: TOM 301.

TOM 455 Just-In-Time Production (4) (formerly OM 455)

Comparison of different production environments. Detailed coverage of successful techniques used in world-class manufacturing: Just-in-time, total quality management, total preventive maintenance, group technology, plant layout, and time and motion study. 4 lectures/problem-solving. Prerequisite: TOM 301. (Also listed as IBM 455.)

TOM 460 Project Design and Development (4) (formerly OM 460)

Problem solving in a business environment. Problem identification and selection. Preparation of project proposals, including problem statement, data collection procedures, selection of analysis techniques. Types of projects (laboratory, field, survey, ex post facto). Ethical issues. Presentation of summary proposals. 4 seminars. Prerequisites: TOM 301, TOM 302, and a minimum of one OM directed elective.

TOM 461, 462 Senior Project (2) (2) (formerly OM 461, 462)

Selection and completion of a project under faculty supervision. Projects typical of problems which graduates must solve in their fields of employment. Formal report is required. Required minimum of 120 hours. Prerequisite: senior standing.

TOM 463 Undergraduate Seminar (2) (formerly OM 463)

Study and discussion by students of recent developments in the students' major field; presentation of senior project status reports. 2 seminars. Prerequisite: TOM 460 and co-registration in TOM 461 and 462.

TOM 499/499A/499L Special Topics for Upper Division Students (1-4) (formerly OM 499/499A/499L)

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor.