

Management
University of Minnesota Bulletin
1986-88



CURTIS L. CARLSON SCHOOL OF MANAGEMENT
UNIVERSITY OF MINNESOTA

UNDERGRADUATE BULLETIN SUPPLEMENT
FALL 1987

This is an official supplement to the 1986-88 Management Bulletin and includes changes in:

New Courses
Foreign Studies Programs
Degree Requirements
 Accounting Residency Statement
 Pre-Management Second Language Requirement
 Banking Emphasis
 General Management Studies Option
 Self-Designed Emphasis
Admission Requirements
 Application Deadline
Scholastic Standards and Policies
 Dean's List Policy

Changes in course prerequisites and credits are described in the Class Schedule.

The following symbols are used in this publication:

- = Credit will not be granted if the equivalent course listed after this symbol has been taken for credit.
- # Consent of instructor and a Registration Override Permit, completed and signed by the college office, is required prior to registration.

Students with questions about the following material should call or visit the Undergraduate Studies Office in 290 Humphrey Center.

Prepared by the Carlson School of Management Undergraduate Studies Office.

Published August 1987

NEW COURSES

FINANCE AND INSURANCE

Change INS 3200 to "Personal Financial Management" - (4 cr; =8200; prereq 3100; may not be repeated for credit) The personal financial planning process, financial statements and cash flow analysis, time value of money and financial functions. Insurance and risk management of liability, disability, life, medical and property exposures. Investment principles and vehicles, investment companies, portfolio construction and management. Taxes and tax management. Retirement planning, employee benefits, and funding vehicles, and estate planning principles and instruments. Professional ethics and government regulation of financial planners.

INS 3230 Employee Benefits - (4 cr; prereq 3100 or equiv) Employee benefit plan objectives, development, and growth. Design issues. Basic features of plans providing death benefits, disability benefits, medical expense benefits, pension, and other benefits. Recent developments and trends.

Change Ins 8200 to "Personal Financial Management" - equivalent to Ins 3200

Replace BFIN 3800 I-III with the following sequence:

BFIN 3601 Bank Financial Management - (4 cr; prereq 3000 or #)
Comprehensive introduction to the principles of bank financial management. Bank risk analysis, lending, investments, liquidity, asset-liability management. Lecture augmented with case discussions.

BFIN 3602 Regulation of Depository Institutions - (4 cr; prereq 3601 or #)
Overview of federal regulation of commercial banks and thrift institutions. Rationale for and history of regulation, current regulatory structure and environment, principles guiding future evolution. Heavy emphasis on student involvement through discussions and group presentations.

BFIN 3603 Selected Problems in Banking Management - (4 cr; prereq 3602 or #)
Close-up view of bank management issues revolving around lectures by guest speakers drawn from the banking community. Bank strategic planning, lending issues, innovative financial instruments, bank risk management, new bank powers, additional topics as appropriate.

MANAGEMENT SCIENCE

DSci 1060 Business Research Practice - (4 cr; prereq 1050, 90 cr) The design and conduct of business research from a management perspective, emphasizing competencies associated with business research practice within functional areas. Research aims and expectations, research strategies, methods, and managerial requirements are stressed.

MIS 1070 - 1074 No more than three credits of MIS 1070-1074 can be used for a Carlson School of Management degree.

MIS 1070 Orientation to Computer Software and Programming (1 cr; =MSci 1010 or MIS 3300)

MIS 1071 Electronic Spreadsheets (1 cr; prereq 1070, proficiency exam based on equiv experience)

MIS 1072 Data Base Management Software (1 cr; prereq 1070, proficiency exam based on equiv experience)

MIS 1073 Business Graphics Software (1 cr; prereq 1070, proficiency exam based on equiv experience)

MIS 1074 Financial Models Software Package (1 cr; prereq 1070, proficiency exam based on equiv experience)

MIS 1075 Elementary Cobol (2 cr; =3098; prereq 1070, proficiency exam based on equiv experience)

MIS 1076 Intermediate Cobol (2 cr; =5098; prereq 1075, proficiency exam based on equiv experience)

MIS 1077 Elementary FORTRAN (2 cr; =3099; prereq 1070, proficiency exam based on equiv experience)

FOREIGN STUDIES PROGRAMS COSPONSORED BY THE CARLSON SCHOOL OF MANAGEMENT -

Through the courses below, students can receive residence credit for a number of study abroad programs sponsored by the Council on International Educational Exchange (CIEE), the Institute of European Studies (IES), and the Denmark International Study Program. Inquiries concerning these programs should be directed to the CSOM Undergraduate Studies Office, 290 Humphrey Center (624-3313).

FSMG 3910 CIEE Japanese Business and Society Program

FSMG 3920 CIEE Business/Society Program, Seville, Spain

FSMG 3820 Denmark's International Study Program

FSMG 3460 IES Business Program, Vienna, Austria

FSMG 3490 IES Business Program, University of Singapore

DEGREE REQUIREMENTS

Accounting Residency - p. 21, #4, add:

In addition, Accounting students must complete 50% of their total number of Accounting classes at the University of Minnesota.

Pre-Management Second Language Requirement - p. 21, add:

Foreign Language Requirement - Students who graduate from high school after June 1986 and who graduate with their BSB from the University after June 1991, will be required to have two years of high school or two quarters of college work in a single foreign language.

Banking Emphasis - p. 21, "Additional Regular Program Requirements," replace with:

BFIN 3601 Bank Financial Management - Spring Quarter
BFIN 3602 Regulation of Depository Institutions - Fall Quarter
BFIN 3603 Selected Problems in Banking Management - Winter Quarter

Two of the following:

Acct 3160 - Financial Statement Analysis
BFin 3100 - Financial Management
BFin 3300 - Investment Management and Financial Markets

General Management Studies Emphasis - p. 22, column 1, add:

Two of the following:

BGS 3004 BLaw 3058
DSci 3055 Ins 3100
LM 3000 Mgmt 3002

Three additional courses within the Carlson School. These may be selected from the list above. No more than two of these courses may be taken from the same department or functional area.

Self-Designed Emphasis - p. 22, column 1, add:

20 credits of upper-division courses with no more than 12 credits in one prefix area. Credits may be from other units within the University. Approval of the Director of Undergraduate Studies is required. At least 12 of the 20 credits must be completed after approval.

ADMISSION REQUIREMENTS

Admission Deadline - p. 16, para. 2, change:

"Application deadlines are June 15 for fall quarter..."

SCHOLASTIC STANDARDS AND POLICIES

Dean's List Policy - p. 23, add:

Dean's List - The Dean's List is a method by which the School recognizes superior academic performance. A notation appears on the records of Carlson School of Management day school or combined day/CEE students who complete 12 or more credits on an A/F basis during a quarter and obtain a 3.5 or greater GPA. The student must submit documentation of credits completed through extension or independent study to be considered with the day school calculation.

Management

General Information	5
Degree Programs	15
Course Descriptions	33
Administration and Faculty	51
Campus Maps	57
Index	61

Introduction

Department Directory

Accounting

645 Management and Economics
624-6506 (M.B.T. Program, 624-7511)

Career Planning and Placement

190 Humphrey Center
624-0011

Finance and Insurance

735 Management and Economics
624-2888

Industrial Relations

537 Management and Economics
624-2500 (Graduate Programs, 624-5810)

Employer Education Service

430 Management and Economics
624-5525

Labor Education Service

437 Management and Economics
624-5020

Reference Room

365 Blegen Hall
624-7011

Management Sciences (Decision Sciences, Management Information Systems, Operations Management, and Logistics Management)

395 Humphrey Center
624-8030

Marketing and Business Law

1235 Management and Economics
624-5055

Ph.D. Program

295 Humphrey Center
624-0875

Professional Management Programs

M.B.A. Program

295 Humphrey Center
624-0006

Executive Development Center

334 Management and Economics
624-2545

Strategic Management and Organization

837 Management and Economics
624-5232

Undergraduate Studies

290 Humphrey Center
624-3313

Policies

Bulletin Use—The contents of this bulletin and other University bulletins, publications, or announcements are subject to change without notice. University offices can provide current information about possible changes.

Admissions—The School of Management is committed to providing equal opportunity to all who seek access to its programs, facilities, and services; establishing fair educational standards and applying them equitably in making decisions about admission and academic standing; and taking affirmative action to assure that previously under-represented groups will be fairly represented in its programs.

Equal Opportunity—The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age, veteran status, or sexual orientation. In adhering to this policy, the University abides by the requirements of Title IX of the Education Amendments of 1972; by Sections 503 and 504 of the Rehabilitation act of 1973; by Executive Order 11246, as amended: 38 U.S.C. 2012; by the Vietnam Era Veterans Readjustment Assistance Act of 1972, as amended; and by other applicable statutes and regulations relating to equality of opportunity.

Inquiries regarding compliance may be addressed to Patricia A. Mullen, Director, Office of Equal Opportunity and Affirmative Action, 419 Morrill Hall, University of Minnesota, 100 Church Street S.E., Minneapolis, MN 55455 (612/624-9547); to the Director of the Office of Civil Rights, Department of Education, Washington, DC 20202; or to the Director of the Office of Federal Contract Compliance Programs, Department of Labor, Washington, DC 20210.

Access to Students Educational

Records—In accordance with regents' policy on access to student records, information about a student generally may not be released to a third party without the student's permission. The policy also permits students to review their educational records and to challenge the contents of those records.

Some student information—name, address, telephone number, dates of enrollment and enrollment termination, college and class, major, adviser, academic awards and honors received, and degrees earned—is considered public or directory information. To prevent release of such information outside the University while in attendance at the University, students must notify the records office on his or her campus.

Students are notified annually of their right to review their educational records. The regents' policy, including a directory of student records, is available for review at the information center in Williamson Hall, Minneapolis, and at records offices on other campuses of the University. Questions may be directed to the Office of Registration, Student Records, and Scheduling, 150 Williamson Hall (612/625-5333).

Postal Statement

Volume LXXXIX, Number 10
July 31, 1986

University of Minnesota Bulletin
(USPS 651-720)

Published by the University of Minnesota, Student Support Services, Publications Center, 150 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455, once in January, April, August, September, October, and November; twice in February; three times in June; and four times in July. Second-class postage paid at Minneapolis, Minnesota. POSTMAS-

Introduction

TER: Send address changes to University of Minnesota Bulletin, Student Support Services, 110 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455.

General Information



General Information

History

In 1899, William Folwell, then president of the University of Minnesota, told a bankers convention that it would be "just as logical" for the University to have a school of commerce as to have a professional school of law, medicine, or engineering. During the next 20 years, courses in business areas were taught in increasing numbers by the economics faculty. This continued until 1919, when, as a "logical" next step, the Board of Regents established the School of Business Administration. The following year the new school became one of the first in the nation to be accredited by the American Assembly of Collegiate Schools of Business (AACSB). Initially, a baccalaureate degree and a master of science (M.S.) degree, principally in economics, were offered. From the start, the undergraduate curriculum called for two years of liberal education followed by two years of professional education.

The master of business administration (M.B.A.) degree was first authorized in 1935 and the doctor of philosophy (Ph.D.) degree in 1948. These programs were both immediately accredited when the AACSB began evaluating graduate programs in 1963. A separate master's program in industrial relations was established in 1956 and was followed by a Ph.D. program in industrial relations less than 10 years later. In 1960, the evening M.B.A. program was begun, making it possible for business professionals to combine a full-time job with advanced study in the field. In 1978, the college established a master of business taxation (M.B.T.) program in conjunction with Continuing Education and Extension.

In 1961, the Board of Regents recognized the growth of graduate study in business by establishing the Graduate School of Business Administration. The College of Business Administration thus became the College and Graduate School of Business Administration. In May 1981, the University of Minnesota Board of Regents voted to change the name to the

School of Management to better reflect the broader role this institution now has in the state and nation.

As part of a large University located in a major metropolitan area, the school is well situated for teaching and research in business and management. The faculty and students have ready access to other University units, a progressive business community, and the state capital. Businesses and other organizations in the area provide opportunities for students to gain practical business and research experience. Leaders of business and other organizations throughout the state are selected by the dean of the school to sit on the Board of Overseers and other advisory committees, thus making their expertise available to the school.

Objectives

The primary mission of the School of Management is to improve the economy of the state and nation. The school does this by helping business firms, labor unions, government and not-for-profit agencies improve their management. To accomplish this, the school offers educational programs, conducts research, and provides service activities that focus on issues of management and its related professions, and on associated questions of public policy.

The bachelor of science in business, with both regular and accounting programs, is the first step in the continuum of business education offered by the school. The specific objectives of the undergraduate programs are:

- to provide a liberal education with a concentration in management;
- to orient students to the functional and environmental aspects of business enterprise and to equip them with basic administrative skills; and
- to prepare graduates to enter careers in business and administration as well as the not-for-profit sector: education, arts and social services, and government.

The graduate programs offered for the master of business administration, master of arts in industrial relations, and master of business taxation degrees are designed to provide advanced professional training. The school also offers doctor of philosophy degrees in business administration and in industrial relations as well as extensive noncredit programs for managers through its Executive Development Center.

Professional Education Programs

The School of Management offers a number of nondegree programs designed to keep practitioners abreast of new information and trends as well as to broaden their educational experience for assuming new responsibilities.

Employer Education Service (430 Management and Economics)—A division of the Industrial Relations Center, this unit provides professional education and resource center opportunities to employers, focusing on personnel administration, industrial relations, human resource management, and supervision topics at both line and staff levels. For more information, call 612/624-5525.

Labor Education Service (437 Management and Economics)—A division of the Industrial Relations Center, this unit conducts conferences, institutes, and short courses for labor union representatives; produces videotapes for documentary and classroom use; and publishes reports. For more information, call 612/624-5020.

Executive Development Center (295 Humphrey Center)—This center offers a variety of noncredit professional management education programs for practitioners in both business and nonprofit organizations. These include:

- Minnesota Executive Program*: a six-week residential program dealing with corporate strategy for senior executives.

- Minnesota Management Institute*: a four-week residential management program aimed at people in operating management positions and focusing on operational, behavioral, and functional management skills.

- Minnesota Management Academy*: a nine-day residential program aimed at managers in the early stages of their careers that focuses on the essentials of management and interpersonal skills.

- Specialty Programs*: a number of seminars from one to eight days that present an in-depth study of a specific functional area of management (e.g., information systems, finance, manufacturing management, marketing) or address the professional/skill needs of specialists such as controllers, manufacturing managers, management information systems executives, and others.

Call 612/624-2545 for more information.

Research Centers

Accounting Research Center (645 Management and Economics)—This center was established in 1979 to coordinate the efforts of the Department of Accounting to contribute to accounting knowledge through research. It encourages significant research in accounting; acts as a vehicle for funding accounting research by members of the business community; and also offers continuing professional education programs to disseminate accounting knowledge to practitioners.

Industrial Relations Center (537 Management and Economics)—This center, established in 1945, conducts research projects on such topics as human resources and labor markets, organized labor and collective bargaining, organization theory and behavior, and personnel administration. Reprint and working paper series, both available through the center, report on research projects and

General Information

results. Service activities include providing speakers and consultants; organizing professional and public service meetings; and planning, participating in, and directing conferences. This center also offers a full-time day and part-time evening master of arts in industrial relations and a Ph.D. degree in industrial relations.

See also the Employer Education Center, the Labor Education Center, and the Industrial Relations Reference Room.

Management Information Systems Research Center (355 Humphrey Center)—This center, founded in 1968, is the focus of research efforts in management information systems (MIS). It is supported cooperatively by a number of large companies headquartered in Minneapolis/St. Paul, the University of Minnesota, and research funds from federal, state, and private contracts.

The center is committed to educating and developing management information systems professionals and educators; conducting research addressing the managerial usage of computers in organizations today and in the future; and promoting interaction among MIS professionals, academicians, and students.

Research is conducted in four major areas—experimental, organizational, applications, and technical. Information about research efforts, working papers, and technical reports is available upon request from the department.

The center also publishes the *MIS Quarterly*, which is distributed internationally to MIS professional and academic communities.

Operations Management Center (382 Humphrey Center)—This center was founded in 1982 to further accelerate the interaction between the Twin Cities business community and the Operations Management program. The center is one of the few in the country, and it effectively brings together senior executives from 10 service and manufacturing companies with faculty and students. The center sponsors research programs on leading-edge problems affecting the operations management profession. These research

programs include studies on quality management, technological innovation, operations strategy, people in operations, white-collar productivity, and materials management. The Operations Management Center also sponsors roundtable discussions and an annual conference on issues of current interest.

Strategic Management Research Center (830 Management and Economics)—The Strategic Management Research Center is a University-wide interdisciplinary center created as a joint venture of the School of Management, the Humphrey Institute of Public Affairs, and the Department of Agricultural and Applied Economics. The purpose of the center is to address strategic managerial problems faced by the general manager in public and private organizations, domestically and internationally. The research agenda for the center focuses on the management of innovation and addresses problems of (1) mergers, acquisitions, and consolidations; (2) organizational productivity and effectiveness; (3) new business startups; (4) international management; (5) the management of innovation; and (6) strategic planning and decision making.

In addition to programmatic research in these areas, a major thrust of the center is to create an intellectually stimulating community that fosters learning and research among faculty, students, and managers. This is accomplished through (1) a biweekly Strategic Management Colloquium in which leading national scholars as well as University faculty and students present their latest thinking and research; (2) Executive Breakfast Roundtable Discussions in which small groups of executives have opportunities for stimulating discussions with some of the colloquium speakers; (3) a Discussion Paper Series in which new theories and research by faculty and associates of the center are disseminated to a network of other scholars and practitioners throughout the world for review and comment; (4) several orientation sessions for faculty and students to meet with general managers in selected organizations to become

aware of strategic management problems and to explore common interests and areas of study; and (5) the provision of "seed money" to faculty and doctoral students to initiate novel research on embryonic ideas that address the key issues of the center's research agenda.

Service Centers

Career Planning and Placement (190 Humphrey Center)—The college maintains a Career Planning and Placement Office for its students and alumni. Career literature, information on many companies throughout the United States, and career planning services are available at the office. As a senior or graduate student, you may interview with representatives of several hundred companies that come to the University during the recruiting season and also have access to job listings of hundreds of additional companies. You may seek part-time work, summer employment, and internships through the Career Planning and Placement Office.

Inquiries about employment should be addressed to the Director of Placement, School of Management, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455.

Computer and Technical Services (90 Blegen Hall)—Several computers are available for use by students and school faculty. High-speed remote access is available to the University's CDC Cyber 845 and supercomputers (Cray 1 and Cyber 205). Nearby time-sharing laboratories provide access to the University's 360-port CDC Cyber 174 educational system. Microcomputer labs equipped with IBM, Apple, and Zenith computers are nearby. Numerous mini and microcomputers are on campus and also available for special projects. Other computer centers on campus provide access to IBM 4341, 4381, and DEC VAX 8600 machines. West Bank Computing Services provides for plotting services and related computer training.

Industrial Relations Reference Room (365 Blegen Hall)—A division of the In-

dustrial Relations Center, this specialized library maintains a unique collection of resource materials covering all aspects of the employer/employee work situation, with special reference to collective bargaining and human resource management. The library is open to business, government, and labor representatives as well as University students and faculty.

O. Meredith Wilson Library—Books that are added to the business collection are interfiled with books on other subjects in the main collection of Wilson Library. The card catalog on the first floor of the library can be consulted for a complete listing of University-owned books dealing with business subjects.

All periodicals are kept in the Periodicals Room in the basement. Some newspaper and periodical indexes of interest to business students can also be found in the Reference Room on the first floor.

Census publications and publications by government agencies (e.g., Small Business Administration, Department of Commerce, Federal Reserve Board, Securities and Exchange Commission) are kept in the Government Publications Library on the fourth floor. Indexes, bibliographies, and reference assistance are also available there.

Students beginning research on business subjects will want to start in the Business Reference Service on the second floor of Wilson Library. Its collection includes reference materials, tax and investment advisory services, periodical indexes, pamphlets, and a large collection of corporate annual reports. Many 10-K reports, which publicly held corporations are required to file with the Securities and Exchange Commission, are on microfiche. Several microfiche readers are available. Reference help is available, and patrons will be referred to other collections if appropriate.

The Deloitte Haskins and Sells Tax Research Room is adjacent to the Business Reference Service. It contains reference materials on tax services, tax cases, revenue rulings, and tax proceedings.

General Information

Tours of the business reference collection or of Wilson Library are available upon request.

Special Programs

University Advance—Sponsored jointly by the School of Management, the Institute of Technology, and the Twin Cities business community, University Advance is designed to help minority students in grades 8-12 develop confidence, ability, and interest in management, engineering, and science. Precollege activities include special programs and tutorial assistance in language arts, mathematics, and science, and career seminars on opportunities in business and engineering. For information on the program, contact the Undergraduate Studies Office, 290 Humphrey Center (612/624-3313) in the School of Management or the Minority Affairs Office, 7 Lind Hall (612/625-9556) in the Institute of Technology.

Honors Program—Special opportunities for high ability students are available through research assistantships, independent study projects, and through the school's Honors Association. In addition to merit scholarships available to students performing high ability work, the school recognizes superior achievement through awards and distinctions announced at commencement ceremonies each year. Students interested in honors opportunities should contact the Undergraduate Studies Office, 290 Humphrey Center.

Study Abroad—The School of Management encourages students to broaden their educational experience by participating in foreign study programs. Information about a variety of foreign study opportunities is available through the University's International Study and Travel Center, 44 Coffman Memorial Union (612/625-1150). The school co-sponsors the "Cooperative Japanese Business and Society Program" in Tokyo. Students interested in earning credits through study abroad programs should begin planning as early as possible. More informa-

tion can be obtained from the Undergraduate Studies Office, 290 Humphrey Center.

Professional Development Seminars—Recognizing that personal and career success often depends upon skills and awareness not specifically covered in the academic curriculum, the School of Management offers quarterly seminars for undergraduates on topics ranging from interpersonal communication to understanding corporate culture. The seminars are taught by human resource experts and other leaders from the local business community.

Student Organizations

As a student in the School of Management, you may find opportunity for valuable experience and personal growth through participation in University activities outside the classroom. Within the school a variety of student groups may appeal to your specialized professional interests. You are encouraged to take an active part in these group activities.

Business Board—This group represents the undergraduate student body in the School of Management. The Business Board channels student opinion into administrative and faculty decisions. Its members serve on various school committees and plan activities to foster interaction among students and faculty. All undergraduate students registered in the School of Management are urged to inquire in the Undergraduate Studies Office, 290 Humphrey Center, for information about nomination and election to the board.

Other student organizations within the school work closely with the Business Board to coordinate and promote their common interests. These organizations may be contacted through the Undergraduate Studies Office.

AIIESEC—The International Association of Students in Economics and Management is one of the largest nonprofit student organizations in the world. AIIESEC

specializes in the international exchange of students for internships in business. Students develop their communication, marketing, and management skills while interacting with the business community and are eligible for internships with corporations in 60 foreign countries. The AIESEC office is located in 412 Peoples Center (612/376-8745), and all interested students are welcome to stop in.

Alpha Kappa Psi—A national professional business fraternity, this coeducational group brings together students with a common interest in business for scholastic and social activities. This chapter has been active on campus since 1922. Prominent men and women in business are featured at the meetings throughout the year. Tours, seminars, and opportunities for participation in community service projects are available. Meetings are held on Monday nights at the chapter house, 1116 5th Street S.E., Minneapolis. Visitors are always welcome.

Beta Alpha Psi—This national, professional, honorary organization is comprised of accounting majors with grade point averages of 3.20 in accounting and 3.00 overall. Beta Alpha Psi strives to introduce the aspiring accountant to the business world by encouraging interaction among students, faculty, alumni, and area business people; sponsoring speakers from all areas of accounting; touring CPA firms, industry, and government; providing recreational sports teams and tutors for students in accounting; and participating in a Volunteer Income Tax Assistance program.

Business Association of Minorities—This multi-ethnic organization is designed to foster a sharing of ideas and concerns among people interested in business administration. While emphasizing the minority perspective and seeking to objectively view the corporate world at large, members are actively involved in various campus and community activities. The association encourages undergraduate and graduate membership.

The Business Quarterly—*The Business Quarterly* magazine is published by students in the School of Management. It serves as a source of information on the requirements, activities, and people in the school, and also provides perspectives on issues that affect business and nonprofit organizations. Students who participate gain practical experience that strengthens their communication, marketing, and organizational skills. *The Business Quarterly* welcomes the involvement of students who wish to share their ideas and time.

Delta Sigma Pi—All students majoring in the fields of business administration and economics may share their similar interests by joining this professional coeducational business fraternity. The group sponsors professional dinners and tours, community service projects, and many athletic, scholastic, and social activities. Meetings are held on Monday nights in the Management and Economics building.

Honors Association—Designed to provide recognition and opportunities for high-achieving students, the Honors Association sponsors programs and activities to foster the interaction of students with faculty, prominent community leaders, and fellow high-ability students. Students with grade point averages of 3.50 and above are encouraged to apply for membership by contacting the Undergraduate Studies Office, 290 Humphrey Center.

Iota Rho Chi—Graduate students in industrial relations are represented by this professional organization. The purpose of the group is to promote advanced study, active research, and exchange of knowledge in the field. Regularly scheduled meetings are held at which various practitioners discuss industrial relations concerns. Iota Rho Chi also sponsors an active internship program for its members.

MBA Association—Serving primarily graduate students and graduate alumni, the MBA Association provides informal learning experiences for the developing business professional and promotes interaction on a regular basis between the

General Information

graduate students and faculty members in the School of Management and the business community.

Phi Delta—Minnesota Women in Management—Students interested in business administration, business education, or economics, or pursuing a business sequence in University College are invited to join this professional business organization. Each quarter the group sponsors varied activities with a professional focus (speakers, panels), and members collaborate on service projects and social events as well.

Society for the Advancement of Management—A student chapter at the University is affiliated with this international professional management organization. The chapter brings together students with common broad-based interests in all phases of business. The chapter holds weekly meetings that include speakers from business and academia, as well as self-development workshops.

Student Accounting Association—The Student Accounting Association provides an opportunity for students to become acquainted with accounting faculty members and area business representatives. Speakers inform students of opportunities in public and private accounting; career fairs and tours of CPA firms give students the opportunity to meet professionals and ask questions on an informal basis.

University of Minnesota Marketing Association—This professional, coeducational organization caters to all business and pre-business students who have a special interest in marketing. The organization helps students increase their working knowledge of marketing through speakers, seminars, and corporate tours. Other benefits include interaction among fellow students, faculty, and local corporate leaders on social and professional levels.

Expenses

For information on current tuition, fees, and estimated total expenses, consult the quarterly *Class Schedule* or the annual *General Information Bulletin*.

Financial Aid

In general, application forms for financial aid are available from the Office of Student Financial Aid, 210 Fraser Hall, University of Minnesota, 106 Pleasant Street S.E., Minneapolis, MN 55455. Applications must be submitted early in the calendar year.

Loans—The loan funds described below are designed for School of Management students and the application process is initiated in the Office of Student Financial Aid.

Paul R. Doelz Emergency Loan Fund—A short-term loan for undergraduate and graduate School of Management students with emergency needs.

F. D. Lindquist Loan Fund—For School of Management students needing financial assistance.

George Russell Loan Fund—For undergraduate and graduate School of Management students with serious financial problems.

Undergraduate Scholarships—A variety of scholarships are available for School of Management students. Some are designated as need-based and are administered through the Office of Student Financial Aid; those designated as merit-based are available through the Undergraduate Studies Office, 290 Humphrey Center, or through various departments.

The following scholarship requires verification of financial need and is administered through the Office of Student Financial Aid:

Evar T. Cedarleaf Memorial Scholarship in Business Administration—For a School of Management student, preferably interested in insurance and surety bond underwriting.

Information and application forms for the following scholarships may be obtained in the Undergraduate Studies Office, 290 Humphrey Center. Applications are accepted February 15 through March 31 each year. Preference is given to students with a grade point average of at least 3.00. The amount of these awards is \$500-\$1,000.

Carl H. Fritze Scholarship in Transportation—For an undergraduate student in the School of Management whose primary area of study and/or career interest is in transportation.

Holden Graphic Arts Scholarship—For a School of Management student whose interest is in business management in a manufacturing industry and, whenever possible, whose interest is in printing and graphic arts.

Maurice L. Rothschild Scholarship—For a School of Management student with a strong interest in merchandising or for other School of Management students regardless of program.

Minnesota Industrial Distributors' Scholarship—For a junior or senior who shows an interest in the field of industrial distribution.

Traveler's Express Scholarship—For senior minority students.

The following scholarships are offered by academic departments in the School of Management:

Accounting Scholarships—The Department of Accounting, 645 Management and Economics, annually awards numerous scholarships to undergraduate accounting majors. Awards are based on scholarship, merit, and letters of recommendation from senior accounting faculty members. Sponsoring firms and individuals are: *Grant Thornton, Arthur Andersen and Co., Cargill, Inc., John B. Clark, Coopers and Lybrand, Deloitte Haskins and Sells, Robert Half Personnel Agencies of Minnesota, Inc., Honeywell Inc., Larson, Allen, Weishair and Co., Laventhol and Horwath, Main Hurdman, McGladrey, Hendrickson and Pullen, Peat, Marwick, Mitchell and Co., C. E. Tranter, Arthur Young and Company.*

Sander D. Genis Award—Awarded to a student whose focus is preferably in collective bargaining and labor relations. Contact the Department of Industrial Relations, 537 Management and Economics, for more information.

Minnesota 1752 Club Scholarship—For an undergraduate student who has expressed a career interest in risk management or insurance. Contact the Department of Finance and Insurance, 837 Management and Economics, for more information.

To provide financial support for talented minority students seeking baccalaureate degrees in business and accounting, the school has established the *Minority Business Scholarship* program. Scholarships covering the cost of tuition are awarded to selected pre-management students entering the College of Liberal Arts' Martin Luther King Program and to promising minority students admitted to the School of Management. Applications and information about the program can be obtained from the Martin Luther King advising office, 19 Johnston Hall (612/625-9898) or from the School of Management Undergraduate Studies Office, 290 Humphrey Center (612/624-3313).

In addition to the above scholarships, the School of Management Undergraduate Studies Office occasionally announces one-time-only scholarships. Such scholarships are advertised in 290 Humphrey Center, where information and application forms for them may be obtained.

Graduate Fellowships and Scholarships—The Application for Financial Aid form for graduate student financial aid in the M.A.I.R. and Ph.D. programs may be obtained from the Graduate School, 307 Johnston Hall, University of Minnesota, 101 Pleasant Street S.E., Minneapolis, MN 55455. In the M.B.A. program, request for financial aid is made on the application form available from the M.B.A. program, 295 Humphrey Center. Unless otherwise noted, the application deadline for the fellowships and scholarships listed below is February 15.

Arthur Andersen and Co. Fellowship—Awarded to a graduate student in accounting. Amount is \$500.

Chevron Fellowship—For an M.B.A. student with an emphasis in management information systems. Award is for tuition, fees, and a stipend.

General Information

- Dow Chemical Fellowship*—For an M.B.A. student.
- Ernst and Whinney Fellowships*—Awarded to a graduate student in accounting. Amount is \$1,200.
- General Mills Fellowship*—Awarded to an M.B.A. specialist in accounting. Amount is \$1,000.
- Sander D. Genis Scholarship Award*—Awarded to a graduate student in industrial relations or an undergraduate student who is focusing on collective bargaining and is interested in a career in the labor movement.
- Paul Goldsborough, Jr., Fellowship*—Awarded to a graduate student. Amount varies depending upon endowment income.
- Graduate School of Management Corporate Fellowships*—Annual awards of \$3,000 for master's students and \$5,000 for doctoral students are supported by the business community through the School of Management Associates Program.
- Ernest Heilman Award*—A \$1,000 scholarship is awarded as the Outstanding Teacher Award. The recipient must be a Ph.D. student in accounting.
- Walter E. Heller Fellowship*—Walter E. Heller and Company of Chicago, Illinois, makes available an annual fellowship of \$1,000 to an M.B.A. student.
- Herbert G. Heneman, Jr., Fellowship*—Awarded to a graduate student in industrial relations.
- Honeywell Inc. Fellowships*—Awarded to several M.B.A. students with undergraduate degrees in engineering and technology.
- Honeywell Inc. Fellowships*—Awarded to two-year, full-time minority/disadvantaged M.B.A. students.
- IBM Fellowship*—For a Ph.D. student in management information systems.
- Minnesota Mining and Manufacturing Fellowship*—For a graduate student in finance. Amount is \$3,500.
- Philip Morris Scholarship in Industrial Relations*—Awarded to a master's student in industrial relations.
- Carl Nelson Doctoral Award*—Awarded to a Ph.D. student in accounting. Amount is \$1,000.
- Pillsbury Foundation Fellowship Grant*—Awarded to an accounting or a finance graduate student. Amount is \$1,000.
- Price Waterhouse Scholarship*—Awarded to a graduate student in accounting. Amount is \$1,000.
- Rosenberg Real Estate Minority Fellowship*—Awarded to new full-time minority students pursuing a career in real estate. Amount is \$5,000.
- Justin A. Rosenblatt Fellowship*—Awarded annually to an M.B.A. student. Amount is \$1,200.
- St. Paul Companies Fellowship*—For a graduate student concentrating in risk management and insurance. Amount is \$2,000.
- Sohio Fellowships*—Awarded to several M.B.A. students with undergraduate degrees in engineering or technology.
- J. Mearl Sweitzer (Wausau Insurance Companies) Scholarship*—For an M.B.A. student concentrating in risk management and insurance. Amount is \$5,000.
- Union Carbide Scholarship in Industrial Relations*—Awarded to a master's student in industrial relations.
- University Graduate School Fellowship*—Annual one-time award of approximately \$7,200, plus full tuition waiver for new M.B.A. and Ph.D. students.
- University Graduate School Minority Fellowships*—Annual one-time award of approximately \$7,200 plus full tuition waiver for new M.B.A. and Ph.D. students.
- Roland S. Vaile Fellowship in Business*—Awarded to a graduate student interested primarily in marketing. Amount varies depending upon endowment income.

Degree Programs



Degree Programs

Baccalaureate Programs

The School of Management offers two programs of study leading to the bachelor of science in business (B.S.B.) degree: the Regular program (with seven "areas of emphasis" described below) and the Accounting program.

Note: The undergraduate program has been extensively revised. Pre-management students who began college-level work before fall 1986 should refer to previous planning sheets to determine requirements. Students admitted to the School of Management before fall 1986 are responsible for the requirements published in the Management bulletin current at the time of their admission. Contact the Undergraduate Studies Office, 290 Humphrey Center (612/624-3313) for more information.

Admission Requirements

Students are considered for admission to the undergraduate curricula of the School of Management after satisfactory completion of a pre-management program. Pre-management course work (completed in the freshman and sophomore years) may be taken at the University of Minnesota, Twin Cities; at the University of Minnesota, Morris; at the University of Minnesota, Duluth; at any state community college; or at any accredited institution offering a comparable program.

Undergraduates are admitted to the School of Management twice a year. Application deadlines are July 15 for fall quarter and January 15 for spring quarter. Because of resource constraints, the School of Management establishes enrollment limits. Admission is based on completion of the pre-management requirements and on grade point average earned in all course work and in specific management-related "tool" courses in accounting, economics, mathematics, and statistics.

To be considered for admission to the School of Management, you must have met the following requirements:

1. Completed or have in progress course work to total 80 credits by the time of admission.
2. Completed the following management "tool" courses on an A/F grading basis by the time you enter the School of Management (with no more than two tool courses in progress when you apply): Principles of Financial Accounting I and II (Acct 1024 and 1025); Principles of Macroeconomics, Microeconomics (Econ 1001 and 1002); Fundamentals of Computers and Information Technology in Organizations (MSci 1010); Data Analysis and Statistical Inference for Managers (MSci 1020) and Calculus (Math 1142 or 1211). *Note:* MSci 1010 and 1020 replace DSci 1050 for pre-management students beginning college fall 1986 or later.
3. Earned a minimum grade point average (GPA) of 2.8 in all transferable credits. Grades in the "tool" courses (listed in #2 above) must average 2.5 for the Regular program, 2.8 for the Accounting program. *Note:* The School accepts only the **first** passing grade (D or better) in calculating grade point averages.
Space permitting, students with strong credentials (e.g. significant leadership experience, particularly rigorous course work), but slightly lower GPAs may be considered for admission to the Regular program.
4. Completed the **Pre-Management Requirements** as listed below. Equivalent courses taken at other institutions may be substituted (upon evaluation) for required University courses. You may apply lacking a total of five pre-management courses. Tool courses in progress at the time of application are included in this total.

The pre-management program includes prerequisites for School of Management courses as well as course work required to fulfill the liberal education distribution requirements established by the University. Generally, all credits

earned in liberal education courses may be applied toward the B.S.B. degree, except that the School of Management accepts a maximum of 12 credits of physical education and only the credits earned in the first introductory course in statistics (e.g., MSci 1020) toward the degree. You are advised to consult the Undergraduate Studies Office, 290 Humphrey Center, about acceptance of such courses.

Pre-Management Requirements

Note: The following course titles and numbers represent specific University courses, but equivalent courses taken at other institutions (upon evaluation) may be substituted. Courses in italics also fulfill the University's College of Liberal Arts (CLA) group distribution requirements. The courses may fulfill a CLA group other than the School of Management group in which they are listed. Please refer to the current *CLA Bulletin* for further information. One course cannot be used to fulfill more than one requirement.

GROUP A: COMMUNICATION, LANGUAGE, AND SYMBOLIC SYSTEMS—14-19 credits

1. **Composition—5-9 credits**
 Comp 1011—Writing Practice I or exemption from requirement (A/F grading required)
 Comp 1027—Intermediate Composition is required if you are applying for admission to the B.S.B. Accounting Program. (S/N grading allowed; A/F grading recommended)
2. **Mathematics—5 credits (A/F grading required)**
 Select one of the following options:
 Math 1142—Short Calculus
 (OR)
 Math 1211—Calculus I
 NOTE: Math 1111 is a prerequisite for Math 1142 and 1211.
3. **Symbolic Systems—4-5 credits (A/F grading required)**
 Computer Science
 3101 3102 3104
 Linguistics
 3001 3111
 Mathematics
 1131 1221
 Philosophy
 1001 3201
 Statistics
 5101

GROUP B: PHYSICAL AND BIOLOGICAL SCIENCES—9 credits

1. **One laboratory science course—5 credits**
 Astronomy
 1011 and 1015 1021 and 1025
 Biology
 1009 1011 1103 1106 3011 3012
 Chemistry
 1001 1002 1003 1004 1005 1031 1032
 Geology
 1001 and 1025 1002 1111 and 1025
 Microbiology
 3103
 Physics
 1001 and 1005 1041 and 1045 1042 and 1046
 1061 and 1065 1071 and 1075 1104 and 1107
 1105 and 1108 1106 and 1109 1271 and 1275
 1281 and 1285 1291 and 1295 1411 and 1425
 1421 and 1435 1431 and 1445 1441
 3801
2. **History or application of science—4 credits**
 Biology
 1008 1101 1102 3051
 Botany
 1012
 Ecology and Behavioral Biology
 3001
 Genetics and Cell Biology
 3002
 Geology and Geophysics
 1005 1007
 History of Science and Technology
 1711 1712 1713 1811 1812 1813
 3201 3202 3203 3711 3712 3713
 3811 3812 3813 3825

GROUP C: THE INDIVIDUAL AND SOCIETY—13 credits

1. **Psychology 1001—5 credits (A/F grading required)**
2. **Two additional courses (as indicated below)**
 - a. At least one course must be from the following list of international courses:
 Afro-American Studies
 1021 1441 3011 3013 3501
 American Indian Studies
 3026 3036 3111 3112 3161 3211
 Anthropology
 1102 3222 3223 3241 3251 3261
 3281 3291
 Dutch
 3510
 East Asian Studies
 1063 1202 1461 1462 1463 3201 3202
 3211 3281 3464 3465 3467 3468 3471
 3472
 Economics
 5301 OR 5331 5307 OR 5337 5311 OR 5341
 5313 5315
 French
 3511 3512 3590 3599
 Geography
 1301, all 3xxx-5xxx level courses focusing on non-U.S. geography

Degree Programs

German							
3501	3511	3512	3513				
History							
All non-U.S. history courses							
Humanities							
1111	1113	1115	1202	1211	1212	1241	
International Relations							
3101	3105	3900					
Italian							
3501	3502	3590					
Latin American Studies							
3131							
MESA							
1506	3501	3505	3506	3508	3544	3566	
Music							
1804	3709	3807	3808				
Polish							
3801							
Political Science							
1025	1054	3475	3477	3835			
Portuguese							
3501	3502						
ROTC							
Mil 1021	1022	1023					
Russian							
3106	3511	3512					
Scandinavian							
3501	3614	3615					
Slavic							
1501	3501	3502	3503				
Sociology							
3315	3551	3671					
South and Southwest Asian Studies							
1506	3501	3502	3506				
Spanish							
1501	1502	1503	3501	3502	3512		
Spanish/Portuguese							
3610							
Speech							
3451							
Women's Studies							
1155							

b. An additional course either from the international studies list (above) or from CLA's Individual and Society (Group C) course list.

GROUP D: LITERARY AND ARTISTIC EXPRESSION—8 credits

Choose one of the following options:

1. Any two of the following:
Hum 1001, Hum 1002, Hum 1003, 1004, 1005
OR
2. One course from each of the following areas (a and b):
 - a. Literature—4 credits
Afro American Studies
3101 3102 3253 3601 3951 3952
American Indian Studies
3116
Chicano Studies
3507 3508 3510 3511
Chinese
3161 3162 3163 3165
Classics
1042 3081 3082 3083 3088

Danish							
3670							
Dutch							
3121	3122	3123	3310	3610			
English—all courses except							
3481	3710	3851	3852	3963	3970		
3980	5108	5211	5230	5481	5482		
5483	5486	5487	5672	5711	5712		
5713	5714	5753	5815	5821	5831		
5843	5851	5860	5871	5876	AND THOSE		
LISTED IN GROUP D2b							
Finnish							
3670							
French							
3101	3102	3103	3107	3209	3219		
3239	3259	3269	3289	3601	3602		
3603	3606	3607					
German							
3040	3041	3042	3043	3104	3104H		
3105	3105H	3301	3302	3303	3310		
3311	3312	3313	3331	3341H	3342H		
3401	3411	3421	3422	3423	3424		
3431	3432	3441	3442	3443	3450		
3490	3601	3602	3603	3604	3610		
Greek							
1104	3105	3106					
Hebrew							
3121	3122	3123	3304	3307			
Italian							
3201	3209	3219	3289	3301	3303		
3305							
Japanese							
3161	3163	3164					
Jewish Studies							
3315							
Latin							
3105	3106						
Middle Eastern Studies							
3211	3601	3602					
Norwegian							
3670							
Polish							
3601	3602						
Portuguese							
3211	3212	3213	3603	3910	5110		
Russian							
1304	3105	3301	3421	3422			
Scandinavian							
3505	3601	3602	3604	3605	3611		
3612	3613	3614	3615	3618			
South and Southwest Asian Studies							
3204							
Spanish							
3104	3211	3211H	3212	3212H	3213		
3213H	3251	3251H	3252	3252H	3253		
3253H	3601	3602	3605	3610	3614		
3615	3620	3910	3940				
Swedish							
3670							
Women's Studies							
3103	3202						

b. Artistic Expression and Humanities—4 credits
Afro-American Studies
1301 3105 3108 3301

American Indian Studies	3221 3242
Architecture	1021 1022 1023
<i>Art History</i> —all courses except	3895 3940 3950 3970 3980 5950
	5960 5970 5990
<i>Art Studio</i> —all courses except	3970 3980 5970
Chicano Studies	3213
Classics	3152 3162 5103
<i>Dance</i> —all courses except	3181 3185 3608 3610 3611 3612
Design	1501 1521 1541
East Asian Studies	3001 3013 3808
English	1101 1104 3101 3104
French and Italian	3604 3608
German	3311 3312 3313 3331
<i>Humanities</i> —all courses except	3910 3944 3970 3980 5910 5930
	5970 5990
Jewish Studies	3401 3402 3403
<i>Music</i> —all courses except	3970 3980 5950
Scandinavian	3606 3607
<i>Theatre Arts</i> —all courses except	3412 3950 3980 5718 5728 5910
	5950 5970
Women's Studies	3502

MANAGEMENT-RELATED GROUP—22 credits (A-F grading required)

1. Acct 1024, 1025—Principles of Financial Accounting I, II
2. Econ 1001, 1002—Principles of Macroeconomics, Microeconomics
3. MSci 1010—Fundamentals of Computers and Information Technology in Organizations
4. MSci 1020 (formerly DSci 1050)—Data Analysis and Statistical Inference for Managers

Additional transferable credits to total 80 are required by the time you enter the School of Management. In general, credits from CLA, IT and Ag are acceptable for credit in the School of Management, with the exception of statistics course work equivalent to MSci 1020, and personal skills/self development courses like efficient reading, how to study, etc.

