

Curtis L. Carlson  
School of Management  
University of Minnesota Bulletin  
1990-92



# Curtis L. Carlson

## School of Management

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General Information	5
Degree Programs	15
Course Descriptions	35
Administration and Faculty	53
Campus Maps	59
Index	63

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# Introduction

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## Department Directory

(area code 612)

### Accounting and Business Law

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

### Career Planning and Placement

190 Humphrey Center  
624-0011

### Carlson Executive M.B.A. Program

295 Humphrey Center  
624-1385

### Executive Development Center

320 Management and Economics  
624-2545

### Finance

735 Management and Economics  
624-2888

### Industrial Relations

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

#### Employer Education Service

423 Management and Economics  
624-5525

#### Labor Education Service

437 Management and Economics  
624-5020

#### Reference Room

365 Blegen Hall  
624-7011

### Information and Decision Sciences

395 Humphrey Center  
624-8030

### Mail and Duplicating Center

86 Management and Economics  
625-1340

### Marketing and Logistics

#### Management

1235 Management and Economics  
624-5055

### M.B.A. Communication Skills Center

280 Humphrey Center  
624-1525

### M.B.A. Program

295 Humphrey Center  
624-0006

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## Office of the Dean:

### Alumni Relations

230 Management and Economics  
625-1556

### Communications

202 Management and Economics  
625-0843

### Corporate Relations

230 Management and Economics  
625-9538

### Facilities

220 Management and Economics  
626-7451

### International Program Development

218 Management and Economics  
625-9361

### Management Conference Center

180-184 Humphrey Center  
625-3056

### Operations and Management Sciences

332 Management and Economics  
624-7010

### Ph.D. Program

280 Humphrey Center  
624-0875

### Strategic Management and Organization

835 Management and Economics  
624-5232

### Undergraduate Program

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 Carlson 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 Minnesota Human Rights Act, Minnesota Statute Ch. 363; by the Federal Civil Rights Act, 420.S.C. 20000e; and 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, 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); or 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 Student 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. (Exceptions under the law include state and federal educational and financial aid institutions.) 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. Students may prevent the release of public information only during their terms of enrollment. To do so, they must notify the records office on their 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 Williamson Hall Information Center, Minneapolis, and at records offices on other University campuses. Questions may be directed to the Office of the Registrar, 150 Williamson Hall (612/625-5333).

**Immunization**—Beginning July 1, 1990, students born after 1956 who will be taking more than one University class are required under Minnesota law to submit an Immunization Record form.

The form, which is sent along with the official University admission letter, must be filled out and returned to Boynton Health Service within 45 days of the first term of enrollment in order for students to continue registering for classes at the University. Complete instructions accompany the form.

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## Introduction

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### **Postal Statement**

Volume 93, Number 13  
August 21, 1990

University of Minnesota Bulletin  
(USPS 651-720)

Published by the University of Minnesota, Student Support Services, Publications and Communications Office, 150 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455; once in March, April, May, October, and November; twice in January, February, and August; and four times in July. Second-class postage paid at Minneapolis, Minnesota. POSTMASTER: 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 began, 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 1971, the name was again changed to the College of Business Administration and, 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.

In 1985 then Dean Preston Townley proposed enhancing the school's name through identification with an individual who embodies the school's values. The logical choice was Curtis L. Carlson, 1937 alumnus, successful entrepreneur, and chairman and CEO of The Carlson Companies, Inc. A first-generation Swedish American, Carlson built a creative idea into a small business that grew to a \$3 billion-a-year international conglomerate. But even more important, Carlson made a long, outstanding commitment to the University and the school through committee work and financial contributions. The school became the Curtis L. Carlson School of Management in October 1986.

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.

The Carlson School continues to provide leaders trained in management to meet an increasingly complex, global business environment. Former Dean Townley has said the school's goal is to be "equal in quality to the excellent business community where we're located. We've built a good school, but we're striving to make it even better. Our aim is to be a business school that ranks among the nation's best in the calibre of research, teaching, and responsiveness to society's needs."

### Objectives

The Carlson School's primary mission is to understand and improve the process of management. It seeks a national and international reputation through the preparation and placement of its graduates and the dissemination of its research. Moreover, the school recognizes a special relationship with and responsibility to the region's business firms, labor unions, government units, and not-for-profit agencies in furthering improved management study and practice. 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 general management 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;
- orient students to the functional and environmental aspects of business enterprise and equip them with basic administrative skills; and
- prepare graduates to enter careers in accounting, business administration, and management, 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 Carlson 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** (320 Management and Economics)—This center offers noncredit professional management programs for business people in both profit and nonprofit organizations.

—*Minnesota Executive Program*: A residential program designed for senior executives and focused on corporate strategy.

—*Minnesota Management Institute*: A residential program for mid-management people that emphasizes operational, behavioral and functional management skills.

—*Minnesota Management Academy*: A residential program for newer managers that focuses on general management principles and interpersonal skills.

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## General Information

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—*21st Century program*: An exclusive development and networking group designed to enhance the leadership skills of select executives from companies in our region.

—*Customized/In-House Programs*: Seminars designed, developed, and delivered in partnership with companies.

Call 612/624-2545 for more information.

## Research Centers

**Accounting Research Center** (645 Management and Economics)—This center was established in 1977 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 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 full-time day and part-time evening M.A. and Ph.D degree programs in industrial relations.

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

**The Institute for Financial Studies** (773 Management and Economics)—Established in 1987, this research center is a focal point for the intellectual

interaction of the finance faculty and students with both academic and industry finance professionals. Institute faculty conduct research primarily in areas such as prices in financial markets, optimal financial contracts, inflation and stock returns, and financial intermediation. Although the institute's orientation is academic, recent research in financial economics is communicated to finance professionals through annual workshops. The institute also publishes a working paper series.

**Logistics Management Research Center** (1235 Management and Economics)—This center was founded in 1987 to sponsor research that will improve the management of logistics, distribution, and transportation. Important changes in how products are distributed have been occurring as a result of changing economics, technology, and the regulatory environment. The center encourages research on multidisciplinary issues that are driven by these changes.

**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 MIS professionals and educators; conducting research addressing the managerial use 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** (332 Management and Economics)—This center was founded in 1983 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 focus on the management of technology and technical change in operations. The Operations and Management Center also sponsors roundtable discussions and speakers on issues of current interest.

**Strategic Management Research Center** (822 Management and Economics)—The Strategic Management Research Center is a University-wide interdisciplinary center created as a joint venture of the Carlson 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. Currently 56 researchers from 11 University units are working on 34 research projects in the areas of managing innovation and change; international management; strategic planning and decision making; small business development and management; and mergers, acquisitions, and divestitures. A new area of research, government-business relations and global competition, is currently being developed.

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) the Strategic Management Colloquium series 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 stimulating discussions with some of the colloquium speakers; (3) three 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 key issues of the center's research agenda.

## Service Centers

**Career Planning and Placement Office** (190 Humphrey Center)—The school 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 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, Carlson School of Management, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455.

## General Information

### **Computer and Technical Services**

(West Bank Computing Services, 93 Blegen Hall)—Computers are available for use by students, staff, and faculty. Interactive mainframe computing is available through dial-up procedures or by using campus lab facilities. University mainframes include Cyber, VAX, IBM, UNIX, and CRAY machines. Microcomputer labs provide access to MS-DOS (IBM) and Apple Macintosh computers and printers, with a wide variety of available software. West Bank Computing Services also provides computer consulting, development, and related training.

### **Industrial Relations Reference**

**Room** (365 Blegen Hall)—A division of the Industrial Relations Center, this specialized library maintains a unique collection of resource materials covering all aspects of employment, with special emphasis on 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 added to the business collection are interfiled with books on other subjects in the main collection of Wilson Library. The database on the library's first floor 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.

Tours of the Business Reference Service or of Wilson Library are available upon request.

## **Special Programs**

**Honors Program**—Special opportunities for high ability students are available through research assistantships, independent study projects, and 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 Carlson School of Management encourages students to broaden their educational experience by participating in study abroad programs. Information about a variety of opportunities is available through the University's International Study and Travel Center, 102 Nicholson Hall (612/625-1150).

The Carlson School co-sponsors foreign studies programs in Japan, Spain, Denmark, Austria, and

Singapore, for which students can receive pre-approved residence credit. These programs are sponsored by the Council on International Educational Exchange (CIEE), the Institute of European Studies (IES), and the Denmark International Study Program. More information is listed in this bulletin under Foreign Studies Management (FSMg). Transfer credit, credit by exam, or directed study credit can be obtained on a case-by-case basis for appropriate coursework in other University and non-University programs. Advance consultation concerning such credit is essential. Additional information can be obtained from the Undergraduate Studies Office, 290 Humphrey Center.

### **Professional Development**

**Seminars**—Recognizing that personal and career success often depends on skills and awareness not specifically covered in the academic curriculum, the Carlson School offers seminars for undergraduates on topics ranging from interpersonal communication to understanding corporate culture. The seminars are taught by staff and local business leaders.

**Student Organizations**—As a student in the Carlson School you may find opportunity for valuable experience and personal growth by participating in University activities outside the classroom. Within the school a variety of student groups may appeal to your professional interests. You are encouraged to take an active part in these group activities. Meeting times and contact information are available in the Undergraduate Studies Office, 290 Humphrey Center.

**Business Board**—This group represents the undergraduate student body in the Carlson 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 between students and faculty.

Representatives from student organizations as well as "at large" representatives from the student body in general are elected each spring as representatives to the Business Board. Carlson student senate representatives serve as *ad hoc* members of the board. All interested students are urged to run as candidates for the Business Board.

**AIESEC**—The International Association of Students in Economics and Management is one of the largest nonprofit student organizations in the world. AIESEC 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 may be eligible for internships with corporations in foreign countries.

**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 (GPAs) of 3.20 in accounting and 3.00 overall. Beta Alpha Psi introduces the aspiring accountant to the business world by encouraging interaction among students, faculty, alumni, and area business people. It sponsors speakers from all areas of accounting. Members tour CPA firms, industry, and government offices. In addition, Beta Alpha Psi provides recreational sports teams and tutors for students in accounting and participates in a Volunteer Income Tax Assistance program.

## General Information

### **Business Association of Minorities—**

This organization is designed to foster a multi-ethnic sharing of ideas and concerns among people interested in business administration. It provides a diverse perspective on the corporate world. Members are actively involved in various campus and community activities.

### **The Business Quarterly—**

*The Business Quarterly* magazine is published by students in the Carlson 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 affecting 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 Undergraduate Student Lounge, 110 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 GPAs 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 graduate students and faculty in the School of Management and the business community.

### **Phi Delta—Minnesota Women in Management—**

Carlson School students and students interested in business administration, business education, or economics are invited to join this professional business organization. Each quarter the group sponsors varied activities with a professional focus, and members also collaborate on service projects and social events.

### **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 on business and academic and self-development topics.

### **Student Accounting and Finance**

**Association—**This association provides an opportunity for students to become acquainted with accounting faculty and area business representatives. Speakers inform students of opportunities in public and private accounting and finance. 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*.

## Financial Aid

Financial aid application forms 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 Carlson 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 Carlson School students with emergency needs.

*F. D. Lindquist Loan Fund*—For Carlson School students needing financial assistance.

**Undergraduate Scholarships**—A variety of scholarships are available for current and prospective Carlson School 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.

*Advantage Scholarship Program*—Scholarships are available for talented minority and disadvantaged students seeking baccalaureate degrees in business and accounting. The scholarships provide a stipend and merit awards for between one and six years, depending on whether a student is admitted to the

program as a freshman, sophomore, junior, or senior. Students in the Advantage Scholarship Program receive quarterly awards based on credits and GPA earned. Finalists are interviewed by the scholarship committee. Application deadline: March 1.

*Alpha Kappa Psi/Arthur Andersen and Company*—Alpha Kappa Psi scholarship awards are available to students seeking careers in business. The scholarship is valued at \$4,000. Preference is given to students who are interested in living at the Alpha Kappa Psi House located at 1116 5th Street S.E., Minneapolis, Minnesota. Finalists are interviewed. Application deadline: March 1.

*Carlson Companies Scholarship*—Scholarships covering tuition, fees, and living expenses are available to employees of the Carlson Companies and their families. Information on these highly competitive awards can be requested from the Undergraduate Studies Office, 290 Humphrey Center.

*Carl H. Fritze Transportation*—Preference for this \$250 award is given to a Carlson School student interested in a career in transportation/transportation law. To be eligible the student must have an overall GPA of 3.0 or higher. Application deadline: May 22.

*Evar T. Cedarleaf Memorial Scholarship in Business Administration*—These \$400 awards are available to CSOM students with financial need. Preference is given to students who are interested in insurance and surety bond underwriting. Application deadline: May 22.

*Farmers Insurance Group of Companies*—This \$750 scholarship is available to assist sophomores, juniors, and seniors in the insurance or general management fields. Financial need is included in the selection criteria. The award recipient will be required to write a one-page autobiographical sketch for the Chairman of the Board of Farmers Insurance Group of Companies. Application deadline: May 22.

*George Russell International Fund*—Preference for this \$750 award is given to Carlson School students who plan to study abroad through one of the five foreign studies programs cosponsored by the Carlson School of Management. Application deadline: May 22.

*Holden Graphic Arts*—Preference for this \$500 award is given to Carlson School students who are interested in printing and graphic arts. The scholarship may be renewed for one additional year for a total possible scholarship of \$1,000 over two years. Application deadline: May 22.

*Jack Collins Memorial Scholarship in Management*—This \$300 scholarship is awarded to a full-time student in the Carlson School who, by choice or necessity, interrupted his or her traditional educational years with career, family, or military service. Application deadline: May 22.

