

VII School of Business Administration

Sam Gould, Dean

Charles E. Wells, Associate Dean for Academic Affairs

Mary Beth DeConinck, Assistant Director, Undergraduate Program

Carol M. Haenel, Assistant Dean for Administration

OUR MISSION

We are a learning community, committed in the Marianist tradition, to educating the whole person and to connecting learning, scholarship, leadership and service within an innovative business curriculum designed to address the characteristics of the contemporary business climate.

AN OVERVIEW OF OUR CURRICULUM

The School of Business Administration seeks to develop people and knowledge which make a difference in business and society. Our mission is to create outstanding value for our stakeholders by providing high quality educational programs, that deliver the best in business thinking and practice, embody the Catholic/Marianist educational tradition and prepare well-rounded graduates for successful business careers and further education.

The undergraduate curriculum has three distinct emphases: a foundation in the liberal arts, a firm grounding in the common body of business knowledge, and specialization in a business major. Supplemented with opportunities for enrichment, the curriculum stimulates critical thinking, enhances communication skills, integrates and synthesizes knowledge, and fosters ethical decision-making and moral leadership. It is built upon the enduring and fundamental bases of knowledge that can prepare students for careers in the complex global economy of the 21st century.

ADMISSION TO THE SCHOOL OF BUSINESS ADMINISTRATION

The minimum requirements for admission to the School of Business Administration are the following:

- Graduation from an accredited high school
- The following units of college preparatory subjects:

English	4 units
Mathematics (Algebra I & II, Geometry)	3 units
Natural Science with a Laboratory	1 unit
Social Science	2 units
- Students who rank in the upper half of their high school graduating class and who have SAT scores of 1000 or ACT scores of 22 are automatically eligible for admission to the School of Business Administration. Applicants who do not meet these criteria are judged on an individual basis. Consideration is given to the type of courses taken, the type of secondary school attended, and leadership activities, in addition to class rank and standardized test scores.
- Any person whose native language is not English must submit an acceptable score in the Test of English as a Foreign Language (TOEFL). (See also International Students in Chapter III.)

TRANSFER STUDENTS

Candidates for admission from other accredited colleges or universities must be in good academic standing in the colleges or universities from which they are transferring. In addition, they must satisfy one of two entrance requirements: (1) a cumulative grade point average of 2.25 and completion of a calculus course with a grade of C or better, or (2) a cumulative grade point average of 2.50 without a calculus course.

Students seeking to transfer into the School of Business Administration from other UD divisions must also satisfy one of two entrance requirements: (1) a cumulative grade point average of 2.25 and completion of a calculus course with a grade of C or better, or (2) a cumulative grade point average of 2.50 without a calculus course.

Individual courses can be transferred only if the student earned a grade of C or better; courses in which a D grade was received will not be transferred. Upper division business courses can be transferred only from business schools accredited by the American Assembly of Collegiate Schools of Business (AACSB). At least 75 percent of a student's business courses must be completed at the University of Dayton. Students planning to attend two year colleges before transferring to the School of Business Administration are encouraged to follow arts and sciences or pre-business programs rather than technical programs. (See also Chapter III.)

RETURNING STUDENTS

A qualified student who returns to the School of Business Administration after an absence of one calendar year or longer may be readmitted to the School of Business Administration according to the University of Dayton requirements which are applied to transfer students from other universities and colleges. (See Chapter III.) These students will be required to satisfy the program requirements which are current at the time of their readmission to the School of Business Administration. Part-time students (those who carry fewer than 12 semester hours) who are readmitted after an absence of two or more years will be required to satisfy the program requirements which are current at the time of readmission to the School of Business Administration.

REQUIREMENTS FOR THE BACCALAUREATE DEGREE

The School of Business Administration programs lead to the degree of Bachelor of Science in Business Administration upon satisfactory completion of the following requirements:

1. The candidate must complete successfully the first-and second-year business administration program, which is designed to give a wide and liberal education for a broader comprehension of the fields of business administration and economics. All students in the School of Business Administration must complete a common block of courses known as the SBA core.
2. The candidate must earn a cumulative grade point average of at least 2.0 in the total semester hours required for the degree and in the major. The 2.00 requirement in the major is calculated using *all* 300-400 level courses attempted in the student's major; courses numbered at the 100 or 200 level are *not* included in this calculation.
3. Each candidate must complete at least 54 upper-level semester hours, with a minimum of 36 semester hours in 300-400-level courses in the School of Business Administration, of which 18 semester hours or more must be in one of the academic majors.

- 4. Candidates majoring in accounting, economics, finance, leadership, entrepreneurship, international business, or marketing must complete a minimum of 121 semester hours. A major in management information systems requires 124 semester hours. A major in operations management requires 124 semester hours.
- 5. The candidate's final 30 semester hours must be earned in residence at the University of Dayton.
- 6. The School of Business Administration will not accept any business or business-related courses more than ten years old.
- 7. A maximum of two semester hours of physical education activities courses (HSS 130) may be applied toward the minimum graduation requirement.
- 8. The candidate has the responsibility of meeting degree requirements in business administration. Therefore, the student should be thoroughly familiar with the course requirements and should keep a record of courses completed and semester hours applicable to degree requirements.

GRADING OPTION

All students in the School of Business Administration must register under Grade Option 1 for courses in any department of the School of Business Administration. Other courses that must be taken under Option 1 are MTH 128, 129; PHL 313; REL 368; the communication requirement; and general education courses. MIS majors must take required computer science courses under Option 1.

FIRST- AND SECOND-YEAR SBA PROGRAM

The program below is to be followed by all business students except those planning to major in management information systems. Those students should follow the program outlined in the section on the Department of Management Information Systems and Decision Sciences (MIS) later in this chapter.

The program below contains all the requirements for the first and second years. There is flexibility in that some courses listed in the first year can be taken during the second year or vice versa. Consult an academic advisor for sequencing options.

Dept.	No.	Course	Semester Hours
First-Year			
BAI	150	Business Educational Planning ¹	1
BAI	103L	Business Computing Laboratory ¹	1
BAI	151	Business Integration Experience	1
ENG	101-102	College Composition I and II ²	6
HST	101 or 102	History of Western Civilization	3
MTH	128	Finite Mathematics ³	3
MTH	129	Calculus for Business	3
PHL	103	Introduction to Philosophy	3
REL	103	Introduction to Religion	3
CMM	110	Group Decision Making ⁴	1
—	—	General Education requirements ⁵	6
		Social Science Elective ⁶	3
			34
Second-Year			
ACC	207-208	Principles of Accounting I and II	6
DSC	210-211	Statistics for Business I and II	6

ECO	203-204	Principles of Microeconomics and Macroeconomics	6
MGT	201	Legal Environment of Business	3
CMM	111	Informative Public Speaking ⁴	1
CMM	113	Interviewing ⁴	1
		Additional Communication Requirement ⁷	3
		General Education Requirements ⁵	3
			<hr/> 29

¹Does not count toward minimum graduation requirement. A proficiency test for BAI 103L is available for those with adequate background.

²Students placed in ENG 114 or 198 take a nonbusiness elective the second term.

³MTH 102 is recommended for students with insufficient knowledge of secondary mathematics. MTH 102 does not count toward minimum graduation requirement.

⁴CMM 110, 111 and 113 may be taken during different years than indicated here. Some academic majors recommend taking some of these courses during the junior year. See faculty advisor for other sequencing possibilities.

⁵See General Education Requirements, Chapter V. Some General Education courses are specified in the program (e.g. PHL 103); others are to be chosen from the listing of approved courses set forth in Chapter V.

⁶Choose any course in ANT, CJS, POL, PSY, SOC or SWK.

⁷Choose from ENG 370, ENG 372, ENG 378, CMM 321, CMM 322, CMM 344, CMM 351 or CMM 420.

UPPER-LEVEL PROGRAMS

Specialization in the School of Business Administration occurs in the junior and senior years. Majors are available in accounting, economics, finance, leadership, entrepreneurship, international business, management information systems, marketing and operations management. These programs are described later in this chapter.

Each major involves some number of general electives, as seen in the appropriate program descriptions. In choosing electives, students must bear in mind two considerations. One is that at least three semester hours of general electives must be taken outside the School of Business Administration. The other is that a minimum of 54 semester hours of *all* academic work must be at the 300-400 level.

Double majors and minors in business administration are available; requirements for minors are set forth under the descriptions for each academic unit later in this chapter. Minors in some nonbusiness programs are also available; consult the appropriate department for details.

MINOR IN BUSINESS ADMINISTRATION

A minor in business administration is available to students in other divisions of the university. A minor is helpful to students considering a Master of Business Administration (MBA) degree, or for those who may be seeking business careers.

The minor consists of 18 semester hours, as follows:

The following two courses are required:

ECO	203	Principles of Microeconomics
ACC	301	Financial Accounting ¹

Select any four of the following:

MGT	201	Legal Environment of Business
FIN	301	Business Finance
MKT	300	Principles of Marketing
MGT	301	Organizational Behavior
MIS	365	Management Information Systems
OPS	301	Production and Operations Management ²

¹Students may complete ACC 207 and ACC 208 in place of ACC 301.

²DSC 210-211, Statistics for Business, is prerequisite for OPS 301.

For those interested in an MBA degree, additional business courses are helpful and would allow completion of an MBA in less time. These courses include: ECO 204, Principles of Macroeconomics; and DSC 210-222, Statistics for Business I and II (or comparable statistics courses offered by other departments), and other courses listed above. In addition, those interested in an MBA degree should consider taking ACC 207-208 in place of ACC 301.

INTERNSHIP

Internship is work experience offered for academic credit in each of the departments in the School of Business Administration. The intent is to provide practical experience in implementing the theory and skills learned in the classroom in work associated with the student's academic concentration. It is an option open to all undergraduate students pursuing four-year programs once they have fulfilled the following prerequisites:

1. Students must have completed a minimum of 45 semester hours prior to the internship experience.

2. A minimum cumulative GPA of 2.0 is required to participate in an internship. However, individual departments may require a higher minimum cumulative GPA, and students should inquire in the department of their major if such a requirement exists. Department may alter the cumulative GPA requirement at any time, and any change in the minimum GPA requirement supercedes the minimum GPA printed in the bulletin.

3. Students can earn credit for internships only through the department of their major. Approval from the department chairperson or the chairperson's designee is a prerequisite for participation in the program. Individual departments may require other prerequisite courses prior to the internship experience. Students are responsible for checking with the department of their major to determine the prerequisites unique to the department.

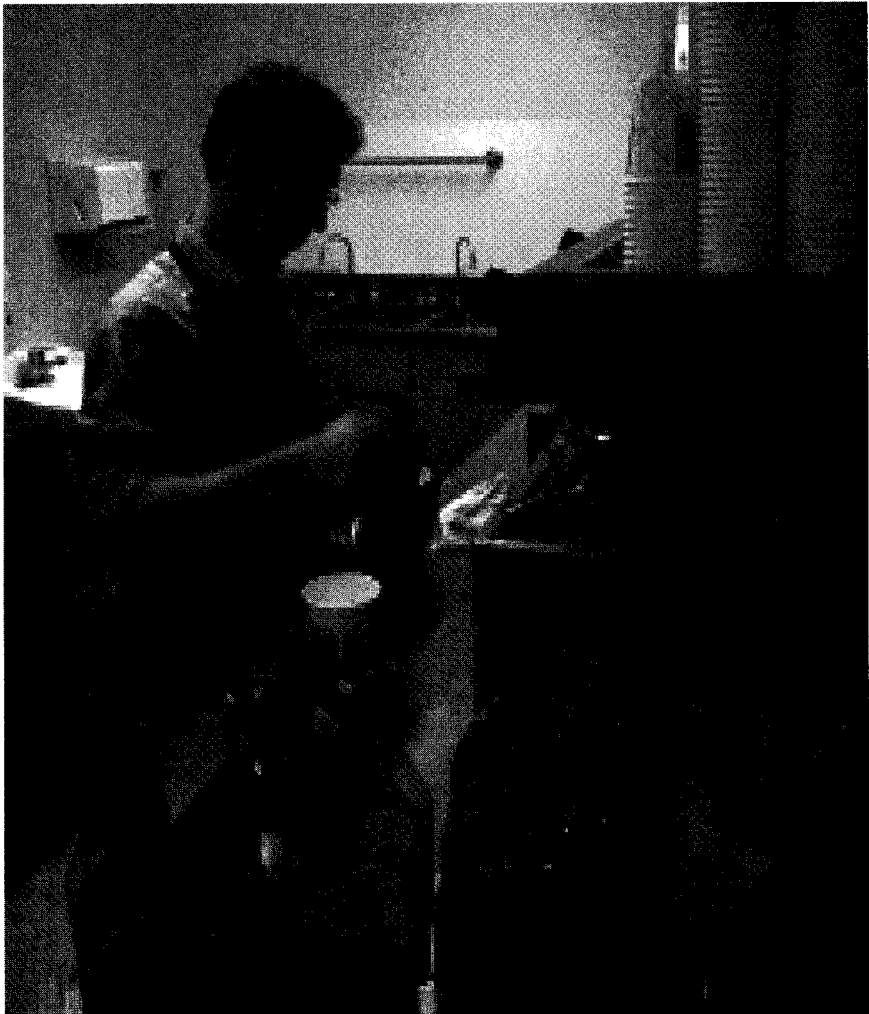
Positions offered to students may be either compensatory or noncompensatory. The intent of the internship is to be beneficial to both the students and the participating organizations. Students are encouraged to find positions themselves, and these are acceptable if the employers agree to the conditions for participating organizations.

Credits earned in internship are applied as general electives. The maximum number of semester hours that may be earned over the full four-year degree program is twelve. Individual department requirements differ and should be checked under the 497 course numbers in the pages which follow.

The internship program is offered in all terms with special policy and conditions governing the summer session. During the first and second terms internships are offered in the Dayton area, while during the summer session arrangements can be made for out-of-town participation. Interested students should see the internship coordinator for further information as soon as they are eligible for participation.

COOPERATIVE EDUCATION

The School of Business Administration participates in the University of Dayton Cooperative Education Program, which is an optional program of full-time, on-campus study alternating with terms of full-time, off-campus work. For a fuller explanation of the program, refer to Chapter X.



ACCOUNTING (ACC)

The mission of the Department of Accounting is to prepare our students for successful professional careers by providing high quality educational programs in accounting within an environment that connects learning, scholarship, leadership, and service creating distinctive graduates able to add value to employers, clients, and society.

An accounting major must earn credit in at least seven upper-level accounting courses. Six specific courses are required: ACC 303, 305, 306, 341, 401, and 420. One additional accounting course is typically required.^{2,3} All upper-division accounting courses require a minimum grade of "C" in all prerequisite accounting courses. Students should consult with their academic advisor about selecting accounting and other elective courses appropriate to particular career goals. Students should also consult their advisor or the chairperson about opportunities for professional work-experience, double majors and minors, foreign exchange opportunities, requirements for professional (e.g., CPA) examination, etc.

Students may complete the new "150 semester hour" requirements to register for the CPA Exam in Ohio and numerous other states. The MBA program, with an optional concentration in accounting, is particularly useful in this regard. Our integrated B.S./M.B.A. program allows for the completion of both degrees, plus professional work experience, foreign exchange experience and a second major or minor, in five years. Consult the department chairperson or an advisor for more information.

BACHELOR OF SCIENCE WITH A MAJOR IN ACCOUNTING (ACC)

Dept.	No.	Course	Semester Hours	
Junior Year			1st Term	2nd Term
ACC	303	Managerial Accounting	3	
ACC	305-306	Intermediate Financial Accounting I & II	4	3
ACC	341	Accounting Information Systems I		3
FIN	301	Business Finance		3
MGT	301	Organization Behavior	3	
MIS	365	Management Information Systems	3	
MKT	301	Principles of Marketing	3	
PHL	313	Business Ethics		3
REL	or 368	Christian Ethics and the Business World		
—	—	General Education requirement ¹		3
			16	15
Senior Year				
ACC	401	Auditing Principles		4
ACC	420	Federal Income Taxation	4	
ACC	—	Accounting elective ^{2,3}	3	
OPS	301	Production and Operations Management	3	
ECO	—	Economics elective ⁴	3	
MGT	490	Managing the Enterprise ³		3
—	—	General Education requirement ¹		3
—	—	General electives ⁵	3	3
			16	13

¹See General Education Requirements, Chapter V. Some General Education courses are specified in the program (e.g., PHL 313 or REL 368); others are to be chosen from the listing of approved courses set forth in Chapter V.

²Accounting majors completing a second major in the SBA can typically waive one specified course in one major. Consult an advisor for further information.

³May be waived, and replaced by general electives, for students electing to complete a combined B.S. with a major in accounting and an MBA. Consult an advisor or the chair of the department for details.

⁴Choose any 300 or 400 level economics course.

⁵A minimum of 54 sem. hrs. of all academic work must be at the 300-400 level.

The program above contains all of the junior and senior requirements for an accounting major. There is flexibility in the sequencing of some courses. Consult the academic advisor for sequencing options.

For a minor in accounting, at least 19 semester hours are required as follows:

ACC 207-208, Introduction to Accounting

ACC 305-306, Intermediate Financial Accounting

Two additional accounting courses, chosen in consultation with the department chairperson.

FACULTY

Ronnie J. Burrows, *Chairperson*

Professors Emeriti: Clark, Eley, Fioriti, Roehm, Rosenzweig

Professor: Castellano

Associate Professors: Brady, Burrows, Geary, Greenlee, Larson

Lecturers: Fink, Griffin, Shishoff

COURSES OF INSTRUCTION

ACC 207. INTRODUCTION TO FINANCIAL ACCOUNTING: Introduction to financial accounting concepts, procedures, and terminology. The accounting framework for recording transactions and reporting to parties external to the organization. Prerequisites: Sophomore standing and BAI 103L or equivalent, or permission of chairperson. 3 sem. hrs.

ACC 208. INTRODUCTION TO MANAGERIAL ACCOUNTING: Management use of accounting data in planning and controlling organization activities; theories and practices of cash flow reporting, cost accounting and analysis of data for management decision making. Prerequisite: ACC 207. 3 sem. hrs.

ACC 301. INTRODUCTION TO ACCOUNTING: Introduction to financial and managerial accounting concepts, terminology, purposes, and applications for the nonbusiness student. Not open to students in the School of Business Administration or to those with credit in ACC 207. 3 sem. hrs.

ACC 303. MANAGERIAL ACCOUNTING: The production, dissemination, and interpretation of financial information for use within an organization. Information for planning, decision making, and control. Study of typical cost accounting systems in various organizations. Prerequisites: ACC 208; junior standing or permission of chairperson. 3 sem. hrs.

ACC 305-306. INTERMEDIATE FINANCIAL ACCOUNTING I & II: Comprehensive treatment of financial accounting concepts, principles, and procedures used in the preparation and analysis of financial statements. Prerequisites: ACC 207 and 208; junior standing, or permission of chairperson. ACC 305 is a prerequisite for ACC 306. *4 and 3 sem. hrs. respectively*

ACC 341. ACCOUNTING INFORMATION SYSTEMS I: Study of designs of accounting systems, including their impact on management decision making and control. Emphasis on (1) a systems approach to the flow of data, (2) system internal control, and (3) computer applications in accounting. Prerequisites: ACC 207 and 208, completion or concurrent registration of MIS 365 or permission of chairperson. *3 sem. hrs.*

ACC 401. AUDITING PRINCIPLES: Study of the concepts, standards, and procedures used to judge and report on the degree of correspondence between quantifiable information and established criteria; and the ethical environment in which these determinations are made; introduction to internal, operational, and governmental auditing. Prerequisites: ACC 306 and 341, or concurrent registration with permission of chairperson. *4 sem. hrs.*

ACC 402. ACCOUNTING FOR NOT-FOR-PROFIT ORGANIZATIONS: Study of the principles, techniques, and procedures related to financial reporting of governmental units and other not-for-profit entities. Prerequisite: ACC 305. *3 sem. hrs.*

ACC 404. ADVANCED MANAGERIAL ACCOUNTING: Study of the more involved methods and concepts of managerial cost accounting. Includes advanced topics in cost determination and analysis, quantitative methods, behavioral aspects of management decision-making, and control systems. Prerequisites: ACC 303. *3 sem. hrs.*

ACC 408. ADVANCED FINANCIAL ACCOUNTING: Study of the principles and procedures in accounting for specialized uses in business combinations, consolidations, government and other not-for-profit entities, multinational companies, and foreign currency transactions. Prerequisite: ACC 305. *3 sem. hrs.*

ACC 412. INTERNATIONAL ACCOUNTING: Introduction to issues of international business as they relate to accounting; accounting practices in selected countries, and activities of the International Accounting Standards committee. Prerequisite: ACC 305 or permission of chairperson. *3 sem. hrs.*

ACC 420. FEDERAL INCOME TAXATION: Study of federal income tax laws and their application to individuals, partnerships, and corporations. The historical, social, economic, and political influence on taxation laws are emphasized. Consideration is given to legal, moral, business, and personal factors involved in taxation. Prerequisite: ACC 305 or ACC 208 with permission of chairperson. *4 sem. hrs.*

ACC 421. ADVANCED TAXATION: Study of taxation of corporations, partnerships, and estates and trusts. Emphasis on the impact of taxation on business entities. Prerequisite: ACC 420. *3 sem. hrs.*

ACC 430. LAW FOR THE ACCOUNTING PROFESSION: Study of major laws affecting the public and private practice of accounting; contracts, property, commercial code, bankruptcy, business organizations, legal responsibility, and government regulations. Credit does *not* apply to requirements for ACC major. Prerequisites: ACC 208 and MGT 203; permission of chairperson. *3 sem. hrs.*

ACC 441. ACCOUNTING INFORMATION SYSTEMS II: Examination of accounting systems with exposure to systems design and evaluation, complex spreadsheet applications, decision support systems, and data base management applications. Prerequisite: ACC 341 or permission of instructor. *3 sem. hrs.*

ACC 491-492. HONORS THESIS: Selection, design, investigation, and completion of an independent original research thesis under the guidance of a departmental faculty member. Restricted to students in the University Honors Program with permission of program director and chairperson. *3 sem. hrs. each*

ACC 497. PROFESSIONAL WORK EXPERIENCE: Supervised accounting work experience in association with a participating public accounting, industrial, commercial, educational, health-care, or governmental organization. May be used for general elective credit only. Option two grading only. Maximum of three credits toward graduation requirements. Permission of chairperson required. *1-6 sem. hrs.*

ACC 499. INDEPENDENT STUDY IN ACCOUNTING: Directed readings, independent study, and research projects in selected fields of accounting. Periodic conferences with instructor. Prerequisites: Senior status in accounting; permission of chairperson and instructor. *1-6 sem. hrs.*



DECISION SCIENCES (DSC)

The Department of Management Information Systems, Operations Management, and Decision Sciences offers courses in several quantitative and systems areas, a major and a minor in management information systems (see MIS), a major and minor in operations management (see OPS) and a minor in decision sciences.

Decision sciences is the study of analysis, quantitative methodologies, and their application to the functional and behavioral problems of any organization. The major areas of study include applied statistics, operations research, and production and operations management. All business students take three decision sciences and operations management courses as part of their core business coursework: DSC 210, Statistics for Business I; DSC 211, Statistics for Business II; and OPS 301, Production and Operations Management.

The minor in decision sciences (DSC) offers business majors and other students an opportunity to develop their skills in the quantitative methods which support managerial decision making. The following courses are required for a minor in decision sciences:

MIS 175, Introduction to Business Applications

DSC 210, Statistics for Business I

DSC 211, Statistics for Business II

MIS 365, Information Systems in Organizations

DSC 370, Decision Support Systems

OPS 301, Production and Operations Management

Three additional semester hours of DSC, MIS, or OPS 300 or 400 level courses in addition to courses used to satisfy the requirements of any other major or minor. See Department Chair for approval.

Specific courses in other areas (e.g. mathematics) may be used. See chairperson for approval.

FACULTY

Jeffrey A. Hoffer, *Chairperson, Department of Management Information Systems and Decision Sciences*

Professor Emeritus and Distinguished Service Professor: Bohlen

Professors Emeriti: Casey, Vlahos, Young

Prabuddha De, *Sherman-Standard Register Chair in MIS*

Professors: De, Dunne, Ferratt, Hoffer, Wells

Associate Professors: Ahire, Amsden, Prasad

Assistant Professor: Enns

Lecturers: Davis, McManamon, Wagner

COURSES OF INSTRUCTION

DSC 210. STATISTICS FOR BUSINESS I: Basic concepts of statistics including descriptive statistics, probability, probability distributions, and estimation. Prerequisites: MTH 128; BAI 103L. 3 sem. hrs.

DSC 211. STATISTICS FOR BUSINESS II: Tests of hypotheses, analysis of variance, simple and multiple regression and correlation, and nonparametric methods. Use of computer software for statistical data analysis. Prerequisite: DSC 210; MTH 129. 3 sem. hrs.

DSC 313. ADVANCED BUSINESS STATISTICS: Selected topics from advanced statistics with emphasis on business applications. Prerequisite: DSC 211 or equivalent. *3 sem. hrs.*

DSC 370. DECISION SUPPORT SYSTEMS: Information systems and mathematical modeling for managerial analysis and decision making. Develops skills to solve problems using computer-based modeling in selected disciplines, such as marketing or finance. Topics include components of a DSS, linear programming, simulation modeling, group decision making, and intelligent support systems. Prerequisites: DSC 211; MIS 365; MIS 175 recommended. *3 sem. hrs.*

DSC 410. DECISION THEORY: Introduction to the analysis of decisions under uncertainty. Topics include structuring of the decision process, Bayesian decision theory, and multicriteria decision making. Prerequisite: DSC 211 or equivalent. *3 sem. hrs.*

DSC 415. SIMULATION MODELING AND ANALYSIS: Introduction to simulation models in support of business decision making. Emphasis on building and analyzing models in a variety of applications including manufacturing and service systems. Study and use of a simulation language. Prerequisites: DSC 211, DSC 370 recommended. *3 sem. hrs.*

DSC 435. ANALYSIS OF FACTORY SYSTEMS: Concepts and techniques for the analysis, design, and management of factory production systems. Work-flow layout, scheduling techniques, stochastic process models, simulations, and computerized factory models. Prerequisites: DSC 370; OPS 301. *3 sem. hrs.*

DSC 491-492. HONORS THESIS: Selection, design, investigation, and completion of an independent original research thesis under the guidance of a departmental faculty member. Restricted to students in the University Honors Program with permission of the director of the program and the departmental chairperson. *3 sem. hrs. each*

DSC 494. SEMINAR IN DECISION SCIENCES: Study of selected topics or issues in applied statistics, quantitative business analysis, and production and operations management. Topics vary from time to time. May be taken more than once if topics change. Title will reflect topics covered in a particular offering. *3 sem. hrs.*

DSC 497. LABORATORY WORK EXPERIENCE: Under faculty sponsorship and in association with a participating industrial, commercial, educational, health-care, or governmental organization, practical experience in work associated with the student's minor concentration. (See internship coordinator for details.) Does not satisfy MIS elective. Permission of chairperson required. *1-6 sem. hrs.*

DSC 499. INDEPENDENT STUDY IN DECISION SCIENCES: Research in conjunction with a faculty member on a subject within the general area of decision sciences. Normally open only to juniors and seniors who have attained a cumulative grade-point average of 3.0 or above. Permission of chairperson required. *1-6 sem. hrs.*

ECONOMICS/BUSINESS ECONOMICS (ECB)

The Department of Economics and Finance offers majors in Business Economics and in Finance for students in the School of Business Administration. The department also offers majors in Economics and in Applied Mathematical Economics for students in the College of Arts and Sciences (See Chapter VI for requirements for these majors.) Minors in Economics, Business Economics and Finance are available to all students.

Economics teaches students to think analytically about problems that arise in business, politics, and everyday life. The Business Economics major offers students the strength of economic theory combined with a focus in an area of applied business and develops the student's quantitative skills by requiring course work in econometrics or forecasting. The major is excellent preparation for a wide range of employment opportunities in business, government and education. It also prepares students for graduate study in law, public policy, and business. Students who wish to pursue graduate study in economics should supplement the major with additional mathematics courses or major in Applied Mathematical Economics.

A major in Business Economics requires: ECO 203-204, ECO 340 or 346, ECO 410 or 441, ECO 490, 6 additional semester hours of economics electives, and a breadth requirement of 6 semester hours of courses in one other business discipline chosen from a list of approved courses. See the department office or website for the approved breadth requirement courses. The breadth courses should be chosen to complement the economics electives taken by the student.

The program below contains all of the junior and senior requirements for a Business Economics major. There is flexibility in the sequencing of some courses. Consult the academic advisor for sequencing options.

BACHELOR OF SCIENCE WITH A MAJOR IN BUSINESS ECONOMICS (ECB)

<i>Dept.</i>	<i>No.</i>	<i>Course</i>	<i>Semester Hours</i>
Junior Year			
ECO	340	Managerial Economics	
or			
ECO	346	Intermediate Microeconomic Analysis	3
ECO	410	Business and Economic Forecasting	
or			
ECO	441	Econometrics	3
ECO	—	Economics elective	3
—	—	Breadth Requirement elective ¹	3
FIN	301	Business Finance	3
MGT	301	Organizational Behavior	3
MIS	365	Management Information Systems	3
MKT	301	Principles of Marketing	3
OPS	301	Production Operations Management	3
—	—	General Education Requirement ²	3
			30

Senior Year			
PHL	313	Business Ethics	
or			
REL	368	Christian Ethics and the Business World	3
ECO	—	Economics elective	3
ECO	490	Senior Seminar in Applied Economics	3
—	—	Breadth Requirement elective ¹	3
MGT	490	Managing the Enterprise	3
—	—	General Education Requirement ²	3
—	—	General Electives ³	12
			30

¹Business Economics majors are required to take 6 semester hours of electives chosen from approved courses in one other business discipline. A list of approved courses is available from the department office or website.

²See General Education Requirements, Chapter V. Some General Education courses are specified in the program (e.g., PHL 313 or REL 368); others are to be chosen from the listing of approved courses set forth in Chapter V.

³At least 3 sem. hrs. of the general electives must be taken outside the School of Business Administration. A minimum of 54 sem. hrs. of all academic work must be at the 300-400 level.

A minor in Business Economics requires:

- ECO 203-204 Principles of Microeconomics and Macroeconomics
- ECO 340 Managerial Economics or ECO 346 Intermediate Microeconomic Analysis
- ECO 410 Business and Economic Forecasting or ECO 441 Econometrics
- Six additional semester hours in economics

FACULTY

Elizabeth Gustafson, *Chairperson*

Professors: Beladi, Frasca, Rapp

Associate Professors: Gustafson, Hadley, Ruggiero

Assistant Professors: Poitras, Oladi

Adjunct Instructor: John

COURSES OF INSTRUCTION

- *ECO 203. PRINCIPLES OF MICROECONOMICS: An introduction to consumer and producer behavior in a market economy, demand and supply, pricing and firm behavior under perfect and imperfect competition, and the distribution of income. Discussion of current topics in microeconomics may be included. 3 sem. hrs.
- *ECO 204. PRINCIPLES OF MACROECONOMICS: Introductory economic analysis of the macroeconomy; the determination of gross national product, employment, inflation and the interest rate in the U.S. economy. Government policy, money and banking, and international trade are analyzed. Prerequisite: ECO 203 recommended. 3 sem. hrs.
- *ECO 310. ECONOMICS OF THE ENVIRONMENT: Introduction to the economics of the global environment including an analysis of market failure as a cause of

environmental degradation. Topics covered include cost-benefits analysis, criteria for public investment, regulation of the environment, and the sustainable global environment. Prerequisite: ECO 203 strongly recommended. 3 sem. hrs.

ECO 340. MANAGERIAL ECONOMICS: Application of economic models to managerial decision making. Topics include demand analysis, forecasting demand, short-run cost analysis, long-run cost and production functions, pricing, and risk and uncertainty. May not get credit for both ECO 340 and ECO 346. Prerequisite: ECO 203. 3 sem. hrs.

ECO 346. INTERMEDIATE MICROECONOMIC ANALYSIS: Analysis of the theory of consumer behavior, production theory, equilibrium of the firm, price determination in various market structures, distribution of income, allocation of resources, and welfare economics. May not get credit for both ECO 346 and ECO 340. Prerequisite: ECO 203. 3 sem. hrs.

ECO 347. INTERMEDIATE MACROECONOMIC ANALYSIS: National income accounting and the determination of the level of income and employment; classical, Keynesian, and post-Keynesian models; private, government, and foreign sectors; theories of inflation and economic growth. Prerequisite: ECO 204. ECO 203 recommended. 3 sem. hrs.

ECO 390. ANTITRUST ECONOMICS: Study of how economic analysis has been applied in the interpretation of the antitrust statutes. Examines major anti-trust laws and relevant case law and reviews economic theories of market behavior. Prerequisite: ECO 203. 3 sem. hrs.

ECO 410. BUSINESS AND ECONOMIC FORECASTING: Forecasting techniques, including ARIMA time series models, econometric models, moving averages, exponential smoothing, and time series decomposition, are used to forecast business and economic variables. Data sources, selection of appropriate forecasting tools and models, and evaluation of forecast results are studied. Prerequisites: ECO 203 or 204, and Statistics (MTH 207 or DSC 211 or MTH 367 or MTH 412). 3 sem. hrs.

ECO 415. GAME THEORY WITH BUSINESS APPLICATIONS: Introductory course in strategic and competitive decision making; provides a thorough discussion of the basic techniques of applied game theory and of systematic thinking in making business decisions. Among the topics covered with applications to business are equilibrium strategies, the prisoner's dilemma, understanding situations involving conflict and cooperation, contracting and creating incentives, and bargaining and negotiations. Prerequisite: ECO 203, 204. 3 sem. hrs.

ECO 441. ECONOMETRICS: Training in the art of making economic measurements from empirical data, using regression analysis as the principal tool; use of a computer program for determining the parameters and statistical measures of the regression equation; interpretation of the results by statistical inference. Prerequisites: ECO 203, 204, Differential calculus and basic statistics or permission of the instructor. 3 sem. hrs.

ECO 442. MONEY AND BANKING: Principles of money and monetary systems; commercial banking and the role of the Federal Reserve System; monetary theory and policy; the mechanism of international payments. Prerequisites: ECO 203, 204. 3 sem. hrs.

ECO 445. PUBLIC FINANCE: The economic aspects of government finance at the local, state, and especially national level; the behavioral effects of various taxes,

efficiency in spending, the changing role of the U.S. government, fiscal policy, and intergovernmental revenue and expenditure programs; emphasis on relating analytical tools to current developments. Prerequisites: ECO 203, 204. 3 sem. hrs.

ECO 450. COMPARATIVE ECONOMIC SYSTEMS: Analysis of the principal tools of economic systems of the world, primarily capitalism, socialism, and communism. A comparative analysis of how each type of economic system allocates resources to achieve desired economic goals. Prerequisites: ECO 203, 204.

3 sem. hrs.

* ECO 460. ECONOMIC DEVELOPMENT AND GROWTH: Study of various dynamic economic theories of growth and structural change; the role of particular factors of production and related noneconomic variables in the development process, primarily, though not exclusively, of Third World nations. Prerequisites: ECO 203, 204.

3 sem. hrs.

* ECO 461. INTERNATIONAL ECONOMICS: Major issues surrounding international trade, the economic interdependence of nations and businesses, essential theoretical and empirical tools necessary to monitor and analyze international economic phenomena, and the application of these tools to contemporary global business problems and issues. Prerequisites: ECO 203, 204; ECO 346 recommended.

3 sem. hrs.

ECO 462. INTERNATIONAL BUSINESS AND MONETARY ECONOMICS: Study of the monetary and financial linkages that exist among countries, macroeconomic policy in a world economy, balance of payments issues, exchange rate determination, and international capital movements. Prerequisites: ECO 203, 204.

3 sem. hrs.

ECO 471. LABOR ECONOMICS: Theory of labor supply and demand, human capital theory, and the process by which wages are determined in various factor markets; applications to topics of unemployment, unions, migration, discrimination, and skill differentials. Prerequisites: ECO 203, 204.

3 sem. hrs.

ECO 480. SPORTS ECONOMICS: The application of economic analysis to the sports industry. Examines demand and efficiency in the product market; the labor market for professional athletes and mechanisms for restricting competition in that market; problems in achieving an efficient allocation of resources in the sports industry. Prerequisites: ECO 203; 204, and DSC 211 or MTH 207 or equivalent.

3 sem. hrs.

ECO 485. URBAN AND REGIONAL ECONOMICS: Treatment of certain theoretical concepts such as location theory and theories of land use and land rent; an economic interpretation for the existence of cities; applying economic analysis to the problems of traffic congestion, pollution, race, poverty, and urban sprawl. Prerequisite: ECO 203; ECO 346 recommended.

3 sem. hrs.

ECO 490. SENIOR SEMINAR IN APPLIED ECONOMICS: Application of theoretical, mathematical, and statistical methods used by economists to economic problems presented by business or government clients or chosen by the instructor. Prerequisite: 15 semester hours in Economics.

3 sem. hrs.

ECO 491-492. HONORS THESIS: Selection, design, investigation, and completion of an independent original research thesis under the guidance of a departmental

faculty member. Restricted to students in the University Honors Program with permission of the director of the program and the departmental chairperson.

3 sem. hrs. each

ECO 494. SEMINAR: Subject varies from time to time. May be taken more than once if topic changes. Prerequisites to be announced.

3 sem. hrs.

ECO 496. COOPERATIVE EDUCATION: Optional full-time work period off campus alternating with study period on campus. (See Chapter X; consult Cooperative Education Office for details.) Does *not* count toward economics major. Permission of chairperson required.

3 sem. hrs.

ECO 497. INTERNSHIP FOR GENERAL ELECTIVE CREDIT: Practical work experience associated with career development and career exploration relating to the student's major. Permission of department chair or designee required. Does not replace economics courses for the economics major. Prerequisite: 45 sem. hrs. of credit.

3 sem. hrs.

ECO 498. STUDIES IN ECONOMICS (HONORS): Directed readings and research in selected fields of economics. The number of sem. hrs. will depend on the amount of work chosen. The course will involve periodic discussions with faculty and other students in the course. May be taken more than once for additional credit. Prerequisite: 3.0 average in economics with a minimum of 9 sem. hrs. in economics; nomination by faculty and permission of chairperson required.

1-6 sem. hrs.

*General Education course. See Chapter V.



FIN

FINANCE (FIN)

The Department of Economics and Finance offers majors in Finance and in Business Economics for students in the School of Business Administration. The department also offers majors in Economics and in Applied Mathematical Economics for students in the College of Arts and Sciences (See Chapter VI). Minors in Finance, Business Economics and Economics are available to all students.

The finance major provides students with a working understanding of the financial decision-making process, how financial markets function, and the acquisition and management of capital. Students may elect course concentrations in investment analysis and portfolio management, financial institutions and services, or corporate financial management. Students will be prepared for a variety of careers in business and in the government sector with work in areas such as financial analysis, capital budgeting, banking, mergers and acquisitions, cash management, financial planning, investment analysis and portfolio management, brokerage, real estate, and insurance. A major in finance is also excellent preparation for graduate study in finance, business administration, or corporate and securities law.

The major in finance consists of 21 semester hours: FIN 301, Business Finance; FIN 360, Investments; FIN 371, Financial Markets and Institutions, 9 semester hours of 400 level finance electives, and 3 additional semester hours of 300 or 400 level finance electives or ACC 305.

The program below contains all of the junior and senior requirements for a finance major. There is flexibility in the sequencing of some courses. Consult an academic advisor for sequencing options.

BACHELOR OF SCIENCE WITH A MAJOR IN FINANCE (FIN)

<i>Dept.</i>	<i>No.</i>	<i>Course</i>	<i>Semester Hours</i>
Junior Year			
ECO	—	Economics elective ¹	3
FIN	301	Business Finance	3
FIN	360	Investments	3
FIN	371	Money and Capital Markets	3
MGT	301	Organizational Behavior	3
MIS	365	Management Information Systems	3
MKT	301	Principles of Marketing	3
OPS	301	Production and Operations Management	3
—	—	General Education requirement ²	3
—	—	General elective ³	3
			30
Senior Year			
PHL	313	Business Ethics	3
or			
REL	368	Christian Ethics and the Business World	12
FIN	—	Finance electives ⁴	3
MGT	490	Managing the Enterprise	3
—	—	General Education requirement ²	3
—	—	General electives ³	9
			30

¹Choose any 300 or 400 level economics course.

²See General Education Requirements, Chapter V. Some General Education courses are specified in the program (e.g., PHL 313 or REL 368); others are to be chosen from the listing of approved courses set forth in Chapter V.

³At least 3 sem. hrs. of the general electives must be taken outside the School of Business Administration. A minimum of 54 sem. hrs. of all academic work must be at the 300-400 level.

⁴9 semester hours of 400 level finance courses and 3 semester hours of 300 or 400 level finance courses or ACC 305.

For a minor in finance, 15 semester hours are required:

FIN 301, Business Finance

FIN 360, Investments

FIN 371, Financial Markets and Institutions

Six additional semester hours in finance, which must include at least three semester hours at the 400 level.

FACULTY

Elizabeth Gustafson, *Chairperson*

Carl Chen, *William J. Hoben Professor of Finance*

Professor: Chen

Associate Professors: Chan, Mohan, Sauer, Steiner

Assistant Professors: Lung, Tay

COURSES OF INSTRUCTION

FIN 300. PERSONAL FINANCE: Principles and techniques for handling personal financial decisions: personal budgeting, obtaining credit, life and casualty insurance, buying a home, buying an automobile, and savings and investments. For both business and nonbusiness majors. Does not count toward the finance major.

3 sem. hrs.

FIN 301. BUSINESS FINANCE: Principles and techniques used by business firms in managing and financing their current and fixed assets; sources of funds within the capital markets; determinants of the financial structure; analytical techniques.

Prerequisites: ECO 203; ACC 207 or 301, junior standing.

3 sem. hrs.

FIN 310. INVESTMENT CENTER PEER MENTOR: Members of the Center for Portfolio Management and Security Analysis Staff mentor peers in effectively utilizing the various software and database package resources within the Center for Portfolio Management and Security Analysis and assist in a range of developmental programs. Requires permission of the CFPM director. Does not count toward the finance major. Grading option 2.

1 sem. hr.

FIN 321/MGT 321. FINANCING ENTREPRENEURIAL VENTURES: Focuses on financial aspects of starting, growing, and harvesting entrepreneurial ventures. Includes emphasis placed on how common financing deals are structured, common financing pitfalls, and various legal documentation used to consummate financial transactions. Prerequisites: MGT 320 or FIN 301; junior standing.

3 sem. hrs.

FIN 330. INSURANCE AND RISK MANAGEMENT: Study of the basic concepts of business and personal risks from the standpoint of creation, identification, reduction, elimination, and evaluation of risks; the use of insurance in meeting problems of risk. *3 sem. hrs.*

FIN 336. PRINCIPLES OF REAL ESTATE: Survey of real estate industry with emphasis on its structure, regulation, growth, needs, financing, and future. Analysis of the methods of determining land use and evaluation of the theories of city development. *3 sem. hrs.*

FIN 360. INVESTMENTS: The principles and techniques used by the investor in selecting securities, emphasis on the stock and bond markets; security valuation methods leading to the selection of individual issues; portfolio theory. Prerequisite: FIN 301. *3 sem. hrs.*

FIN 371. FINANCIAL MARKETS AND INSTITUTIONS: Study of financial markets and financial institutions, including the Federal Reserve, interest rate theories, money and capital market securities, interest rate futures, options and swaps, international financial markets, such as commercial banking, insurance, and investment banking. Prerequisite: FIN 301. *3 sem. hrs.*

FIN 401. ADVANCED FINANCIAL ANALYSIS: Advanced study of current developments in financial planning, acquisition of funds, asset management valuation; policy strategy and techniques in financial decision making. Prerequisite: FIN 301. *3 sem. hrs.*

FIN 410. INVESTMENT CENTER OPERATING COMMITTEE: Members of the Center for Portfolio Management and Security Analysis Operating Committee provide leadership within the CFPM structure. Responsible for achieving assigned unit objectives, managing a team, and taking a leadership position for a range of center initiatives and projects that directly impact the effective implementation of the Center's overall strategic objectives. Requires permission of the CFPM director. Does not count toward the finance major. Grading option 1. *1 sem. hr.*

FIN 450. INTERNATIONAL BUSINESS FINANCE: Introduction to problems facing financial management of international companies, including foreign exchange risk, working capital and capital budgeting decisions for multinational corporations, international financing, accounting and control. Prerequisite: FIN 301. *3 sem. hrs.*

FIN 460. PORTFOLIO MANAGEMENT AND SECURITY ANALYSIS: Advanced valuation theory and security analysis; portfolio construction, evaluation, and management. Prerequisites: FIN 301, 360. *3 sem. hrs.*

FIN 460L. PORTFOLIO MANAGEMENT LAB: Provide analyst support for the Seminar in Investments course and the Flyer Investments team. Requires previous or concurrent enrollment in FIN 460 and instructor permission. Does not count toward the finance major. Grading option 2. *1 sem. hr.*

FIN 471. MANAGEMENT OF FINANCIAL INSTITUTIONS: Integrated and comprehensive analysis of financial institutions that include depository institutions, insurance companies, securities firms, and investment companies. Prerequisite:

sites: FIN 301, 371.

3 sem. hrs.

FIN 475. COMMERCIAL BANK MANAGEMENT: Explores the environment in which banks must operate, the financial statements of banks, and a thorough study of bank management topics which include: asset-liability management, the investment portfolio, sources of funds, and the loan portfolio. The methodology includes a bank simulation game. Prerequisites: FIN 301 and FIN 360 or 371. 3 sem. hrs.

FIN 480. OPTIONS AND FUTURES MARKETS: Study of options, futures, and other derivatives fundamentals, trading strategies, hedging, speculation, and arbitrating, pricing theories, and market regulations. Prerequisites: FIN 301 and FIN 360 or 371. 3 sem. hrs.

FIN 491-492. HONORS THESIS: Selection, design, investigation, and completion of an independent original research thesis under the guidance of a departmental faculty member. Restricted to students in the University Honors Program with permission of the director of the program and the departmental chairperson. 3 sem. hrs. each

FIN 493. SEMINAR IN INVESTMENTS: Application of investment theory and techniques in a real-world setting. Students manage a funded portfolio in terms of establishing objectives, selecting securities to buy (sell), and evaluating portfolio performance. Emphasis is placed upon attempting to identify undervalued common stocks. Prerequisite: FIN 360 required; FIN 460 highly recommended. Admission to the course is limited and must be approved by the instructor. 3 sem. hrs.

FIN 493L. SEMINAR IN INVESTMENTS LAB: Provide leadership in facilitating the supporting analyst role for the Seminar in Investments course. Requires previous or concurrent enrollment in FIN 493 and instructor permission. Does not count toward the finance major. Grading option 1. 1 sem. hr.

FIN 494. SEMINAR: Subject varies from time to time. May be taken more than once if topic changes. Prerequisites: To be announced. 3 sem. hrs.

FIN 496. COOPERATIVE EDUCATION: Optional full-time work period off campus alternating with study period on campus. (See Chapter X; consult Cooperative Education Office for details.) Does *not* count toward finance major. Permission of chairperson required. 3 sem. hrs.

FIN 497. INTERNSHIP FOR GENERAL ELECTIVE CREDIT: Practical work experience associated with career development and career exploration relating to the student's major. Permission of department chair or designee required. Does not replace finance courses for the finance major. Prerequisite: 45 sem. hrs. of credit. 3 sem. hrs.

FIN 498. STUDIES IN FINANCE: Directed readings and research in selected fields of finance. The number of semester hours will depend on the amount of work chosen. The course will involve periodic discussions with other students and faculty in the program. May be taken more than once for additional credit. Prerequisite: 3.0 average in finance with a minimum of 9 sem. hrs. in finance; nomination by faculty and permission of chairperson required. 1-6 sem. hrs.

INTERDISCIPLINARY STUDIES (BAI)

BAI 150. BUSINESS EDUCATIONAL PLANNING: Introduction to the School of Business Administration and the University. Development of approaches to all inclusive educational planning. Does not count toward minimum graduation requirement. *1 sem. hr.*

BAI 151. BUSINESS INTEGRATION EXPERIENCE: Integrated introduction to major business processes and decision making. *1 sem. hr.*

BAI 103L. BUSINESS COMPUTING LABORATORY: Basic computer literacy—hardware, software, databases, networks; introduction to business computer laboratories; use of word-processing, spreadsheet and other business software. Does not count toward minimum graduation requirement. *1 sem. hr.*

BAI 199. BUSINESS SCHOLARS FORUM I: Exploration and discussion of a wide range of business topics. Weekly sessions led by faculty members and guest professionals in their areas of expertise. Open only to first-year Business Scholars. *1 sem. hr.*

BAI 201. BUSINESS SCHOLARS FORUM II: Similar to BAI 199 with topics geared to sophomore Business Scholars. Open only to sophomore Business Scholars. *1 sem. hr.*

BAI 295. CAREER DEVELOPMENT SEMINAR: Seminar for exploration of career options. Involves exploring career options, investigating tentative career choices, deciding on potential career direction, and developing the knowledge and skill to pursue a career direction. Should be taken second semester sophomore year or either semester junior year. In management and marketing, BAI 295 is a prerequisite for internship or co-op experience if either is undertaken for academic credit. *1 sem. hr.*

BAI 301. PRACTICUM IN INTERNATIONAL BUSINESS: Study and analysis of international business concepts: objectives and ethics; planning; decision-making; business skills and entrepreneurial aptitudes. Comparative analysis of various cultures and their impact on international business operation. *3 sem. hrs.*

BAI 400. DEAN'S LEADERSHIP LABORATORY: Upper-class student participation in first-year student advising program. Permission of dean's office required. *1 sem. hr.*

BAI 497. LABORATORY WORK EXPERIENCE: Under faculty sponsorship and in association with a participating industrial, commercial, educational, health-care, or governmental organization; practical experience in work associated with the student's major or minor concentration. (See internship coordinator for details.) Does not count toward major. Permission of dean required. *3-6 sem. hrs.*

INTERNATIONAL BUSINESS (INB)

The International Business major is an interdisciplinary major designed to meet the needs of students interested in different facets of the international area. It may be taken as a stand-alone major, in conjunction with a major or minor in a functional business discipline, or with a major or minor in a language. The business curriculum for the major consists of all core business courses (FIN 301, an upper level ECO, MGT 301, MKT 301, DSC 316, MIS 365 & MGT 490) and their prerequisites, five required International Business courses: ECO 461 or ECO 450 or ECO 460, FIN 450, MGT 403 or MGT 414, MKT 340 or MKT 440, and INB 450, plus two international electives. These electives may come from the courses listed above, which are not selected as a required course, or from the following International Business electives: ACC 412, BAI 301, or MKT 445, or from an international course outside the School of Business Administration that is approved by the Director of International Business Programs. One of the two electives may be waived if the student is a double major, or is a language major or minor. In addition, competency in a foreign language, which may be demonstrated by successful completion of two semesters of 300 or 400 language study or passing of the competency test given by the language department, and an international experience are required. (This may include: participation in a study abroad program; attendance at an educational institution outside the United States; or an international business internship or co-op.)

A minor in International Business requires four core business courses: ACC 207 or 301, ECO 203, MGT 301, and MKT 301 and their prerequisites, and four International Business courses, including three courses from ACC 412, ECO 461, ECO 450, ECO 460, FIN 450, MGT 403, MGT 414, MKT 340, MKT 440, plus INB 450. Only two of these courses may come from one discipline, only one may also count towards a student's major. In addition, nine hours of non-business international oriented courses, which may fulfill General Education requirements or be general electives are required. Students may choose from the following: Any 300 or 400 level language course (Two 200 level courses count as one course.); ANT 315, 351, 352, or 406; BIO 395; CMM 414; ENG 203, 205, 306, 322, 348, 358, or 448; HST 315, 321, 322, 323, 326, 327, 328, 332, 333, 337, 339, 357, 358, 374, 382, or 383; ASI 390 or 398; PBL 355 or 362; POL 202, 214, 320-329, 331, 406, 407, 409, or 410; REL 201, 202, or 345. Other courses may be substituted for the above courses with the permission of the Director of International Business Programs.

Two Certificates in International Business are also available for non-business students wishing to demonstrate an interest in international business. One has a Marketing or Human Resource Emphasis. The requirements for this are: four core business courses: ACC 207 or 301, ECO 203, MGT 301, and MKT 301, three International Business courses, including, two courses from ECO 460, MGT 403, MGT 414, MKT 340, and MKT 440; plus INB 450. The second certificate has an Economics or Finance emphasis. The requirements for this are: four or five core business courses: ACC 207 and 208 or ACC 301, ECO 203, 204, and FIN 301, three International Business courses, including, two courses from ECO 461, ECO 450, ECO 460, ACC 412, and FIN 450; plus INB 450.

Other requirements for both certificates include: competency in a foreign language which may be demonstrated by successful completion of two years of college language study or passing of the competency test given by the language department, and an international experience. This may include: participation in a study abroad program; attendance at an educational institution outside the United States; or an international business internship or co-op.