Application Procedures

Each student receives an Acceptance Notice when admitted to the School of Management, which indicates terms of

admission and credits accepted. If you apply for admission and are not accepted, you will receive a notice explaining the reasons.

When applying to the Regular program, you must indicate your intended area of emphasis: Actuarial Science, Banking, Finance, Risk Management and Insurance, Logistics Management, Marketing, Small Business Management and Entrepreneurship, or General Management Studies. If you wish to apply to both the Accounting program and the regular program, please indicate on your application your first and second choice.

If you wish to change programs after admission, you must file a petition. Accounting students may petition to transfer to the Regular program at any time. Regular program students may petition to transfer to the Accounting program by the application deadlines for fall and spring quarters.

Change of College Within the University—If you are currently enrolled in another unit of the University of Minnesota, you must apply to transfer to the School of Management by July 15 for fall quarter admission and by January 15 for spring quarter admission. A Change of College Within the University form is available for this purpose at the Office of Admissions, 240 Williamson Hall, University of Minnesota, 231 Pillsbury Drive S.E., Minneapolis, MN 55455 (612/625-2008).

Transfer From Other Institutions—If you are transferring from outside the University to the School of Management, you must submit an Application for Admission, available at the Office of Admissions, 240 Williamson Hall. You must request that an official transcript from each college you have attended be sent directly from the college to the Admissions office. In addition, a \$20 nonrefundable application fee must accompany your application.

Credits completed at other institutions that are acceptable for transfer to the School of Management may be used to meet admission requirements. Credits in business courses at the lower division

Degree Programs

level are accepted for transfer only if such course work is available for credit in the College of Liberal Arts pre-management program. Junior- and senior-level business courses completed at other institutions are usually accepted for credit only by petition; you should petition for acceptance of these courses after admission to the School of Management through the Undergraduate Studies Office, 290 Humphrey Center. An appropriate faculty member will make the evaluation.

Foreign Study Credits—Credits earned at recognized institutions of learning abroad may be transferred to the School of Management if such work meets specific lower division distribution requirements or upper division elective requirements, as determined by the coordinator of admissions. No more than 45 credits of foreign study may be used to meet degree requirements. Foreign study credits transferred are accepted on the S-N grading system only, and are applied to the maximum of 25% of a student's total program credits that may be completed on S-N grading. Credits for other study abroad experiences may be earned only through special examinations authorized by the Undergraduate Studies Office.

Adult Special Status—If you wish to take courses to meet special needs, you may be admitted under adult special status. If you desire admission in this category, you must formally apply at the Office of Admissions, 240 Williamson Hall. Adult special students are not considered candidates for degrees. If you are admitted under adult special status and later decide to become a degree candidate, you must satisfy the admission requirements and apply for transfer to the school.

Generally, adult special students admitted to the School of Management must have a bachelor's degree or business experience and a strong undergraduate academic record. After admission as an adult special, you will be allowed to continue on a quarter-by-quarter basis for a maximum of three quarters and must have written approval from the Undergraduate Studies Office, 290 Humphrey Center, for each

quarter of registration. Continued registration will not be approved if you do not maintain a satisfactory grade record.

Application deadlines for adult special students in the School of Management are August 15 for fall quarter and February 15 for spring quarter.

Continuing Education and Extension (CEE)—Generally, undergraduate degree courses offered in the evening through the Continuing Education and Extension division of the University are accepted for full credit and grade value by the School of Management. The school offers an extensive selection of credit and noncredit undergraduate courses in the evening. You must be formally admitted to the School of Management if you plan to complete requirements for the baccalaureate degree in business administration through evening classes. As an extension student, you should complete the pre-management requirements early in your program and apply to the school after fulfilling the 80 credits required for admission. School of Management CEE application forms are available in the Extension Counseling office, 314 Nolte Center, University of Minnesota, 315 Pillsbury Drive S.E., Minneapolis, MN 55455 (612/625-2500); and they must be completed if you wish to complete all of the B.S.B. course requirements through extension classes. If you have already been admitted to the School of Management as a day school student and wish to complete the degree program requirements in evening classes, you must notify the Undergraduate Studies Office.

Continuing Education and Extension offers a number of certificate programs in various business fields. These programs are described in the *Extension Classes Bulletin*. Certificate credits earned through evening classes may not be applied toward degree programs.

Extension Independent Study Credits—University of Minnesota independent study (correspondence) courses carrying degree credit may be applied toward course, credit, and grade requirements in the School of Management. The school ac-

cepts a maximum of 16 credits of upper division School of Management course work that has been completed through correspondence study toward the B.S.B. degree.

Degree Requirements

To graduate from the School of Management you are required to:

1. Complete a minimum of 180 credits. These credits include the required pre-management course work and the specific degree requirements listed below.

2. Complete no less than 40% and no more than 60% of all credits in business and economics course work.

3. Complete a minimum of 40 credits of upper division courses taught by departments in the School of Management after official admission to the school.

4. Complete the final 45 credits of the degree program at the University of Minnesota. (With prior approval, students may apply credits earned at an institution participating in the National Student Exchange Program toward these 45 credits.)

5. Be in good academic standing with a minimum grade point average of 2.00 in all work taken after admission to the School of Management and in all upper division courses offered by departments in the School of Management.

Bachelor of Science in Business

Note: Students admitted to the School of Management prior to fall 1986 are responsible for the requirements published in the Management bulletin current at the time of their admission. Contact the Undergraduate Studies Office for more information.

REQUIREMENTS COMMON TO BOTH ACCOUNTING AND REGULAR PROGRAMS

28 credits of core courses to be completed during the first three quarters in the School (A/F grading required).

First Quarter

Acct 3001—Managerial Accounting
Mgmt 3001—Fundamentals of Management

Second Quarter

BFin 3000—Finance Fundamentals
MSci 3030 (formerly MIS 3300)—Information Systems and Information Management

Third Quarter

Mktg 3000—Principles of Marketing
OM 3000—Introduction to Operations Management
IR 3002—Personnel and Industrial Relations

4 credit economics course selected from the following list (A-F grading required): BGS 3001, Econ 3101, 3102, 3105, or 3701.

5 credit senior policy course (A-F grading required): Mgmt 3004

8 credits upper division communications courses:

Comp 3032—Pre-professional Writing for Business

One course from the following:

Rhet 3254—Advanced Public Speaking

Rhet 3266—Discussion Methods

Spch 3605—Public Speaking (Instructor approval required)

Spch 3411—Small Group Communication Processes

Spch 5422—Interviewing and Communication

Th 3950—Topics: Platform Performance Communications Workshop Project (non-credit)

4 credits international course (A-F required) selected from the following:

AgEc 3070, 3080, 5720, 5750

BGS 3004 (to be taken after admission to the School of Management)

BGS 3019 (to be taken after admission to the School of Management; depending on the topic offered, this course may fulfill the requirement; consult the Undergraduate Studies Office for further information.)

Econ 3041, 5041, 5301 or 5331, 5307 or 5337, 5311 or 5341, 5313, 5315, 5401 or 5431

Geog 5145, 5181, 5191, 3321, 3331, 3341, 3351, 3378

IntR 5145, 5802, 5831

PolS 3477, 3810, 5889

PA 5820 (formerly 5301), 5404

ADDITIONAL REGULAR PROGRAM REQUIREMENTS

21 credits of free electives selected from Agriculture, CLA, IT or Management

20 credits in area of emphasis or general studies option (A-F grading required for all classes comprising the area of emphasis). See below for courses:

Actuarial Science

Ins 3100—Risk Management and Insurance

Ins 5230/Math 5057—Life Contingencies I

Ins 5231/Math 5058—Life Contingencies II

Math 5473—Analysis of Numerical Methods

Math 5056—Theory of Interest

Banking

BFin 3800—Finance Senior Seminar: Financial Management of Depository Institutions

BFin 3800—Finance Senior Seminar: Regulation of Depository Institutions

BFin 3800—Finance Senior Seminar: Selected Problems in Bank Management

Two additional upper division School of Management courses

Degree Programs

Finance

- BFin 3100—Financial Management
- BFin 3300—Investment Management and Financial Markets
- Ins 3100—Risk Management and Insurance
- Acct 3160—Financial Statement Analysis
- Acct 3255—Managerial Cost Accounting

Small Business Management and Entrepreneurship

- Mgmt 3002—Psychology and Management
- Mgmt 3008—Entrepreneurship and the Smaller Enterprise

One of the following:

- Mgmt 5101—Advanced Topics: Entrepreneurship Project
- Mgmt 5101—Advanced Topics: Small Business Management

Two of the following:

- Acct 3160—Financial Statement Analysis
- BFin 3100—Financial Management
- Mktg 3010—Buyer Behavior and Marketing Analysis
- OM 3041—Project Management
- Mktg 3020 is recommended.

Marketing

- Mktg 3010—Buyer Behavior and Marketing Analysis
- Mktg 3020—Marketing Operations Management

One of the following:

- Mktg 3030—Sales and Distribution Management
- Mktg 3050—Marketing Communications
- Mktg 3065—Retail Management
- Mktg 3090—Marketing Topics

Two additional upper division School of Management courses

Logistics Management

- LM 3000—Introduction to Logistics Management
- LM 3010—Principles of Transportation
- LM 3020—Advanced Logistics Management
- LM 5010—Topics in Logistics Management

Two advanced courses (8 credits) selected from Finance, Management Information Systems, Marketing, or Operations Management

Risk Management and Insurance

- Ins 3100—Risk Management and Insurance
- BFin 3100—Financial Management
- BLaw 3058—Introduction to Law, and the Law of Contracts and Sales Contracts

Two of the following:

- Ins 3200—Life and Health Insurance
- Ins 3210—Economic and Social Security
- Ins 3220—Property and Liability Insurance

Information regarding the General Studies option and the "self-designed" option is available in the Undergraduate Studies Office.

ADDITIONAL ACCOUNTING PROGRAM MAJOR REQUIREMENTS (A-F grading required)

- BLaw 3058—Introduction to Law, and the Law of Contracts and Sales Contracts
- DSci 3055—Introduction to Management Sciences
- Acct 3101—Financial Accounting Theory and Practice I

Acct 3102—Financial Accounting Theory and Practice II

Acct 3201—Cost Accounting

Acct 5125—Auditing Principles and Procedures

Acct 5135—Income Tax Accounting

8 credits Accounting electives (A-F grading required; Acct 3199 and 3299 do not apply.)

Note: If you take a course without fulfilling a prerequisite, you may not take the prerequisite course later for credit except by permission from the Undergraduate Studies Office.

Additional transferable electives (upper or lower division) from the school, College of Liberal Arts, Institute of Technology, or College of Agriculture to complete the 180 credits required for graduation. Consult an adviser in the Undergraduate Studies Office before taking courses in colleges other than those listed above.

You may seek advice from accounting faculty members on upper division electives. It is recommended, but not required, that you choose one of the following four options:

1. Decision Sciences (formerly Quantitative Analysis): DSci 3053 and one of the following: DSci 5000, DSci 5161, DSci 5171, Stat 5101, or Econ 5231
2. Economics: Econ 3102 and one additional course
3. Legal and Political Environment: BLaw 3078 and BLaw 3088
4. Management Information Systems: MIS 5102 and MIS 5103

Noncredit seminars for your personal and professional development are strongly recommended. Refer to your quarterly registration instructions for further information.

Accounting Internships—Two internship opportunities are available in the accounting program: Acct 3199—Internship in Public Accounting and Acct 3299—Internship in Industrial Accounting. These courses require full-time work for one quarter and give students an opportunity to apply accounting concepts and methods and to obtain experience that is helpful in making career decisions. The public accounting internship, usually taken during winter quarter, emphasizes auditing and taxation. The industrial accounting internship, usually taken during the summer, involves such areas as development of cost data for specific projects, accounting procedures review, and evaluation and operation of some phase of an accounting system.

Advising

The School of Management offers centralized student personnel and advising ser-

VICES for undergraduate students currently enrolled in or interested in its day school or evening programs. In addition, the school works closely with the College of Liberal Arts' pre-management advisers in B-18 Johnston Hall. Students in CLA's pre-management program can schedule appointments by calling 612/624-9585. Other pre-management and management students can call 612/624-3313 or stop into the Management Undergraduate Studies Office located in 290 Humphrey Center to schedule appointments.

Scholastic Standards and Policies

Grading Options—University regulations allow students the choice of two grading system options: A-F or S-N. You indicate the option you have chosen at the time of registration. Changes in a course registration from A-F to S-N grading or vice versa are not allowed after the second week of a quarter (first week of a summer term).

There are five permanent grades that are acceptable for the completion of a course: A (highest), B, C, D (lowest), and S (satisfactory). The grade of N (no credit) is assigned when a student does not successfully complete the work of a course. F represents performance that fails to meet basic course requirements and is unworthy of credit. In calculating grade point averages, F is assigned zero points.

The following rules and policies govern grading in the School of Management:

1. School of Management departmental faculty designate courses in which students may register for S-N grading. A list of these courses is available in 290 Humphrey Center.

2. Non-School of Management students may register for S-N grading in any School of Management course that offers S-N grading.

3. School of Management students must present a minimum of 75% (135 credits) of their total program requirements on A-F grading.

4. Students must complete all upper division degree requirements on A-F

grading, except for upper division communications.

5. The following pre-management courses must be taken on A-F grading: Comp 1011, mathematics and symbolic systems requirements, Econ 1001 and 1002, Psy 1001, Acct 1024 and 1025, and MSci 1010/1020 (formerly DSci 1050). High academic performance in these areas may enhance chances for admission to the school.

Transcript Symbols—The following grade or symbol may be assigned in lieu of a permanent grade:

The temporary grade of I (incomplete) indicates there was not sufficient information immediately available to permit the assignment of a permanent grade. In all cases, the incomplete must be made up during the next quarter of registration (summer session is not considered a regular quarter). The instructor decides whether or not sufficient work has been completed to warrant the assignment of an I. To simply stop attending class does not guarantee you will be assigned an I.

The symbol W (withdrawal) indicates official cancellation of a course after the second week and through the first six weeks of a quarter, irrespective of your standing at that time. Cancellation must be official; you will not be assigned a W if you simply stop attending a class. Withdrawal from a class after the sixth week of a quarter is not allowed without scholastic committee approval.

GPA, Repeating Courses—Your grade point average (GPA) is defined as the sum of your grade points divided by the sum of credits for which you have earned grades of A, B, C, D, F or N. For purposes of defining academic achievement, grade points are assigned to the five permanent grades as follows: each credit of A carries 4 grade points; each credit of B, 3 grade points; each credit of C, 2 grade points; each credit of D, 1 grade point; *each credit of F, 0 grade points; each credit of N earned after admission to the School of Management, effective fall quarter 1982, 0 grade points.* Credits of S, and credits of N

Degree Programs

earned before admission and before fall quarter 1982 are not computed in the GPA.

The grade point average on your University of Minnesota transcript is computed on work completed at the University of Minnesota only. Grade points for work completed at other institutions are computed by the School of Management into an overall average even though they are not reflected in the GPA on your University transcript.

The first passing grade (D or higher) earned in any course is counted for purposes of GPA and total credit. No credit is granted for a grade resulting from repeating a course in which a passing grade (D or higher) has already been earned, nor does the second grade affect your GPA.

You may repeat courses in which you receive a grade of F or N. Both the old and new grades will remain on your record and count toward your GPA. No degree credit is granted for grades of F or N. You need not repeat a course for which an F or N was received unless it is required for graduation.

If you take a course without fulfilling a prerequisite, you may not later take the prerequisite course for credit except by permission from the Undergraduate Studies Office.

Satisfactory Progress and Scholastic Probation—All students are expected to make satisfactory progress toward the bachelor's degree. Satisfactory progress is defined by honor point accumulation which is calculated as follows:

- A = + 2 per credit
- B = + 1 per credit
- C = 0 per credit
- S = 0 per credit
- D = - 1 per credit
- N = - 2 per credit
- F = - 2 per credit

To remain in good academic standing, students must accumulate positive honor points in each of two areas: (1) all courses taken after admission to the school and (2) all upper division courses offered by School of Management departments. An accumulation of Ds, Fs, and Ns without

offsetting As and Bs in either of these two areas will result in a grade point deficiency.

Students are placed on probation when their accumulated honor points are from - 1 to - 10. Students are placed on "Final Quarter Notice" when their accumulated grade points fall below - 10. Failure to meet the terms of the "Final Quarter Notice" can result in suspension from the school according to terms set by the Undergraduate Studies Office.

Probationary action is based on University course work only. Thus, grade point deficiencies accumulated at the University of Minnesota cannot be offset by high grades earned at other academic institutions.

Students suspended for academic reasons are normally not allowed to register in the school for a period of one year. *Any credits earned during the period of suspension are not counted toward the degree unless prior approval has been granted.*

Cancel-Adding—Cancellations are allowed through the sixth week of the quarter (third week of summer terms). No signature or approvals are required. Instructor permission is also required to add accounting courses on or after the first day of the quarter.

Special Examination for Credit—In some instances, a student who has mastered the subject matter of a specific course outside of class may take a special examination in order to receive credit for the course. If you believe you know the subject matter as well as students successfully completing a course, you may apply first to the Undergraduate Studies Office and then to the instructor of the course for permission to take a special examination. A fee of \$30 per examination is charged.

Petitions—Petition forms, available in the Undergraduate Studies Office, are required to change from the B.S.B.-Regular to B.S.B.-Accounting program or vice versa; to evaluate whether certain courses completed at other institutions are equivalent to University of Minnesota courses for transfer purposes; and to request exceptions to rules and requirements.

Petition forms are filled out in triplicate and may require the written recommendation of the department or instructors involved. Completed forms should be turned in to the Undergraduate Studies Office. After official action has been taken on the petition, a copy of the form, indicating the decision made, will be available in 290 Humphrey Center.

Academic Misconduct—The school defines academic dishonesty broadly as any act that violates the rights of another student in academic work or that involves misrepresentation of your own work. Academic dishonesty includes, but is not necessarily limited to, cheating on assignments or examinations; plagiarizing, which means misrepresenting as your own work any part of work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned; depriving another student of necessary course materials; or interfering with another student's work.

A committee composed of students and faculty members investigates charges of academic dishonesty referred to it by School of Management faculty members or students. When charges are upheld, the committee may place a student on disciplinary probation, fail the student in a course, suspend the student from the school, or take other action.

School of Management faculty members may act on cases involving School of Management students in their classes, but such action may not exceed modification of a course grade. Instructors must report any action to the director of undergraduate studies, and the student will be informed of the right to ask for a committee hearing. The advising staff can provide specific information about reporting and appeal procedures.

Disciplinary or conduct cases that are nonacademic in nature or that involve two or more colleges are referred to the Campus Committee on Student Behavior (624-6073).

Attendance—Each School of Management student is expected to attend classes regularly. Instructors announce their own policies regarding class attendance and are responsible for determining whether a student may make up work missed because of absence from class. School of Management faculty members are required to allow make-up of missed examinations or other required course work only under the following circumstances:

1. Participation in a formally approved and scheduled University activity such as intercollegiate competition in academic or athletic events. This does not include activities of student organizations of any type.
2. Performance of military or civil duty (such as jury duty) that could not be scheduled at another time.
3. Having a conflict of three or more examinations scheduled in one calendar day.
4. Having an illness or a family emergency that is attested to by a doctor's note or other acceptable evidence.

Grievance—If you have a complaint against a faculty member, you should first discuss the matter with that faculty member. If the matter cannot be resolved through this discussion, you should then present the complaint to the appropriate department chair. If a solution cannot be reached at that level, or if the grievance is directed specifically against the department chair, you should request a meeting with the director of undergraduate studies. If this meeting fails to yield a satisfactory solution, the director will instruct you to submit a written explanation of the grievance to the dean. The dean refers the grievance to the appropriate school committee, which, under the guidance of its chair, reviews the complaint and attempts to resolve it through mediational methods. If necessary, the committee may conduct hearings on the matter and submit recommendations to the dean. If either party involved in the complaint is dissatisfied with the recommendations, it may submit an appeal to the school's

Degree Programs

Grievance Committee. Students serve as members of both the initial hearing committee and the school's Grievance Committee.