*Jeannette Winter Tilly Fund*—This \$1,100 award is available to Carlson School students who have financial need and who have a competitive GPA. Preference is given to women candidates. Application deadline: May 22.

## General Information

**LaBissoniere**—One or two \$1,000 scholarships are available to Carlson School students. Application deadline: May 22.

**Maurice L. Rothschild**—Several \$1,000 scholarships are available to new Preferred Admission freshmen each year. Preference is given to students entering the College of Liberal Arts Honors Program as full-time students. (Full-time status requires taking a minimum of 12 credits each quarter.) Application deadline: March 1.

**Merrill and Donna Anderson**—Preference for this \$500 award is given to Carlson School students who have had employment experience in the restaurant industry. This award is renewable for one additional year for a total possible scholarship of \$1,000 over two years. Application deadline: May 22.

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

**Accounting Scholarships**—The Department of Accounting, 645 Management and Economics, annually awards numerous scholarships to undergraduate accounting majors. Students are encouraged to contact the department office early each fall term to obtain application information. Awards are primarily based on scholarship. Scholarship sponsors include public accounting firms, corporations, and individuals. Recent sponsors include: *Arthur Andersen and Co.; Cargill, Inc.; John B. Clark, Coopers and Lybrand; Deloitte and Touche; Ernst and Young; General Mills; Robert Half Personnel Agencies; Honeywell, Inc.; Larson, Allen, Weishair and Co.; Laventhol and Horwath; McGladrey and Pullen; Peat, Marwick, Mitchell and Co.; C.E. Tranter; Price Waterhouse and Co.; 3M 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.

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

**Graduate Fellowships and Scholarships**—The Application for Financial Aid for students in the Industrial Relations graduate 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. and Ph.D. programs, request for fellowships is made on the application forms available from the M.B.A. or Ph.D. program offices. Unless otherwise noted, the application deadline for the fellowships and scholarships listed below is February 15.

**American Assembly of Collegiate Schools of Business Graduate Management Admission Council National Doctoral Fellowship Program in Business and Management (NDFP)**—\$10,000 fellowship to be awarded to the applicant and \$5,000 grant to the school to cover the student's first-year tuition and fees.

**Carlson School of Management Associates Fellowships**—For new graduate students in Carlson School of Management. Amount varies.

**Carlson School of Management Alumni Fellowships**—For new graduate students in the Carlson School of Management. Funded by annual gifts from alumni and friends. Amount varies.

**Chrysler Corporation Scholarship in Industrial Relations**—Awarded to a master's student in industrial relations.

**Elwell Foundation**—Awarded to several Ph.D. students in finance. Amount varies.

**Paul Goldsborough, Jr. Fellowship**—Awarded to graduate students in the Carlson School of Management. Amount varies.

**Ernest Heilman Award**—An outstanding teacher award for a Ph.D. student in accounting. \$1,000.

**Honeywell Scholarship**—Awarded to an outstanding graduate student in accounting. Amount varies.

**Minnesota Mining and Manufacturing Scholarship**—Awarded to an outstanding graduate student in accounting. Amount varies.

**Carl Nelson Doctoral Award**—Awarded to a Ph.D. student in accounting. \$1,000.

**Price Waterhouse Scholarship**—Awarded to an outstanding graduate student in accounting. Amount varies.

**Minority/Disadvantaged Fellowship**—Awarded to two graduate minority/disadvantaged students annually. Variable up to \$5,000.

**Rosenberg Real Estate Equity Funds (RREEF) Minority/Disadvantaged Fellowship**—Awarded to new full-time minority/disadvantaged M.B.A. students pursuing a career in real estate. \$5,000.

**C.E. Tranter Scholarship**—Awarded to an outstanding graduate student in accounting. \$1,500.

# Degree Programs



# Degree Programs

## Baccalaureate Programs

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

*Note:* The general management and accounting undergraduate programs have been revised. Students admitted to the Carlson School of Management before fall 1990 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 updated degree planning sheets.

### Carlson School of Management Preferred Admission Program

The Carlson School of Management at the University of Minnesota is one of the nation's top undergraduate business programs. Although students selected for admission to the school normally have completed their first two years of college, starting in 1990, a limited number of new freshmen are accepted into the school's Preferred Admission Program.

Students beginning their college work in the University of Minnesota's College of Liberal Arts Honors Program are the primary group the Preferred Admissions Program seeks to serve. Interested students beginning coursework at other colleges or at other two or four-year institutions, however, can also apply for this status.

Selection for the Preferred Admission Program is based primarily on high school academic performance, test scores, and extracurricular achievement.

Contact the Undergraduate Studies Department, 290 Humphrey Center (612/624-3313) for complete details.

## Admission Requirements

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

Undergraduates are admitted to the Carlson School of Management twice a year. Application deadlines are June 15 for fall quarter and January 15 for spring quarter. Because of resource constraints, the Carlson School establishes enrollment limits. Although GPAs (as described below) are the primary determinants of admission, applicants are required to provide additional information about their background and achievements to allow a broader view of their qualifications for admission.

Recent enrollment reductions have made admission to the Carlson School competitive. To be *considered* for admission, you must have met the following requirements:

1. Completed or have in progress coursework totaling 90 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 Carlson School (with no more than two tool courses in progress when you apply): Introduction to Financial Reporting (Acct 1050) or Principles of Financial Accounting I and II (Acct 1024 and 1025); Principles of Microeconomics and Macroeconomics (Econ 1101 and 1102); Fundamentals of Information Development and Use (IDSc 1010); Data Analysis and Statistical Inference for Managers (OMS 1020); and Calculus (Math 1142 or 1211).

3. Earned a minimum GPA of 2.80 in all transferable credits and in the tool courses. As space permits, students with strong credentials (e.g. significant leadership experience, particularly rigorous coursework) but slightly lower GPAs may be considered for admission.

*Note:* Once a passing grade (D or better) has been earned, students may not receive credit for repeating the course. The original grade of D or better will be used in calculating the GPA. In addition, Ns and Fs earned fall 1987 or later in transferable coursework are counted as zero grade points in the student's GPA.

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 Carlson School courses as well as coursework 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 Carlson School accepts a maximum of 12 credits of physical education activities courses toward the degree. Consult the Undergraduate Studies Office, 290 Humphrey Center, about acceptance of such courses.

**Pre-Management Requirements**  
**The Carlson School of Management has adopted the following second language requirement for students pursuing a B.S.B.:**

I. A Second Language is *not* required for:

1. Students who graduated from high school June 1986 or earlier *and* are admitted to the Carlson School before fall 1993;

2. Students who graduated from high school July 1986 or later and who graduate from the Carlson School by spring quarter 1991.

II. A Second Language (i.e., two college quarters or two high school years of the same second language) *is* required for:

1. Students who graduated from high school July of 1986 or later and graduate from the Carlson School with the B.S.B. degree SSI 1991 or later;

2. All students who are admitted to the Carlson School fall 1993 or later, regardless of when they graduated from high school.

*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) general education requirements. The courses may fulfill a CLA group other than the Carlson 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—9-10 credits**

**1. Composition—5 credits (A-F grading required)**

Comp 1011—Writing Practice I or exemption from requirement

**2. Mathematics—5 credits (A-F grading required)**

See "Management Related Group (tool)" listed after Group D

**3. Symbolic Systems—4-5 credits (A-F grading required)**

Computer Science  
 3101 3102 3104

English  
 3851

Linguistics  
 3001 3111

Mathematics  
 1131 1221

Philosophy  
 1001

# Degree Programs

## GROUP B: PHYSICAL AND BIOLOGICAL SCIENCES—9 credits

### 1. One laboratory science course—5 credits

Astronomy

1011 and 1015 1021 and 1025

Biochemistry

3001 3031

Biology

1009 1103 1106 3011 3012

Chemistry

1001 1002 1003 1004 1005 1006 1031 1032

Geology

1001 and 1021 1002 1111

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  
3801 5091

### 2. History or application of science—4 credits

Biology

1008 1101 1301 3051 3112 5041

Botany

1012

Ecology and Behavioral Biology

3001

Genetics and Cell Biology

3002 3022

Geology and Geophysics

1005

History of Science and Technology

1711 1712 1713 1811 1812 1813 3201 3202  
3711 3712 3713 3811 3812 3813 3825 5924  
5925

Interdepartmental Studies

5402 5403

Mechanical Engineering

5402 5403

Physics

1002

## 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 cross-cultural and international courses:

Afro-American Studies

1021 1441 3001 3002 3013 3141 3421 3864  
3865 3876 5121 5142 5143 5145

American Indian Studies

3026 3036 3111 3112 3211 3871

Ancient Near Eastern and Jewish Studies

3501 3502 3505

Anthropology

1102 3003 3211 3221 3212 3222 3223 3241  
3261 3293 3371 3513 3515 3521 3533 3541  
5120

Chicano Studies

1105 3427

Chinese

1201 1202

Classics

1001-1006 1023-1025 1042 3023-3025 3071  
3073

Dutch

3510

East Asian Studies

1032 1063 1461 1462 1463 3211 3464 3465  
3467 3468 3471 3472 3481 5032 5481

Economics

5301 or 5331 5307 or 5377 3315 or 5315 5401 or  
5431 5461 5462 5463

French

3511 3512 3590 3599 3513

Geography

1301 all 3xxx-5xxx level courses focusing on non-  
U.S. geography

German

3501 3502 3511 3512 3513

History

All non-U.S. history courses

Humanities

1111 1113 1115 1117 1119 1201 1202 1211  
1212 3813 3878

International Relations

3101 3105 3900

Italian

3501 3502 3590

Jewish Studies

1034 3100 3142 3521 3522 3607

Journalism

5801 5825 5826

Latin American Studies

3131 5120

Middle Eastern Studies

1536 3301 3491 3505 3507 3508 3511 3512  
3541 3542 3543 3544 3555 3612 5521 5523  
5525

Medieval Studies

1001

Music

1804 3709 3807 3808

Polish

3801

Political Science

1025 1054 3475 3477 3810 3835 5461 5463  
5465 5467 5471 5473 5476 5477 5478 5479  
5883 5885 5886 5889

Portuguese

3501 3502

Religious Studies

1031 1032 1034 1036 3100 3501 3502

Russian

3106 3511 3512 5378

Scandinavian

3271 3272 3273 3457 3501 3614 3615 5118  
5173

Sociology

3315 3456 3457 3481 3551 3671 5675

South and Southwest Asian Studies

1504 1506 3412 3413 3501 3502 3506 3607  
5531 5532 5535

Soviet Central Asian Studies

3601

Spanish

1501 1502 1503 3501 3502 3512

Spanish/Portuguese

3610

Speech

3451 5231 5232 5451

Women's Studies

1102 3402 5401

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

*Note:* In addition, Social Science classes on non-American cultures taken while studying on a University of Minnesota approved foreign studies program (see current *CLA Bulletin*) may also fulfill the international studies requirement.

**GROUP D: LITERARY AND ARTISTIC EXPRESSION—8 credits**

Choose *one* of the following options:

**1. Any two of the following:**

Hum 1001 1002 1003 1004 1005

OR

**2. One course from each of the following areas (a and b):**

**a. Literature—4 credits**

Afro American Studies

3591 3592 3601 5301 5341 5591 5592 5593  
5595 5596 5597

American Indian Studies

3116

Chicano Studies

3507 3508 3510 3511

Chinese

3161 3162 3163 3165

Classics

1042 1201 3001 3002 3003 3081 3082 3083  
5003 5081 5082 5083

Comparative Literature

5311 5321 5331 5332

Dutch

3610

English—all courses except

3481 3710 3851 3852 3963 3970 3980 5211  
5230 5481 5482 5483 5486 5487 5711 5712  
5713 5714 5753 5815 5821 5831 5843 5851  
5860 5871 and those listed in group D2b  
(English/Creative Writing)

French

3601 3602 3603 3606 3607 5607

French and Italian

5219 5531 5568 5569

German

3601 3602 3603 3604 3610

Italian

5601 5602 5603 5609

Japanese

3162 3163 3164

Jewish Studies

3315

Middle Eastern Studies

3211 3212 3213 3601 3602 5601 5602

Polish

3601 3602

Portuguese

3603

Russian

3421 3422 5401 5404 5407 5409 5421 5422  
5425

Scandinavian

3505 3601 3602 3604 3605 3611 3612 3613  
3614 3615 3618 5201 5202 5501 5502 5512  
5602 5611 5613 5614 5615 5616 5617 5618  
5619 5631 5632

South and Southwest Asian Studies

3204 5201 5202 5203

Spanish

3601 3602 3605 3610 3614 3615 3620

Women's Studies

3306 3307 3308 5304

**b. Artistic Expression and Humanities—4 credits**

Afro-American Studies

1301 3105 3108 5201

American Indian Studies

3221 3242 5251

Architecture

1021 1022 1023 3121 5051 5052 5053 5054  
5055 5056 5057 5061 5064

Art History—all courses except

3940 3950 3970 3975 5895 5950 5960 5970  
5990

Art Studio—all courses except

3970 3980 5970

Chicano Studies

3213

Classics

3008 3142 3152 3162 3252 5103 5104 5105  
5106 5107 5108 5109 5111 5112

Comparative Literature

1921

Dance—all courses except

3712 3851 5616 5700

Design

1501 1521 1541

East Asian Studies

3001 3013 3808

English

5486 5487

English (Creative Writing)

1101 1102 1103 3102 3103 3105 5101 5102  
5103 5104 5105 5106 5107

French and Italian

3604 3608

German

5621 5622 5623 5624 5630

Humanities—all courses except

3910 3944 3970 3980 5910 5970 5990

Jewish Studies

3401 3402 3403

Music—all courses except

3970 3980 5950 5970

Scandinavian

3606 3607 3654 5641 5644 5645

## Degree Programs

### South Asian Studies

3456

### Theatre Arts—all courses except

3412 3950 3980 5718 5728 5910 5950 5970

### Women's Studies

3304

### MANAGEMENT-RELATED GROUP (tool)—25 credits (A-F grading required)

1. Acct 1050—Introduction to Financial Reporting
2. Econ 1101, 1102—Principles of Microeconomics, Macroeconomics
3. IDSc 1010—Fundamentals of Information Development and Use
4. OMS 1020—Data Analysis and Statistical Inference for Managers
5. Math 1142 or 1211—Calculus

*Additional transferable credits to total 90 are required by the time you enter the Carlson School of Management.* In general, credits from The College of Liberal Arts (CLA), the Institute of Technology (IT), and the College of Agriculture are acceptable for credit in the Carlson School with the exception of statistics coursework equivalent to OMS 1020, and personal skills/self development courses such as efficient reading and how to study.