BACHELOR OF SCIENCE WITH A MAJOR IN INTERNATIONAL BUSINESS (INB)

<i>Dept.</i>	<i>No.</i>	<i>Course</i>	<i>Semester Hours</i>
Junior Year			
FIN	301	Business Finance	3
MGT	301	Organizational Behavior	3
MKT	301	Principles of Marketing	3
MIS	365	Management Information Systems	3
OPS	301	Production and Operations Management	3
ECO	461	International Trade or	
ECO	450	Comparative Economic Systems or	
ECO	460	Economic Development and Growth	3
PHL	313	Business Ethics or	
REL	368	Christian Ethics and the Business World	3
MKT	340	Multicultural Marketing Analysis or	
MKT	440	Global Marketing	3
MGT	403	Cross-cultural Management or	
MGT	414	Multinational Corporate Management	3
—	—	General elective	3
			<hr/> 30
Senior Year			
FIN	450	International Business Finance	3
INB	—	International Business elective	6
INB	450	Seminar in Current Global Issues	3
MGT	490	Managing the Enterprise	3
—	—	General Education requirements	6
—	—	General electives	9
			<hr/> 30

INTERNATIONAL BUSINESS OVERSIGHT COMMITTEE

William Sekely, *Director, International Business Programs*
 Burrows (Accounting), Gustafson (Economics and Finance),
 Hoffer (MIS and Decision Sciences), King (Management and Marketing)

COURSES OF INSTRUCTION

INB 450. SEMINAR IN CURRENT GLOBAL ISSUES: Seminar focusing on various contemporary international issues and regions; topics vary. Required of International Business majors and minors and students completing a Certificate in International Business. *3 sem. hrs.*

INB 491-492. HONORS THESIS: Selection, design, investigation, and completion of an independent original research thesis under the guidance of a departmental faculty member. Restricted to students in the University Honors Program with permission of the director of the Honors Program and the International Business program director. *3 sem. hrs. each*

INB 497. INTERNATIONAL INTERNSHIP: Practical international work experience closely associated with student's major, minor, certificate program. Permission of program director required. See internship coordinator for details. *1-3 sem. hrs.*

MANAGEMENT (LDR, ENT)

The Management program offered by the Management/Marketing Department includes a major or minor in two distinct areas: Leadership and Entrepreneurship.

MAJOR IN LEADERSHIP

Students majoring or minoring in Leadership will develop understanding and competencies in motivation, group dynamics, team processes, cross-cultural management, employee training and development, and organizational design, development, and change. For the student majoring in Leadership, a key component of the curriculum is the "bookend" experience that begins in the first semester of the junior year with co-registration in Organizational Behavior (MGT 301) and Managerial Skills (MGT 302). Knowledge, skills, and abilities gained in these two courses will be reinforced throughout the remaining Leadership courses, and Leadership majors are required to demonstrate working competencies in these areas in subsequent courses. To complete the "bookend" experience, Leadership majors will register in their senior year for the capstone course, Seminar in Experiencing Leadership.

The Management faculty strongly recommend that students completing the Leadership major also complete a major or minor in another business discipline. Other majors or minors that are complementary include entrepreneurship, marketing, finance, operations management, accounting, or MIS. A Leadership major combined with a major or minor in a business function creates an outstanding combination for employment.

The major in Leadership consists of:

- 1st semester junior year *concurrent registration* in
 - MGT 301 Organizational Behavior
 - MGT 302 Managerial Skills
- Junior and senior year
 - MGT 401 Organizational Design, Culture, and Change
 - MGT 402 Leadership and Motivation
 - Choose 2 from:
 - MGT 403 Cross-cultural Management
 - MGT 404 Group Dynamics, Team Processes, and Decision Making
 - MGT 405 Employee Training and Development
 - MGT 409 Current Issues in Leadership
- Senior year
 - MGT 410 Senior Seminar in Experiencing Leadership

A minor in Leadership consists of:

- MGT 301 Organizational Behavior
- MGT 401 Organizational Design, Culture, and Change
- MGT 402 Leadership and Motivation
- Choose 2 from:
 - MGT 302 Managerial Skills
 - MGT 403 Cross-cultural Management
 - MGT 404 Group Dynamics, Team Processes, and Decision Making
 - MGT 409 Current Issues in Leadership
- A student minoring in Leadership may petition the department chair to substitute other Management courses in place of one, but not two, of these electives. The request will be considered in light of the student's overall academic program and career intentions.

BACHELOR OF SCIENCE WITH A MAJOR IN LEADERSHIP (LDR)

<i>Dept.</i>	<i>No.</i>	<i>Course</i>	<i>Semester Hours</i>
<hr/>			
Junior Year			
MGT	301	Organizational Behavior	3
MGT	302	Managerial Skills	3
MKT	301	Principles of Marketing	3
FIN	301	Business Finance	3
MGT	401	Organizational Design, Culture, & Change	3
MGT	402	Leadership and Motivation	3
OPS	301	Production and Operations Management	3
MIS	365	Management Information Systems	3
ECO	—	Economics elective ¹	3
—	—	General elective ²	3
			<hr/> 30
Senior Year			
MGT	—	Leadership elective	3
MGT	—	Leadership elective	3
PHL	313	Business Ethics	
or			
REL	368	Christian Ethics	3
MGT	410	Senior Seminar in Experiencing Leadership	3
MGT	490	Managing the Enterprise	3
—	—	General Education requirement ³	3
—	—	General electives ²	12
			<hr/> 30

¹Choose any 300 or 400 level economics course.

²At least 3 sem. hrs. of the general electives must be taken outside the School of Business Administration. A minimum of 54 sem. hrs. of all academic work must be at the 300-400 level.

³See General Education Requirements, Chapter V. Some General Education courses are specified in the program (e.g., PHL 313 or REL 368); others are to be chosen from the listing of approved courses set forth in Chapter V.

MAJOR IN ENTREPRENEURSHIP

Students majoring or minoring in Entrepreneurship will develop an understanding of how a business enterprise is conceived, launched, and sustained. The curriculum teaches students how to identify viable business opportunities and explores how such opportunities are transformed into new ventures. Additional, emphasis is placed on how entrepreneurial ventures successfully compete for financial resources, successfully identify and reach their target markets, and successfully establish business processes, systems, and controls to manage small and growth-oriented ventures.

A key feature of the Entrepreneurship major is the Sophomore Experience in which student teams create micro-businesses and actually run them during their sophomore year. This experience is directed through the Crotty Center for Entrepreneurial Leadership and includes seminars with faculty and entrepreneurs who work with students to develop the essential knowledge, skills, and abilities for successfully running a micro business. Another key feature is the senior seminar in which students either (a) write a complete business plan for a viable business that they are considering launching after graduation; (b) or work as consultants with an entrepreneur to solve an actual problem within an existing entrepreneurial business.

The major in Entrepreneurship consists of:

- Sophomore year
 - MGT 220 Entrepreneurship Sophomore Experience I
 - MGT 221 Entrepreneurship Sophomore Experience II
- Junior year
 - MGT 320 New Venture Creation
 - MGT 321 Financing Entrepreneurial Ventures
- Junior or Senior year, choose 2 from:
 - MGT 402 Leadership and Motivation
 - MGT 420 Entrepreneurial Marketing
 - MGT 421 Small Business Management
 - MGT 427 Internship in Entrepreneurship
 - MGT 429 Current Issues in Entrepreneurship
- Senior year
 - MGT 430 Senior Seminar in Entrepreneurship

For business majors, the minor in Entrepreneurship consists of:

- MGT 320 New Venture Creation
 - MGT 321 Financing Entrepreneurial Ventures
- Choose 3 from the following:
- MGT 402 Leadership and Motivation
 - MGT 420 Entrepreneurial Marketing
 - MGT 421 Small Business Management
 - MGT 429 Current Issues in Entrepreneurship

For non-business majors, the minor in Entrepreneurship consists of:

- ACC 301 Introduction to Accounting
- MGT 201 Legal Environment of Business
- MGT 320 New Venture Creation
- MGT 321 Financing Entrepreneurial Ventures
- MGT 421 Small Business Management

A minor in Entrepreneurship may petition the department chair to substitute other Management courses in place of one, but not two, of these electives. MGT 427 and 499, however, are not among those courses that may be used as substitutes. The request will be considered in light of the student's overall academic program and career intentions.

BACHELOR OF SCIENCE WITH A MAJOR IN ENTREPRENEURSHIP (ENT)

<i>Dept.</i>	<i>No.</i>	<i>Course</i>	<i>Semester Hours</i>
Sophomore Year			
MGT	220	Entrepreneurship Sophomore Experience I	2
MGT	221	Entrepreneurship Sophomore Experience II	1
			<u>3</u>
Junior Year			
MGT	320	New Venture Creation	3
MGT	321	Financing Entrepreneurial Ventures	3
MGT	301	Organizational Behavior	3
MKT	301	Principles of Marketing	3
FIN	301	Business Finance	3
OPS	301	Production and Operations Management	3
MIS	365	Management Information Systems	3
ECO	—	Economics elective ¹	3
—	—	General elective ²	6
			<u>30</u>
Senior Year			
MGT	—	Entrepreneurship elective	3
MGT	—	Entrepreneurship elective	3
PHL	313	Business Ethics	
or			
REL	368	Christian Ethics	3
MGT	430	Senior Seminar in Entrepreneurship	3
MGT	490	Managing the Enterprise	3
—	—	General Education requirement ³	9
—	—	General electives ²	6
			<u>30</u>

¹Choose any 300 or 400 level economics course.

²At least 3 sem. hrs. of the general electives must be taken outside the School of Business Administration. A minimum of 54 sem. hrs. of all academic work must be at the 300-400 level.

³See General Education Requirements, Chapter V. Some General Education courses are specified in the program (e.g., PHL 313 or REL 368); others are to be chosen from the listing of approved courses set forth in Chapter V.

FACULTY

Wesley C. King, Jr., *Department Chair*

Professors Emeriti: Darr, R. Miller

Professors: Gould, McFarlin, Sweeney

Associate Professors: Bickford, King, Lee, Schenk

Assistant Professor: Janney

Lecturers: Forlani, Chelle

Adjunct: Evans, C. Wells, T. Miller, Kairis, Rehg, Lush

COURSES OF INSTRUCTION

MGT 201. LEGAL ENVIRONMENT OF BUSINESS: Survey of the legal environment in which businesses operate. Includes overview of legal system and judicial processes and coverage of constitutional principles for U.S. legal system, ways to resolve legal disputes, forms of business organization, legal issues relevant to employment, legal responsibility of businesses to clients and customers, and liability issues. *3 sem. hrs.*

MGT 220. ENTREPRENEURSHIP SOPHOMORE EXPERIENCE I: First of two-course sequence. Designed to immerse Entrepreneurship major into the dynamics of starting and running a micro-business. Focuses on identifying market need, researching financial viability of business venture to meet that need, and marshaling the resources (among them, financial, human, technical, and motivational) to launch the business. Course is coordinated through the Crotty Center for Enterprise Leadership. Prerequisite: Entrepreneurship major accepted into the Entrepreneurship program; sophomore standing; concurrent registration in ACC 207, ECO 203. *2 sem. hrs.*

MGT 221. ENTREPRENEURSHIP SOPHOMORE EXPERIENCE II: Continuation of MGT 220. Focuses on growing and running the micro-business throughout the academic year with planned liquidation or shutdown by the end of the academic year. Course is coordinated through the Crotty Center for Enterprise Leadership. Prerequisite: MGT 201, 220, ACC 207, ECO 203; Entrepreneurship major accepted into the Entrepreneurship program; concurrent registration in ACC 208, ECO 204. *1 sem. hr.*

MGT 301. ORGANIZATIONAL BEHAVIOR: Study of individual, group, and team behavior in organizations as they interact to achieve both personal and organizational goals. Topics include individual differences, interpersonal communication, leadership, decision-making, reward systems, conflict management, and work groups and teams. Prerequisite: junior standing. *3 sem. hrs.*

MGT 302. MANAGERIAL SKILLS: Course focuses on knowledge, skills and abilities in oral and written communication, decision-making, and facilitation of conflict management and group/team management. Demonstrated working competencies are required to complete the course. Prerequisite: junior Standing. *3 sem. hrs.*

MGT 313. NEGOTIATION: Course integrates conceptual understanding with practical application of negotiation and examines cultural and gender differences in negotiation, influence of personality traits, the negotiation process, and different ways in which to negotiate. Demonstrated knowledge, skills and abilities are part of course requirements. Prerequisite: MGT 301, junior standing. *3 sem. hrs.*

MGT 314. SURVEY OF HUMAN RESOURCES: Survey course designed to familiarize student with the major functional areas in human resources including planning, recruitment and selection, training and development, compensation, benefits, safety, and employee relations. Course develops framework for understanding the roles of HR professional, issues faced by managers and supervisors, and application of sound management theory to these issues. Prerequisite: MGT 301, junior standing. *3 sem. hrs.*

MGT 315. EMPLOYEE RELATIONS: Study of interrelationships and interactions of employer and employee. Emphasis placed on how employee knowledge and skills can be used to provide competitive advantage for employer. Both union and non-union environments are studied and evaluated. Prerequisites: junior standing. *3 sem. hrs.*

MGT 316. WOMEN IN MANAGEMENT: Study of gender stereotyping, gender socialization, gender and the law, work/family issues, glass ceiling, and strategies employed by successful women to address these issues. Course increases understanding of unique issues of women's advancement in the workplace and develops skills in working with co-workers and business partners of the other gender, domestically and internationally. Prerequisite: junior standing. *3 sem. hrs.*

MGT 318. MANAGEMENT AND SOCIETY: Study of business firm's relationship with society through examination of influence of the competitive environment, government, interest groups, and lobbyists in the public policy process. Subjects include technological changes, racism, poverty, diversity, urban issues, and environmental concerns. Prerequisite: junior standing. *3 sem. hrs.*

MGT 320. NEW VENTURE CREATION: Overview of the concepts and aspects involving creation of new business ventures, new product development, and innovation within existing companies now popularly called corporate venturing. Topics include entry strategies, creating high potential opportunities, entrepreneurial finance, business plan development, entrepreneurial marketing, the legal structures of new businesses, and government programs for assisting entrepreneurial firms. Prerequisite: ACC 208 or ACC 301; MGT 201, junior standing. *3 sem. hrs.*

MGT 321. FINANCING ENTREPRENEURIAL VENTURES: Focuses on financial aspects of starting, growing, and harvesting entrepreneurial ventures. Includes assessments of various sources of capital for small and growth businesses with emphasis placed on how common financing deals are structured, common financing pitfalls, and various legal documentation used to consummate financial transactions. Prerequisites: MGT 320 or FIN 301; junior standing. *3 sem. hrs.*

MGT 401. ORGANIZATIONAL DESIGN, CULTURE, AND CHANGE: A course focused at the organizational level of analysis that includes design of organizations, development of organizational culture, and other issues of organizational change. Topics include leadership processes for organizational design and change, power, and information processing. Prerequisites: junior standing. *3 sem. hrs.*

MGT 402. LEADERSHIP AND MOTIVATION: An in-depth study of individual and group/team motivation in an organizational setting through examination of individual, organizational, and societal influences on motivation. Focus is on how

leaders can understand, and then affect, motivation through a variety of mechanisms. Prerequisites: MGT 301, junior standing. 3 sem. hrs.