If you have a complaint against a staff member, you should first attempt to resolve the difference with that staff member. If this meeting proves unproductive, you may bring the matter to the staff member's supervisor. If you and the supervisor cannot resolve the complaint, you may request a hearing by presenting a written explanation of the grievance to the dean. Beyond this point, the grievance procedure is the same as that outlined above for a complaint against a faculty member.

Graduation

Applying to Graduate—Two quarters before your intended quarter of graduation you must complete an Application for Degree in 150 Williamson Hall. You should then schedule an appointment to verify your degree progress with an adviser in the Undergraduate Studies Office. If you are enrolled in extension classes during the final quarter of your undergraduate program, you must notify the Undergraduate Studies Office of any classes in which you are currently enrolled (including quarter or semester, course number, and section number); your graduation may be delayed if such notification is not received. A final check of graduation requirements is made by an adviser after you have completed all course work. If you do not meet the graduation requirements at that time, you will be notified by the Undergraduate Studies Office.

Graduation With Honors—The B.S.B. degree may be awarded "with distinction" or "with high distinction" upon final review of course work. Honors listed in the commencement program are not final until all grades have been received. To be eligible for graduation with honors, you must:

1. Complete a minimum of 44 upper division School of Management credits on an A-F grading basis after admission, and

2. Meet the following specific requirement for one of the two honors:

With Distinction—Rank in the upper 4 to 10% of your graduating class based on all course work completed while enrolled in the School of Management.

With High Distinction—Rank in the upper 3% of your graduating class based on all course work completed while enrolled in the School of Management.

Graduation honors are calculated using the School of Management GPAs of the students who have graduated fall quarter through summer session II of the preceding year.

Honors and Awards—The following honors and awards are presented annually and are announced at the School of Management spring commencement or other event. Names of recipients are inscribed on tablets displayed in Management and Economics.

Alpha Kappa Psi Scholarship Medal—Awarded by Alpha Kappa Psi to the graduating senior in the school who has maintained the highest scholastic average in the upper division School of Management courses. In the case of a tie, the student who has completed the most upper division School of Management credits on an A-F grading basis will be awarded the medal.

Alpha Kappa Psi Tablet—Awarded to the four seniors in the school "who in scholarship and service to the school have been most outstanding." The Student Awards Committee, composed of representatives from each of the student organizations, selects the recipients. The first tablet was presented by Alpha Kappa Psi in 1926, and the second was given in 1947.

Beta Alpha Psi—Membership in this national honorary accounting society is awarded to accounting majors on the basis of performance in specific accounting courses and overall grade point average.

Beta Gamma Sigma—This national honorary business society is recognized by the American Assembly of Collegiate Schools

of Business as the official honorary society in the business field. Membership is offered to the upper 5% of the juniors and upper 10% of the seniors enrolled in the school, and to the upper 20% of those receiving master's degrees during the year.

Business Association of Minorities Outstanding Achievement Award—Awarded by the Business Association of Minorities to one or two multiethnic (Hispanic, Asian American, Native American, or black) graduating business seniors who have contributed to the political, social, and academic development of multiethnic students, and who have worked in developing and implementing minority programs within the School of Management.

Delta Sigma Pi Scholarship Key—Awarded by Delta Sigma Pi to the graduating senior in the school who has the highest scholastic average for work completed in the prescribed pre-management areas and in the School of Management.

Phi Beta Kappa—Students are selected for this national liberal arts honorary society on the basis of scholarship by members of the society. Students who have completed the College of Liberal Arts distribution requirements, have earned 150 or more credits, and have achieved a grade point average of 3.50 or higher may apply. Study of a foreign language is also required. Annual elections are held during spring quarter. Questions concerning the society should be addressed to Student Relations, 150 Williamson Hall.

Phi Delta Junior Scholarship Award—Awarded by Phi Delta to the junior in the school who has maintained the highest scholastic average during the first two quarters (24 credits minimum) of her or his junior year.

The Pillsbury Scholastic Achievement Award—The Pillsbury Scholastic Achievement Award is sponsored by the Pillsbury Company to recognize the senior who ranks highest academically among those students who have pursued advanced marketing course work as well as overall scholastic achievement in the School of Management.

The 3M Marketing Leadership Award—The 3M Marketing Leadership Award recognizes a graduating senior who has demonstrated leadership service and scholastic achievement while pursuing the study of marketing. The award is sponsored by the 3M Company and is presented to the outstanding senior as selected by the marketing faculty.

Tomato Can Loving Cup Award—Awarded annually to the person the dean deems to have performed the most distinctive service to the school. A plaque was donated several years ago by the local chapter of Delta Sigma Pi to make possible a more permanent record of this very distinctive and highly valued award.

Wall Street Journal Achievement Award—Awarded annually to a graduating undergraduate student and to a graduating graduate student and sponsored by the *Wall Street Journal*. Presented to the student in each area, as selected by the finance faculty, who ranks highest scholastically among those who have expressed a special interest in finance and have pursued advanced course work in that area.

Graduate Programs

The School of Management, in conjunction with the Graduate School, offers programs leading to the degrees of master of business administration (M.B.A.), master of business taxation (M.B.T.), and doctor of philosophy (Ph.D.). The Department of Industrial Relations, in conjunction with the Graduate School, offers programs in industrial relations leading to the degrees of master of arts and doctor of philosophy. Complete descriptions of these programs and of graduate-level courses in these areas are presented in the *Graduate School Bulletin*.

Eligibility Examination—All applicants seeking admission to graduate programs in business administration, except those interested in industrial relations, are required to present a report of their performance on the Graduate Management

Degree Programs

Admission Test (GMAT—formerly Admission Test for Graduate Study in Business) as part of their application for admission. A report of performance on the Law School Admission Test (LSAT) may be submitted in lieu of the GMAT score for M.B.T. program applicants. Test scores on the Graduate Record Examination (GRE) may be submitted in lieu of the GMAT score for Ph.D. in Business Administration applicants. All applicants seeking admission to graduate programs in industrial relations must present a report of their performance on the Graduate Record Examination (GRE) and the Miller Analogies Test (MAT) as part of their application for admission. Applications cannot be processed without the reports. Since the GMAT and GRE are given at limited times and places during the year, you are advised to register early to take the examinations. For information concerning registration for the examinations, write to the Educational Testing Service, P.O. Box 966, Princeton, New Jersey 08540. For information concerning the MAT, contact the University Counseling Services, 301 Eddy Hall, University of Minnesota, 192 Pillsbury Drive S.E., Minneapolis, MN 55455 (612/624-9853).

Master of Business Administration (M.B.A.)

Two programs are offered for the M.B.A. The regular program, consisting of 74 credits, is designed for students without prior education in business administration. The accelerated program, consisting of 50 credits, is designed for students with an undergraduate degree in business administration. The regular and accelerated programs are offered through both full-time day and part-time evening study.

A part-time evening program leading to the master of business administration degree is also offered by the School of Management and the Graduate School for persons who are employed full-time.

To be admitted to the M.B.A. program, you must have completed an undergraduate degree in any field plus introductory courses in microeconomics and calculus or

finite mathematics. You must take the Graduate Management Admission Test (GMAT). If your native language is not English, you are required to score 550 or higher on the Test of English as a Foreign Language (TOEFL).

Selection for admission is based primarily on three factors: the applicant's aptitude for graduate work in business administration, the quality of the applicant's prior academic experience, and a statement of the applicant's career goals; managerial or administrative work experience is taken into consideration.

Full-time day students may enter the regular program in the fall; they may start the accelerated program in the summer. Part-time evening students in either program may begin fall, winter, or spring.

You are encouraged to apply six months in advance of the quarter you wish to enter.

The Regular M.B.A. Program consists of a carefully structured group of core courses to be completed in the first year followed by course work in an area of concentration and a sequence of three required courses to be completed in the second year. Also included in the second year is a field project in which students work with Twin Cities business firms and other organizations to solve current problems. The program requires completion of the following courses:

- MBA 8005—Computer Access and Programming for Business Analysis (first five weeks)
 - Communications Skills Program (second five weeks)
 - MBA 8010—Management and Organizational Behavior
 - MBA 8015—Human Resources Management
 - MBA 8020—Business Statistics: Sources, Presentation, and Analysis
 - MBA 8025—Decision Sciences and Information Systems
 - MBA 8030—Financial Accounting
 - MBA 8035—Managerial Economics and Accounting
 - MBA 8040—Financial Management
 - MBA 8045—Marketing Management
 - MBA 8050—Operations Management
 - MBA 8055—Business, Government, and Macroeconomics
 - MBA 8060—Strategy and Policy
 - MBA 8065—Field Project
- Plus six concentration courses totaling 24 credits

In the full-time day school program, these courses will take two years to complete. MBA 8010 through 8050 must be taken in sequence, three courses each quarter, and must be completed in three quarters. The six concentration courses are generally taken in the fourth through sixth quarters.

Part-time evening students must take the courses in sequence but are not required to take a minimum number of courses per quarter. In this program MBA 8070, Problem Formulation and Decision Making, is taken instead of MBA 8065, Field Project. If you take two courses per quarter, the program may be completed in nine quarters.

The Accelerated M.B.A. Program consists of an introductory quarter of course work that complements the student's background followed by course work in an area of concentration and a sequence of three required courses. The program requires completion of the following 13 courses:

Three of the following six:

- MBA 8015—Human Resources Management
- MBA 8025—Decision Sciences and Information Systems
- MBA 8035—Managerial Economics and Accounting
- MBA 8040—Financial Management
- MBA 8045—Marketing Management
- MBA 8050—Operations Management
- MBA 8005—Computer Access and Programming for Business Analysis
- Communications Skills Program
- MBA 8055—Business, Government, and Macroeconomics
- MBA 8060—Strategy and Policy
- MBA 8065—Field Project

Plus six concentration courses totaling 24 credits

In the full-time day school program, this program requires four quarters to complete (summer-fall-winter-spring).

Part-time evening students must take the courses in sequence but are not required to take a minimum number of courses per quarter. In this program MBA 8070, Problem Formulation and Decision Making, is taken instead of MBA 8065, Field Project. If you take two courses per quarter, the program may be completed in six quarters.

Additional Requirements—Each day and part-time evening M.B.A. student must select an area of concentration. This area of concentration is selected at the time of application for admission. Concentrations available to part-time evening students are identified with an asterisk. The available concentrations are:

- Accounting*
- Advertising Management
- Auditing*
- Business, Government and Society*
- Controllership*
- Decision Sciences
- Finance*
- General Management*
- Industrial Relations
- Insurance
- Line Management
- Logistics Management
- Management Information Systems*
- Management Support Systems*
- Marketing Management*
- Marketing Research*
- Operations Management*
- Organizational Leadership

Plan B Projects—Two Plan B projects are required for the M.B.A. degree. One project is completed as part of MBA 8065, Field Project (for day students), or MBA 8070, Problem Formulation and Decision Making (for part-time evening students). This project enables you to work on current problems of an actual organization. A second project must be completed as part of a course within your area of concentration.

Graduation Requirements—Upon completion of your program, you must present copies of your Plan B papers, academic transcript, and degree program to the M.B.A. program director. A minimum grade point average of 3.00 must be earned in the 74 prescribed graduate credits for the regular program or in the 50 prescribed graduate credits for the accelerated program. The degree must be completed within seven years of initial registration in the program.

Further information about the M.B.A. day and evening programs is available

Degree Programs

from the M.B.A. Program, School of Management, 295 Humphrey Center, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455 (612/624-0006).

Master of Business Taxation (M.B.T.)

This degree program is designed to help students acquire a conceptual understanding of taxation and to develop technical competence in the practical application of the rules of taxation in business and personal decision making.

The program is offered only in the evening through Continuing Education and Extension. It is designed to accommodate nontraditional students who are employed during the day and enrolled in the program on a part-time basis during the evening. Students enrolled on a part-time basis can expect to complete the program in approximately two years. Students who choose to enroll in the program on a full-time basis can complete the program in a shorter period of time.

Application forms for and additional information about the M.B.T. program may be obtained from the Director of Graduate Studies in Taxation, 645 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455 (624-7511).

Common Body of Knowledge—All students are required to possess a common body of knowledge in the business areas listed below. This requirement may be met through appropriate courses completed in your undergraduate program. If you are lacking courses in any of these areas, you must make up the deficiencies. Any deficiencies may be completed while enrolled in the M.B.T. program. Graduate credit will not be granted for courses used to satisfy these requirements. The prerequisites can be met by completing introductory courses in the following areas:

Finance
Marketing
Macroeconomics
Microeconomics
Managerial Statistics

Management Information Systems
Financial Accounting
Managerial Accounting
Management
Law of Contracts and Sales Contracts
Operations Management

Graduation Requirements—All students must complete 45 graduate credits, excluding credits earned in completing the required common body of knowledge course work in business, and must maintain a 3.00 grade point average in these degree credits. The following courses must be completed:

Required Courses—General

Acct 8150—Financial Accounting, Issues (or equivalent)
Econ 5821—Principles of Public Finance (or equivalent)
MBA 8055—Business, Government, and Macroeconomics
MBA 8060—Strategy and Policy

Required Courses—Taxation

Acct 5135—Income Tax Accounting (or equivalent)
Acct 8220—Tax Research
Acct 8225—Tax Procedure and Practice
Acct 8230—Taxation of Corporations I

Elective Courses—Taxation: complete 16 credits selected from the following courses

Acct 8330—Taxation of Corporations II
Acct 8335—Tax Effects on Business Decision Making
Acct 8340—Taxation of Partners and Partnerships
Acct 8350—Taxation of Estates, Gifts, and Trusts
Acct 8354—Tax Planning for Families and Organizations
Acct 8356—Taxation of Deferred Compensation and Fringe Benefits
Acct 8360—State and Local Taxation
Acct 8370—Taxation of Property Transactions
Acct 8380—Tax Aspects of International Business
Acct 8390—Current Topics in Taxation

Plan B Project—At least four quarter credits must be earned in a course providing the opportunity to prepare written reports of the quality, but not the range, of a master's thesis.

Examination—All candidates are required to take a final oral or written examination, or both, at the discretion of the faculty examining committee.

Doctor of Philosophy in Business Administration

Details about admission and degree requirements for the Ph.D. program in business administration are explained in the *Graduate School Bulletin* and in the Ph.D. program brochure, available from 295

Humphrey Center, University of Minnesota, 271 19th Avenue South, Minneapolis, Mn 55455 (612/624-0875).

Master of Arts in Industrial Relations

The M.A. degree program is designed to prepare students for professional employment in industrial relations, business, government, and labor organizations. The program also serves as preparation for further graduate work in industrial relations or in related fields of study. The degree is offered in full-time day and part-time evening programs.

Candidates for this program are selected on the basis of demonstrated interest and aptitude in industrial relations and the quality of their undergraduate work. A social sciences background is desirable for students seeking admission to graduate work in industrial relations. You will be expected to have completed, or to subsequently complete, course work prerequisite to courses selected for your graduate program.

Completion of the full-time day master's program normally requires six quarters in residence, or its equivalent in summer terms. Evening program students usually take one or two courses per quarter and thus could finish within eight quarters. Most students, however, can expect that three to three and one-half years are necessary when work schedules must be balanced. If you are adequately prepared and devote full time to graduate study, you can complete the program in less than two years. If you are less prepared or a part-time student, you should anticipate a longer period of study.

Application forms for and additional information about the M.A. degree program in industrial relations can be obtained from the Director of Graduate Study in Industrial Relations, 537 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455 (612/624-5810).

Plan A—Thesis Program—A minimum of 48 course credits, 16 thesis credits, and an accepted thesis are required. Addi-

tional course work may be required by your adviser to insure adequate preparation in the major field.

The major course work consists of a minimum of 32 credits that include IR 8002, IR 8001, one course in each of at least three areas in industrial relations, and one additional industrial relations course.

A minimum of 12 credits are required in an approved field of study related to industrial relations. However, more than 12 credits may be required, depending upon previous preparation. Commonly selected fields are business administration, psychology, sociology, or economics.

A thesis dealing with a specialized topic in the major field must be approved for the degree.

There is no language requirement.

A final oral examination is required of all M.A. students. Candidates will be admitted to the examination only after they have completed all course requirements and their Plan A thesis has been approved.

Plan B—Nonthesis Program—A minimum of 64 credits and completion of three Plan B projects are required. The major course work consists of a minimum of 48 credits that include IR 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8012, and four additional industrial relations courses.

The remaining course work consists of a minimum of 16 credits earned in at least two related fields. A minimum of 8 credits must be earned in one related field. Commonly selected fields are business administration, psychology, sociology, or economics. A 12-credit core of management courses is recommended for students having limited or no business administration background. The core consists of MBA 8030, MBA 8025 or MBA 8035, and MBA 8040 or MBA 8050.

Three papers of the quality, but not the scope, of a master's thesis must be prepared involving independent work under faculty supervision. Two papers will be written in conjunction with IR 8001 and IR 8012 and are expected to require individual research roughly equivalent to 40

Degree Programs

hours beyond normal requirements for a 4-credit course. The third paper can be written in conjunction with any course appearing on the approved program.

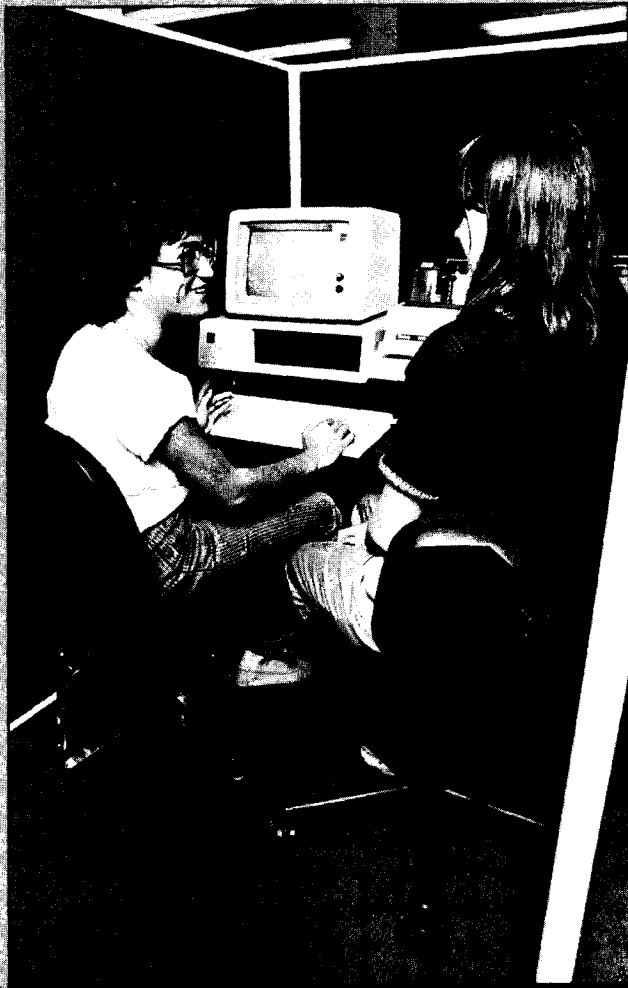
There is no language requirement.

A final oral examination is required of all M.A. students. Candidates will be admitted to the examination only after they have completed all course requirements and their Plan B projects have been approved.

Doctor of Philosophy in Industrial Relations

Details about admission and degree requirements and application forms for the Ph.D. program in industrial relations can be obtained from the Director of Graduate Study in Industrial Relations, 537 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455 (612/624-5810).

Course Descriptions



Course Descriptions

Symbols—The following symbols are used throughout the course descriptions in lieu of page footnotes:

- § Credit will not be granted if the equivalent course listed after this symbol has been taken for credit.
- ¶ Concurrent registration is allowed in the course listed after this symbol.
- # Consent of instructor and a Registration Override Permit, completed and signed by the college office, is required prior to registration.
- △ Registration Override Permit, completed and signed by the college office is required prior to registration.

Accounting (Acct)

645 Management and Economics

Accounting has been termed “the language of business.” It is an essential tool for planning and controlling both profit-seeking and nonprofit organizations. The growing complexity of American businesses and the need for unconventional approaches to business problems have increased the demand for professional accountants within individual firms. Effective operations planning demands that relevant data be collected, analyzed intelligently, and reported coherently. Management needs assistance in directing activities to meet objectives and in adjusting operations to fit new conditions. Providing information for planning and control is the function of the controller, the chief accounting officer of the firm. Employment opportunities for accountants extend to nonprofit organizations and government units—organizations that have needs similar to those of private firms and recognize increasingly the value of the basic tools of accounting in managing their development. Professional accountants are also needed in industry, teaching, and public accounting.

Certified public accountant (CPA) is the professional designation of those who analyze operations and financial position in order to provide an independent opinion on the financial statements of an orga-

nization. Certified management accountant (CMA) is the professional designation of those accountants who serve as internal financial advisers to management. The certified internal auditor (CIA) serves management and corporate boards of directors by analyzing and reporting on the implementation and effects of management policies. The CPA designation is issued by the state of Minnesota, the CMA by the Institute of Management Accounting, and the CIA by the Institute of Internal Auditors. Each requires practical experience and passing scores on extensive qualifying examinations. Completion of the accounting program serves as the basic preparation for these examinations and enables you to take the examinations in the area of your career interest immediately before or after graduation.

Courses offered are designed to develop the analytical abilities of students as well as to present the usefulness and limitations of accounting procedures. If you are interested in becoming a professional accountant, you should refer to the B.S.B.-Accounting program requirements described in the second section of this bulletin.

If you have prior background or training in accounting, you may receive credit for Acct 1024 and/or 1025 by passing a special examination. A \$30 fee is required in advance for each examination you wish to take. The examinations are given in August, November, and February; contact Continuing Education and Extension Counseling (612/625-2500) for exact dates. To allow time for processing the necessary forms, you must contact your current college office *at least* one week before the date of the examination.