### Application Procedures

Each student receives an Acceptance Notice when admitted to the Carlson 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 General Management Program, you should indicate your intended area of emphasis: actuarial science, banking, finance, logistics management, marketing, operations management, small business management and entrepreneurship, general management studies, or self-designed. If you wish to apply to both the Accounting Program and the General Management Program, please indicate on your application your first and second choice.

If you wish to change programs after admission, you must file a petition. Petitions must be filed in 290 Humphrey Center by the application deadlines for fall and spring quarters. Students must meet the minimum overall and tool admission GPAs in place at the time of

their petition. If your petition to switch majors is approved, you will need to meet the program requirements in place at the time of your change.

### 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 Carlson School of Management by June 15 for fall quarter admission and by January 15 for spring quarter admission. A "Change of College Within the University" form and the Applicant Essay/Activities Résumé are available for this purpose at the Office of the Registrar, 150 Williamson Hall, University of Minnesota, 231 Pillsbury Drive S.E., Minneapolis, MN 55455 (612/625-5333).

### Transfer From Other Institutions—

If you are transferring from outside the University to the Carlson School of Management, you must submit an Application for Admission and an Applicant Essay/Activities Résumé, 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 \$25 nonrefundable application fee must accompany your application. Please note that if you have earned a bachelor's degree in business from another four-year institution, you may not earn a second bachelor's degree from the Carlson School.

Credits completed at other institutions that are acceptable for transfer to the Carlson School of Management may be used to meet admission requirements. Credits in business courses at the lower division level are accepted for transfer only if such coursework is available for credit in the College of Liberal Arts pre-management program. Junior and senior level business courses completed at other institutions (1) are usually accepted for general elective credit and

(2) must be evaluated by an appropriate faculty member to be used in lieu of upper division course requirements. You need to petition for acceptance of these courses after admission to the Carlson School through the Undergraduate Studies Office, 290 Humphrey Center. Please note that the Carlson School of Management does not normally accept lower division transfer coursework in lieu of its upper division course requirements.

**Foreign Study Credits**—Credits earned at recognized institutions of learning abroad may be transferred to the Carlson 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 of these credits may be used to meet degree requirements. Credits from foreign institutions completed before admission to the Carlson School are accepted on the S-N grading system only. 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 want 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 degree program of your choice.

Generally, adult special students admitted to the Carlson 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 Carlson School are July 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 Carlson 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 Carlson School 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 90 credits required for admission. Carlson School CEE applications 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 must be completed if you plan to take all courses through CEE during your first quarter in the Carlson School, or if you wish to complete all of the B.S.B. course requirements through extension classes. If you have already been admitted to the Carlson School as a day school student and wish to complete the degree program requirements in evening classes, you must notify the Undergraduate Studies Office.

## Degree Programs

Continuing Education and Extension offers a number of noncredit 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 Carlson School of Management. The school accepts a maximum of 16 credits of upper division Carlson School coursework completed through correspondence study toward the B.S.B. degree.

Failure to complete your independent study within the allotted time period (without filing for an extension) will result in the appropriate failing grade (F or N) being posted on your transcript.

## Bachelor of Science in Business

### Degree Requirements

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

1. Complete a minimum of 180 credits. These credits include the required pre-management coursework and the specific degree requirements listed below.
2. Complete a minimum of 72 credits in business/economics coursework and 72 credits non-business/economics coursework. This includes coursework taken before and after admission to the Carlson School of Management.
3. Complete a minimum of 40 credits of upper division courses taught by departments in the Carlson School *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 and through foreign studies programs toward these 45 credits.) In addition, accounting students must complete 50% of their total number of accounting classes at the University of Minnesota.

5. Be in good academic standing with a minimum GPA of 2.00 in all work taken after admission to the Carlson School and in all upper division courses offered by departments in the Carlson School as well as in the first course of Econ 3101, 3102, 3105, or 3701 if taken after admission to the Carlson School.

### Second Language Requirement—

Students who graduate from high school after June 1986 and who graduate with their B.S.B. 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. Refer to page 17 for detailed layout of second language requirement.

*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.

Noncredit seminars for your personal and professional development are strongly recommended. Refer to the quarterly Undergraduate Update for further information.

### Core Requirements for General Management and Accounting Students

*Note:* Students admitted to the Carlson School of Management before fall 1990 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.

**Core**—28 credits (A-F required):

Acct 3001—Introduction to Management Accounting

BFin 3000—Finance Fundamentals

IR 3002—Personnel and Industrial Relations

Mgmt 3001—Fundamentals of Management

IDS<sub>c</sub> 3030 (formerly MSci 3300)—Information Systems and Information Management  
 Mktg 3000—Principles of Marketing  
 OMS 3000—Introduction to Operations Management

Senior Policy Course—5 credits (A-F required)  
 Mgmt 3004

Economics—4 credit course selected from the following (A-F required):

Econ 3101  
 Econ 3102  
 Econ 3105  
 Econ 3701

International—4 credits (A-F required) selected from the following:

AgEc 3070, 5720, 5750, 5790  
 BGS 3004

BGS 3019 (depending on the topic offered, this course may fulfill the requirement; consult the Undergraduate Studies Office for further information)

Econ 3041, 3315, 5041, 5301 or 5331, 5307 or 5337, 5313, 5315, 5401, 5431

FSMg 3460, 3490, 3620, 3680, 3820

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

IntrR 5145, 5831

PolS 3477, 3810, 5889

PA 5820

Communications—12 credits (A-F or S-N)

Comp 3022—Critical Reading and Writing for Management (or Comp 1027 if taken fall 1989 or earlier)

Comp 3032—Pre-professional Writing for Business

One course from the following (Note: Students are encouraged to complete any introductory speech or rhetoric prerequisites for the following courses; the prerequisite work, however, is not required for the CSOM degree program):

Rhet 3254—Advanced Public Speaking

Rhet 3266—Discussion Methods

Spch 3111—Leadership Communication

Spch 3411—Small Group Communication Processes

Spch 3605—Public Speaking (instructor approval required)

Spch 5422—Interviewing and Communication

Th 3803—Topics: Platform Performance

## Additional General Management Program Requirements

Emphasis—20-24 credits in one of the following areas of emphasis (A-F required). *Note:* Students pursuing more than one area of emphasis should expect to spend more than two years completing their degrees in the Carlson School.

## Actuarial Science (20 credits)

Ins 5100—Risk Management and Insurance

Ins 5230/Math 5057—Actuarial Math I

Ins 5231/Math 5058—Actuarial Math II

Math 5473—Analysis of Numerical Methods

Math 5056—Theory of Interest

## Banking (20 credits)

BFin 3601—Bank Financial Management

BFin 3602—Regulation of Depository Institutions

BFin 3603—Selected Problems in Bank Management

Two of the following:

Acct 3101—Intermediate Financial Reporting

BFin 3100—Financial Management

BFin 3300—Investment Management and Financial Markets

## Finance (20 credits)

BFin 3100—Financial Management

BFin 3300—Investment Management and Financial Markets

Ins 5100—Risk Management and Insurance

Acct 3101—Intermediate Financial Reporting

Acct 3201—Intermediate Management Accounting

## Small Business Management and Entrepreneurship (20 credits)

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 3101—Intermediate Financial Reporting

BFin 3100—Financial Management

Mktg 3010—Buyer Behavior and Marketing Analysis

OMS 3041—Project Management

## Marketing (20 credits)

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 Carlson School of Management courses other than additional marketing courses.

## Logistics Management (24 credits)

LM 3000—Introduction to Logistics Management

LM 5010—Topics in Logistics Management

LM 5020—Advanced Logistics Management

LM 5030—Principles of Transportation

Two advanced courses (8 credits) selected from Finance, Marketing, Operations and Management Sciences, or Information and Decision Sciences.

## Degree Programs

### Operations Management (20 credits)

OMS 3056—Production and Inventory Management

OMS 3059—Quality Management

One of the following:

OMS 3041—Project Management

OMS 5155—Methods for Quality Improvement

Two additional upper division courses within the Carlson School.

The OMS Department recommends that you choose these from the following list: LM 3000, LM 5020, Mgmt 3002, Mgmt 3008, IDSc 5102, IDSc 5103, IR 3007, Acct 3101, Acct 3201.

### General Management Studies (20 credits)

At least two of the following:

BGS 3004      BLaw 3058

Ins 5100      OMS 5060

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

20 credits of upper division courses with no more than 12 credits in one designator area. Credits may be from other University units. Approval of the director of undergraduate studies is required. At least 12 of the 20 credits must be completed after approval.

*Note:* Not all of the courses for the emphasis areas will be available every year in Extension. Also, students wishing to have a second official emphasis may not use one course to count in both emphases.

### Additional Electives

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

### Additional Accounting Program Requirements

Core 24—credits (A-F required)

Acct 3101—Intermediate Financial Reporting

Acct 5102—Advanced Financial Reporting I

Acct 3201—Intermediate Management

Accounting

Acct 5125—Auditing Principles and Procedures

Acct 5135—Income Tax Accounting

BLaw 3058—Introduction to Law and the Law of Contracts and Sales Contracts

Accounting Electives—8 credits of Accounting electives (A-F required; Acct 3199 and 3299 do not apply.) Acct 5180 is recommended for students planning to take the CPA examination.

Additional Electives—Additional transferable electives (upper or lower division) from the Carlson 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.

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

1. Economics: Econ 3102 and one additional Economics course
2. Legal and Political Environment: BLaw 3078 and BLaw 3088
3. Information and Decision Sciences: IDSc 5102 and IDSc 5103

**Accounting Internships**—Two internship opportunities are available in the accounting program: Acct 3199—Internship in Public Accounting and Acct 3299—Internship in Management 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 Carlson School of Management offers centralized advising services 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. CLA pre-management majors may schedule appointments in B-18 Johnston Hall (612/624-9585) or in 290 Humphrey Center (612/

624-3313). Other students can call 612/624-3313 or go to the 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).

*Note:* The end of the first (second, etc.) week in day school is always a Friday during the regular school year (during Summer Sessions it may not necessarily be a Friday).

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 GPAs, F and N are assigned zero points.

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

1. Carlson School department 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-Carlson School students may register for S-N grading in any Carlson School course that offers S-N grading.

3. Carlson School students must earn a minimum of 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 1101 and 1102, Psy 1001, Acct 1050 or Acct 1024 and 1025, and IDSc 1010 and OMS 1020. High academic performance in these areas may enhance chances for admission to the school.

**Dean's List Policy**—The Dean's List is a method by which the Carlson 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 earn a 3.50 or greater GPA. Students may need to submit documentation of credits completed through extension or independent study to be considered.

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

The temporary grade of I (incomplete) indicates that the instructor did not have sufficient information immediately available to assign a permanent grade. An incomplete is awarded at the instructor's discretion. *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. Incompletes which are not changed to a permanent grade will lapse to the appropriate failing grade (F or N).

The symbol W (withdrawal) indicates official cancellation of a course after the second week and through the first six weeks of a quarter, regardless 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.

## Degree Programs

**GPA**—Your 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 Carlson School of Management (effective fall quarter 1982) 0 grade points.* Credits of S are not computed in the GPA.

The GPA 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 Carlson School of Management into an overall average even though they are not reflected in the GPA on your University transcript.

**Repeating Courses**—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. Academic standing 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 Carlson School and (2) all upper division courses offered by Carlson School departments, plus the first course of Econ 3101, 3102, 3105, 3701 if taken after admission to the Carlson School. 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 coursework 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 required to add

all courses after the first week of the quarter. After the second week, Scholastic Committee approval is required to add any class (regardless of instructor approval).

**Proficiency Examinations**—There are proficiency examinations available to students who have taken other upper-division coursework and feel they have sufficient background and knowledge in Marketing 3000 and Information and Decision Sciences 3030. (Please refer to the Accounting section for information regarding the Accounting 3101 Pre-Test). Contact the Undergraduate Studies Office, 290 Humphrey Center (612/624-3313) for complete details.

**Petitions**—Petition forms, available in the Undergraduate Studies Office, are required for the following: 1) to change from the B.S.B.-General Management to B.S.B.-Accounting Program or vice versa; 2) to evaluate whether certain courses completed at other institutions are equivalent to University of Minnesota courses for transfer purposes; and 3) to request exceptions to rules and requirements.

Petition forms 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 investigates charges of academic dishonesty referred to it by Carlson School of Management faculty 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.

Carlson School of Management faculty may act on cases involving Carlson School 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 nonacademic in nature or involving two or more colleges are referred to the Campus Committee on Student Behavior (612/624-6073).

**Attendance**—Each Carlson 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. Carlson School faculty are required to allow make-up of missed examinations or other required coursework 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.