MGT 403. CROSS-CULTURAL MANAGEMENT: Study of general cross-cultural differences and development of cross-cultural frameworks in decision-making, negotiation, conflict management, communication, and general business relations. Primary emphasis is on understanding how and why cultures differ and how such differences can be managed. Prerequisites: MGT 301, junior standing. 3 sem. hrs.

MGT 404. GROUP DYNAMICS, TEAM PROCESSES, AND DECISION MAKING: In-depth study of group formation, team design, and diagnosis with emphasis on developing and maintaining different types of groups and teams. Course focuses on leaders' knowledge, skills and abilities to work effectively with teams and groups. Prerequisites: MGT 301, junior standing. 3 sem. hrs.

MGT 405. EMPLOYEE TRAINING AND DEVELOPMENT: Focuses on training and learning methods and models, career paths, and self-improvement methods within the balance of organizational, job, and individual needs. Additional emphasis on systematic development and evaluation of training programs and role of organizational leader in ensuring employee training and development. Prerequisites: MGT 301, junior standing. 3 sem. hrs.

MGT 409. CURRENT ISSUES IN LEADERSHIP: Selected topics that consider and analyze current problems and emerging issues in leadership and in the leader's role in promoting effective organizational change and development. Prerequisites: MGT 301, senior standing. 3 sem. hrs.

MGT 410. SENIOR SEMINAR IN EXPERIENCING LEADERSHIP: Focus on integration of knowledge, skills and abilities acquired in leadership major courses. Seminar combines classroom component with relevant and approved internship or consulting project to integrate the study of leadership with its practice. Prerequisites: senior standing, Leadership major. 3 sem. hrs.

MGT 413. PROJECT MANAGEMENT AND TEAM BUILDING: Course focuses on managerial activities associated with the project type organizational structure and provides broad view of project management so student can use concepts in a variety of different organizational settings. Particular emphasis on understanding project planning, scheduling, and controlling activities with a major parallel theme on understanding how to build an effective project team. Prerequisites: junior standing; OPS 301 recommended. 3 sem. hrs.

MGT 414. MULTINATIONAL CORPORATE MANAGEMENT: Introduction to use of strategic management in international context with examination of different strategic and tactical approaches organizations use to manage international operations. Prerequisite: senior standing. 3 sem. hrs.

MGT 420. ENTREPRENEURIAL MARKETING: Study of the techniques used to profitably identify and fill customers' needs when operating with a limited budget during the early stages of a start-up or in a small to medium sized firm. Course strives to develop skills in applying basic marketing principles and high impact sales and promotion techniques in integrated manner to produce a practical, cost-effective action plan for start-ups and smaller companies. Also listed as MKT 420. Prerequisite: MKT 301. 3 sem. hrs.

MGT 421. SMALL BUSINESS MANAGEMENT: Course addresses unique characteristics of small businesses (e.g., resource limitations, family participation) and grapples with ways to overcome the "liability of smallness." Coverage includes effect of macro-trends (e.g., changing technology and globalization) on small business, review of topics from functionally-oriented courses, examination of how functional models such as pricing models can be modified for small business use, and ways for small business to identify and exploit weaknesses of larger, better financed competitors. Prerequisites: ACC 208 or ACC 301; MGT 201; junior standing. *3 sem. hrs.*

MGT 427. INTERNSHIP IN ENTREPRENEURSHIP: Exposes students to practicing entrepreneurs currently managing on-going entrepreneurial enterprises. Purpose of course is to develop mentor relationships with successful practicing entrepreneurs, to experience success working in entrepreneurial setting, and to gain first-hand experience about knowledge, skills, and abilities necessary to be a successful entrepreneur. Internships coordinated through the Crotty Center for Enterprise Leadership. Students will submit reports throughout semester addressing questions that integrate Entrepreneurship and other business coursework with their work experience. Prerequisites: BAI 295, MGT 320; Entrepreneurship major, junior standing. *1-3 sem. hrs.*

MGT 429. CURRENT ISSUES IN ENTREPRENEURSHIP: In-depth examination of selected contemporary topics relevant to entrepreneurship. Subject matter may vary each semester. May be taken only once for credit toward Entrepreneurship major or minor. Prerequisites: MGT 320, 321; senior standing. *3 sem. hrs.*

MGT 430. SENIOR SEMINAR IN ENTREPRENEURSHIP: Project-based capstone course for Entrepreneurship major. Course objective is to integrate prior coursework through one of two projects: (1) writing of complete business plan — including market and cost research, competitive analysis, and financial and legal planning — for student's personal business to start after graduation; or (2) completion of a consulting project with local entrepreneurial firm, including business plan revision, market research, feasibility testing, financial modeling and analysis, and operations analysis. Prerequisites: MGT 320, 321; ENT major; senior standing. *3 sem. hrs.*

MGT 490. MANAGING THE ENTERPRISE: Course focuses on creating understanding of how concepts and analytical tools learned in other business courses are integrated in practice to create a unified whole. Students learn how general and top managers gather and use information to influence organizational mission, goals, and strategies. Course typically relies heavily on cases and/or business simulation. Prerequisites: MGT 301, MKT 301, FIN 301, OPS 301, MIS 365, senior standing. *3 sem. hrs.*

MGT 491-492. HONORSTHESIS: Selection, design, investigation, and completion of an independent original research thesis under guidance of departmental faculty member. Prerequisites: University Honors Program participant; permission of director of Honors Program and of department chairperson; senior standing. *3 sem. hrs.*

MGT 494. SEMINAR IN MANAGEMENT: Study of selected topics or issues in contemporary managerial practice, domestic or international. May be taken more than once if topics change. Title will reflect topics covered in a particular offering. Prerequisites vary by topic being studied. *3 sem. hrs.*

MGT 495. SERVICE LEARNING: Designated sections of selected courses may include service learning component through which students apply concepts learned in the course in an applied setting. Prerequisite: permission of instructor.

1 sem. hr.

MGT 497. INTERNSHIP FOR GENERAL ELECTIVE CREDIT: Supervised work experience in partnership with sponsoring employer that is directly relevant to major or minor. Must work with internship coordinator in Internship Office and get approval of department chairperson or designee. May be used for general elective credit only. Prerequisites: LDR or ENT major; BAI 295; junior standing; overall GPA 2.7 or higher; prior completion of 6 sem. hrs. of MGT.

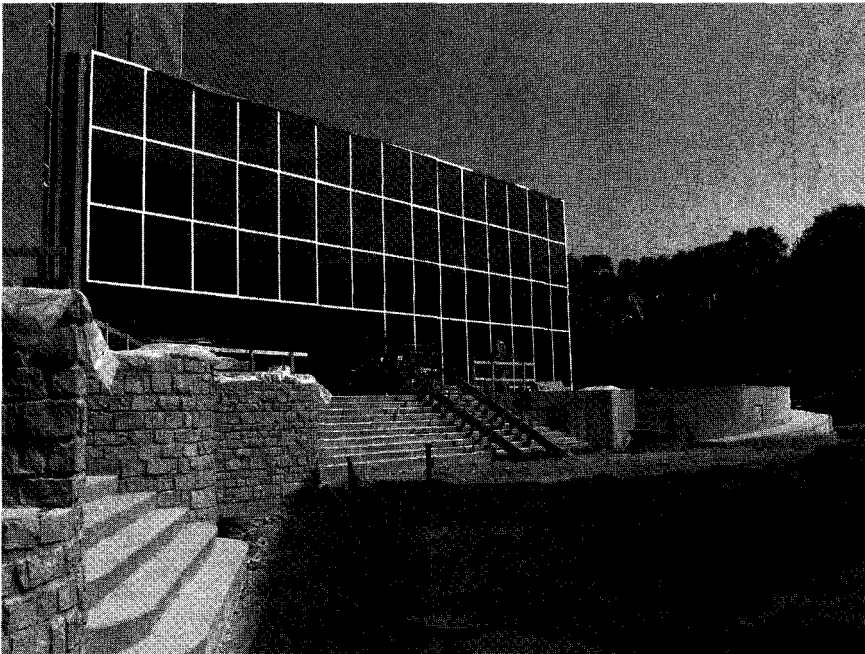
1-3 sem. hrs.

MGT 498. COOPERATIVE EDUCATION: Optional full-time work period off campus alternating with study period on campus. (See Chapter X; consult Cooperative Education Office for details.) Permission of chairperson or designee required. May be used for general elective credit only. Prerequisite: LDR or ENT major; BAI 295, overall GPA 2.7 or higher.

1-3 sem. hrs.

MGT 499. INDEPENDENT STUDY: Supervised study involving directed readings, individual research (library, field, or experimental), or projects in specialized area of management. May be taken only once. May count as general elective credit. Does not apply to requirements for Leadership or Entrepreneurship major or minor. Prerequisites: Major in Leadership or Entrepreneurship; senior standing; sponsorship by faculty member and permission of chairperson.

1-3 sem. hrs.



MANAGEMENT INFORMATION SYSTEMS (MIS)

The Department of Management Information Systems, Operations Management, and Decision Sciences offers courses in several quantitative and systems areas, a major and a minor in management information systems, a major and minor in operations management (see OPS), and a minor in decision sciences. (See DSC.)

The major in management information systems enables the student to design, implement, and maintain effective information systems in organizations. The curriculum integrates the technical knowledge of computer and networking technologies and the business and organizational knowledge of the business curriculum. Significant emphasis is placed on developing the students' writing and speaking skills in presenting the results of their work and in team problem solving.

The curriculum prepares the graduate to assume any of a variety of positions in organizations dealing with the design, development, and maintenance of information systems as well as the education and training of users of information systems.

The curriculum consists of four major groups of courses:

1. *General Education* provides the student with a well rounded liberal education and includes such courses as history, philosophy, art, science, and English.
2. *Business* provides the student with the business and organizational concepts and skills to perform effectively in organizations.
3. *Computer Science* provides the student with the technical knowledge necessary to design and build effective information systems. Specifically, two courses in programming business applications and computer system networking and architecture are required: CPS 225 and CPS 437.
4. *Management Information Systems* provides knowledge and skills for analyzing the need for building systems supporting the information and decision needs in any organization. Specifically, the major consists of MIS 175, Introduction to Business Applications; MIS 380, Systems Analysis and Re-engineering; MIS 385, Systems Implementation with Database Management Systems; MIS 465, Analysis and Design in Teams; MIS 475, Design and Implementation in Teams; and DSC 370, Decision Support Systems.

The program below contains all of the requirements for the major in management information systems. There is flexibility in the sequencing of some courses—e.g., PHL 103 can be taken during either the first or the second semester; some courses listed in the first year can just as well be taken during the second year, and vice-versa; and some upper-level courses can also be taken during various terms of the junior and senior years. Consult your academic advisor for sequencing options.

BACHELOR OF SCIENCE WITH A MAJOR IN MANAGEMENT INFORMATION SYSTEMS (MIS)

Dept.	No.	Course	Semester Hours	
			1st Term	2nd Term
First-Year				
BAI	150	Business Educational Planning ¹	1	
BAI	151	Business Integration Experience		1
BAI	103L	Business Computing Laboratory ¹	1	
ENG	101-102	College Composition I and II	3	3
HST	101 or 102	History of Western Civilization		3

MTH	128	Finite Mathematics ²	3	
MTH	129	Calculus for Business ²		3
PHL	103	Introduction to Philosophy	3	
REL	103	Introduction to Religion	3	
CMM	111	Information Public Speaking ⁹		1
—	—	Social science elective ³	3	
—	—	General Education requirements ⁴		3
			<hr/>	<hr/>
			17	14
Second-Year				
CMM	110	Group Decision Making		1
CMM	113	Interviewing	1	
ACC	207-208	Principles of Accounting I and II	3	3
MIS	175	Introduction to Business Applications ⁷	3	
CPS	225	Programming for Business Systems with C/C++		4
DSC	210-211	Statistics for Business I and II	3	3
ECO	203-204	Principles of Microeconomics and Macroeconomics	3	3
MGT	201	Legal Environment of Business	3	
			<hr/>	<hr/>
			16	14
Junior Year				
MIS	380	Systems Analysis and Re-engineering		3
MIS	385	Systems Implementation with Database Management Systems		3
OPS	301	Production and Operations Management	3	
DSC	370	Decision Support Systems		3
FIN	301	Business Finance	3	
MGT	301	Organizational Behavior	3	
MIS	365	Information Systems in Organizations	3	
MKT	301	Principles of Marketing		3
—	—	General Education requirements ⁴	3	3
			<hr/>	<hr/>
			15	15
Senior Year				
CPS	437	System Architectures and Networking	3	
ECO	—	Economics elective ⁶	3	
MGT	490	Managing the Enterprise		3
MIS	465, 475	Analysis and Design Project I, II	3	3
PHL	313	Business Ethics	3	
or				
REL	368	Christian Ethics and the Business World		
—	—	General electives ⁸	3	3
—	—	General Education requirement ⁴		6
			<hr/>	<hr/>
			15	15

¹Does not count toward minimum graduation requirement. Credit by examination for BAI 103L is available for those with adequate background.