1024. PRINCIPLES OF FINANCIAL ACCOUNTING I. (3 cr; prereq 3rd-qttr fr; not offered S-N)
Introduction to basic concepts and definitions in accounting. Transaction analysis. Statement presentation.

1025. PRINCIPLES OF FINANCIAL ACCOUNTING II. (3 cr; prereq 1024; not offered S-N)
Valuation and measurement problems. Emphasis on inventories, marketable securities, property plant and taxes, leases.

3001. MANAGERIAL ACCOUNTING. (4 cr; prereq 1025; not offered S-N)

Accounting analysis and reports for managerial decisions. Information for planning and controlling of operations.

3101. FINANCIAL ACCOUNTING THEORY AND PRACTICE I. (4 cr; prereq 1025)

Development of generally accepted accounting principles. Income determination. Asset valuation. Statement of changes in financial position. Price level accounting.

3102. FINANCIAL ACCOUNTING THEORY AND PRACTICE II. (4 cr; prereq 3101)

Accounting for and reporting of current and long term liabilities, owner's equity. Leases. Pensions. Income tax accounting.

3160. FINANCIAL STATEMENT ANALYSIS.

(4 cr; not for accounting majors; prereq 1025)
Analysis and interpretation of financial statements and schedules for investors and other users.

3199. INTERNSHIP IN PUBLIC ACCOUNTING.

(3 cr; offered S-N only; prereq 5125 and #)
Full-time work for a public accounting firm plus a written report on the work experience.

3201. COST ACCOUNTING. (4 cr; prereq 3001, DSci 3055)

Process and standard costs, behavior of costs under varying conditions, cost allocations, variance analysis.

3255. MANAGERIAL COST ACCOUNTING. (4 cr; prereq 1051 or 3001)

Cost concepts and their application from the point of view of the executive who uses cost information in decision making. Management control systems.

3299. INTERNSHIP IN MANAGEMENT ACCOUNTING. (3 cr; offered S-N only; prereq 3201 and #)

Full-time work in general accounting, cost accounting, or internal auditing in an industrial or governmental organization plus a written report analyzing the work experience.

5125. AUDITING PRINCIPLES AND PROCEDURES. (4 cr; prereq 3102)

The auditor's role and function. Includes audit standards, ethics, procedures, legal responsibilities.

5126. INTERNAL AUDITING. (4 cr; prereq 3102 and 3201)

Financial and operational auditing. Standards. Management of the function.

5127. EDP AUDITING. (4 cr; prereq 5125, MIS 3300 or MSci 3030)

Audits of computerized data processing systems. Computer audit tools and techniques. General and application controls.

5135. INCOME TAX ACCOUNTING. (4 cr; prereq 1025)

An introduction to principles of federal income taxation of various taxpaying entities.

5180. ADVANCED ACCOUNTING. (4 cr; prereq 3102)

Consolidated statements. Partnerships. Fiduciaries. International operations. Governmental accounting. Accounting for not-for-profit entities.

5210. FINANCIAL ACCOUNTING THEORY. (4 cr; prereq 3102)

History of financial accounting, alternative concepts of income, measurement theory, presentation of financial condition.

5230. CORPORATE TAXATION. (4 cr; prereq 5135, #)

The tax consequences of the formation, operation, and liquidation of a business corporation.

5236. TAXATION II. (4 cr; prereq 5135)

Income taxation of corporations. Partnerships. Tax research.

5270. REPORTING FOR MANAGEMENT CONTROL. (4 cr; prereq 3201)

Management accounting tools and techniques applied to medium and large organization problems. Management control systems.

5271. ACCOUNTING SYSTEMS. (4 cr; prereq 3102 or 3201)

Applications of electronic data processing systems in accounting, including modeling, financial planning, auditing, and data security. Analysis and design of accounting information systems.

5281. ACCOUNTING FOR GOVERNMENTAL AND NONPROFIT SEEKING ENTITIES. (3 cr; prereq 3102)

Accounting concepts and practices appropriate for managing and reporting of activities and positions of governmental units and not-for-profit organizations.

5290. PERSPECTIVES OF TOP FINANCIAL EXECUTIVES. (4 cr; prereq 3201 or MBA 8035)

Opportunity to study in depth problems faced by top financial executives, to better understand the work of a financial executive, and to interact with executives in analysis of a problem. Designed to sharpen skills in library research, written and oral expression, and ability to raise relevant questions.

5300. CURRENT TOPICS IN MANAGERIAL ACCOUNTING. (4 cr [may be repeated for cr]; prereq 3201)

Selected topic(s) in managerial accounting. Topics vary from quarter to quarter.

5310. CURRENT TOPICS IN FINANCIAL ACCOUNTING. (4 cr [may be repeated for cr]; prereq 3102)

Current topic(s) in financial accounting. Topics vary from quarter to quarter.

5340. PARTNERSHIP TAXATION. (4 cr; prereq 5135)

The tax consequences of the formation, operation, and dissolution of a partnership.

Course Descriptions

5390. CURRENT TOPICS IN TAXATION. (Cr ar; prereq 5135 or equiv, #)
Current tax legislation problems. Topics vary from quarter to quarter.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8050. PRINCIPLES OF ACCOUNTING I

8051. PRINCIPLES OF ACCOUNTING II

8101. CORPORATE FINANCIAL REPORTING

8102. CORPORATE FINANCIAL REPORTING—ADVANCED TOPICS

8125. SECURITY, CONTROL, AND AUDIT OF FINANCIAL INFORMATION SYSTEMS

8128. ANALYTIC REVIEW AND AUDIT SAMPLING

8135. MANAGERIAL ISSUES IN TAXATION

8150. FINANCIAL ACCOUNTING ISSUES

8160. FINANCIAL STATEMENT ANALYSIS

8201. ACCOUNTING FOR MANAGERIAL DECISIONS AND CONTROL

8202. MANAGERIAL ACCOUNTING AND QUANTITATIVE METHODS

8215. BEHAVIORAL ACCOUNTING

8220. TAX RESEARCH

8225. TAX PROCEDURE AND PRACTICE

8230. TAXATION OF CORPORATIONS I

8255. MANAGERIAL COST ACCOUNTING

8330. TAXATION OF CORPORATIONS II

8335. TAX EFFECTS ON BUSINESS DECISION MAKING

8340. TAXATION OF PARTNERS AND PARTNERSHIPS

8350. TAXATION OF ESTATES, GIFTS, AND TRUSTS

8354. TAX PLANNING FOR FAMILIES AND ORGANIZATIONS

8356. TAXATION OF DEFERRED COMPENSATION AND FRINGE BENEFITS

8360. STATE AND LOCAL TAXATION

8370. TAXATION OF PROPERTY TRANSACTIONS

8380. TAX ASPECTS OF INTERNATIONAL BUSINESS

8390. CURRENT TOPICS IN TAXATION

8805. SEMINAR I

8810. SEMINAR II

8820. SEMINAR III

8825. AUDITING: SEMINAR

8990. READINGS IN ACCOUNTING

8995. RESEARCH IN ACCOUNTING

Business Administration (BA)

290 Humphrey Center

3998. INDEPENDENT STUDY. (Cr ar [may be repeated for cr]; prereq consent of faculty member willing to supervise the study)
Student-initiated project and/or independent course of study.

3998H. HONORS COURSE: INDEPENDENT STUDY. (Cr ar [may be repeated for cr]; prereq consent of faculty member willing to supervise the study; School of Management honors student or #, and Δ)
See BA 3998.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8159. QUANTITATIVE APPROACHES TO ADMINISTRATIVE PROBLEMS

8200. LIBRARY ACCESS FOR BUSINESS RESEARCH

8210. Ph.D TEACHING SEMINAR

8220. Ph.D. RESEARCH SEMINAR

Business, Government, and Society (BGS)

835 Management and Economics

This curricular area was developed because of the growing concern of business about its relationship to other social institutions and issues. Many companies now have public affairs departments, centrally responsible for their social efforts. In other companies, various social relationships are handled by relevant departments. If you are anticipating a management career, you will find these courses useful, whatever the nature or internal arrangement of the firm in which you will work.

The basic course, BGS 3002, examines general topics. Other courses examine

specific subjects such as regulation, antitrust, environment, and international aspects of business.

3001. MANAGERIAL ECONOMICS. (4 cr, §Econ 3101, §Econ 3105; prereq Econ 1002 or equiv)

Intermediate microeconomics from the perspective of the business enterprise and of the manager. Firm and industry demand, firm revenues and costs, supply, pricing practices, market structures, and other relevant economic concepts are applied to the individual business.

3001H. HONORS COURSE: MANAGERIAL ECONOMICS. (4 cr, §3001, §Econ 3101, 3105; prereq Econ 1002; School of Management honors student or #, and Δ)
See BGS 3001.

3002. BUSINESS AND SOCIETY. (4 cr; prereq jr or sr)

Basic economic and social goals and various attempts to meet them, with emphasis on American society. Business as an institution; its relationships to other institutions and to society. Ethical and practical conflicts in the role of the firm and the manager examined in the context of the public policy process. Current social issues and their impacts on business.

3002H. HONORS COURSE: BUSINESS AND SOCIETY. (4 cr, §3002; prereq jr or sr; School of Management honors student or #, and Δ)
See BGS 3002.

3003. BUSINESS AND THE NATURAL ENVIRONMENT. (4 cr; prereq jr or sr)

Business and its relationship to the natural environment. The use by industry of renewable and nonrenewable resources. Environmental deterioration caused by businesses to air, land, and water. Business solutions to environmental problems. May emphasize energy in some quarters.

3004. INTERNATIONAL BUSINESS. (4 cr)

World business with emphasis on the global economy, international concepts, global business structures, comparative cultures and environments, global business strategies, multinational corporations and technology, personnel and operations in the host nations. Resource (including energy) questions in their global contexts: quantities, demands, distribution of resources.

3005. GOVERNMENT AND BUSINESS. (4 cr, §Econ 3651; prereq Econ 1001 and 1002 or equiv)

The role of the free enterprise system; structure of American industry; economic and social consequences of big business; public policies toward private enterprise; public regulation, public ownership; antitrust laws and their applications.

3019. TOPICS IN BUSINESS, GOVERNMENT, AND SOCIETY. (4 cr; prereq 3002 or #)

Selected topics and problems of current interest considered in depth. Class discussions and course projects. Topics vary from quarter to quarter depending on the instructor.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8009. BUSINESS AND GOVERNMENT I: GOVERNMENT ECONOMIC REGULATION OF BUSINESS

8010. BUSINESS AND GOVERNMENT II: GOVERNMENT SOCIAL REGULATION OF BUSINESS

8017. ORGANIZATIONAL POLITICS AND MANAGEMENT

8019. TOPICS IN BUSINESS, GOVERNMENT, AND SOCIETY

Business Law (BLaw)

1235 Management and Economics

Courses in business law are designed to provide students with an understanding of legal processes and the principles of legal reasoning and decision-making techniques. They also aid students in recognizing legal pitfalls involved in the specific functions of business, such as finance, marketing, and personnel management. The American legal system is scrutinized within its historical, philosophical, and societal contexts via a variety of methods: lectures, readings, analysis of judicial decisions, and class discussions.

Business law is not offered as a separate field for specialization in the School of Management. Rather, the courses in this area provide a sequence of elective offerings for management students. The first course, BLaw 3058, is a prerequisite for the other business law courses.

3058. INTRODUCTION TO LAW, THE LAW OF CONTRACTS AND SALES CONTRACTS. (4 cr, §8158; prereq Econ 1002 or equiv)

The origin of law, its place in and effect upon society; the history and development of law; the system of courts; and legal procedure. The law of contracts as the basic law affecting business transactions. Laws affecting the sales of goods contracts.

3078. AGENCY, PARTNERSHIPS, CORPORATIONS, AND COMMERCIAL PAPER. (4 cr, §8278; prereq 3058)

A study of law affecting the relationship between principal and agent, master and servant, and employer and employee. Partnership and corporate forms of business entities, including the methods of creating the relationships. Law developed to regulate and control these organizations and their members and contracts referred to as commercial papers (negotiable instruments), with emphasis on effect of the Uniform Commercial Code.

Course Descriptions

3088. LAW OF PERSONAL PROPERTY, REAL PROPERTY, WILLS AND ESTATES. (4 cr, §8288; prereq 3058)

Basic concepts of personal property, including rights of possessors, bailees, finders and holders of security interests. Real property law. Transfers of ownership, control of and encumbering such interests. The law of wills and estates in passing rights to property in event of death.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8158. INTRODUCTION TO LAW, AND THE LAW OF CONTRACTS AND SALES CONTRACTS

Decision Sciences (DSci)

395 Humphrey Center

The decision sciences address a body of technology that supports management and administrative decision making over the entire range of hierarchical and functional areas that exist in an organization. While the principal technologies of the area are statistics and mathematical modeling, both rely heavily on the computer for gaining access to data and for manipulating data.

Decision making is viewed as a process in which problem formulation, the decision-making technologies, and implementation all play integral parts. Accordingly, all of the decision-making technologies—statistics, mathematics, and the computer—are taught to be used within structured approaches to the decision-making process including structured approaches to problem formulation and to the implementation of decision science methods and solutions.

Mathematical modeling techniques are used to deal with such problems as warehouse and plant location, vehicle scheduling, production scheduling, personnel utilization, design of service facilities, and capital budgeting. Statistical techniques are used to deal with such problems as forecasting consumer demand, controlling product quality, designing production processes, evaluating investment opportunities, and estimating unemployment levels.

Decision scientists are employed in such diverse organizational areas as marketing, operations, finance, and information systems. In addition, there are rapidly increasing opportunities for decision scientists with M.B.A. degrees to serve in staff capacities as either internal or external consultants to business and government.

School of Management undergraduates are required to take courses in the management science area, MSci 1010, 1020, 3030, which include instruction in decision science and management information systems. DSci 3055 should be taken early in the junior year. If you want more thorough training in decision science methods, you may elect additional courses from the following list. If you are planning extensive study in this area, either at the undergraduate or graduate level, you should confer with a department faculty member as early as possible to ensure completion of necessary mathematical preparation. Course work in decision sciences focuses on applications and not theoretical developments.

1050. ELEMENTARY MANAGERIAL STATISTICS. (4 cr, §MSci 1010, 1020, §QA 1050; prereq Math 1111 or Math 1131 or equiv)

Introduction to quantitative decision making. Probabilistic and other statistical techniques for decision making and data analysis, e.g., laws of probability, sampling, estimation, hypothesis testing, and regression.

3050. STATISTICAL METHODS FOR MANAGERIAL DECISION MAKING. (4 cr, §QA 3053; prereq 1050 or equiv)

Regression and correlation; time series and forecasting; analysis of variance; nonparametric statistics. Application to managerial decision making.

3055. INTRODUCTION TO MANAGEMENT SCIENCES. (4 cr, §QA 3055; prereq 1050, Math 1142 or equiv)

Analytical approaches and quantitative reasoning in management problems, stressing problem formulation, analytical methods for solution, and use of computer models. Topics include management science concepts, decision theory, simulation, linear programming, implementation.

3057. MANAGEMENT SCIENCE METHODS FOR MANAGERIAL DECISION MAKING. (4 cr, §QA 5000; prereq 3055 or equiv)

Analysis and solution of network, integer programming, queuing, and Markov process models. Application to managerial decision making.

For Graduate Students Only(For descriptions, see the *Graduate School Bulletin*)**8500. MANAGEMENT OF THE DECISION SCIENCES PROCESS****8510. PROBLEM FORMULATION****8520. DATA ACQUISITION, STORAGE, RETRIEVAL, AND PRESENTATION****8530. STATISTICAL METHODS AND APPLICATIONS I: REGRESSION ANALYSIS****8540. DETERMINISTIC METHODS AND APPLICATIONS****8550. SIMULATIONS METHODS AND APPLICATIONS****8560. FORECASTING METHODS AND APPLICATIONS****8611. IMPLEMENTATION OF DECISION SCIENCE MODELS AND SYSTEMS****8612. PROBLEM FORMULATION AND DECISION MAKING****8631. STATISTICAL METHODS AND APPLICATIONS II: MULTIVARIATE METHODS****8632. STATISTICAL METHODS AND APPLICATIONS III: ANALYSIS OF VARIANCE AND EXPERIMENTAL DESIGN****8633. BAYESIAN INFERENCE AND DECISION THEORY****8641. MATHEMATICAL PROGRAMMING METHODS AND APPLICATIONS I: LINEAR PROGRAMMING****8642. MATHEMATICAL PROGRAMMING METHODS AND APPLICATIONS II: NONLINEAR PROGRAMMING****8643. MATHEMATICAL PROGRAMMING METHODS AND APPLICATIONS III: INTEGER PROGRAMMING AND NETWORK FLOW MODELS****8715. FOUNDATIONS FOR RESEARCH IN DECISION PROCESSES****8735. FOUNDATIONS FOR RESEARCH IN APPLIED STATISTICS****8745. FOUNDATIONS FOR RESEARCH IN APPLIED MATHEMATICAL MODELS****8799. SEMINAR: DECISION SCIENCES****8850. TOPICS IN DECISION SCIENCES****8990. READINGS IN DECISION SCIENCES****8995. GRADUATE RESEARCH IN DECISION SCIENCES****Finance (BFin)****735 Management and Economics**

The principles of finance are crucial to financial decision making. Should an investment in real capital be made, and if so, how should the purchase be financed? Applying certain principles of finance gives answers to these questions. Even in a risky world, finance offers guidance on how accumulated wealth and savings from the past should be managed. The principles of finance are crucial not only to the financial decision making of business enterprises, but also to government and private nonprofit organizations, and individuals and families.

Since financial decision making is so common, students trained in the application of the principles and techniques of finance to such decision making have career opportunities in many different kinds of companies—manufacturing companies; insurance and trust companies and others which manage accumulated wealth; and banks and other types of financial institutions that borrow from and lend to the public. Since there are many different financial decisions to be made, students trained in finance can participate in various activities such as capital budgeting, security analysis, and commercial lending.

The courses in finance are intended to acquaint students with the principles and techniques which give guidance in financial decision making. In BFin 3000, students are introduced to many of these principles and techniques. In BFin 3100 students increase their understanding of the principles and techniques of BFin 3000 by applying them to actual problems in financial decision making faced by business enterprises. This course makes significant use of cases and of computer-based financial modeling. In BFin 3300, students are acquainted with the particular principles and techniques applicable to portfolio management or, in other words, to the management of accumulated wealth.

Course Descriptions

If you choose a finance emphasis, the course requirements are: BFin 3100—Financial Management, BFin 3300—Investment Management, Ins 3100—Risk Management and Insurance, Acct 3160—Financial Statement Analysis, and Acct 3255—Managerial Cost Accounting.

BFin 3800 is a finance seminar for undergraduates, and for the immediate future the seminar topics will be in banking. Offerings in winter and spring terms are intended for students in their first year in the School of Management; the fall term offering is intended for students in their second year. The topics for the winter and spring terms are, respectively, financial management of banks and regulation of banking. The topic for the fall term offering is selected problems in bank management.

If you choose a banking emphasis, the finance course requirements are: BFin 3800-I—Finance Senior Seminar: Financial Management of Depository Institutions, BFin 3800-II—Finance Senior Seminar: Regulation of Depository Institutions, and BFin 3800-III—Finance Senior Seminar: Selected Problems in Bank Management. See the Undergraduate Studies Office for additional course requirements.

3000. FINANCE FUNDAMENTALS. (4 cr, \$MBA 8040; prereq Acct 3001 or 1051)

A comprehensive, analytical introduction to the principal concepts in finance. The general business environment, valuation theory, financial management decisions concerning uses and sources of funds (capital budgeting), survey of the nation's financial markets.

3100. FINANCIAL MANAGEMENT. (4 cr; prereq 3000)

A broad, case-oriented course building on concepts introduced in 3000. The viewpoint of a corporation's principal financial officer is generally used. Case discussions, augmented by lectures and readings, prepare students to apply finance principles in actual business situations. Experience in problem definition, specification of alternatives, analysis, and decisions. Effective verbal and written communication stressed.

3300. INVESTMENT MANAGEMENT AND FINANCIAL MARKETS. (4 cr, \$8300; prereq 3000)
Introduces decision procedures in a variety of financial markets. The banking system and other financial intermediaries, risk-return relationships of various marketable securities, analytical techniques of portfolio management in the context of the nation's changing financial markets.

3500. REAL ESTATE INVESTMENT ANALYSIS. (4 cr; prereq 3000 and Econ 1002 or equiv)
Analysis and economic aspects of investments in real property including cash flows; accounting depreciation vs. market value depreciation or appreciation; financing methods and cost; sources of funds; measures of return on investment.

3800. FINANCE SENIOR SEMINAR. (4 cr [may be repeated for credit]; prereq 3100 or 3300 and #)
Provides a forum for student-faculty study of advanced topics in finance. Experimentation with new topics, materials, and formats facilitates discussion of contemporary research and writing in finance and enables students to apply analytical skills acquired through previous courses. Likely topics include advanced financial management; advanced portfolio management; financial management of nonprofit institutions; financial markets; and current issues and research. Because topics covered in the various sections of this seminar will differ, interested students should inquire at the department office at the beginning of the academic year.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8100. CASES IN FINANCIAL MANAGEMENT

8150. THEORY OF FINANCE

8200. FINANCIAL MARKETS AND INTEREST RATES

8300. INVESTMENTS AND SECURITY ANALYSIS

8400. INTERNATIONAL FINANCIAL MANAGEMENT

8700. SEMINAR: WORKING CAPITAL MANAGEMENT

8701. SEMINAR: CORPORATE INVESTMENT AND FINANCIAL STRATEGY

8702. SEMINAR: FINANCIAL MANAGEMENT OF FINANCIAL INSTITUTIONS

8703. SEMINAR: PORTFOLIO THEORY AND MANAGEMENT

8704. SEMINAR: INTERNATIONAL FINANCIAL MANAGEMENT

8705. SEMINAR: FEDERAL RESERVE SYSTEM, HISTORY AND CONTROVERSIES

8706. SEMINAR: REGULATION OF FINANCIAL INSTITUTIONS AND MARKETS

8800. SEMINAR: SPECIAL TOPICS IN FINANCE

8801. INTRODUCTION TO THE THEORY OF CAPITAL MARKETS

8802. MATHEMATICAL METHODS IN THE THEORY OF CAPITAL MARKETS

8803. ADVANCED THEORY OF CAPITAL MARKETS

8811. THEORY OF FINANCIAL CONTRACTS

8821. CORPORATE FINANCE

8831. ECONOMETRIC METHODS IN FINANCE

8850. INDEPENDENT STUDY IN FINANCE

8900. RESEARCH WORKSHOP

Industrial Relations (IR)

537 Management and Economics

Industrial relations is an interdisciplinary field of study that utilizes the specialized knowledge and methods of various disciplines for an integrated approach to problems of employment relationships, employment and unemployment, wage levels, collective bargaining, and the recruitment and maintenance of employee work teams in industry. These problems are diverse, and many disciplines contribute to their understanding and solution.