## Degree Programs

2. Performance of military or civil duty (such as jury duty) that could not be scheduled at another time.
3. Having 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. It is recommended that you put your complaint in writing in preparation for this meeting. If this meeting fails to yield a satisfactory solution, the director will instruct you to submit a written explanation of the complaint to the school's Grievance Review Officer (GRO) who reviews the complaint and attempts to resolve it through informal mediation. If either party involved is dissatisfied with the GRO's recommendations, the issue may be appealed to the school's Grievance Committee. If necessary, the committee may conduct hearings on the matter and submit recommendations to the dean.

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**—The quarter before your intended quarter of graduation you must complete an Application for Degree in 150 Williamson Hall. Before you file the Application for Degree you should schedule an appointment to verify your degree progress with an adviser in the Undergraduate Studies Office. You must notify the Undergraduate Studies Office of any independent study classes in which you are 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 coursework. 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 coursework. Honors listed in the commencement program are not final until all grades have been received. To be eligible to graduate with honors, you must:

1. Complete a minimum of 44 upper division Carlson 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% percent of graduates based on all coursework completed while enrolled in the Carlson School of Management.

*With High Distinction*—Rank in the upper 3% percent of graduates based on all coursework completed while enrolled in the Carlson School of Management.

Graduation honors are calculated using the Carlson 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 Carlson School of Management spring commencement.

*Alpha Kappa Psi Scholarship Medal*—Awarded by Alpha Kappa Psi to the graduating senior in the school who has maintained the highest GPA in the upper division Carlson School of Management courses. In the case of a tie, the student who has completed the most upper division Carlson School 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 first tablet was presented by Alpha Kappa Psi in 1926. The Student Awards Committee, composed of representatives from the Business Board, recommends the recipients to the Coordinator of Student Development who, in consultation with the Director of Undergraduate Studies, makes the final decision.

*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 GPA.

*Beta Gamma Sigma*—This national honorary society is recognized by the American Assembly of Collegiate Schools of Business as the official honorary society in business. 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 multi-ethnic (Hispanic, Asian American, Native American, or African American) graduating business seniors who have contributed to the political, social, and academic development of multi-ethnic students, and who have worked in

developing and implementing minority programs within the Carlson School of Management.

*Delta Sigma Pi Scholarship Key*—Awarded by Delta Sigma Pi to the graduating senior in the school who has the highest GPA for work completed in the prescribed pre-management areas and in the Carlson School of Management. In the case of a tie, more than one key may be awarded.

*Phi Delta Junior Scholarship Award*—Awarded by Phi Delta to the junior in the school who has maintained the highest GPA 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 coursework.

*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 since 1929 to the undergraduate the dean deems to have performed the most distinctive service to the school. A plaque donated by the local chapter of Delta Sigma Pi makes possible a permanent record of this distinctive and highly valued award.

*Wall Street Journal Achievement Award*—Awarded annually to one graduating undergraduate and to a graduating graduate student. This award is sponsored by the *Wall Street Journal*. The finance faculty selects students who rank highest scholastically among those who have expressed a special interest in finance and have pursued advanced coursework in that area.

## Degree Programs

### Graduate Programs

The Carlson 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 (M.A.I.R.) and doctor of philosophy (Ph.D.). 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 Admission Test (GMAT), 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 GRE 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.

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

Two programs are offered for the M.B.A. The Minnesota M.B.A., consisting of 78 credits, is designed for students without prior education in business administra-

tion. The Advanced Placement M.B.A. option, consisting of 54 credits, is designed for students with an undergraduate degree in business administration. These programs are offered through both full-time day and part-time evening study.

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 580 or higher on the Test of English as a Foreign Language (TOEFL).

Selection for admission is based primarily on five factors: the applicant's aptitude for graduate work in business administration, the quality of the applicant's prior academic experience, a statement of the applicant's career goals, managerial or administrative work experience, and two letters of recommendation.

Full-time day students may enter the regular program in the fall; Advanced Placement students start in the summer. Part-time evening students in either program may begin fall or spring.

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

**The Minnesota M.B.A. Program** (two-year program) consists of a carefully structured group of core courses to be completed in the first year followed by coursework in an area of concentration, a sequence of four required courses, and three elective courses. 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—Fundamentals of Computer and Communication Skills

MBA 8010—Management and Organizational Behavior

MBA 8015—Human Resources Management  
 MBA 8020—Business Statistics: Sources, Presentation, an Analysis  
 MBA 8025—Decision Sciences and Information Systems  
 MBA 8030—Financial Accounting  
 MBA 8035—Managerial 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 four concentration and three elective courses

In the full-time day school program, these courses will take two years to complete. The core courses must be taken in sequence with at least three courses each quarter and must be completed in three quarters.

Part-time evening students must complete a minimum of 12 credits per year in a recommended sequence. In the evening 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 approximately ten quarters.

**The Advanced Placement M.B.A. Option** (one-year program) consists of an introductory quarter of coursework that complements the student's background followed by coursework in an area of concentration, a sequence of four required courses, and one elective course. The program requires completion of the following 14 courses:

Four assigned of the following eight:  
 MBA 8015—Human Resources Management  
 MBA 8020—Business Statistics  
 MBA 8025—Decision Sciences and Information Systems  
 MBA 8030—Financial Accounting  
 MBA 8035—Managerial Accounting  
 MBA 8040—Financial Management  
 MBA 8045—Marketing Management  
 MBA 8050—Operations Management  
 Plus:  
 MBA 8005—Fundamentals of Computer and Communications Skills

MBA 8010—Management and Organizational Behavior  
 MBA 8055—Business, Government, and Macroeconomics  
 MBA 8060—Strategy and Policy  
 MBA 8065—Field Project  
 Plus four concentration and one elective courses

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

Part-time evening students must complete a minimum of 12 credits per year in a recommended sequence. In the evening 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 approximately seven quarters.

**Additional Requirements**—Each day and part-time evening M.B.A. student must select a tentative area of concentration, at the time of application for admission. The available concentrations are:

Accounting  
 Finance  
 Strategic Management  
 Information and Decision Sciences (M.I.S.)  
 Logistics Management  
 Marketing  
 Operations and Management Sciences  
 Industrial Relations courses can be used as electives or to self-design an Industrial Relations emphasis.

**Graduation Requirements**—A minimum GPA of 2.80 must be earned in the M.B.A. coursework. 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 from the M.B.A. Program, Carlson School of Management, 295 Humphrey Center, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455 (612/624-0006).

## Degree Programs

**The Carlson Executive M.B.A. Program** (74 credits) is for individuals with ten or more years of full-time professional and/or managerial experience. This program meets on Friday and Saturday, every other week. For further information and applications, contact the Carlson Executive M.B.A. (CEMBA) Program, 295 Humphrey Center, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455 (612/624-1385).

### **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 to three 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 (612/624-7511).

**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. The common body of knowledge requirement can be met by completing introductory courses in the areas listed below. These courses may be taken on either an S-N or A-F basis and do not need to be taken for graduate credit.

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 46 graduate credits. A 3.00 GPA must be maintained in these credits. The following courses must be completed:

#### *Required Courses—General (16 credits)*

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 (14 credits)*

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 (16 credits 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*—Credits must be earned in courses 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 280 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 in 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 through 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, coursework 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 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. Additional coursework may be required by your adviser to ensure adequate preparation in the major field.

The major coursework consists of a minimum of 36 credits that include IR 8001, IR 8002, IR 8011, one course in each of at least three areas in industrial relations, and one additional industrial relations course.

A minimum of 8 credits are required in an approved field of study related to industrial relations. However, more than 8 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 coursework consists of a minimum of 52 credits that include IR 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8011, 8012, and four additional industrial relations courses.

## Degree Programs

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The remaining coursework consists of a minimum of 12 credits earned in 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 with 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 8011 and IR 8012 and are expected to require individual research roughly equivalent to 40 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 thesis or 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 credit has been received for the course listed after this symbol.

¶ 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 before registration.

Δ Registration Override Permit, completed and signed by the college office is required before registration.

, In prerequisite listings, comma means “and” (e.g., “prereq 1101, 1102 or 1103” means the prerequisites are 1101 and either 1102 or 1103).

## 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 increasingly recognize 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 (C.P.A.) 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 organization. Certified management accountant (C.M.A.) is the professional designation of those accountants who serve as internal financial advisers to management. The certified internal auditor (C.I.A.) serves management and corporate boards of directors by analyzing and reporting on the implementation and effects of management policies. The C.P.A. designation is issued by the state of Minnesota, the C.M.A. by the Institute of Management Accounting, and the C.I.A. 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 on pages 22-24 of this bulletin.

If you take your lower-division financial accounting course(s)—the course equivalent to Acct 1050—at a school other than the University of Minnesota and you plan to take Acct 3101, you will need to take a pre-test in order to determine your preparation for Acct 3101. Contact the Carlson School of Management Undergraduate Studies Office in 290 Humphrey Center for details.

**1050. INTRODUCTION TO FINANCIAL**

**REPORTING.** (4 cr; not offered S-N; prereq 40 cr)  
Introduction to basic concepts of measurement and valuation which underlie the development of financial reports for external users. Financial statement preparation, analysis of alternative valuation approaches, and interpretation of financial statement information are the focal points of the course.

**3001. INTRODUCTION TO MANAGEMENT ACCOUNTING.** (4 cr; not offered S-N; prereq 1025 or 1050)

A broad overview of management accounting as the main information collection and analysis technology in an organization. Topics include analysis of cost-volume-profit relationships, budgeting and analysis of variances from budgeted performance, and issues relating to decentralized organizational design.

**3101. INTERMEDIATE FINANCIAL REPORTING.** (4 cr; not offered S-N; prereq A or B in 1024/1025 or 1050)

Relationships between economic events and their representation in financial statements aimed at external users. Income determination, asset valuation, and capitalization of corporations are covered.

**3199. INTERNSHIP IN PUBLIC ACCOUNTING.**

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

**3201. INTERMEDIATE MANAGEMENT ACCOUNTING.** (4 cr; not offered S-N; prereq 3001)

Examines multiproduct, multiperiod decision contexts emphasizing net present value including statistical and other data collection and analysis techniques, analysis of performance evaluation stemming from development in the theory of contracting; and richer development of coordination problems in decentralized organizations.

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

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.

**5101. CORPORATE FINANCIAL REPORTING.** (4 cr; MBA students only; not offered S-N; prereq Acct 1050 or MBA 8030)

Preparation and interpretation of corporate financial reports. Covers income determinations, revenue recognition, income tax allocation, inventories, fixed assets, long-term debt, and leases.

**5102. ADVANCED FINANCIAL REPORTING I.** (4 cr; not offered S-N; prereq 3101 or 5101)

Development of an understanding of the relationship between complex events such as defined benefit pension plans, leases, and intercorporate investments and the reflection of these events in financial statements. Includes an introduction to business combinations and consolidated reporting.

**5125. AUDITING PRINCIPLES AND PROCES-**

**DURES.** (4 cr; not offered S-N; prereq 3102 or 5102)  
Auditor's role and function. Includes audit standards, ethics, procedures, legal responsibilities.

**5126. INTERNAL AUDITING.** (4 cr; not offered S-N; prereq 3102 or 5102, 3201 or 5201)

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

**5127. EDP AUDITING.** (4 cr; not offered S-N; 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; not offered S-N; prereq 1025 or 1050)

Introduction to principles of federal income taxation of various taxpaying entities.

**5160. FINANCIAL STATEMENT ANALYSIS.**

(4 cr; not offered S-N; prereq 1050 or MBA 8030)  
Interpretation and analysis of financial statements and schedules for investors and other users.

**5180. ADVANCED ACCOUNTING II.** (4 cr; not offered S-N; prereq 3102 or 5102)

Consolidated financial reporting with a particular focus on international business organizations. An introduction to reporting issues in government and not-for-profit entities is also presented.

**5201. ADVANCED MANAGEMENT ACCOUNTING.** (4 cr; not offered S-N; prereq 3201 or MBA 8035)

Design of internal control systems in decentralized organizations, focusing on strategic interactions between the internal control system, market share, and pricing strategies. Highlights performance evaluation, transfer pricing, and cost allocations.

**5230. CORPORATE TAXATION.** (4 cr; not offered S-N; prereq 5135; MBT program approval required)

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

**5236. TAXATION II.** (4 cr; not offered S-N; prereq 5135)

Income taxation of corporations. Partnerships. Tax research.

**5271. ACCOUNTING SYSTEMS.** (4 cr; not offered S-N; prereq 3102 or 5102, 3201 or 5201)

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

**5300. CURRENT TOPICS IN MANAGERIAL ACCOUNTING.** (4 cr [may be repeated for cr]; not offered S-N; prereq 3201 or 5201)

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

## Course Descriptions

**5310. CURRENT TOPICS IN FINANCIAL ACCOUNTING.** (4 cr [may be repeated for cr]; not offered S-N; prereq 3102 or 5102)  
Current topic(s) in financial accounting. Topics vary each quarter.

**5340. PARTNERSHIP TAXATION.** (4 cr; not offered S-N; prereq 5135; MBT program approval required)

Tax consequences of the formation, operation, and dissolution of a partnership.

**5390. CURRENT TOPICS IN TAXATION.** (Cr ar; not offered S-N; prereq 5135 or equiv; MBT program approval required)

Current tax legislation problems. Topics vary each quarter.