²MTH 102 is recommended for students with insufficient knowledge of secondary mathematics. MTH 102 does not count toward minimum graduation requirement. MTH 168 is recommended in lieu of both MTH 128 and 129 for students with high mathematics test scores.

³Choose any course from one of the following: anthropology, political science, psychology, sociology. May want to select a course that also satisfies thematic cluster requirement.

⁴See General Education Requirements, Chapter V. Some General Education courses are specified in the program (e.g., PHL 103); others are to be chosen from the listing of approved courses set forth in Chapter V.

⁵Choose from ENG 370, ENG 372, ENG 378; CMM 321, CMM 322, CMM 344, CMM 351 or CMM 420. MIS majors are encouraged to take one of the ENG courses in this list.

⁶Choose any 300 or 400 level economics course.

⁷This may be taken any time after completing BAI 103L.

⁸Students may fulfill General elective requirements by Internship or Co-operative Education credits. See Chairperson for approval.

⁹To be taken the semester immediately following BAI 103L.

A minor in management information systems is available for students who wish to acquire skills needed to be an effective user of information systems and to specify needs for information systems.

Required courses:

BAI 103L	Business Computing Laboratory
MIS 175	Introduction to Business Applications
DSC 210-211	Statistics for Business I and II
MIS 365	Information Systems in Organizations
MIS 380	Systems Analysis and Re-engineering
DSC 370	Decision Support Systems

Three credit hours of MIS, DSC, or OPS 300 or 400 level electives in addition to courses used to satisfy the requirements of any other major or minor. See Department Chair for approval.

FACULTY

Jeffrey A. Hoffer, *Chairperson*

Professor Emeritus and Distinguished Service Professor: Bohlen

Professors Emeriti: Vlahos, Young

Prabuddha De, *Sherman-Standard Register Chair In MIS*

Professors: De, Dunne, Ferratt, Hoffer, Wells

Associate Professors: Ahire, Amsden, Prasad

Assistant Professor: Enns

Lecturers: Davis, McManamon, Wagner

COURSES OF INSTRUCTION

MIS 175. INTRODUCTION TO BUSINESS APPLICATIONS: PROBLEM SOLVING WITH VISUAL TOOLS: Introduction to the role of information technology (IT) in business, graphical user interface design using a visual programming language, and programming based on principles of problem-solving. Relationship of visual programming to business computing tools. Web-based programming. Prerequisite: BAI 103L or equivalent. 3 sem. hrs.

MIS 225. PROGRAMMING FOR BUSINESS SYSTEMS. Process of software development for business system implementation. Fundamental programming concepts including program design, documentation, development, and testing of computer solutions of business problems using modern programming languages, such as Java and C++. Prerequisite: MIS 175. 3 sem. hrs.

MIS 365. INFORMATION SYSTEMS IN ORGANIZATIONS: Survey of theory and applications of computer-based information systems in organizations. The role of information in organizational processes, current information technology, decision support systems, and end-user computing and distributed processing systems. Prerequisites: BAI 103L or HSS 226 and junior standing. 3 sem. hrs.

MIS 380. SYSTEMS ANALYSIS AND RE-ENGINEERING: Concepts, methods, techniques, and tools needed to initiate a systems development project and to conduct the requirements collection, analysis, and structuring activities of systems development. Structured life cycle and alternatives. Re-engineering business processes through information systems. Prerequisites: MIS 175, MIS 365. 3 sem. hrs.

MIS 385. SYSTEMS IMPLEMENTATION WITH DATABASE MANAGEMENT SYSTEMS: Concepts, techniques, and tools to convert a logical system design into a working application using a relational DBMS. File and data structures, logical and physical database design, security and data integrity, file design and processing. DBMS functions, SQL, 3GL and 4GL access to databases, linkage to WWW pages, database architectures, CASE. Prerequisite: CPS 225 or MIS 225, or permission of instructor. *3 sem. hrs.*

MIS 410. OBJECT-ORIENTED ANALYSIS AND DESIGN: Introduction to object-oriented concepts and techniques for analyzing and designing systems. Systems development project using an object-oriented CASE tool. Prerequisite: MIS 365 or permission; MIS 175 recommended. *3 sem. hrs.*

MIS 420. EXPERT AND KNOWLEDGE-BASED SYSTEMS: Introduction to artificial intelligence and expert and knowledge-based systems; knowledge acquisition, implementation, and validation; advanced topics; applications to business. Use of expert system software. Prerequisite: BAI 103L or equivalent; DSC 370 recommended. *3 sem. hrs.*

MIS 425. INFORMATION FOR TOTAL QUALITY: Theory and practice of total quality management (TQM); applications of TQM in the information systems function, information system requirements for TQM programs. Prerequisite: OPS 301, MIS 365. *3 sem. hrs.*

MIS 430. TELECOMMUNICATIONS AND NETWORKING Introduction to computer-based communication networks; underlying concepts; basic hardware components and operating systems; network architectures and protocols; data integrity and security; message routing; network management. Prerequisite: MIS 380. *3 sem. hrs.*

MIS 465. MIS PROJECT I—ANALYSIS AND DESIGN IN TEAMS: First of a two-course sequence. Team participation/management and project management skills. Apply these skills in teams to perform an analysis and preliminary re-design of an existing organization's information system. Emphasis on written and oral communications, including team-prepared reports and presentations. Prerequisite: MIS 380 or CPS 310. *3 sem. hrs.*

MIS 475. MIS PROJECT II—DESIGN AND IMPLEMENTATION IN TEAMS: Continuation of MIS 465. With its organizational client, each team carries its project as far as possible towards final design and actual implementation. Emphasis on written and oral communications, including team-prepared reports and presentations. Prerequisites: MIS 385, 465, and CPS 437 or MIS 430. *3 sem. hrs.*

MIS 491-492. HONORS THESIS: Selection, design, investigation, and completion of an independent original research thesis under the guidance of a departmental faculty member. Restricted to students in the University Honors Program with permission of the director of the program and the departmental chairperson. *3 sem. hrs. each*

MIS 494. SEMINAR IN MANAGEMENT INFORMATION SYSTEMS: Study of selected technical and/or organizational issues in information systems. Topics vary from time to time. May be taken more than once if topics change. Title will reflect topics covered in a particular offering. *3 sem. hrs.*

MIS 497. LABORATORY WORK EXPERIENCE: Under faculty sponsorship and in association with a participating industrial, commercial, educational, health-care, or governmental organization; practical experience in work associated with the student's major concentration. (See internship coordinator for details.) Permission of chairperson required. *1-6 sem. hrs.*

MIS 498. COOPERATIVE EDUCATION: Optional full-time work period off campus alternating with study period on campus. (See Chapter X; consult Cooperative Education Office for details.) Permission of chairperson required. *1-6 sem. hrs.*

MIS 499. INDEPENDENT STUDY: Research in conjunction with a faculty member on a subject within the general area of management information systems. Open only to juniors or seniors who have attained a cumulative grade point average of 3.0 or above. Permission of chairperson required. *1-6 sem. hrs.*



MARKETING (MKT)

The Marketing program offered by the Management/Marketing Department includes a major and a minor in Marketing.

A student with a major or minor in marketing learns systematic ways for identifying, understanding, and satisfying consumer and organizational needs. Courses in the major are designed to instill in students an appreciation for both the total marketing process as well as specialized marketing activities such as purchasing, sales, transportation, warehousing, and marketing research. They likewise focus on how to integrate the marketing process with the objectives of the organization, the functions of the economy, and the constraints of society from national and global perspectives. Students learn to apply conceptual principles and quantitative techniques in their study of consumer and business markets with the goal of becoming informed, skilled, and competent marketing professionals.

The major in marketing is 18 semester hours with the following requirements:

- MKT 450 Buyer Behavior and Market Analysis
(This is a 6 semester hour class.)
- MKT 455 Marketing Planning and Strategy
- 9 additional semester hours of 300-400 level marketing electives.

For business majors, the minor in marketing consists of:

- MKT 301 Principles of Marketing and
- 12 additional semester hours of 300-400 level marketing courses in a pattern chosen in consultation with an academic advisor.

For non-business majors, the minor in marketing consists of:

- MKT 300 Survey of Marketing
- 12 additional semesters hours of 300-400 level marketing courses in a pattern chosen in consultation with an academic advisor.

Marketing majors frequently combine their academic studies with either a co-op or internship work experience. General elective credit for such experiences is approved on a case-by-case basis with the criteria being the nature of the experience and its degree of integration into the student's academic program.

BACHELOR OF SCIENCE WITH A MAJOR IN MARKETING (MKT)

<i>Dept.</i>	<i>No.</i>	<i>Course</i>	<i>Semester Hours</i>
Junior Year			
MKT	301	Principles of Marketing	3
MKT	450	Buyer Behavior and Market Analysis	6
MKT	—	Marketing elective ¹	3
MGT	301	Organizational Behavior	3
FIN	301	Business Finance	3
OPS	301	Production and Operations Management	3
MIS	365	Management Information Systems	3
—	—	General elective ²	6
			30
Senior Year			
MKT	455	Marketing Planning and Strategy	3

MKT	—	Marketing elective	3
MKT	—	Marketing elective	3
PHL	313	Business Ethics	
or			
REL	368	Christian Ethics	3
MGT	490	Managing the Enterprise	3
ECO	—	Economics elective ³	3
—	—	General Education requirement ⁴	6
—	—	General electives ²	6
			<hr/> 30

¹Marketing electives selected in consultation with academic advisor.

²At least 3 sem. hrs. of the general electives must be taken outside the School of Business Administration. A minimum of 54 sem. hrs. of all academic work must be at the 300-400 level.

³Choose any 300 or 400 level economics course.

⁴See General Education Requirements, Chapter V. Some General Education courses are specified in the program (e.g., PHL 313 or REL 368); others are to be chosen from the listing of approved courses set forth in Chapter V.

FACULTY

Wesley C. King, Jr., *Chairperson*

Distinguished Service Professor: Murphy

Professor Emeritus: Comer

Associate Professors: DeConinck, Lewis, Oumlil, Sekely, Sparks, Yates-Wells

Lecturer: Dickey

Adjunct: Krystofik, Blanford, Leddin, Kaminski, Mitchell, Swartz

COURSES OF INSTRUCTION

MKT 300. SURVEY OF MARKETING: Survey of marketing for non-marketing majors. Course introduces students to market and environmental analysis, marketing strategy and link with corporate strategy, market segmentation, organizational and consumer markets, and marketing mix (product, price, promotion, distribution). Prerequisite: junior standing, non-business major. 3 sem. hrs.

MKT 301. PRINCIPLES OF MARKETING: The general principles and practices underlying the processes of marketing. Analysis of the environmental conditions of manufacturers, wholesalers, retailers, and other marketing agencies. Prerequisite: junior standing. 3 sem. hrs.

MKT 310. PRINCIPLES OF SELLING: The nature of selling, explored through the practical application of buying motives and selling techniques. Projects and role-playing to experience the preparation, closing, and post-purchase phases of selling. Prerequisite: MKT 300 or MKT 301. 3 sem. hrs.

MKT 315. RETAIL MARKETING: Survey of the development of retailing and the impact of consumer behavior, fashion, computers, and other innovations. Structural organization, location, and layout. Merchandising operations including planning of sales, purchases, stock control, markup, and expense control. Prerequisite: MKT 300 or MKT 301. 3 sem. hrs.

MKT 330. SERVICES MARKETING: Basic concepts of services marketing including discussion of marketing concepts and their management implications in services organizations, the scope of ethics and social responsibility at the national and global levels, and how the external environment, both domestic and international, influences organization strategy. Prerequisite: MKT 300 or MKT 301. 3 sem. hrs.

MKT 340. MULTICULTURAL MARKETING ANALYSIS: Study of basic concepts and theories of multicultural marketing. Students acquire basic understanding of culture, awareness of cultural differences, and appreciation of importance of cultural adaptation for marketing program, especially as related to development of marketing systems. Prerequisite: MKT 300 or MKT 301. 3 sem. hrs.

MKT 341. BUSINESS-TO-BUSINESS MARKETING: Concepts and analytical procedures associated with marketing to business. Business consumer and competitor analysis, marketing information systems, marketing research, and demand forecasting. Strategy development in product, promotion, distribution, and pricing with focus on manufacturers of business products. Prerequisite: MKT 300 or MKT 301. 3 sem. hrs.

MKT 405. CONSUMER BEHAVIOR: Comprehensive study of buyer decision making which offers insight into the buyer-seller relationship. Application of theories from psychology and social psychology to investigate the behavior of industrial and consumer buyers. Prerequisite: MKT 300. 3 sem. hrs.

MKT 406. MARKETING CHANNELS: Study of the place element of the marketing mix. A focus on the relationships among manufacturers, wholesalers, and retailers. Channel structure and design including franchising. Prerequisite: MKT 300 or MKT 301. 3 sem. hrs.