Professional training in industrial relations is offered in graduate programs leading to the following degrees: M.A. in industrial relations, Ph.D. in industrial relations.

No undergraduate degree major nor specialization is offered. However, various industrial relations courses may be taken for elective purposes and included in programs for undergraduate degrees in business administration, engineering, and the liberal arts.

3000. TOPICS IN INDUSTRIAL RELATIONS.

(Cr ar [may be repeated for cr])

Selected topics and issues of current interest. Topics vary from quarter to quarter, depending on instructor.

3002. PERSONNEL AND INDUSTRIAL RELATIONS.

(4 cr, §8002; prereq Econ 1001, 1002, Psy 1001)

An introduction to the human resource management function in organizations. The labor market, recruitment, selection, training, compensation, and labor relations. Topics include the changing nature of the world of work, emerging legal issues, discrimination in pay and employment, comparable work, work performance and its assessment, and the effects of technological change on jobs and employment. Lecture presentations, discussion, case studies, and simulation exercises.

3007. COLLECTIVE BARGAINING AND LABOR RELATIONS. (4 cr)

Analysis of the roles of unions and collective bargaining in contemporary American society. Negotiations and related policies and practices of employers, employees, unions, legislative bodies, and the public in dealing with questions of worker representation in the private and public sectors. Impact and transference of collective bargaining principles from the union sector to the non-union sector. Lecture presentations, discussion, case studies, and bargaining simulations.

3010. THE INDIVIDUAL AND THE ORGANIZATION. (4 cr)

An introduction to the human side of organizations, focusing on workers and how they enter and succeed in the work setting. Theories and techniques of employment interviewing; training needs analysis; career planning; management development; turnover, outplacement, and retirement; understanding leadership roles and styles; work motivation; organization culture and job design; and planning for change. Lecture presentations, discussion, case studies, and simulation exercises.

5000. TOPICS IN PERSONNEL AND INDUSTRIAL RELATIONS. (Cr ar [may be repeated for credit])

Selected topics of current relevance to human resource management.

5002. SYSTEMS OF CONFLICT AND DISPUTE RESOLUTION. (4 cr)

Theoretical and practical treatment of the settlement of conflict in interpersonal, work-related, community, business, and international settings. Includes lecture presentations, discussion, observation of actual dispute resolution sessions, and laboratory exercises, with participation in various dispute resolution simulations applied to real world conflicts.

5990. INDEPENDENT STUDY IN PERSONNEL AND INDUSTRIAL RELATIONS. (Cr ar [may be repeated for credit])

Individual readings or research topics in human resource management.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8000. GRADUATE TOPICS IN INDUSTRIAL RELATIONS

8001. QUANTITATIVE METHODS IN INDUSTRIAL RELATIONS

8002. AN INTRODUCTION TO INDUSTRIAL RELATIONS

8003. STAFFING, TRAINING AND DEVELOPMENT

8004. ORGANIZATIONAL THEORY AND ANALYSIS

8005. EMPLOYEE COMPENSATION AND REWARD

Course Descriptions

- 8006. LABOR MARKET ANALYSIS
- 8007. COLLECTIVE BARGAINING IN THE PUBLIC AND PRIVATE SECTORS
- 8012. INDUSTRIAL RELATIONS SYSTEMS
- 8013. ORGANIZATION AND STAFFING
- 8014. ORGANIZATION DESIGN AND ADMINISTRATION
- 8015. COMPENSATION, REWARD, MOTIVATION, AND PERFORMANCE
- 8016. MICRO LABOR MARKET ANALYSIS
- 8017. THEORIES OF LABOR-MANAGEMENT RELATIONSHIPS AND NEGOTIATIONS
- 8022. INTERNATIONAL HUMAN RESOURCE MANAGEMENT
- 8023. TRAINING AND DEVELOPMENT
- 8024. ORGANIZATION ANALYSIS AND ENVIRONMENTAL SYSTEMS
- 8025. EMPLOYEE BENEFITS AND ADMINISTRATION
- 8026. MACRO LABOR MARKET ANALYSIS
- 8027. METHODS FOR DISPUTE RESOLUTION
- 8032. COMPARATIVE AND INTERNATIONAL LABOR MOVEMENTS
- 8033. MANAGEMENT DEVELOPMENT
- 8035. MOTIVATION AND WORK BEHAVIOR
- 8036. HUMAN RESOURCE PLANNING
- 8037. THE LABOR MOVEMENT IN THE UNITED STATES
- 8801. SEMINAR: INDUSTRIAL RELATIONS RESEARCH METHODOLOGY
- 8802. SEMINAR: INDUSTRIAL RELATIONS SYSTEMS
- 8803. SEMINAR: STAFFING, TRAINING AND DEVELOPMENT
- 8804. SEMINAR: ORGANIZATION THEORY
- 8805. SEMINAR: COMPENSATION AND REWARD
- 8806. SEMINAR: LABOR MARKET THEORY AND RESEARCH
- 8807. SEMINAR: COLLECTIVE BARGAINING AND LABOR RELATIONS
- 8990. INDEPENDENT STUDY IN INDUSTRIAL RELATIONS

Logistics Management (LM)

395 Humphrey Center

Logistics management deals with managing the flow of physical goods in a business firm or other organization. Logistics activities are of vital importance in controlling costs and in providing appropriate service to customers. Logistics activities include transportation, warehouse operation, inventory management, production scheduling, materials handling, packaging, order processing, plant and warehouse location, and customer service. Together, the cost of these activities represent 20 to 25% of the cost of doing business for many firms in the United States. The cost of freight transportation alone is about 8% of the nation's annual gross national product.

Logistics activities cut across several management areas in a business firm or other organization, which results in unique coordination, jurisdictional, and management problems. Logistics management is often referred to as an "interdisciplinary" activity or field. Its closest relationships are with operations management, marketing, and finance, although there are logistics relationships with accounting, information systems management, personnel management, and other areas of an organization.

The increase in recognition given to the logistics function in American business firms and other organizations over the past 25 years has led to increasing job opportunities and rising incomes for those engaged in logistics management.

Courses offered in the logistics management field provide a useful background and preparation for a wide variety of careers with business firms, government agencies, and other organizations that have logistics systems, and also with transportation companies and consulting firms. Research and teaching opportunities in the logistics management field are available.

The requirements for an undergraduate emphasis in logistics management consist of four courses in logistics management plus a total of two advanced courses

selected from finance, management information systems, marketing, or operations management. The requirements are intended to provide you with a basic knowledge of and skills in logistics management, and an awareness of its interrelatedness with other areas of an organization.

3000. INTRODUCTION TO LOGISTICS MANAGEMENT. (4 cr, [replaces Tran 3054] §Tran 3064, §Tran 8264; prereq Econ 1002 or equiv)

Management of the flow of physical products (physical supply and physical distribution) of an organization and the linkages between the process of controlling the physical flow of products and the major functions of the organization, i.e., finance, marketing, and operations management. Logistics topics and analysis of the impact of logistics topics on other functional areas.

3010. PRINCIPLES OF TRANSPORTATION. (4 cr, §8010, §Tran 3054, §Tran 8154; prereq Econ 1002 or equiv)

Organizational, economic, and service aspects of the transportation system of the United States including rail, highway, water, pipeline, and air transportation. Decision making in transportation companies. Government promotional and regulatory policy regarding transportation.

3020. ADVANCED LOGISTICS MANAGEMENT. (4 cr, §8020, §Tran 3064, §Tran 8264; prereq 3000 or 3010 or equiv)

Management of the flow of physical products (physical supply and physical distribution) of an organization. Transportation alternatives, customer service, inventory management, location decisions, warehousing, logistics information systems, international logistics, and logistics system design. Case problems. Usually includes logistics simulation exercise.

5010. TOPICS IN LOGISTICS MANAGEMENT.

(4 cr [may be repeated for credit]; prereq 3000 or 3010 or 8010 or 8020 and #)

Specialized topics in the field of logistics management; topics change from quarter to quarter.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8010. PRINCIPLES OF TRANSPORTATION

8020. ADVANCED LOGISTICS MANAGEMENT

8030. SEMINAR IN LOGISTICS MANAGEMENT

8990. READINGS IN LOGISTICS MANAGEMENT

8995. GRADUATE RESEARCH IN LOGISTICS MANAGEMENT

Management (Mgmt)

835 Management and Economics

Management and organizational principles are involved whenever people are working toward a common objective. The functions of management are analyzed and examined using case examples of organizational situations and research evidence and theory to develop insights, skill in application of knowledge, and the professional attitudes which enhance management and leadership performance. Most of the course content is applicable to administrative situations in either business or nonbusiness environments.

Courses such as Mgmt 3001, Mgmt 8001, and MBA 8010 are introductory; they may be followed by more specialized and advanced courses. Mgmt 3004 and MBA 8060 are general policy courses designed to help students develop skills in problem identification, analysis, and solution at the general policy level, and skills in strategic planning and direction setting. These skills require students to apply knowledge of frameworks developed in the Mgmt 3004 course as well as skills that require students to draw on knowledge acquired in other subject areas such as accounting, economics, finance, and marketing. These integrating courses are recommended only for students who are about to graduate and who are already acquainted with the various business areas.

The undergraduate emphasis in small business management and entrepreneurship include the following requirements: Mgmt 3002, Mgmt 3008, and Mgmt 5101; and two of the following: Acct 3160, BFin 3100, Mktg 3010, OM 3041. Marketing 3020 is recommended.

3001. FUNDAMENTALS OF MANAGEMENT. (4 cr, §8001)

Leadership and management functions such as those required to establish goals, policies, procedures, and plans. Motivation, planning and control systems, and concepts of organizational structure and behavior.

3002. PSYCHOLOGY IN MANAGEMENT. (4 cr, §8006)

Behavior principles, methods, and skills fundamental to managerial competence in preventing and solving problems within and between individuals and groups and aid in effective utilization of human resources. Various laboratory procedures are used to study these concepts, methods, and skills and furnish practice in applying them to management problems.

Course Descriptions

3003. CONFERENCE AND DISCUSSION METHODS IN MANAGEMENT. (4 cr, §8007; prereq 3002)

Theory and research relating to the use of conference and discussion methods for line managers in organizations. Stresses theory, methods, and skill building in organizing and conducting problem solving discussions and conferences.

3004. BUSINESS POLICY: STRATEGY FORMULATION AND IMPLEMENTATION. (5 cr; prereq sr and completion of business core courses or ¶ final core course)

Undergraduate-level capstone course designed to develop skill in the management functions of identifying and analyzing strategic issues and problems, establishing corporate or divisional goals, and designing realistic programs of action. Case analysis and discussion in class. Students also meet in small groups to prepare cases and, occasionally, presentations to be made to the entire class. These concepts as well as concepts, tools, and theories previously presented in other courses are applied to solve goal selection and strategy implementation problems. Usually the viewpoint of the general line manager (department, division, or executive level) is taken.

3008. ENTREPRENEURSHIP AND THE SMALLER ENTERPRISE. (4 cr; prereq completion of business core courses or #)

Assessment of opportunities and constraints in establishing and managing one's own firm; topics include structuring a new venture, buying into an existing enterprise, owning an enterprise versus becoming a principal employee in a new venture. Case method.

5101. ADVANCED TOPICS IN MANAGEMENT. (Cr ar [may be repeated for cr]; prereq sr or grad student and #)

Specialized topics in the field of management; topics vary from quarter to quarter.

5175. BUSINESS FORECASTING. (4 cr; prereq 3001 or 8001 or MBA 8010 and QA 3055 or #)

Methods of economic, social, and technological forecasting and applications to problems of managerial decision making and planning.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8001. FUNDAMENTALS OF MANAGEMENT

8004. ADVANCED TOPICS IN MANAGEMENT

8006. PSYCHOLOGY IN MANAGEMENT

8008. ENTREPRENEURSHIP AND THE SMALLER ENTERPRISE

8009. PLANNING AND CONTROL FOR LINE MANAGEMENT

8012. ORGANIZATIONAL BEHAVIOR AND MANAGEMENT ANALYSIS

8021. ORGANIZATIONAL DESIGN AND DEVELOPMENT

8022. CAREER MANAGEMENT

8040. INTERNATIONAL BUSINESS

8101. SEMINAR IN STRATEGIC MANAGEMENT

8102. HISTORY OF MANAGEMENT THOUGHT

8201. FOUNDATIONS OF BUSINESS-GOVERNMENT-SOCIETY

8202. EXTERNAL AFFAIRS MANAGEMENT

8203. RESEARCH TOPICS AND METHODS IN BUSINESS-GOVERNMENT-SOCIETY

8251. BUSINESS RESEARCH METHODS AND TECHNIQUES

8301. SEMINAR IN ORGANIZATIONAL BEHAVIOR

8302. SEMINAR IN ORGANIZATION THEORY

8303. ORGANIZATIONAL RESEARCH SEMINAR

8401. SEMINAR IN STRATEGY FORMULATION

8402. SEMINAR IN STRATEGY IMPLEMENTATION

8403. STRATEGIC MANAGEMENT RESEARCH SEMINAR

8801. SEMINAR: INTERPERSONAL RELATIONS

8802. SEMINAR: MANAGEMENT

8990. READINGS IN MANAGEMENT THEORY AND ADMINISTRATION

8995. GRADUATE RESEARCH IN MANAGEMENT THEORY AND ADMINISTRATION

Management Information Systems (MIS)

395 Humphrey Center

Management information systems is a field that recognizes information as a resource comparable to capital, labor, land, or other valuable commodities that should be subject to managerial planning and control. Study in this field centers on concepts and methods necessary to analyze, design, and manage complex information-decision systems. As preparation for these tasks, MIS courses integrate elements of computer processing technology, systems analysis, statistics, management, operations research, and accounting.

Although a major or specialization in management information systems is not offered at the undergraduate level, students receive instruction in the MIS area in the required courses MSci 1010, 1020, and 3030. A series of computer skills courses and programming courses in FORTRAN and COBOL are being developed. Contact the Management Sciences Department, 395 Humphrey Center, for more information.

3040. ORGANIZATIONAL USE OF COMPUTERS. (4 cr; intended for non-MIS majors)

A nontechnical description of computers and computer systems used in government and business. The kinds of people who work with computers and their activities. Current issues such as privacy, data banks, and point-of-sale systems, and likely future issues such as communications networks, mini and micro computer applications, electronic funds transfer. The history, status, and future of the computer industry.

3100. INTRODUCTION TO COMPUTERS AND COMPUTER DATA PROCESSING. (4 cr, \$5100, \$5300, \$8300)

Elements of computer hardware and their functions. Computer software. Tools and methods for development of computer applications. Preparing computer programs. Acquisition, organization, and management of computer resources. The computer industry. Future developments.

3101. INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS. (4 cr, \$5101)

An overview of MIS. Conceptual foundation of MIS including: concepts of information, humans as information processors, systems concepts and information systems, concepts of management and organizational concepts relevant to MIS, decision-making concepts and the value of information for decision making. The structure of an MIS and its development, organization, management, and evaluation. Emphasis on the user/system interface.

3131. DATA BASE MANAGEMENT SYSTEMS. (4 cr; prereq 5103)

Concepts and methods in the definition, creation, and management of data bases for management information systems. Topics include objectives of data base management, design and evaluation of data base management systems, theory of files, data structures, storage structures, interrogation, responsibilities of the data base administrator, data base integrity, security, and privacy.

3132. DATA COMMUNICATIONS SYSTEMS. (4 cr; prereq 5102)

Characteristics of transmission facilities and networks, concentrators and multiplexors, terminals, modems and front end processors. Control hardware and software systems. The role of data communications in management information systems.

3151. ADMINISTRATION AND CONTROL OF MANAGEMENT INFORMATION SYSTEMS.

(4 cr; prereq 5102 and Mgmt 3001)

Technical tools and management concepts required in the administration of the information systems function. Topics include the structure and management of computer operations, measurement of operating performance, budgeting and planning, project management techniques for systems and programming, the role of the information processing manager, and personnel selection, training, and compensation.

3300. INTRODUCTION TO COMPUTERS AND MANAGEMENT INFORMATION SYSTEMS.

(4 cr, \$3100, \$5100, \$5300)

A computer appreciation course. Structure and operation of computer systems. Hardware technology and software development. Structure and components of MIS. Computer use in organizations to support operations and management, planning and control, decision making. Issues in managing the development and use of computer systems. Acquiring computer resources. Computer industry and impact on society.

5102. INTRODUCTION TO INFORMATION SYSTEMS ANALYSIS. (4 cr [cr cannot be applied to MBA programs begun after December 15, 1979] \$MSci 3030; prereq 3098, and 3300 [or 3100 and 3101])

The phases within the life cycle for development of an information system application. Emphasis on the standards, tools, and techniques required for analysis of information requirements and in logical design. Processing alternatives and alternative approaches to systems design.

5103. DATA STRUCTURES AND FILE PROCESSING. (4 cr [cr cannot be applied to MBA programs begun after December 15, 1979]; \$MSci 3030 prereq 5098, and 3300 [or 3100 and 3101])

Principles and techniques of data organization, physical representation of data in a computer system, and file processing strategy to meet user information requirements and system performance objectives. Topics include theory of files, data storage devices, record design, sequential and random processing, linked structures, indexing, hashing, balanced search trees, multiattribute search, inverted and multilist file organizations, hierarchic, network, and relational structures, sorting, data compression, and data integrity. Students establish and manipulate data structures at the University computer facility.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8279. LEGAL ASPECTS OF COMPUTING

8300. COMPUTERS AND MANAGEMENT INFORMATION SYSTEMS

8301. PROGRAM DESIGN AND PROGRAMMING

8302. SYSTEMS ANALYSIS AND DESIGN

8303. DATA STRUCTURES, FILE PROCESSING, AND RETRIEVAL LANGUAGES

Course Descriptions

8304. MIS ADMINISTRATION

8312. ADVANCED SYSTEMS DEVELOPMENT AND ADMINISTRATION

8313. ADVANCED DATA BASE DESIGN, MANAGEMENT SYSTEMS, AND ADMINISTRATION

8838. MANAGEMENT SCIENCE COLLOQUIUM

8850. TOPICS IN MANAGEMENT INFORMATION SYSTEMS

8985. MIS RESEARCH SEMINAR

8990. READINGS IN MANAGEMENT INFORMATION SYSTEMS

8995. GRADUATE RESEARCH IN MANAGEMENT INFORMATION SYSTEMS

Management Science (MSci)

395 Humphrey Center

These management science courses make up the School of Management undergraduate core courses and include integrative material in the areas of management information systems and decision sciences.

1010. FUNDAMENTALS OF COMPUTERS AND INFORMATION TECHNOLOGY IN ORGANIZATIONS. (4 cr, §DSci 1050; prereq 45 cr, pre-mgmt major, Math 1111 or §Math 1111)

Computer hardware, software, and data communications. Future technology. Introduction to computer data processing. Elementary data analysis. Skill development in computer access and data analysis software.

1020. DATA ANALYSIS AND STATISTICAL INFERENCE FOR MANAGERS. (4 cr, §DSci 1050; prereq 1010, Math 1111, pre-mgmt major [Math 1131 recommended])

Introduction to probabilistic and statistical techniques for decision making, e.g., data analysis, sampling, estimation, and hypothesis testing. Using computer software and computer-stored data in statistical analysis. Introduction to modeling using modeling software.

3030. INFORMATION SYSTEMS AND INFORMATION MANAGEMENT. (4 cr, §MIS 3300; prereq 1020)

Defining information requirements. Developing information systems applications. Using information systems. Defining data structures and building and using databases. Formulating database retrievals. Building and using models and expert systems to support decision making. Obtaining external data to support model building and decision making. Evaluating information. Skill development in database software.

Marketing (Mktg)

1235 Management and Economics

The field of marketing is concerned with the flow of goods and services through the economy and the distribution of both industrial and consumer goods. Since more than half of the consumer's dollar goes to pay for marketing services, marketing is a very significant part of the economy, and the efficiency with which marketing activities are carried out has major social implications.

Manufacturers, wholesalers, retailers, and other business firms are faced with the need to formulate marketing policies and to implement them through the development of marketing strategies and programs. Among the major marketing decision areas are development of the product and expansion of the product line, selection of distribution channels, maintenance and control of a sales organization, development of a promotional program, and establishment of service policies and pricing policies and methods.

Marketing offers a wide range of employment opportunities in sales, advertising, retailing, merchandising, sales promotion, brand management, international marketing, and marketing research. If you are interested in a career in marketing research, marketing management, or product management, you should consider completing an M.B.A. degree.

The undergraduate emphasis in marketing includes the following requirements: Mktg 3010, Mktg 3020; one of the following courses—Mktg 3030, Mktg 3050, Mktg 3065, Mktg 3090; and two advanced courses from any School of Management department.