### For Graduate Students Only

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

**8050. PRINCIPLES OF ACCOUNTING I**

**8051. PRINCIPLES OF ACCOUNTING II**

**8128. ANALYTIC REVIEW AND AUDIT SAMPLING**

**8150. FINANCIAL ACCOUNTING ISSUES**

**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**

**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 study, college office approval)  
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 study; School of Management honors student or #, 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*

The Business, Government, and Society (BGS) area examines the complex relationships between business and its economic, social, political-legal, and technological environments. With close intellectual ties with strategy formulation and implementation, the BGS area focuses on interactions from both the perspectives of the practicing manager and public policy. The BGS area also emphasizes the international aspects of business management.

**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 society. Ethical and practical conflicts in the role of firm and manager examined in the context of the public policy process. Current social issues and their impact on business.

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

**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 each quarter depending on 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)

645 *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 lectures, readings, analysis of judicial decisions, and class discussions.

Business law is not offered as a separate field for specialization in the Carlson 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)

Origin of law, its place in and effect on society; history and development of law; system of courts; legal procedure. Law of contracts as the basic law affecting business transactions. Laws affecting the sale of goods contracts.

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

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 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.

**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**

## Finance (BFin)

735 *Management and Economics*

Finance principles 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 finance principles answers these questions. Even in a risky world, finance offers guidance on how

## Course Descriptions

accumulated wealth and savings from the past should be managed. Finance principles are crucial not only to the financial decision making of business enterprises, but also to government and private nonprofit organizations, and individuals and families.

Because 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. Because 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.

Finance courses are intended to acquaint students with the principles and techniques that guide 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 computer-based financial modeling. In BFin 3300, students learn the particular principles and techniques applicable to portfolio management or, in other words, to the management of accumulated wealth.

If you choose a finance emphasis, the course requirements are: BFin 3100—Financial Management, BFin 3300—Investment Management, Ins 5100—Risk Management and Insurance, Acct 3101—Intermediate Financial Reporting, and Acct 3201—Intermediate Management Accounting.

If you choose a banking emphasis, the finance course requirements are: BFin

3601—Bank Financial Management, BFin 3602—Regulation of Depository Institutions, BFin 3603—Selected Problems in Banking Management.

**3000. FINANCE FUNDAMENTALS.** (4 cr, \$MBA 8040; prereq Acct 1050 or 1025)

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)

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 emphasized.

**3300. INVESTMENT MANAGEMENT AND FINANCIAL MARKETS.** (4 cr, \$8300; prereq 3000)

Introduces decision procedures in a variety of financial markets. 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, Econ 1101 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.

**3601. BANK FINANCIAL MANAGEMENT.** (4 cr; prereq 3000 or #)

Comprehensive introduction to principles of bank financial management. Bank risk analysis, lending, investments, liquidity, asset-liability management. Lecture augmented with case discussions.

**3602. REGULATION OF DEPOSITORY INSTITUTIONS.** (4 cr; prereq 3000 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.

**3603. SELECTED PROBLEMS IN BANKING MANAGEMENT.** (4 cr; prereq 3000 or #)

Close-up view of bank management issues through lectures by guest speakers drawn from the banking community. Bank strategic planning, lending issues, innovative financial instruments, bank risk management, new bank powers.

**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 PORTFOLIO MANAGEMENT
- 8400. INTERNATIONAL FINANCIAL MANAGEMENT
- 8701. CORPORATE INVESTMENT AND FINANCIAL STRATEGY
- 8702. FINANCIAL MANAGEMENT OF DEPOSITORY INSTITUTIONS
- 8703. FUTURES MARKETS
- 8704. OPTIONS MARKETS
- 8705. INVESTMENT BANKING
- 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

**Foreign Studies Management (FSMg)**

290 Humphrey Center

Through foreign studies management courses, 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 Undergraduate Studies Office, 290 Humphrey Center (612/624-3313).

**3460. IES BUSINESS PROGRAM IN VIENNA, AUSTRIA. (Cr ar)**

Semester or year study in English at Vienna Center of Institute of European Studies. Courses on business (FSMg), economics, East-West studies, humanities, and required intensive German language instruction. Advanced students of German may take University of Vienna courses. Internships available.

**3490. IES BUSINESS PROGRAM AT THE UNIVERSITY OF SINGAPORE. (Cr ar)**

Academic year or fall semester study in regular courses at the National University of Singapore under auspices of Institute of European Studies. Instruction in English. Courses on business (FSMg), economics, Asian studies, and Chinese, Japanese, and/or Malay language.

**3620. CIEE JAPANESE BUSINESS AND SOCIETY PROGRAM. (Cr ar)**

Summer or semester of study near Tokyo under supervision of an on-site CIEE director, with instruction in English by Japanese faculty. Courses on Japanese business (FSMg), society, economy, politics, language, and extensive field study. Students may live with Japanese families.

**3680. CIEE BUSINESS/SOCIETY PROGRAM, SEVILLE, SPAIN. (Cr ar)**

Semester study in off-campus facilities of University of Seville's business college. Courses taught in Spanish by Seville faculty. Courses on Spanish business (FSMg), economy, society, language, plus field visits. Prerequisites include 2½ years of Spanish and some business/economics. Internships available on a competitive basis.

**3820. DENMARK'S INTERNATIONAL STUDY PROGRAM IN COPENHAGEN. (Cr ar)**

Semester or year study in Copenhagen. Courses on international business (FSMg), economics, liberal arts, and language. Courses taught in English by Danish faculty, mostly from the University of Copenhagen. Students encouraged to study Danish language and live with Danish families.

**Industrial Relations (IR)**

537 Management and Economics

Industrial relations is an interdisciplinary field that uses 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.

## Course Descriptions

Professional training in industrial relations is offered in graduate programs leading to M.A. and Ph.D. degrees in industrial relations.

No undergraduate degree major or specialization is offered. However, various industrial relations courses may be taken as electives 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 each quarter depending on instructor.

### **3002. PERSONNEL AND INDUSTRIAL RELATIONS.** (4 cr, §8002; prereq Econ 1101, Econ 1102, Psy 1001)

Introduction to the human resource management function in organizations. Labor market, recruitment, selection, training, compensation, labor relations. Topics include the changing nature of the world of work, emerging legal issues, discrimination in pay and employment, 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)

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; planning for change. Lecture presentations, discussion, case studies, and simulation exercises.

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

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.

### **5006. LABOR POLICY.** (3 cr, §PA 5430)

Analysis of public policies regarding employment, unions, and labor markets. Public programs affecting wages, unemployment, training, worker mobility, security, and quality of work life. Policy implications of changing nature of work.

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

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. INTRODUCTION TO QUANTITATIVE METHODS AND TECHNIQUES FOR INDUSTRIAL RELATIONS**

#### **8002. INTRODUCTION TO INDUSTRIAL RELATIONS**

#### **8003. STAFFING, TRAINING, AND DEVELOPMENT**

#### **8004. ORGANIZATIONAL THEORY AND ANALYSIS**

#### **8005. EMPLOYEE COMPENSATION AND REWARD**

#### **8006. LABOR MARKET ANALYSIS**

#### **8007. COLLECTIVE BARGAINING IN THE PUBLIC AND PRIVATE SECTORS**

#### **8011. INTERMEDIATE QUANTITATIVE METHODS AND TECHNIQUES FOR INDUSTRIAL RELATIONS**

#### **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**

## Information and Decision Sciences (IDSc)

*395 Humphrey Center*

Continued advances in computing and communication capabilities, as well as rapid improvements in general purpose and special applications software, combine to create a quickly changing information environment for management. The increased ability to acquire, store, retrieve, manipulate, and present data to support an organization's decision making and operations is profoundly changing the concept of management.

Students learn the intellectual frameworks and methodologies for data acquisition and analysis, as well as how to design, implement, and manage computer-based information decision systems. These topics are covered in two undergraduate courses: IDSc 1010—Fundamentals of Information Development and Use and IDSc 3030—Information Systems and Information Management.

Students wanting additional coursework in information systems should contact the Undergraduate Studies Office for recommendations and information regarding the Proposal for the Self-Designed Program.

**1010. FUNDAMENTALS OF INFORMATION DEVELOPMENT AND USE.** (4 cr, §MSci 1010; prereq 30 cr, pre-mgmt student, Math 1111 or ¶Math 1111)

Meeting information needs of managers. Sources of data, data collection methods, data organization and presentation. Descriptive statistical analysis methods. Lab instruction to develop skill in word processing and spreadsheet analysis on personal computers.

**1060. BUSINESS RESEARCH.** (4 cr, §DSci 1060; prereq OMS 1020) (Offered through CEE only) Design and conduct of business research from a management perspective, emphasizing competencies associated with business research practice within functional areas. Research aims, expectations, strategies, methods, and managerial requirements.

**1071. ELECTRONIC SPREADSHEETS.** (1 cr, §MIS 1071; prereq 1070 or proficiency exam based on equiv exper) (Offered through CEE only) Focuses on concepts and uses of electronic spreadsheets, benefits and limitations, using examples applicable to accounting, finance, management, and marketing. Lotus 123 used to illustrate spreadsheet practice.

**1072. DATABASE MANAGEMENT.** (1 cr, §MIS 1072; prereq 1070 or proficiency exam based on equiv exper) (Offered through CEE only) Database software package used to illustrate concepts and practice involved in managing data on computer systems, especially microcomputers.

**1073. BUSINESS GRAPHICS SOFTWARE.** (1 cr, §MIS 1073; prereq 1070 or proficiency exam based on equiv exper) (Offered through CEE only) Overview of graphics software commonly used in business, such as desktop publishing, presentation graphics, business graphs and charts, and CAD. Both IBM MS-DOS and Macintosh-based systems will be used to develop technical skills and an understanding of graphic design considerations and problems. Attention also given to microcomputer systems, including printers, appropriate to graphics applications.

# Course Descriptions

**1075. ELEMENTARY COBOL.** (2 cr, §MIS 1075 or §MIS 3098; prereq 1070 or proficiency exam based on equivalent experience). (Offered through CEE only) Introduction to programming in COBOL. In self-paced units, students complete structured set of COBOL programs and tests. No regular lectures.

**1076. INTERMEDIATE COBOL.** (2 cr, §MIS 1076 or §MIS 5098; prereq 1075 or proficiency exam based on equiv exper) (Offered through CEE only) Advanced features of COBOL. Students complete structured set of COBOL programs and tests on or before a scheduled date on a self-paced basis. No regular lectures.

**3030. INFORMATION SYSTEMS AND INFORMATION MANAGEMENT.** (4 cr, §MIS 3300 or MScI 3030; prereq OMS 1020; Mgmt 3001 recommended) Defining information requirements. Developing information system 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.

**3131. DATABASE MANAGEMENT SYSTEMS.** (4 cr, §MIS 3131; prereq 5103 or MIS 5103, at least 90 cr completed or in progress) (Offered through CEE only) Concepts and methods in the definition, creation, and management of databases for management information systems. Objectives of database management, design and evaluation of database management systems, theory of files, data structures, storage structures, interrogation, responsibilities of the database administrator, database integrity, security, and privacy.

**3132. DATA COMMUNICATIONS SYSTEMS.** (4 cr, §MIS 3132; prereq 5102 or MIS 5102, at least 90 cr completed or in progress) (Offered through CEE only) 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, §MIS 3151; prereq 5102 or MIS 5102, Mgmt 3001, at least 90 cr completed or in progress) (Offered through CEE only) Technical tools and management concepts required for administering the information systems function. Structure and management of computer operations; measurement of operating performance; budgeting and planning; project management techniques for systems and programming; personnel selection, training, and compensation; role of the information processing manager.

**3990. TOPICS IN INFORMATION AND DECISION SCIENCES.** (Cr ar; prereq #) Discussion and analysis of current topics and developments in information and decision sciences.

**5102. INTRODUCTION TO INFORMATION SYSTEMS ANALYSIS.** (4 cr, §MIS 5102; prereq 3030 or 3001 or 3002 or MIS 3001 or MIS 3002) Developing an information system application. Standards, tools, and techniques required for analyzing information requirements and logical information systems design. Processing alternatives and alternative approaches to systems design.

**5103. DATABASE DESIGN, MANIPULATION, AND MANAGEMENT.** (4 cr, §MIS 5103; prereq IDS 3030 or 3001 or 3002) Use of computer technology and software to represent, manipulate, and manage data. For users of databases and database management system (DBMS). Facilities for *ad hoc* interactive use and system development. Principles and techniques of logical database design. Introduction to physical representation and storage of data in a computer system. DBMS tools to manage data and high-level languages to retrieve and manipulate data.

**5410. DECISION SUPPORT SYSTEMS.** (4 cr; prereq 3030 or MBA 8025 or equiv or #) Overview of technical and organizational aspects of decision support systems, including individual and group decision support systems, expert systems, and executive information systems. Management of DSS within the end-user computing environment. Conceptual foundations of DSS, DSS software reviews, and case examples.

**5420. MANAGERIAL DECISION ANALYSIS.** (4 cr; prereq 1010 or MBA 8025 or equiv or #) Prescriptive implications of research in individual decision making for managerial problems. Problem structuring, elicitation of values/utilities for one or more decision variable(s), probability assessment. Focus on prescriptive tools and guidelines that can improve decision quality. Application of computer software for decision analysis.