MKT 408. MARKETING LOGISTICS: Study of the physical distribution element of the marketing mix. Customer service, service quality, transportation, inventory, warehousing, and information systems used by manufacturers and retailers. Prerequisite: MKT 300 or MKT 301. 3 sem. hrs.

MKT 411. SALES MANAGEMENT: The structure of the sales organization; determination of sales policies; selection, training, and motivation of salespersons; establishing sales territories and quotas. Prerequisites: MKT 300 or MKT 301, MKT 310. 3 sem. hrs.

MKT 420. ENTREPRENEURIAL MARKETING: Study of the techniques used to profitably identify and fill customers' needs when operating within a limited budget during the early stages of a start-up or in a small to medium sized firm. Course strives to develop skills in applying basic marketing principles and high impact sales and promotion techniques in integrated manner to produce a practical, cost-effective action plan for start-ups and smaller companies. Also listed as MGT 420. Prerequisite: MKT 300 or MKT 301. 3 sem. hrs.

MKT 421. ADVERTISING: Nature and scope of advertising, social and economic aspects, role of research, creative strategy, media planning and selection, coordination with other marketing efforts. Prerequisite: MKT 300 or MKT 301. 3 sem. hrs.

MKT 428. PROMOTION MANAGEMENT: Integration course to familiarize marketing students interested in promotion and marketing communication with tools necessary for the development, implementation, and management of promotional programs. Focus on management and coordination of advertising, personal selling, publicity and public relations, sales promotion, and collateral materials. Prerequisite: MKT 421. 3 sem. hrs.

MKT 435. PRODUCT DEVELOPMENT, MANAGEMENT, AND PRICING: Investigation and analysis of the new product development process, the management of a product through its life cycle, and the importance of the price variable in the product management process. Prerequisite: MKT 301. *3 sem. hrs.*

MKT 440. GLOBAL MARKETING: Emphasis on understanding global marketing environments, developing skills of global market analysis, designing and developing appropriate marketing strategies for global markets, decision making in global marketing. Prerequisite: MKT 300 or MKT 301. *3 sem. hrs.*

MKT 445. SPECIAL TOPICS IN INTERNATIONAL MARKETING: Study abroad program. Subject varies from time to time. May be taken more than once if topic changes. Prerequisite: junior standing. *3 sem. hrs.*

MKT 450. BUYER BEHAVIOR AND MARKET ANALYSIS: Integration of theoretical components of buyer behavior and marketing research. Emphasis placed on how marketing managers use concepts from these bodies of knowledge to make better decisions. Topics include common processes and methods of contemporary market research, analysis of purchase decisions, market research techniques used to gather information about purchase decisions, and use of information to formulate and implement a marketing strategy. *3 sem. hrs.*

MKT 455. MARKETING PLANNING AND STRATEGY: Integrative course in marketing with emphasis on managerial decision making. The course is designed around a strategic marketing planning approach with a clear emphasis on how to do strategic analysis and marketing planning. Prerequisite: senior standing and MKT 450, FIN 301, ACC 207-208. *3 sem. hrs.*

MKT 491-492. HONORS THESIS: Selection, design, investigation, and completion of an independent original research thesis under the guidance of a departmental faculty member. Restricted to students in the University Honors Program with permission of the director of the program and the departmental chairperson. *3 sem. hrs. each*

MKT 494. SPECIAL TOPICS IN MARKETING: Subject varies from time to time. May be taken more than once if topic changes. Prerequisite: Varies with topic. *3 sem. hrs.*

MKT 497. INTERNSHIP FOR GENERAL ELECTIVE CREDIT: Practical work experience associated with career development and career exploration. See internship coordinator for details. Permission of department chair or designee required. Prerequisites: MKT major; BAI 295, junior standing, overall GPA 2.7 or higher, prior completion of 6 sem. hrs. of MKT. *1-3 sem. hrs.*

MKT 498. COOPERATIVE EDUCATION: Optional full-time work period off campus alternating with study period on campus. (See Chapter X; consult Cooperative Education Office for details.) Permission of chairperson or designee required. For general elective credit only. Prerequisite: MKT major; BAI 295, overall GPA 2.7 or higher. *1-3 sem. hrs.*

MKT 499. INDEPENDENT STUDY IN MARKETING: Study of one or more specific aspects of the marketing process with emphasis on individual reading and research. Subject matter to be determined by the instructor on the basis of interest and need of the student. Enrollment limited. Permission of chairperson or designee required. Prerequisite: MKT major; MKT 301. *1-3 sem. hrs.*

OPERATIONS MANAGEMENT (OPS)

The Operations Management program offered by the Management Information Systems, Operations Management, and Decision Sciences Department includes a major and a minor in Operations Management (OM).

Students who major or minor in Operations Management learn how to manage the core operations of an organization. These core operations use the human, technical, and financial resources of the organization to create goods and services for customers. Operations managers apply technical and quantitative tools and techniques, together with behavioral skills, to manage the transformation of inputs into outputs desired by customers. Operations managers participate in these transformation processes in many different roles, including: process improvement analyst, quality assurance analyst, purchasing agent, production/inventory manager, warehouse manager, service facility manager, and operations consultant.

The major consists of 22 semester hours, which includes four required courses and three OM electives. The four required courses are:

- OPS 350, Business Process Management
- OPS 401, Operations Planning and Control
- OPS/MKT 480, Supply Chain Management Strategies
- OPS 495, Capstone OM Project

The OM electives are listed below in logical, focused tracks. While a student may take any three of these electives to satisfy the major, focusing the electives in a track will add to a student's marketability and depth of knowledge in an area:

- Manufacturing Operations Management
 - DSC 370, Decision Support Systems
 - DSC 313, Advanced Business Statistics
 - IET 318, Statistical Process Control
 - IET 319, Quality Improvement Methods
 - IET 321, Quality Management
 - OPS/MGT 413 or IET 323, Project Management
 - DSC 415 Simulation Modeling and Analysis
 - OPS 430, Quality and JIT in Manufacturing
 - DSC 435, Analysis of Factory Systems
 - OPS 440, Continuous Improvement
- Electronics Operations Management
 - MIS 494, E-Commerce
 - MKT 494, E-Marketing
 - MIS 225, Web Programming
 - MGT 320, New Venture Creation
 - OPS/MGT 413 or IET 323, Project Management
- Supply Chain Management
 - MKT 406, Marketing Channels
 - MKT 408, Marketing Logistics
 - An approved 300/400 level elective
- Small Business Operations Management
 - MIS 494, E-Commerce
 - MGT 320, New Venture Creation

- MGT/FIN 321, Financing Entrepreneurial Ventures
- MGT/MKT 420, Entrepreneurial Marketing
- MGT 421, Small Business Management
- Quality Management
 - DSC 313, Advanced Business Statistics
 - IET 318, Statistical Process Control
 - IET 319, Quality Improvement Methods
 - IET 320, Quality Assurance Techniques
 - IET 321, Quality Management
 - OPS/MGT 413 or IET 323, Project Management
 - OPS 430 Quality and JIT in Manufacturing
 - OPS 440 Continuous Improvement
- Business Process Management
 - DSC 370, Decision Support Systems
 - OPS/MGT 413 or IET 323, Project Management
 - OPS 440 Continuous Improvement
 - An approved 300/400 level elective
- Accounting Operations Management
 - ACC 303, Managerial Accounting
 - ACC 304, Advanced Managerial Accounting
 - An approved 300/400 level elective

Operations Management majors will frequently combine their academic studies with a co-op or internship work experience. Academic credit for such experiences is approved on a case-by-case basis. Criteria applied involve the nature of the experience and its degree of applicability to the student's OM major.

The program below contains all junior and senior course requirements for an OM major.

BACHELOR OF SCIENCE WITH A MAJOR IN OPERATIONS MANAGEMENT (OPS)

<i>Dept.</i>	<i>No.</i>	<i>Course</i>	<i>Semester Hours</i>	
			1st Term	2nd Term
Junior Year				
OPS	301	Survey of Operations Management	3	
MGT	301	Organizational Behavior	3	
MKT	301	Principles of Marketing	3	
FIN	301	Business Finance	3	
MIS	365	Information Systems in Organizations	3	
OPS	350	Business Process Management		3
OPS	401	Operations Planning and Control		3
PHL	313	Business Ethics		3
or				
REL	368	Christian Ethics and the Business World		
—	—	Operations Management elective		3
—	—	General Education requirement		3
			15	15

		Senior Year		
OPS/MKT	480	Supply Chain Management Strategies	3	
—	—	Operations Management elective	3	3
—	—	Economics elective	3	
—	—	General elective	3	3
OPS	495	Capstone Operations Management Project		4
MGT	490	Managing the Enterprise		3
—	—	General Education requirement	3	3
			15	16

A minor in Operations Management is available to students who want to acquire basic skills in this area and understand that doing so will enhance their ability to manage operations in any functional area of a business. A minor in Operations Management consists of:

- DSC 210, Statistics for Business I
- DSC 211, Statistics for Business II
- OPS 301, Survey of Operations Management
- OPS 350, Business Process Management
- OPS 401, Operations Planning and Control
- Six additional hours of upper level courses in DSC, OPS, MIS or IET approved by the Department Chair

FACULTY

Jeffrey A. Hoffer, *Chairperson*

Professor Emeritus Distinguished Service Professor: Bohlen

Professors Emeriti: Casey, Vlahos, Young

Prabuddha De, *Sherman-Standard Register Chair in MIS*

Professors: Dunne, Ferratt, Hoffer, Wells

Associate Professors: Ahire, Amsden, Prasad

Assistant Professor: Enns

Lecturers: Davis, McManamon, Wagner

COURSES OF INSTRUCTION

OPS 301. SURVEY OF OPERATIONS MANAGEMENT: Concepts and OM software-based techniques of designing, implementing, managing, and improving operations in manufacturing and service organizations, including project management, service systems design, resource allocation modeling, facility location, layout, aggregate planning, scheduling, and material requirements planning. Survey of major OM strategies such as just-in-time production, total quality management, business process reengineering, synchronous manufacturing, enterprise resource planning, and supply chain management. Prerequisite: DSC 211 or equivalent.

3 sem. hrs.

OPS 350. BUSINESS PROCESS MANAGEMENT: Concepts of business process management and improvement in manufacturing/service firms. Simulation analy-

sis of business processes through mapping and improvement evaluation using software packages such as ProcessModel. Other tools of business process analysis (operations charts, time-function mapping, work-flow analysis, etc.). Behavioral/managerial issues of business process improvement (benchmarking, incremental versus radical change, and management of change). Corequisite: OPS 301.

3 sem. hrs.

OPS 401. OPERATIONS PLANNING AND CONTROL: Concepts and techniques of operations design, on-going management and improvement. Advanced treatment topics, including total quality management, just-in-time, operations scheduling, synchronous manufacturing, and enterprise resource planning (ERP). Software-based analysis of ERP operations. Linkages between technical and managerial/organizational issues in planning and controlling operations in manufacturing and service organizations. Prerequisite: OPS 301; Corequisite: OPS 350.

3 sem. hrs.

OPS 413. PROJECT MANAGEMENT: A broad coverage of technical and human management issues in projects. Emphasis on project planning, scheduling, tracking, and close-down. Task time and cost estimation and description. Use of computer software. Team building and other aspects of managing project teams. Prerequisite: OPS 301.

3 sem. hrs.

OPS 430. QUALITY AND JIT IN MANUFACTURING: The concepts of just-in-time manufacturing, total quality system, and statistical process control. Projects, tours, and guest speakers. Prerequisite: OPS 301.

3 sem. hrs.

OPS 440. CONTINUOUS IMPROVEMENT: Theory and practice of continuous improvement especially as applied in manufacturing; comparison to the traditional operations management approach, tools and techniques, the KAISEN approach. Prerequisite: OPS 301.

3 sem. hrs.

OPS 480. SUPPLY CHAIN MANAGEMENT STRATEGIES: Concepts, analytical techniques, and solution methods for designing and managing integrated supply chains. Strategic issues of integrated supply chain design and management, including inventory management, logistics network design, distribution systems, strategic alliances, value of information for centralized decisions and risk-pooling, information technology and decision support, and international supply chain management. Prerequisite: OPS 401.

3 sem. hrs.

OPS 491-492. HONORS THESIS: Selection, design, investigation, and completion of an independent original research thesis under the guidance of a departmental faculty member. Restricted to students in the University Honors Program with permission of the director of the program and the departmental chairperson.

3 sem. hrs. each

*OPS 494. SEMINAR IN OPERATIONS MANAGEMENT: Study of selected topics or issues in operations management. Topics vary from time to time. May be taken more than once if topics change. Title will reflect topics covered in a particular offering.

3 sem. hrs.

OPS 495. CAPSTONE OM PROJECT: Experiential project applying operations management concepts and techniques to practical problems with faculty supervision. Student teams address significant operational problems and opportunities in real-world service and manufacturing firms. Teams write recommendation/implementation reports and make presentations of their work. Corequisite: OPS 480.

4 sem. hrs.

OPS 497. LABORATORY WORK EXPERIENCE: Under faculty sponsorship and in association with a participating industrial, commercial, educational, health-care, government, or other organization, practical experience in work associated with the student's major. (See internship coordinator for details.) May satisfy OPS elective, with chairperson approval.

1-6 sem. hrs.

OPS 499. INDEPENDENT STUDY IN OPERATIONS MANAGEMENT: Research in conjunction with a faculty member on a subject within the general area of operations management. Normally open only to juniors and seniors who have attained a cumulative grade-point average of 3.0 or above. Permission of chairperson required.

1-6 sem. hrs.