You may also complete electives in fields outside of the School of Management in order to form a program that best meets your needs. Such areas as agricultural economics, economics, geography, home economics, journalism, psychology, sociology, and speech-communication may be of interest.

3000. PRINCIPLES OF MARKETING. (4 cr, \$8000; prereq Econ 1002 or equiv)
Basic policy and strategy issues in marketing and the environmental factors that affect these issues. Legal, behavioral, ethical, competitive, economic, and technological factors that affect product, pricing, promotion, and marketing-channel decisions.

3000H. HONORS COURSE: PRINCIPLES OF MARKETING. (4 cr, \$3000, \$8000; prereq Econ 1002 or equiv, School of Management honors student or #, and Δ)
See Marketing 3000.

3010. BUYER BEHAVIOR AND MARKETING ANALYSIS. (4 cr; prereq 3000 and DSci 1050 or equiv)
Identifying and applying secondary and primary data to solve marketing problems. Consideration of consumer and organizational buyer behavior. Topics include survey and experimental research techniques, market segmentation, data analysis, behavior concepts and processes, consumer and organizational decision-making models, and managerial applications of these models.

3020. MARKETING OPERATIONS MANAGEMENT. (4 cr; prereq 3010)
Development of marketing plans, primarily for manufacturing organizations. Analytical methods for developing and appraising marketing programs, factors important in shaping marketing plans. Planning for selling, communication, distribution, pricing, product development, and marketing research activities.

3030. SALES AND DISTRIBUTION MANAGEMENT. (4 cr; prereq 3020)
Design and management of marketing systems for distributing goods and services to industrial users and ultimate consumers. Institutional, functional, and social aspects of distribution channels, with emphasis on the managerial problems of channel design, integration, and control. Managing the personal selling function as an integral part of the overall distribution system, with emphasis on sales force organization, selection, training, motivation, compensation, forecasting, budgeting, and control.

3050. MARKETING COMMUNICATIONS. (4 cr; prereq 3020)
The communications aspect of the marketing mix and the communications process. Emphasis on advertising, media alternatives, and research. Integration of the sales force in communications strategy.

3065. RETAIL MANAGEMENT. (4 cr, \$8065; prereq 3010)
Retailing principles, problems, and trends as they relate to various types of retailing institutions. Assignment of trade journal and supplementary readings for in-store study (buying and pricing) with a local retailer.

3090. MARKETING TOPICS. (4 cr [may be repeated for cr]; prereq 3010 and #)
Selected topics and problems of current interest considered in depth. Class discussion and course projects. Topics vary from quarter to quarter, depending on the instructor.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

- 8040. INTERNATIONAL BUSINESS**
- 8051. MARKETING RESEARCH**
- 8053. MARKETING RESEARCH: ADVANCED ANALYSIS AND FIELDWORK**
- 8055. INTRODUCTION TO CONSUMER BEHAVIOR**
- 8060. MARKETING SYSTEMS**
- 8074. PRODUCT AND PRICE POLICY**
- 8076. SALES MANAGEMENT**
- 8078. MARKETING COMMUNICATIONS**
- 8080. INDUSTRIAL MARKETING**
- 8088. STRATEGIC MARKETING**
- 8090. MARKETING TOPICS**
- 8800. SEMINAR: MARKETING THEORY**
- 8810. SEMINAR: CONSUMER BEHAVIOR**
- 8990. READINGS IN MARKETING**
- 8995. GRADUATE RESEARCH IN MARKETING**

Operations Management (OM)

395 Humphrey Center

Most organizations have operating units that are responsible for providing the goods or services needed to carry out their functions. Managers of these operating units must analyze and improve their unit's performance. Courses in operations management deal with the methods, techniques, and general principles that contribute to the efficient running of such departments. Course work emphasizes two themes: 1) a management perspective, examining the various operating functions and related decisions, and 2) the application of scientific/analytic approaches to operations management.

While traditionally this area has emphasized manufacturing, OM also encompasses service industries or components of business that require planning and control of operating processes.

Since OM functions are basic to all enterprises and interface with all other business functions, students expecting to

Course Descriptions

pursue any type of business career will benefit by taking these courses. Graduate students majoring in OM will find opportunities in both line and staff positions in business and industry.

3000. INTRODUCTION TO OPERATIONS MANAGEMENT. (4 cr)

Concepts and principles related to the management of operations functions, taught from a managerial perspective. Examples from service industries, nonprofit organizations, and manufacturing. Relationships to the environment and other functional areas, such as marketing and finance. Topics include operations strategy, forecasting, process selection, capacity management, scheduling, quality planning and control, inventory management, productivity and work standards.

3041. PROJECT MANAGEMENT (4 cr; prereq 3000 or #)

Principles and methods useful for planning and controlling a project. Topics include developing a project plan, resource planning and scheduling, and project monitoring and evaluation. Various computerized packages, including PERT and CPM. Examples of different types of projects from manufacturing and service industries.

3056. PRODUCTION AND INVENTORY MANAGEMENT. (4 cr; prereq 3000 or #)

The functions of forecasting, inventory control, materials requirements planning, capacity planning, and scheduling. Taught from a planning and control point of view with applications in manufacturing and service industries. Computer packages used and evaluated.

3059. QUALITY MANAGEMENT. (4 cr; prereq 3000 or 90 cr)

The quality function within manufacturing and service organizations. Topics include quality planning, vendor relations, process control, acceptance sampling and quality improvement. Taught from a managerial point of view.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8041. PROJECT MANAGEMENT

8056. PRODUCTION AND INVENTORY MANAGEMENT

8057. PROCESSES, TECHNOLOGY, AND INNOVATION IN THE OPERATIONS FUNCTION

8058. OPERATIONS STRATEGY

8059. QUALITY MANAGEMENT

8215. OPERATIONS FORECASTING

8220. INVENTORY MANAGEMENT

8221. RESOURCE PLANNING AND SCHEDULING

8850. TOPICS IN OPERATIONS MANAGEMENT

8900. FOUNDATIONS FOR RESEARCH IN OPERATIONS MANAGEMENT I

8901. FOUNDATIONS FOR RESEARCH IN OPERATIONS MANAGEMENT II

8990. READINGS IN OPERATIONS MANAGEMENT

8995. GRADUATE RESEARCH IN OPERATIONS MANAGEMENT

Risk Management and Insurance (Ins)

735 Management and Economics

Risk management deals with the identification, measurement, and treatment of the property, liability, and personnel risks facing businesses, nonprofit organizations, federal, state, and local governments, and individuals or families. Insurance is the most important and most complex tool used to handle this class of risks.

Career opportunities in risk management and insurance include the following occupations: (1) underwriters, claims adjusters, actuaries, investment analysts, accountants, office managers, pension consultants, agents, brokers, and other positions in the private insurance industry; (2) risk managers for large firms, nonprofit organizations, and government units that are becoming more aware of the need for a rational risk management program; (3) consultants, including consulting actuaries, employee benefits specialists, and risk management consultants; (4) employees of government organizations that regulate the private insurance industry or administer social insurance programs; and (5) educators and research personnel.

Many professionals in areas other than risk management and insurance may find that handling insurance matters for their firm will become a part of their responsibility or that their activities affect the operations of the risk manager and vice versa. In their personal lives all individuals will be risk managers. Finally, as evi-

denced by the extent of government regulation and social insurance programs, all citizens have reason to be interested in the public policy aspects of risk management and insurance. For these reasons, risk management and insurance courses can also be useful to students who do not intend to specialize in this area.

The introductory risk management and insurance course is consumer oriented. The actuarial science courses are designed for students interested in that field. The other courses should interest both consumers and those students intending to enter the insurance business.

If you choose a risk management and insurance emphasis, the course requirements are: Ins 3100—Risk Management and Insurance, BFin 3100—Financial Management, BLaw 3058—Introduction to Law, the Law of Contracts, and Sales Contracts; and two of the following: Ins 3200—Life and Health Insurance, Ins 3210—Economic and Social Security, Ins 3220—Property and Liability Insurance.

If you choose an actuarial science emphasis, you must take the following courses: Ins 3100—Risk Management and Insurance, Ins 5230/Math 5051—Life Contingencies I, Ins 5231/Math 5058—Life Contingencies II, Math 5473—Analysis of Numerical Methods and Math 5056—Theory of Interest.

3100. RISK MANAGEMENT AND INSURANCE. (4 cr, \$8100)

How to recognize and evaluate the property, liability, and personnel risks facing a business, a nonprofit organization, a government unit, or an individual or family. The tools of risk management—mainly retention, loss control, and insurance—and the conditions under which they should be used. How to select and deal with an insurer. Public policy issues such as availability of insurance, insurance pricing, and social insurance.

3200. LIFE AND HEALTH INSURANCE. (4 cr, \$8200; prereq 3100 or equiv)

Types, uses, and major provisions of individual life and health insurance contracts. Insurance and pension components of employee benefit plans, characteristics and regulation. Programming and estate planning. Business uses of individual life and health insurance. Selection of a life and health insurer.

3210. ECONOMIC AND SOCIAL SECURITY.

(4 cr, \$8210, \$Econ 5534)

Nature and causes of economic insecurity and poverty. Details and economic and social implications of private and public programs, with emphasis on public programs such as Old Age, Survivors, Disability and Health Insurance (Social Security), workers' compensation insurance, unemployment insurance, and public assistance programs.

3220. PROPERTY AND LIABILITY INSURANCE. (4 cr, \$8220; prereq 3100 or equiv)

Types of property and liability losses and their measurement. Legal doctrines and statutes creating liability risks for business firms, families, and other units. Analysis of major property and liability insurance contracts and self-insurance alternatives. How property and liability insurance is priced and marketed. Selection of insurers and service organizations. Public policy issues such as availability of insurance, insurance pricing, automobile compensation, and workers' compensation systems.

5230. LIFE CONTINGENCIES I. (4 cr, \$Math 5057; prereq Math 1211, 1221, plus Math 1231 or 1131 or #, plus one course in probability or statistics)

How to calculate net premiums, gross premiums, reserves, and nonforfeiture values for major life insurance contracts. The impact of assumed mortality, interest, and expense assumptions on these items.

5231. LIFE CONTINGENCIES II. (4 cr, \$Math 5058; prereq 5230 or #)

Advanced topics such as compound interest and annuities certain, the measurement of mortality, life insurance and annuity premiums and reserves. Multilife functions. Population problems and multiple-decrement theory.

For Graduate Students Only

(For descriptions, see the *Graduate School Bulletin*)

8100. RISK MANAGEMENT AND INSURANCE I

8101. RISK MANAGEMENT AND INSURANCE II

8200. LIFE AND HEALTH INSURANCE

8210. ECONOMIC AND SOCIAL SECURITY

8220. PROPERTY AND LIABILITY INSURANCE

8800. SEMINAR: RISK MANAGEMENT AND INSURANCE

8990. READINGS IN RISK MANAGEMENT AND INSURANCE

Course Descriptions

8995. GRADUATE RESEARCH IN RISK MANAGEMENT AND INSURANCE

See also IR 8025. **EMPLOYEE BENEFITS AND ADMINISTRATION**

Administration and Faculty



Administration and Faculty

University Regents

Charles F. McGuiggan, Marshall, Chair
David M. Lebedoff, Minneapolis, Vice
Chair
Wendell R. Anderson, Wayzata
Charles H. Casey, West Concord
Willis K. Drake, Edina
Erwin L. Goldfine, Duluth
Wally Hilke, St. Paul
Verne E. Long, Pipestone
Wenda W. Moore, Minneapolis
David K. Roe, Minneapolis
Stanley D. Sahlstrom, Crookston
Mary T. Schertler, St. Paul

University Administrators

Kenneth H. Keller, President
Stephen S. Dunham, Vice President and
General Counsel
Stanley B. Kegler, Vice President for
Institutional Relations
David M. Lilly, Vice President for Finance
and Operations
V. Rama Murthy, Acting Vice President
for Academic Affairs and Provost of the
Twin Cities Campus
Richard J. Sauer, Vice President for
Agriculture, Forestry, and Home
Economics
Neal A. Vanselow, Vice President for
Health Sciences
Frank B. Wilderson, Vice President for
Student Affairs

School of Management Administrators

Preston Townley, Dean
Frederick J. Beier, Associate Dean
Anne M. Benisch, Associate Dean for
External Affairs
Norman L. Chervany, Director, Profes-
sional Management Programs (M.B.A.
Program and Executive Development
Center)
John A. Fossum, Director of Graduate
Study, M.A. and Ph.D. Programs in
Industrial Relations
Frederick R. Jacobs, Director of Graduate
Study, M.B.T. Program

Paul E. Johnson, Director of Graduate
Study, Ph.D. Program in Business Ad-
ministration
Gerald Rinehart, Director of Undergradu-
ate Studies

School of Management Faculty

Department of Accounting

David A. Dittman, Chair, Department of
Accounting; Director, Accounting Re-
search Center

Professor

R. Glen Berryman, Ph.D.,
University of Illinois; C.P.A., C.I.A.
Gordon B. Davis, Ph.D.,
Stanford University; C.P.A.
John W. Dickhaut, Ph.D.,
Ohio State University
David A. Dittman, Ph.D.,
Ohio State University
Jack Gray, Ph.D.,
Ohio State University; C.P.A.
Shyam Sunder, Ph.D.,
Carnegie-Mellon University

Associate Professor

Amin H. Amershi, Ph.D.,
University of British Columbia
Grover Cleveland, D.B.A.,
Indiana University; C.P.A.
James S. Jordan, Jr., Ph.D.,
Northwestern University
Edward Joyce, Ph.D.,
University of Illinois
Chandra Kanodia, Ph.D.,
Carnegie-Mellon University
Robert Vigeland, Ph.D.,
Columbia University; C.P.A.

Assistant Professor

Matthew Anderson, Ph.D.,
Michigan State University
Gary W. Carter, Ph.D.,
University of Texas
Lane Daley, Ph.D.,
Washington State University; C.P.A.
Gordon Duke, Ph.D.,
University of Georgia; C.P.A.
Doris L. Holt, Ph.D.,
University of Michigan; C.P.A.
Gordon S. Potter, Ph.D.,
University of Wisconsin-Madison; C.P.A.
Judy D. Rayburn, Ph.D.,
University of Iowa; C.P.A.

Coordinator of Undergraduate Studies in Accounting

Dennis Daly, M.B.A.,
University of Detroit; C.M.A.

Director of Masters in Business Taxation

Frederick R. Jacobs, Ph.D.,
University of Wisconsin, Madison; C.P.A.

**Department of
Finance and Insurance**

Timothy J. Nantell, Chair

Professor

- Gordon J. Alexander, Ph.D.,
University of Michigan; Finance
Michael U. Dothan, Ph.D.,
Harvard University; Finance
John H. Kareken, Ph.D.,
Massachusetts Institute of Technology; Finance
Timothy J. Nantell, Ph.D.,
University of Wisconsin; Finance
Andrew F. Whitman, Ph.D.,
University of Wisconsin; Insurance
C. Arthur Williams, Jr., Ph.D.,
Columbia University; Insurance

Adjunct Professor

John H. Boyd, Ph.D.,
University of Pennsylvania; Finance

Associate Professor

- James M. Gahlon, Ph.D.,
University of Illinois; Finance
Patrick J. Hess, Ph.D.,
University of Chicago; Finance
Peter Rosko, Ph.D.,
University of Michigan; Finance

Assistant Professor

- Dongsae Cho, Ph.D.,
University of Illinois; Insurance
Haim Reisman, Ph.D.,
Hebrew University; Finance
Paul A. Richardson, Ph.D.,
Harvard University; Finance
Scott R. Ulman, Ph.D.,
Northwestern University; Finance

Adjunct Assistant Professor

Evelyn F. Carroll, Ph.D.,
Michigan State University; Finance

Department of Industrial Relations

Mario F. Bognanno, Chair, Department of
Industrial Relations;
Director, Industrial Relations Center

Professor

- Richard D. Arvey, Ph.D.,
University of Minnesota; Industrial/Organizational Psychology and Industrial Relations
Mario F. Bognanno, Ph.D.,
University of Iowa; Labor Economics and Industrial Relations
John J. Flagler, M.S.,
Cornell University; Industrial Relations and Labor Education

- John A. Fossum, Ph.D.,
Michigan State University; Labor Education and Industrial Relations
James G. Scoville, Ph.D.,
Harvard University; Labor Economics and Comparative Industrial Relations
George Seltzer, Ph.D.,
University of Chicago; Manpower Economics and Industrial Relations
C. Arthur Williams, Jr., Ph.D.,
Columbia University; Insurance and Compensation and Benefits
Mahmood A. Zaidi, Ph.D.,
University of California, Berkeley; Manpower Economics and Industrial Relations

Associate Professor

- Dennis A. Ahlburg, Ph.D.,
University of Pennsylvania; Labor Economics and Industrial Organizations
Ross E. Azevedo, Ph.D.,
Cornell University; Industrial Relations
Martin W. Duffy, B.S.,
Northern Michigan University; Labor Education
Patrick R. Pinto, Ph.D.,
University of Georgia; Industrial Relations and Psychology

Assistant Professor

- Rebecca A. Luzadis, Ph.D.,
Cornell University; Labor Economics
Raymond A. Noe, Ph.D.,
Michigan State University; Industrial/Organizational Psychology
Paul L. Schumann, Ph.D.,
Cornell University; Labor Economics and Industrial Relations
Joshua L. Schwarz, Ph.D.,
Cornell University; Industrial Relations
Brian D. Steffy, Ph.D.,
University of Georgia; Human Resources Management

Graduate Faculty From Outside the College

Professor

- Hyman Berman, Ph.D.,
Columbia University; Labor History
John P. Campbell, Ph.D.,
University of Minnesota; Psychology
René V. Dawis, Ph.D.,
University of Minnesota; Psychology
Marvin D. Dunnette, Ph.D.,
University of Minnesota; Psychology
Jeylan T. Mortimer, Ph.D.,
University of Michigan; Sociology
Norman J. Simler, Ph.D.,
University of Minnesota; Economics

Department of Management Sciences

Carl R. Adams, Chair

Professor

- Carl R. Adams, Ph.D.,
Purdue University; Decision Sciences

Administration and Faculty

Frederick J. Beier, Ph.D.,
Ohio State University; Logistics Management
Norman L. Chervany, Ph.D.,
Indiana University; Decision Sciences
Gordon B. Davis, Ph.D.,
Stanford University; Management Information
Systems
Gary W. Dickson, D.B.A.,
University of Washington; Management Informa-
tion Systems
Donald V. Harper, Ph.D.,
University of Illinois; Logistics Management
Thomas R. Hoffmann, Ph.D.,
University of Wisconsin; Management Sciences
Paul E. Johnson, Ph.D.,
Johns Hopkins University; Management Sciences
Roger G. Schroeder, Ph.D.,
Northwestern University; Operations Manage-
ment
James C. Wetherbe, D.B.A.,
Texas Tech University; Management Information
Systems

Associate Professor

John C. Anderson, Ph.D.,
University of Minnesota; Management Sciences
P. George Benson, Ph.D.,
University of Florida; Decision Sciences
Gordon C. Everest, Ph.D.,
University of Pennsylvania; Management Informa-
tion Systems
Arthur V. Hill, Ph.D.,
Purdue University; Management Sciences
W. David Kelton, Ph.D.,
University of Wisconsin; Decision Sciences
Salvatore March, Ph.D.,
Cornell University; Management Information
Systems
Christopher J. Nachtsheim, Ph.D.,
University of Minnesota; Management Sciences
J. David Naumann, Ph.D.,
University of Minnesota; Management Informa-
tion Systems
Gary D. Scudder, Ph.D.,
Stanford University; Operations Management

Assistant Professor

Cynthia M. Breath, Ph.D.,
UCLA; Management Information Systems
Shawn P. Curley, Ph.D.,
University of Michigan; Decision Sciences
Gerardine DeSanctis, Ph.D.,
Texas Tech University; Management Information
Systems
John A. Lehman, Ph.D.,
University of Michigan; Management Information
Systems
Rema Padman, Ph.D.,
University of Texas; Decision Sciences
Gerald Smith, Ph.D.,
University of Pennsylvania; Decision Sciences
Vicki Smith-Daniels, Ph.D.,
Ohio State University; Operations Management

Detmar W. Straub, DBA,
Indiana University; Management Information
Systems
Mark Treleven, Ph.D.,
University of North Carolina; Operations Manage-
ment

Department of Marketing and Business Law

Michael J. Houston, Chair

Professor

Richard N. Cardozo, Ph.D.,
University of Minnesota; Marketing
Michael J. Houston, Ph.D.,
University of Illinois; Marketing
Kenneth J. Roering, Ph.D.,
University of Iowa; Marketing
Ivan Ross, Ph.D.,
Purdue University; Marketing
William Rudelius, Ph.D.,
University of Pennsylvania; Marketing
Orville C. Walker, Ph.D.,
University of Wisconsin; Marketing

Associate Professor

Robert A. Hansen, Ph.D.,
University of Wisconsin; Marketing
Barbara J. Loken, Ph.D.,
University of Illinois; Marketing

Assistant Professor

Terry Childers, Ph.D.,
University of Wisconsin; Marketing
Akshay Rao, Ph.D.,
Virginia Polytechnic Institute; Marketing
Robert Ruekert, Ph.D.,
University of Wisconsin; Marketing

Instructor

Donald Campbell, LL.B.,
University of Minnesota; Business Law
Peter Weiss, LL.B.,
University of Wisconsin; Business Law

Lecturer

Albert O. Andrews, LL.B.,
University of Minnesota; Business Law
Warren E. Eastlund, LL.B.,
University of Minnesota; Business Law
Lillian P. Werner, M.S.,
New York University; Marketing

Department of Strategic Management and Organization

Raymond E. Willis, Chair

Professor

Richard A. Edwards, Ph.D.,
Columbia University; Frederick R. Kappel Chair
in Business Government Relations

W. Bruce Erickson, Ph.D.,
Michigan State University; Business, Government
and Society

Andrew H. Van de Ven, Ph.D.
University of Wisconsin; 3M Professor of Human
Systems Management

Raymond E. Willis, Ph.D.
Massachusetts Institute of Technology;
Management

Associate Professor

Stuart Albert, Ph.D.,
Ohio State University; Management

Harold L. Angle, Ph.D.,
University of California, Irvine; Management

Balaji Chakravarthy, D.B.A.
Harvard University; Management

R. Edward Freeman, Ph.D.,
Washington University; Management

Ian H. Maitland, Ph.D.,
Columbia University; Business, Government and
Society

John J. Mauriel, Jr., D.B.A.,
Harvard University; Management

Mary L. Nichols, Ph.D.,
University of Kansas; Management

Peter Smith Ring, Ph.D.,
University of California, Irvine; Management

Assistant Professor

Philip Bromiley, Ph.D.
Carnegie-Mellon University; Management

Stefanie Lenway, Ph.D.,
University of California, Berkeley; Management

Charles C. Manz, Ph.D.,
Pennsylvania State University; Management

Alfred A. Marcus, Ph.D.,
Harvard University; Business, Government and
Society

Nancy C. Roberts, Ph.D.,
Stanford University; Management

Lecturer

Stephen Keating, J.D.,
University of Minnesota; Management

Board of Overseers

William A. Hodder, Chairman,
President, and CEO, Donaldson Co., Inc.