**5998. SPECIAL RESEARCH TOPICS.** (Cr ar; prereq #)

## For Graduate Students Only

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

**8101. THE MANAGEMENT OF INFORMATION TECHNOLOGY IN ORGANIZATIONS**

**8102. MANAGEMENT OF THE INFORMATION SERVICES FUNCTION**

**8103. INFORMATION SYSTEMS ANALYSIS, DESIGN, AND DEVELOPMENT**

**8104. SOFTWARE DESIGN AND PROGRAMMING**

**8430. ADVANCED DATABASE DESIGN AND ADMINISTRATION**

- 8440. ADVANCED INFORMATION SYSTEMS DEVELOPMENT
- 8450. TELECOMMUNICATIONS
- 8460. ADVANCED TOPICS IN MANAGEMENT OF INFORMATION SYSTEMS
- 8470. PROBLEM FORMULATION AND DECISION MAKING
- 8480. EXPERT SYSTEMS
- 8501. PHILOSOPHY OF SCIENCE AND SURVEY OF RESEARCH METHODOLOGIES
- 8502. ORGANIZATION THEORY AND RESEARCH
- 8503. COGNITIVE SCIENCE RESEARCH AND THEORY
- 8601. SYSTEM DEVELOPMENT SEMINAR
- 8602. MANAGEMENT OF INFORMATION SYSTEMS SEMINAR
- 8603. ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEMS
- 8604. SEMINAR ON EXPERIMENTAL RESEARCH IN INFORMATION SYSTEMS
- 8699. SEMINAR IN MIS TOPICS
- 8701. DECISION ANALYSIS
- 8702. BEHAVIORAL DECISION THEORY
- 8703. MANAGERIAL PROBLEM SOLVING
- 8704. KNOWLEDGE ENGINEERING
- 8799. SEMINAR IN DECISION SCIENCES TOPICS
- 8990. READINGS IN INFORMATION AND DECISION SCIENCES
- 8995. GRADUATE RESEARCH IN INFORMATION AND DECISION SCIENCES

## **Logistics Management (LM)**

*1235 Management and Economics*

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 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.

Increasing 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 logistics management 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 logistics management 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.

## Course Descriptions

**3000. INTRODUCTION TO LOGISTICS MANAGEMENT.** (4 cr, [replaces Tran 3054] §Tran 3064, §Tran 8264; prereq Econ 1101 or equiv) Managing the flow of an organization's physical products (physical supply and distribution) and the linkages between the process of controlling the physical flow of products and the organization's major functions, i.e., finance, marketing, and operations management. Logistics topics and analysis of the impact of logistics topics on other functional areas. Simulation exercises.

**5010. TOPICS IN LOGISTICS MANAGEMENT.** (4 cr [may be repeated for cr]; prereq 3000 or 5020 or 5030, #) Specialized topics in logistics management; topics change each quarter. Simulation exercises.

**5020. ADVANCED LOGISTICS MANAGEMENT.** (4 cr, §3020/8020, §Tran 3064, §Tran 8264; prereq 3000 or 5030 or equiv) Managing the flow of an organization's physical products (physical supply and distribution). Transportation alternatives, customer service, inventory management, location decisions, warehousing, logistics information systems, international logistics, logistics system design. Case problems. Usually includes logistics simulation exercise.

**5030. PRINCIPLES OF TRANSPORTATION.** (4 cr, §3010/8010, §Tran 3054, §Tran 8154; prereq Econ 1101 or equiv) Organizational, economic, and service aspects of the U.S. transportation system, including rail, highway, water, pipeline, and air transportation. Decision making in transportation companies. Government promotional and regulatory policy regarding transportation.

### For Graduate Students Only

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

**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. Management functions are analyzed and examined using case examples of organizational situations and research evidence and theory to develop insights,

skill in knowledge applications, and the professional attitudes that 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 are already acquainted with the various business areas.

The undergraduate emphasis in small business management and entrepreneurship includes the following requirements: Mgmt 3002, Mgmt 3008, and Mgmt 5101; and two of the following: Acct 3101, BFin 3100, Mktg 3010, OMS 3041.

**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 use of human resources. Various laboratory procedures used to study these concepts, methods, and skills and furnish practice in applying them to management problems.

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

Identifying and analyzing strategic issues and problems, establishing corporate or divisional goals, and designing realistic programs of action. Case analysis and discussion. Students meet in small groups to prepare cases and presentations. These concepts and 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; structuring a new venture, buying into an existing enterprise, owning an enterprise vs. 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, #)

Specialized topics in management; topics vary each quarter.

**5175. BUSINESS FORECASTING.** (4 cr; prereq 3001 or 8001 or MBA 8010, DSci 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**

**Marketing (Mktg)**

*1235 Management and Economics*

Marketing is concerned with the flow of goods and services through the economy and the distribution of both industrial and consumer goods. Because 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 and implement marketing policies by developing and executing marketing strategies and programs. Among the major marketing decision areas are product development and product line expansion, 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.

## Course Descriptions

Marketing offers a wide range of employment opportunities in sales, advertising, retailing, sales promotion, brand management, international marketing, and marketing research. If you are interested in a career in marketing research or brand 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 other Carlson School of Management department.

You may also complete electives in fields outside of the Carlson School 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. Please see an adviser in the Undergraduate Studies Office, 290 Humphrey Center, for assistance in choosing these elective credits.

**3000. PRINCIPLES OF MARKETING.** (4 cr, \$8000; prereq Econ 1101 or equiv)  
Basic policy and strategy issues in marketing and the environmental factors affecting these issues. Legal, behavioral, ethical, competitive, economic, and technological factors affecting product, pricing, promotion, and marketing-channel decisions.

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

**3010. BUYER BEHAVIOR AND MARKETING ANALYSIS.** (4 cr; prereq 3000, OMS 1020 or equiv)  
Identifying and applying secondary and primary data to solve marketing problems. Consideration of consumer and organizational buyer behavior. 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)

Developing 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 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)

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, #)

Selected topics and problems of current interest considered in depth. Class discussion and course projects. Topics vary each quarter depending on instructor.

### For Graduate Students Only

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

**8051. MARKETING RESEARCH**

**8053. MARKETING RESEARCH: ADVANCED ANALYSIS AND FIELDWORK**

**8055. INTRODUCTION TO CONSUMER BEHAVIOR**

**8060. MARKETING SYSTEMS**

**8072. INTERNATIONAL MARKETING**

**8074. PRODUCT AND PRICE POLICY**

**8076. SALES MANAGEMENT**

**8078. MARKETING COMMUNICATIONS**

**8080. INDUSTRIAL MARKETING**

**8084. BUSINESS PLANS FOR NEW PRODUCTS**

**8088. STRATEGIC MARKETING**

**8090. MARKETING TOPICS**

**8501. ENTREPRENEURSHIP**

**8800. SEMINAR: MARKETING THEORY**

**8810. SEMINAR: CONSUMER BEHAVIOR**

**8990. READINGS IN MARKETING**

**8995. GRADUATE RESEARCH IN MARKETING**

## Operations and Management Science (OMS)

*332 Management and Economics*

The Operations and Management Science Department deals with the production of goods and services and the associated methods used to analyze and improve operations. Operations, which exist in all organizations, create value by converting economic inputs into products or services. Managing operations is becoming increasingly important in society as global competition increases, productivity lags, and resources become more scarce. The operations function in the firm manages the majority of the physical and human resources and is therefore a critical organizational function. Operations functions exist in both manufacturing and service firms.

The OMS department focuses on decision-making activities in operations and supporting analytical methods. Course topics include strategic management of operations, capacity planning, quality improvement, process design, inventory control, project management, statistical analysis, and analytical methods.

Operations careers are available to students in all types of organizations—public and private. Typical operations positions include inventory control, operations scheduling, quality manager, project manager, operations manager, and operations analyst. The operations job market is very solid for graduates. For example, there is a 20% unmet

demand, according to the Minnesota Department of Labor Statistics, and diversity of industry and opportunity is substantial. Substantial opportunities exist in service industries as well as manufacturing.

Because operations is basic to all enterprises and interfaces with all other business functions, students expecting to pursue any type of business career will benefit from OMS courses as electives. These courses are also a good base for students planning to pursue further graduate education.

**1020. DATA ANALYSIS AND STATISTICAL INFERENCE FOR MANAGERS.** (4 cr, §DSci 1050, §MSci 1020; prereq IDSc 1010, pre-mgmt student, Math 1111; Math 1131 recommended) Introduction to probabilistic and statistical techniques for decision making, including data analysis, sampling, estimation, and hypothesis testing and regression. User computer software and computer-stored data in statistical analysis. Introduction to modeling and linear programming.

**3000. INTRODUCTION TO OPERATIONS MANAGEMENT.** (4 cr, §OM 3000) Concepts and principles related to the management of operations functions, including operations strategy, process design, just-in-time, forecasting, inventory management, principles of scheduling, and quality improvement. Examples from service industries, nonprofit organizations, and manufacturing. Relationships between operations and environment taught from a managerial perspective.

**3041. PROJECT MANAGEMENT.** (4 cr, §OM 3041; prereq OMS 3000 or #) Principles and methods useful for planning and controlling a project, including project plan development, resource planning and scheduling, and project monitoring and control. Selected computerized packages, including PERT and CPM, and examples of different types of projects from manufacturing and service industries.

**3056. PRODUCTION AND INVENTORY MANAGEMENT.** (4 cr, §OM 3056; prereq OMS 3000 or #) Inventory planning, production planning, Materials Requirements Planning (MRP), just-in-time concepts, finite loading systems, distribution systems, forecasting, master scheduling, capacity management, production activity control and purchasing. Taught from a planning and control systems point of view with managerial orientation.

## Course Descriptions

**3059. QUALITY MANAGEMENT.** (4 cr, §OM 3059; prereq OMS 3000 or #)

Key issues of quality management, including planning and organizing for quality improvement, cost of quality, customer and vendor relation, process control, quality control, management of the improvement process. Introduces concepts and principles relevant to both service and manufacturing environments. Lecture and case instruction.

**3850. CURRENT TOPICS IN OPERATIONS AND MANAGEMENT SCIENCE.** (4 cr, [may be repeated for cr]; prereq 3000, 1020 or #)

Current topics in operations management and management science. Topics vary each quarter.

**5100. MANUFACTURING FOR COMPETITIVE ADVANTAGE.** (4 cr; prereq IEOR 3000 or OMS 3000 or MBA 8050 or instructor consent)

Overview of the manufacturing function, particularly as manufacturing can contribute to the competitiveness of the firm. Intended primarily for students in engineering disciplines. Manufacturing strategy, technology issues, quality issues, and integration of the work force into the manufacturing effort.

**5150. MANAGERIAL STATISTICS.** (4 cr, §DSci 5050; prereq OMS 1020 or MBA 8020 or #)

Simple linear and multiple regression analysis; residual analysis, model building, and the use of transformations; time series forecasting, exponential smoothing and autoregressive models; the use of factorial and response surface designs in product development and testing; business applications.

**5155. METHODS FOR QUALITY AND PRODUCTIVITY IMPROVEMENT.** (4 cr, §DSci 5055; prereq OMS 1020 or MBA 8020 or #)

Statistical methods for on-line and off-line quality control. Quality management philosophy, Pareto analysis, control charts, experimental design, sampling inspection. Applications to administrative, service, and production operations.

**5160. DETERMINISTIC MODELING AND OPTIMIZATION.** (4 cr, §DSci 5060; prereq IDSc 3030 or MBA 8025 or #)

Survey of deterministic optimization problems, techniques, and applications. Classical optimization, linear programming, transportation and assignment problems, integer programming, networks, PERT/CPM, dynamic programming. Applications in pricing, vehicle routing, capital budgeting, portfolio selection, production scheduling, and marketing strategy. Computer packages for solving optimization problems.

**5170. STOCHASTIC MODELING AND SIMULATION.** (4 cr, §DSci 5070; prereq OMS 1020 or MBA 8020 or #)

Survey of probabilistic modeling, with emphasis on computer simulation of complex systems. Event-scheduling simulation models, process-interaction simulations using a high-level simulation language, structural and quantitative simulation modeling, overview of simulation methodological issues, animation. Use of computers and various languages to carry out actual simulation studies. Business applications.

### For Graduate Students Only

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

**8041. PROJECT MANAGEMENT**

**8051. MANAGEMENT AND SERVICE OPERATIONS**

**8056. PRODUCTION AND INVENTORY MANAGEMENT**

**8057. PROCESS, TECHNOLOGY AND INNOVATION IN THE OPERATIONS FUNCTION**

**8058. OPERATIONS STRATEGY**

**8059. QUALITY MANAGEMENT**

**8600. MATHEMATICAL PROGRAMMING**

**8605. SIMULATION MODELING**

**8610. DECISION ANALYSIS**

**8650. REGRESSION ANALYSIS**

**8651. EXPERIMENTAL DESIGN**

**8652. MULTIVARIATE METHODS**

**8660. LINEAR PROGRAMMING**

**8661. NONLINEAR PROGRAMMING**

**8662. COMBINATORIAL OPTIMIZATION**

**8670. STOCHASTIC MODELING AND ANALYSIS**

**8671. SIMULATION ANALYSIS**

**8700. MODELS FOR PRODUCTION AND INVENTORY MANAGEMENT**

**8705. PRINCIPLES FOR THE DESIGN AND IMPROVEMENT OF OPERATIONS**

**8730. RESEARCH ON SCHEDULING**

**8735. OPERATIONS FORECASTING AND INVENTORY RESEARCH**

**8740. RESEARCH IN OPERATIONS STRATEGY AND TECHNOLOGY MANAGEMENT**

**8745. RESEARCH ON QUALITY MANAGEMENT**

## 8799. SEMINAR OPERATIONS AND MANAGEMENT SCIENCE

## 8850. TOPICS IN OPERATIONS AND MANAGEMENT SCIENCE

## 8990. READINGS IN OPERATIONS AND MANAGEMENT SCIENCE

## 8995. GRADUATE RESEARCH IN OPERATIONS AND MANAGEMENT SCIENCE

## Risk Management and Insurance (Ins)

537 *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 evidenced 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 school no longer offers an area of emphasis in risk management and insurance. However, students may prepare for careers in this area by taking Ins 5100 and Ins 5210 as electives under other areas. Finance majors are required to take Ins 5100.