Barb Adams, Chair,
First Bank Eagle City

Anthony Andersen, President and CEO,
H.B. Fuller Co.

Barbara Armajani, Chief Executive Officer,
Pinstripes Petites, Inc.

Curtis L. Carlson, Chairman of the Board,
Carlson Companies, Inc.

Robert J. Carlson, Chairman,
President, and CEO, BMC Industries, Inc.

Dennis Cavanaugh, President and CEO,
Soo Line Railroad Co.

Thomas Dale, Chairman of the Board and CEO,
Dain Bosworth, Inc.

William Dunlap, Chairman and CEO
Campbell-Mithun, Inc.

Luella Goldberg, Director
Northwestern National Life Insurance Co.

Harvey Golub, President and CEO,
IDS Financial Services, Inc.

Pierson Grieve, Chairman and CEO,
Economics Laboratory, Inc.

N. Bud Grossman, Chairman and CEO,
Gelco Corporation

Roger L. Hale, President and CEO,
Tennant Company

Vernon Heath, President,
Rosemount, Inc.

Deborah Howell, Executive Editor,
St. Paul Pioneer Press and Dispatch

Allen F. Jacobson, President,
U.S. Operations, 3M

Lloyd Johnson, Chairman, President, and CEO,
Norwest Corporation

Geri M. Joseph, Senior Fellow,
Hubert H. Humphrey Institute of Public Affairs

Richard L. Knowlton, Chairman,
President, and CEO, Geo. A. Hormel and Co.

Darrell G. Knudson, Vice Chairman,
First Bank System, Inc.

Duane Kullberg, Managing Partner and CEO,
Arthur Andersen & Co.

David M. Lilly, Vice President,
Finance and Operations, University of Minnesota

Harvey B. Mackay, Chairman and CEO,
Mackay Envelope Company

W. Eugene Mayberry, Chairman,
Board of Governors, Mayo Clinic

Donald W. McCarthy, Chairman and CEO,
Northern States Power Company, Inc.

Glen Nelson, Chairman and Chief Executive Officer,
American MedCenters, Inc.

Dale R. Olseth, President,
DAROL Corporation

Charles W. Oswald, Chairman and CEO,
National Computer Systems, Inc.

James J. Renier, President and COO,
Honeywell Inc.

Richard L. Schall

Dean F. Scheff, President and CEO,
CPT Corporation

James R. Spicola, President and COO,
Cargill, Inc.

Administration and Faculty

John M. Stafford, Chairman, President and CEO,
The Pillsbury Company

John G. Turner, President,
Northwestern National Life Insurance Co.

Mervin D. Winston, Vice President
of Professional Practices, First Bank System, Inc.

Stephen Wolf, President and CEO,
Republic Airlines, Inc.

C. Angus Wurtele, Chairman and CEO,
The Valspar Corporation

Ex Officio Members

Preston Townley, Dean,
School of Management

Frederick J. Beier, Associate Dean,
School of Management

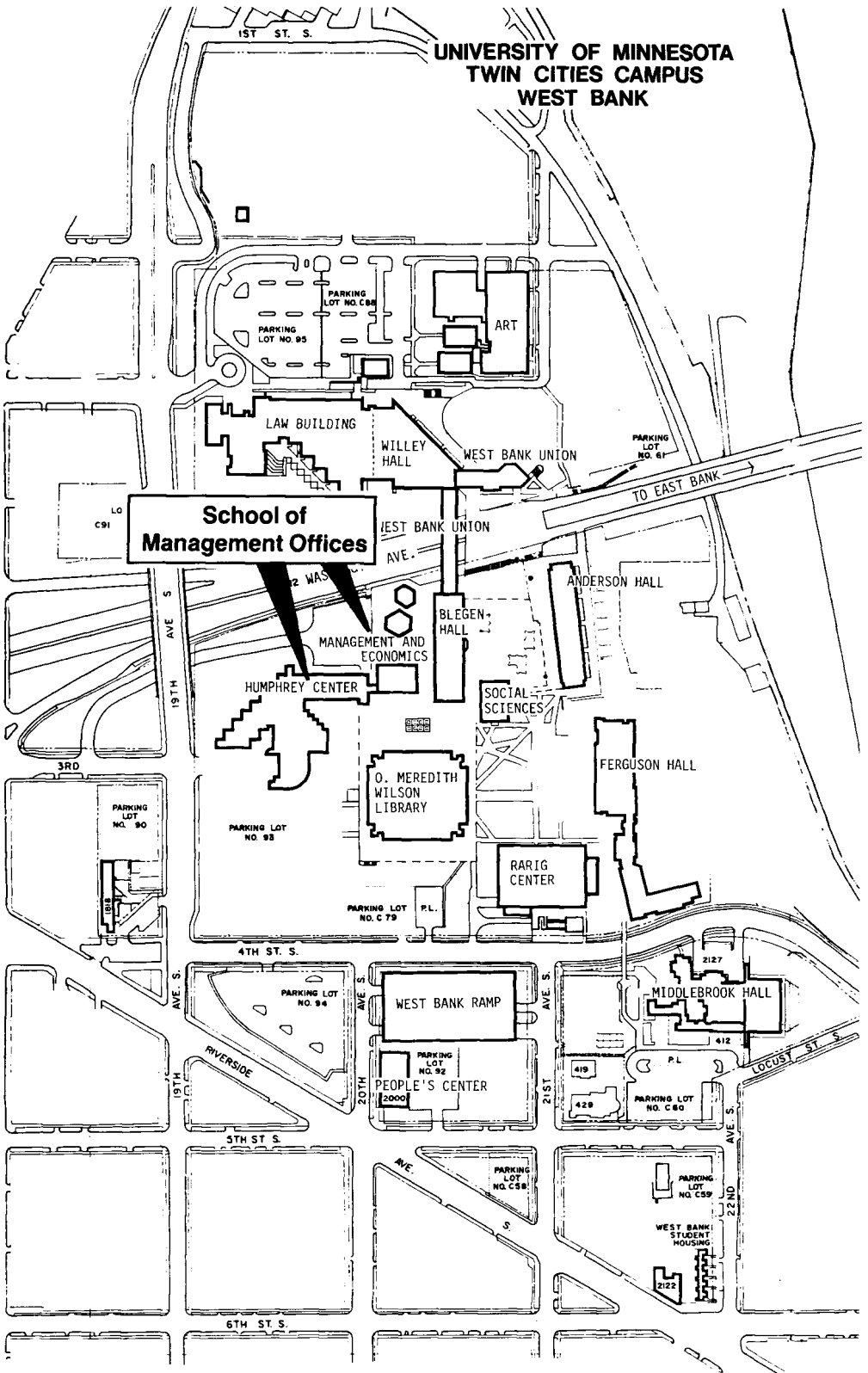
Anne M. Benisch, Associate Dean,
External Affairs, School of Management

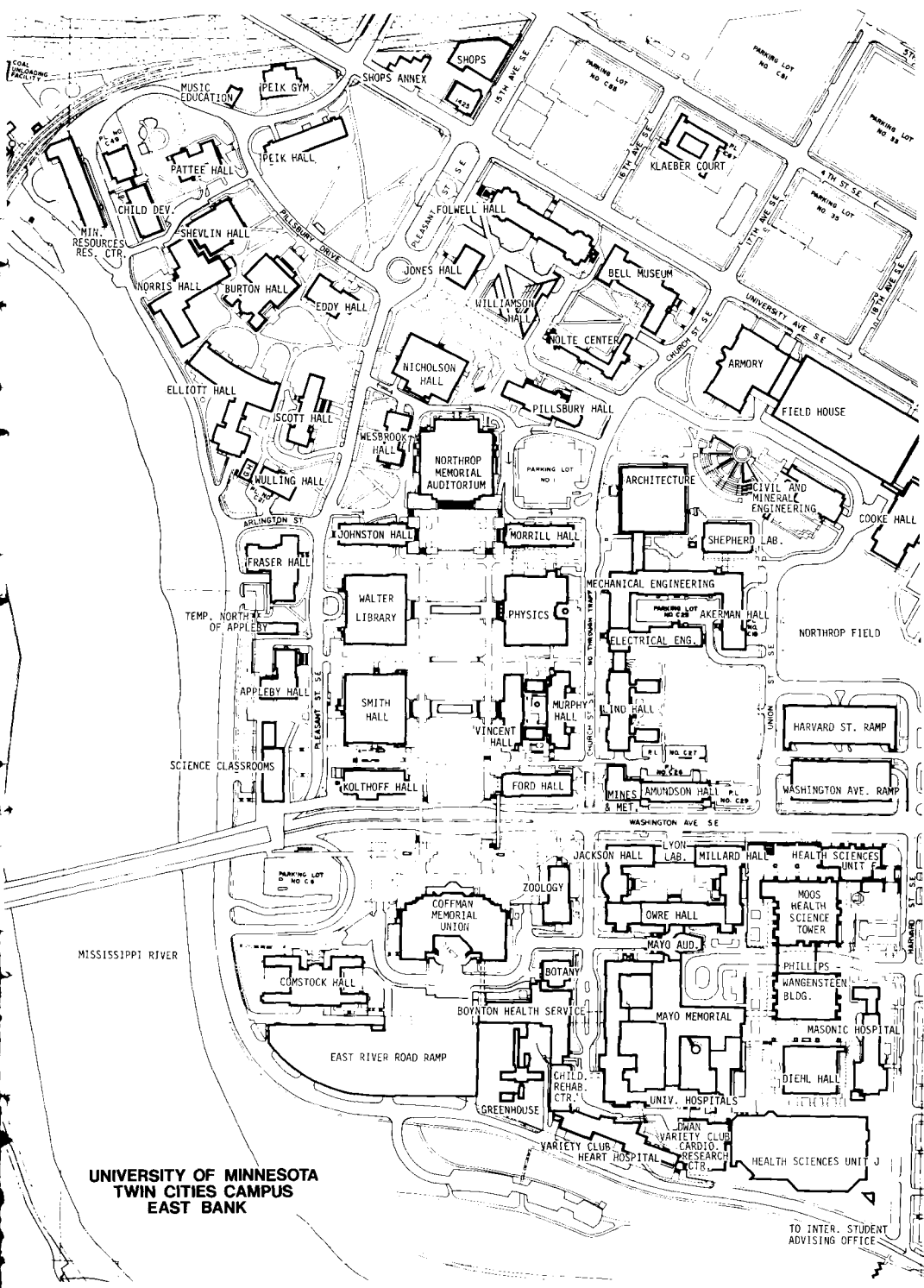
Kay Barber, Chair, Alumni Advisory Council

Campus Maps



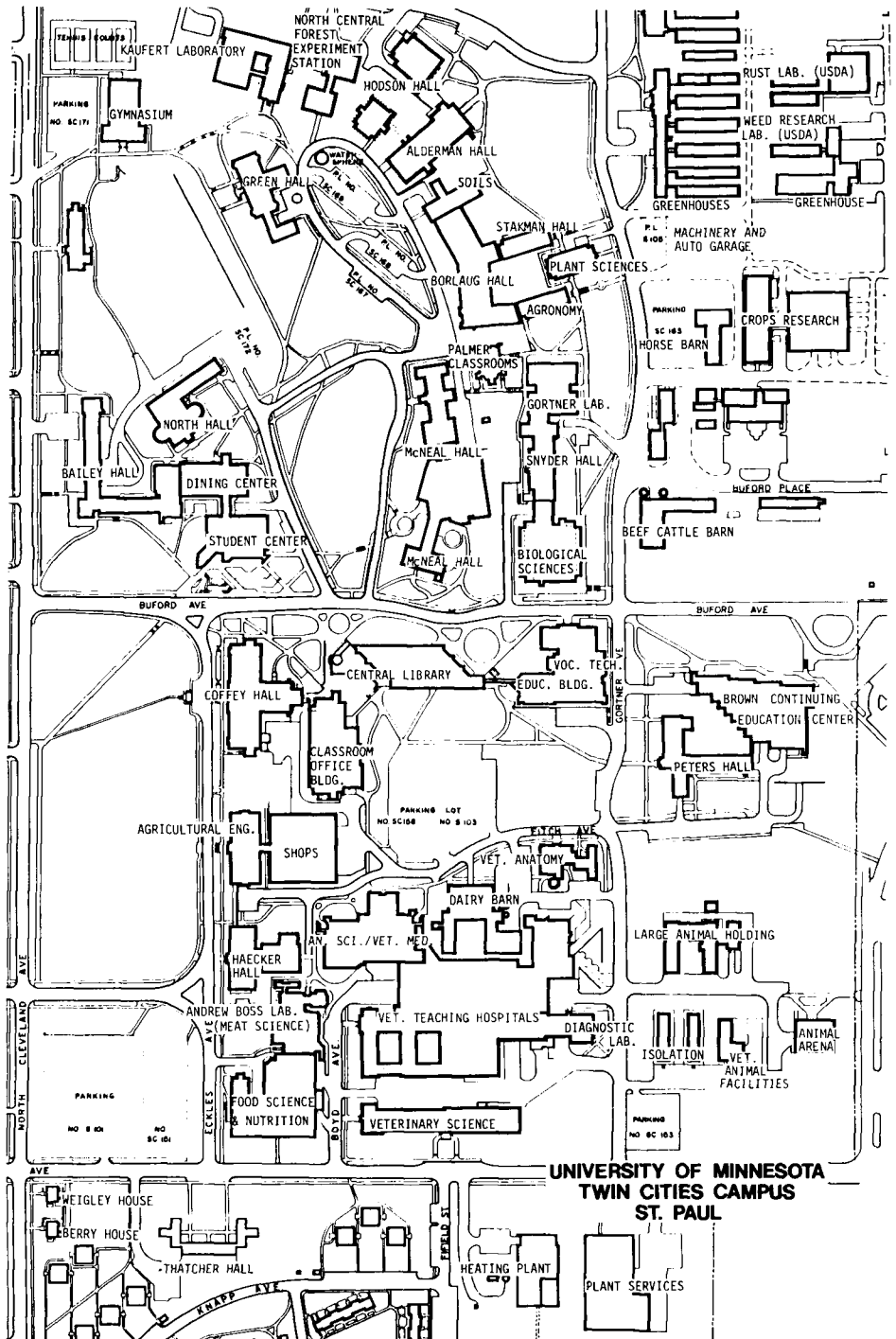
UNIVERSITY OF MINNESOTA
TWIN CITIES CAMPUS
WEST BANK





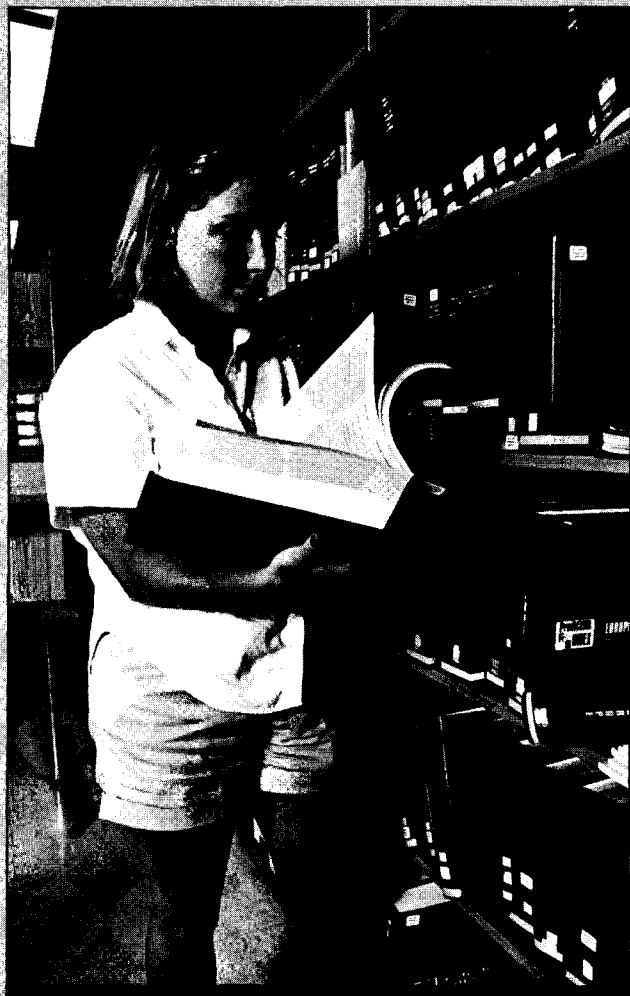
**UNIVERSITY OF MINNESOTA
TWIN CITIES CAMPUS
EAST BANK**

TO INTER. STUDENT
ADVISING OFFICE



**UNIVERSITY OF MINNESOTA
TWIN CITIES CAMPUS
ST. PAUL**

Index



Index

- Academic Misconduct 25
Accounting 2, 7, 21, 22, 34, 52, 53
Accounting Program (B.S.B.) 21, 22
Administration 52
Admission Requirements 16, 27-31
Adult Special 20
Advising 22
Attendance 25
Awards and Honors 26
- Baccalaureate Programs 16
Bachelor of Science in
 Business Degree (B.S.B.) 16
 Regular Program 21, 22
 Accounting Program 21, 22
Board of Overseers 55
Business Board 10
Business, Government, and Society 36
Business Law 2, 37
Business Reference Service 9
- Cancel-Adding 24
Career Planning and Placement 2, 9
Change of Degree Program 19, 24
Class Attendance 25
Computer and Technical Services 9
Continuing Education and Extension
 (CEE) 20
Core Group 21
Correspondence Courses 20
Course Descriptions 34
CPA Examination 34
Credits, Foreign Study 10, 20
Credits, Residence 21
Credits, Transfer 19, 20, 24
- Degree Programs 21, 22, 28-31
Degree Requirements 21, 22, 26, 28-31
Decision Sciences 2, 38
Doctor of Philosophy
 Business Administration 30
 Industrial Relations 31
- Employer Education Service 2, 7
Equal Opportunity 2
Evening Classes 20
Evening Master of Business 27
Examination for Credit 24
Examination, Makeup 25
Executive Development Center 2, 7
Expenses 12
Extension 20
- Faculty 52
Fellowships 13
Finance 2, 39, 53
Financial Aid 12
Foreign Study Credits 10, 20
- Grade Point Average 23
Grades, Transfer 23, 24
Grading Options 23
Graduate Fellowships and
 Scholarships 13
Graduate Programs 27
Graduation
 Application for 26, 29-31
 With Honors 26
 Requirements 21, 29-31
Grievance 25
- History 6
Honors and Awards 26
Honors, Graduation with 26
Honors Program 10
- Incompletes 23
Independent Study 20
Industrial Relations 2, 7, 30, 31, 41, 53
Industrial Relations Reference Room 2, 9
Insurance (see Risk Management and
 Insurance)
Internship Program—Accounting 22
- Labor Education Service 2, 7
Library 9
Loans 12
Logistics Management 2, 42, 53
Lower Division Requirements 17
- Makeup Examinations 25
Management 43, 54
Management Information Systems
 2, 8, 44, 53
Management Science 2, 46, 53
Marketing 2, 46, 54
Master of Arts in Industrial Relations 30
Master of Business Administration 2, 28
Master of Business Taxation 29
- Operations Management 2, 8, 47, 53
Organizations, Student 10
Overseers, Board of 55
- Petitions 24
Ph.D. Programs 2, 30, 31

Placement, Career Planning 2, 9
Pre-management Requirements 17
Probation 24
Professional Education Program 2, 7

Quantitative Analysis (see Decision Sciences)

Records, Access to 2
Regular program (B.S.B.) 21
Repeating Courses 23
Research Centers 7
Residence Credits 21, 23
Risk Management and Insurance
2, 48, 53

Satisfactory Progress 24
Scholarships 12, 13
Service Center 7
Special Examination 24
Special Programs 10
Statistics (see Decision Sciences)
Strategic Management 2, 8, 43, 54
Student Organizations 10
Study Abroad 10
Suspension 24
Symbols, Course 34

Transcript Symbols 34

Transfer
Credits 19, 24
Grades 23

Transportation (see Logistics Management)

Undergraduate Programs (see Baccalaureate Programs)

Undergraduate Studies Office
2, 10, 11, 12, 16, 20, 22-26

University Advance 10

Notes

University of Minnesota Bulletin
(USPS 651-720)
Student Support Services
110 Williamson Hall
231 Pillsbury Drive S.E.
Minneapolis, MN 55455

Second-Class
U.S. Postage
Paid
Minneapolis, MN

UNIVERSITY OF MINNESOTA LIBRARY SERVICES