If you choose an actuarial science emphasis, you must take the following courses: Ins 5100—Risk Management and Insurance, Ins 5230/Math 5051—Actuarial Mathematics I, Ins 5231/Math 5058—Actuarial Mathematics II, Math 5473—Analysis of Numerical Methods, and Math 5056—Theory of Interest.

### 5100. RISK MANAGEMENT AND INSURANCE. (4 cr, §8100)

How to recognize and evaluate the property, liability, and personnel risks facing a business, nonprofit organization, government unit, or 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.

### 5210. 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 employee benefits and public programs, with emphasis on public programs such as Old Age, Survivors, Disability and Health Insurance (Social Security), workers' compensation insurance, and unemployment insurance.

### 5230. ACTUARIAL MATHEMATICS I. (4 cr, §Math 5057; prereq Math 1221, Math 1241 or #, one probability or statistics course)

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

### 5231. ACTUARIAL MATHEMATICS II. (4 cr, §Math 5058; prereq 5230 or #)

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

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## Course Descriptions

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### **For Graduate Students Only**

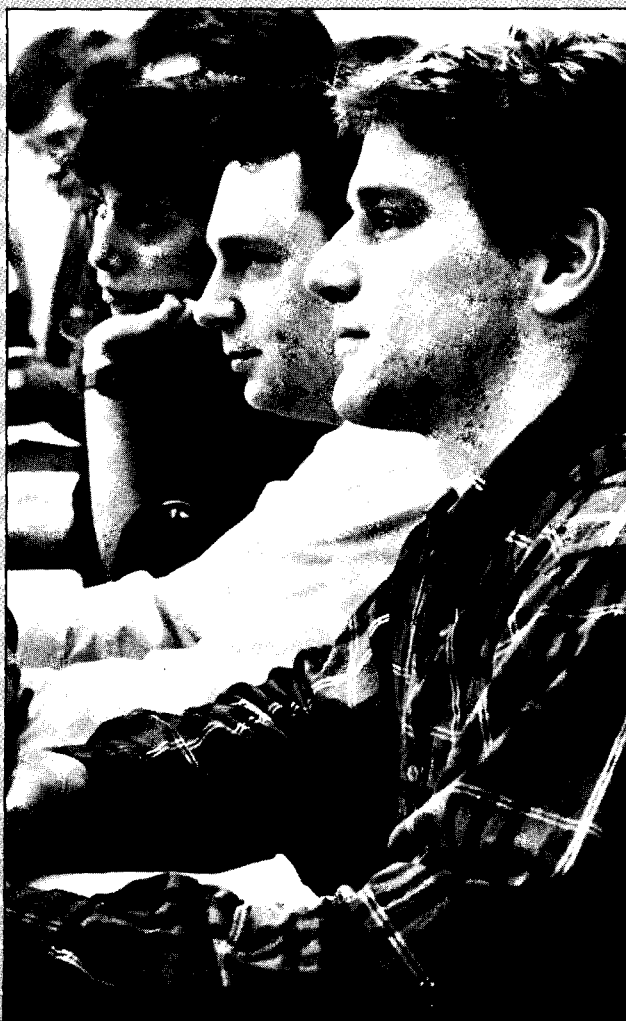
(For descriptions, see the *Graduate School Bulletin*)

**8990. READINGS IN RISK MANAGEMENT AND INSURANCE**

**8995. GRADUATE RESEARCH IN RISK MANAGEMENT AND INSURANCE**

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

# Administration and Faculty



# Administration and Faculty

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Indiana University; C.P.A.  
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University of Wisconsin-Madison; C.P.A.  
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Fred Jacobs, Ph.D.,  
University of Wisconsin, Madison; C.P.A.

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Terry Tranter, Ph.D.,  
University of Washington; C.P.A.

**Department of Business Law**

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University of Michigan; Finance  
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Harvard University; Finance  
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Massachusetts Institute of Technology; Finance  
Timothy J. Nantell, Ph.D.,  
University of Wisconsin; Finance

*Associate Professor*

James M. Gahlon, Ph.D.,  
University of Illinois; Finance  
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University of Chicago; Finance  
Ravi Jagannathan, Ph.D.,  
Carnegie-Mellon University; Financial Economics  
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University of Michigan; Finance  
Michael J. Stutzer, Ph.D.,  
University of Minnesota; Economics

*Assistant Professor*

Chun Chang, Ph.D.,  
Northwestern University; Finance  
Ellie Glennon Harris, Ph.D.,  
Northwestern University  
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University of Minnesota; Economics

*Adjunct Professor*

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

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Steven Dym, Ph.D.,  
Harvard University; Economics  
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Economics

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Evelyn Carroll, Ph.D.,  
Michigan State University; Finance  
John W. Reik, J.D.,  
University of Minnesota; Law

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Michael G. Sher, M.S.  
University of Minnesota; Consumption Economics

**Department of Industrial Relations**

John A. Fossum, 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  
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Dennis A. Ahlburg, Ph.D.,  
University of Pennsylvania; Labor Economics and Industrial Organization  
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Michigan State University; Industrial/Organizational Psychology  
Cheri Ostroff, Ph.D.,  
Michigan State University; Psychology  
Judi M. Parks, Ph.D.,  
University of Iowa, Organizational Behavior and Theory

**Graduate Faculty From Outside the College**

*Professor*

Hyman Berman, Ph.D.,  
Columbia University; Labor History  
John P. Campbell, Ph.D.,  
University of Minnesota; Psychology

# Administration and Faculty

René V. Dawis, Ph.D.,  
University of Minnesota; Psychology  
Marvin D. Dunnette, Ph.D.,  
University of Minnesota; Psychology  
Morris M. Kleiner, Ph.D.,  
University of Illinois; Economics  
Jeylan T. Mortimer, Ph.D.,  
University of Michigan; Sociology  
Norman J. Simler, Ph.D.,  
University of Minnesota; Economics

## Department of Information and Decision Sciences

Carl R. Adams, Chair

### *Professor*

Carl R. Adams, Ph.D.,  
Purdue University; Management Science  
Rajiv Banker, Ph.D. (joint appointment with  
Accounting),  
Harvard University  
Norman L. Chervany, Ph.D.,  
Indiana University; Mathematics  
Gordon B. Davis, Ph.D.,  
Stanford University; Business Administration  
Gary W. Dickson, D.B.A.,  
University of Washington; Business  
Administration  
Thomas R. Hoffmann, Ph.D.,  
University of Wisconsin; Industrial Engineering  
and Mathematics  
Paul E. Johnson, Ph.D.,  
Johns Hopkins University; Psychology  
James C. Wetherbe, D.B.A.,  
Texas Tech University; Management Information  
Systems

### *Associate Professor*

P. George Benson, Ph.D. (joint appointment with  
Operations and Management Sciences),  
University of Florida; Management Science  
George D'Elia, Ph.D.,  
Rutgers University; Library Information Systems  
Gerardine DeSanctis, Ph.D.,  
Texas Tech University; Management Information  
Systems  
Gordon C. Everest, Ph.D.,  
University of Pennsylvania; Business and  
Applied Economics  
Salvatore March, Ph.D.,  
Cornell University; Operations Research and  
Information Processing  
J. David Naumann, Ph.D.,  
University of Minnesota; Business  
Administration

### *Assistant Professor*

Cynthia M. Beath, Ph.D.,  
UCLA; Management  
Shawn P. Curley, Ph.D.,  
University of Michigan; Psychology  
Dale L. Goodhue, Ph.D.,  
M.I.T.; Management Information Systems

Gerald F. Smith, Ph.D.,  
University of Pennsylvania; Decision Sciences  
Detmar W. Straub, D.B.A.,  
Indiana University; Management Information  
Systems

### *Lecturer*

Douglas Lund, M.B.A.,  
University of Minnesota  
Robert VanCleave, M.B.A.,  
University of Minnesota  
Les Wanninger, Ph.D.,  
Northwestern University

## Department of Marketing and Logistics Management

Michael J. Houston, Chair

### *Professor*

Frederick J. Beier, Ph.D.,  
Ohio State University; Logistics Management  
Richard N. Cardozo, Ph.D.,  
University of Minnesota; Marketing  
Donald V. Harper, Ph.D.,  
University of Illinois; Logistics Management  
Michael J. Houston, Ph.D.,  
University of Illinois; Marketing  
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University of Iowa; Marketing  
Ivan Ross, Ph.D.,  
Purdue University; Marketing  
William Rudelius, Ph.D.,  
University of Pennsylvania; Marketing  
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Carnegie-Mellon University; Marketing  
Orville C. Walker, Ph.D.,  
University of Wisconsin; Marketing

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Terry Childers, Ph.D.,  
University of Wisconsin; Marketing  
Robert A. Hansen, Ph.D.,  
University of Wisconsin; Marketing  
Deborah Roedder John, Ph.D.,  
Northwestern University; Marketing  
George John, Ph.D.,  
Northwestern University; Marketing  
Barbara J. Loken, Ph.D.,  
University of Illinois; Marketing  
Robert W. Ruekert, Ph.D.,  
University of Wisconsin; Marketing

### *Assistant Professor*

Akshay Rao, Ph.D.,  
Virginia Polytechnic Institute; Marketing

### *Lecturer*

Lillian P. Werner, M.S.,  
New York University; Marketing

**Department of Operations and Management Science**

Roger G. Schroeder, Chair

*Professor*

\*Roger G. Schroeder, Ph.D.,  
Northwestern University; Operations Research

*Associate Professor*

John C. Anderson, Ph.D.,  
University of Minnesota; Management Sciences

P. George Benson, Ph.D.,  
University of Florida; Management Sciences

Arthur V. Hill, Ph.D.,  
Purdue University; Operations Management and Simulation

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University of Wisconsin; Industrial Engineering

Christopher J. Nachtsheim, Ph.D.,  
University of Minnesota; Operations Research

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Inder S. Khosla, Ph.D.,  
University of Rochester; Operations Management

Robert Schmidt, Ph.D.,  
University of Virginia; Operations Management

**Department of Strategic Management and Organization**

W. Bruce Erickson, Chair

*Professor*

Norman E. Bowie, Ph.D.,  
University of Rochester, New York; Philosophy  
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Raymond E. Willis, Ph.D.,  
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Stuart Albert, Ph.D.,  
Ohio State University; Management

Srinivasan Balakrishnan, Ph.D.,  
University of Michigan; Strategic Management

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

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

P. Christopher Earley, Ph.D.,  
University of Illinois; Industrial/Organizational Psychology

Laurent L. Jacque, Ph.D.,  
The Wharton School; University of Pennsylvania  
Business, Government, and Society

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

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Columbia University; Business, Government, and Society

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Harvard University; Business, Government, and Society

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

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

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University of California, Irvine; Management

*Assistant Professor*

Thomas H. Brush, Ph.D.,  
University of Michigan; Corporate Strategy

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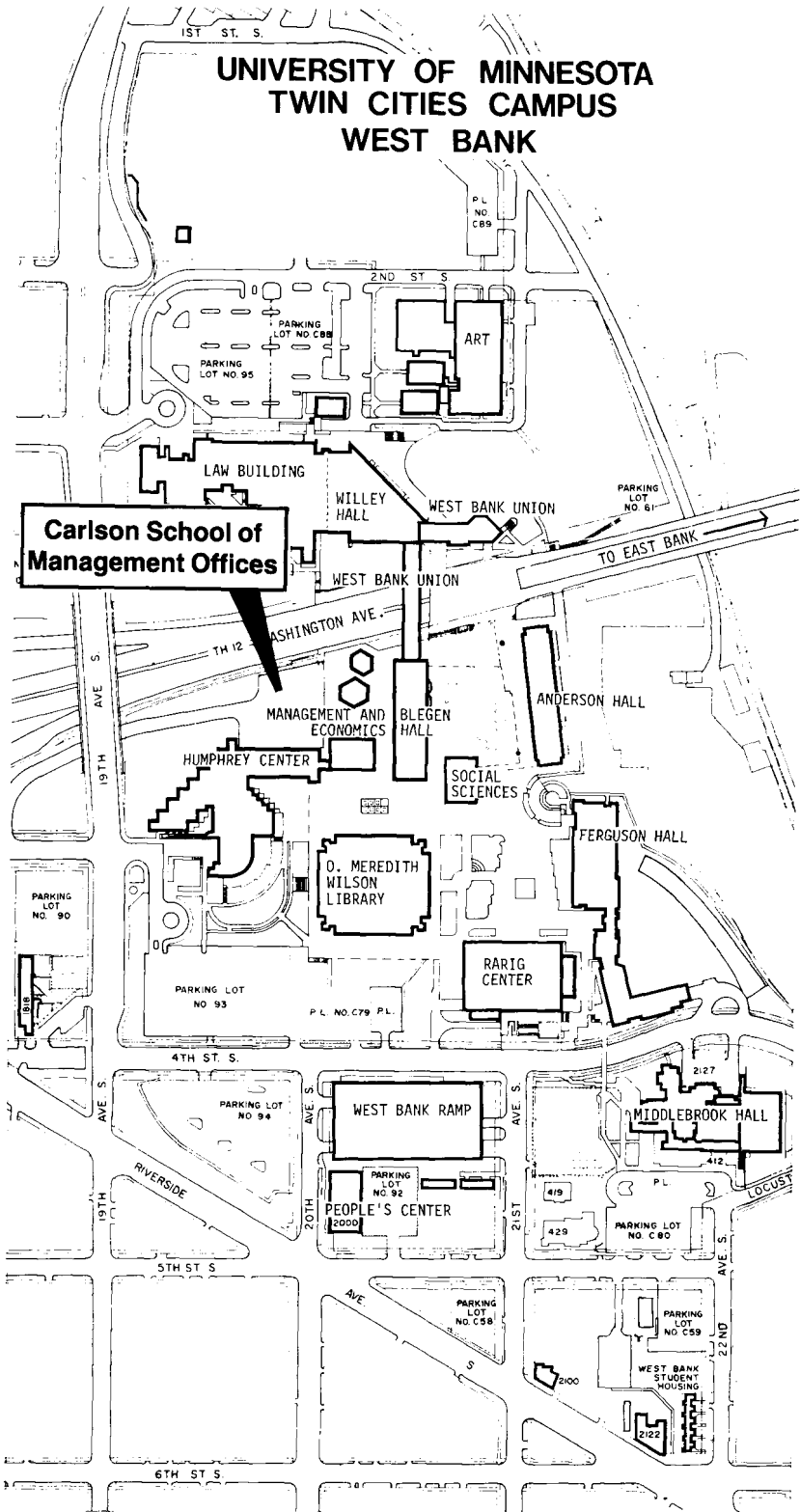
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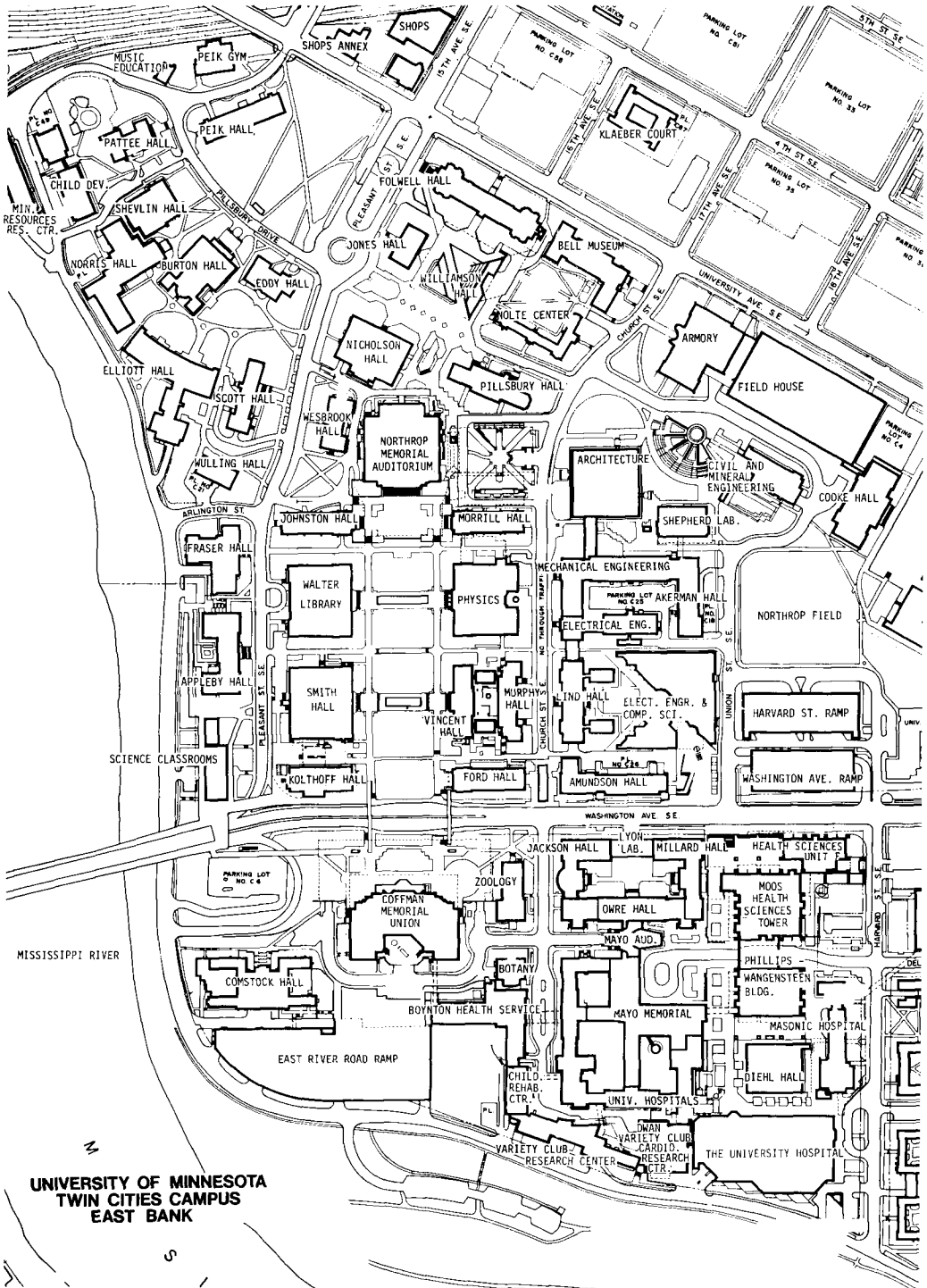
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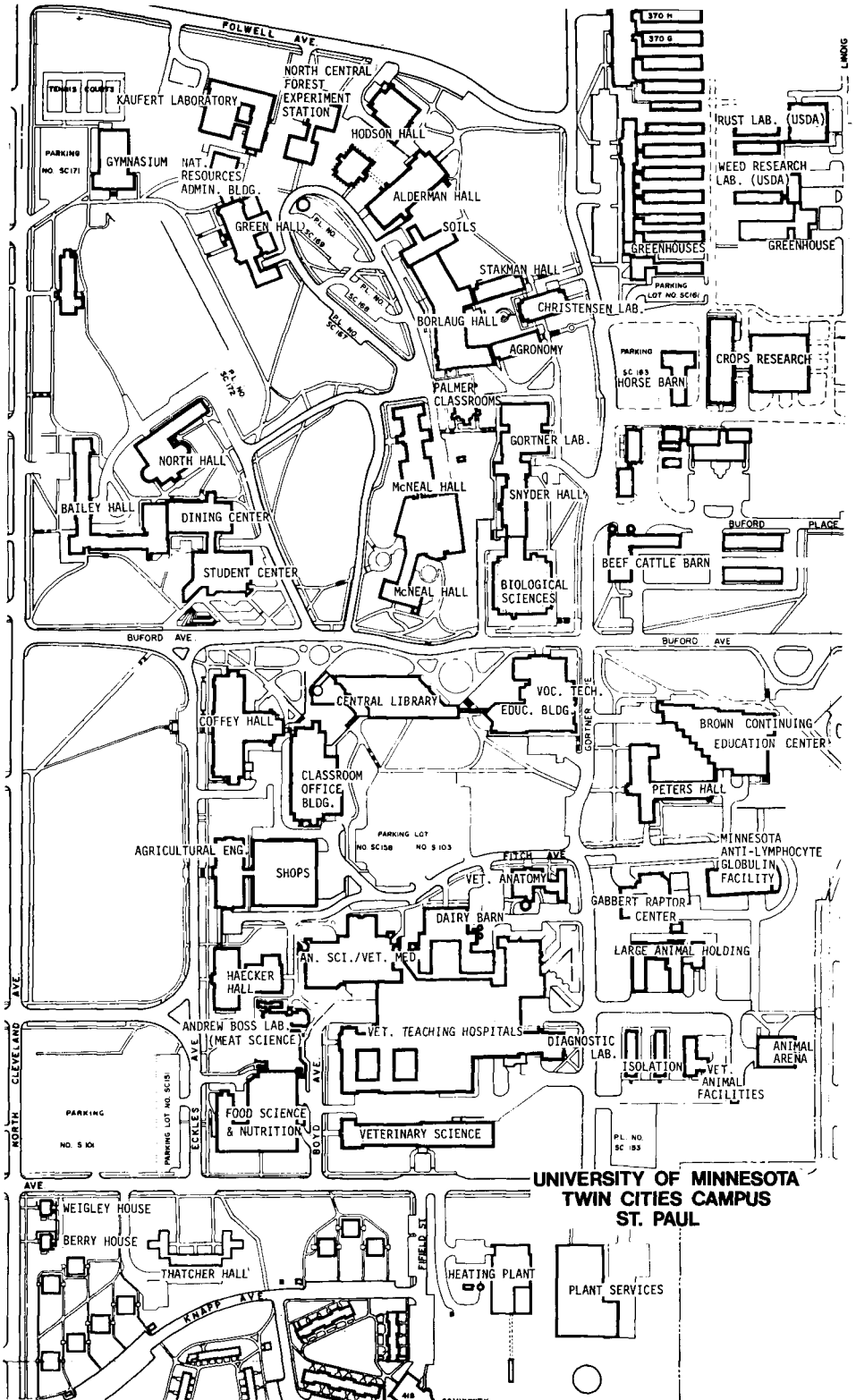
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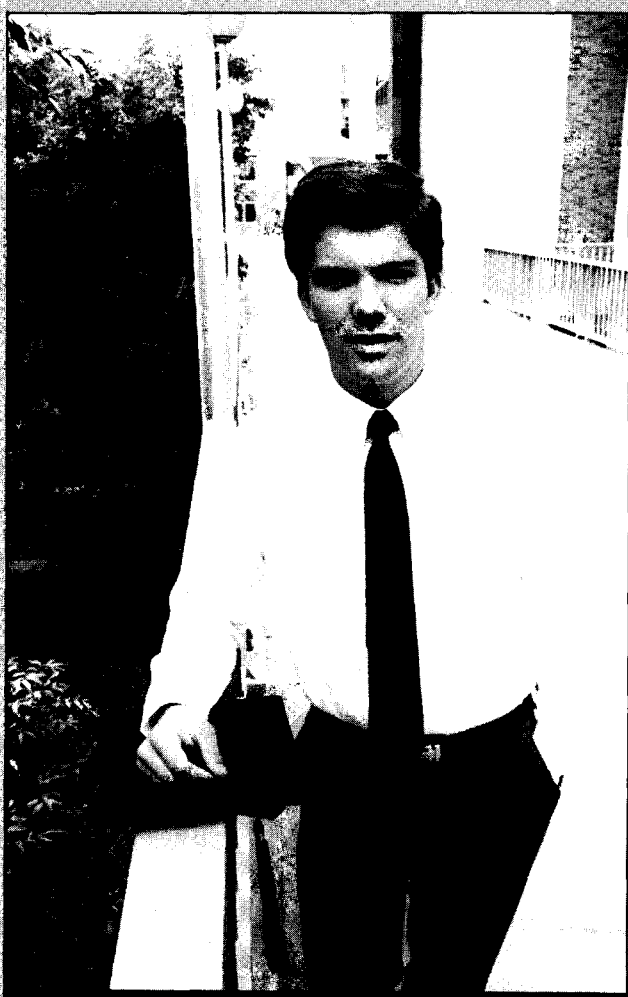




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# Index



# Index

- Academic Misconduct 27
- Accounting 36
- Accounting Program (B.S.B.) 22-24
- Accounting Research Center 8
- Administration 54
- Admission Requirements 16
- Adult Special 21
- Advising 24
- Attendance 27
- Awards and Honors 29
- Baccalaureate Programs 16
- Bachelor of Science in
  - Accounting Program 24
  - Business Degree (B.S.B.) 22
  - General Management Program 23
- Board of Overseers 57
- Business Board 11
- Business, Government, and Society 38
- Business Law 39
- Business Reference Service 10
- Cancel-Adding 26
- Career Planning and Placement 9
- Change of Degree Program 20
- Class Attendance 27
- Computer and Technical Services 10
- Continuing Education and Extension (CEE) 21
- Core Group 22
- Correspondence Courses 22
- Course Descriptions 36
- CPA Examination 36
- Credits
  - Foreign Study 21
  - Residence 22
  - Transfer 20
- Degree Programs 22
- Degree Requirements 22
- Doctor of Philosophy
  - Business Administration 33
  - Industrial Relations 34
- Employer Education Service 7
- Equal Opportunity 3
- Evening Classes 21
- Examination, Makeup 27
- Executive Development Center 7
- Expenses 13
- Extension 21
- Faculty 54
- Fellowships 14
- Finance 39
- Financial Aid 13
- Foreign Study Credits 21
- Foreign Studies Management 41
- General Management Program (B.S.B.) 23
- Grade Point Average 26
- Grades, Transfer 26
- Grading Options 25
- Graduate Fellowships and Scholarships 14
- Graduate Programs 30
- Graduation
  - Application for 28
  - With Honors 28
  - Requirements 22
- Grievance 28
- History 6
- Honors and Awards 29
- Honors, Graduation with 28
- Honors Program 10
- Incompletes 25
- Independent Study 22
- Industrial Relations 41
- Industrial Relations Center 8
- Industrial Relations Reference Room 10
- Information and Decision Sciences 43
- Institute for Financial Studies, The 8
- Insurance (see Risk Management and Insurance)
- Internship Program—Accounting 24
- Labor Education Service 7
- Library 10
- Loans 13
- Logistics Management 45
- Logistics Management Research Center 8
- Lower Division Requirements 17
- Makeup Examinations 27
- Management 46
- Management Information Systems Research Center 8
- Marketing 47
- Master of Arts in Industrial Relations 33
- Master of Business Administration 30
- Master of Business Taxation 32
- Operations and Management Sciences 49
- Operations Management Center 9
- Organizations, Student 11
- Overseers, Board of 57
- Petitions 27
- Ph.D. Programs 33
- Placement, Career Planning 9
- Preferred Admission Program 16
- Pre-management Requirements 17
- Probation 26
- Professional Education Program 7
- Proficiency Examination 27
- Records, Access to 3
- Repeating Courses 26
- Research Centers 8
- Residence Credits 22
- Risk Management and Insurance 51
- Satisfactory Progress 26
- Scholarships 13
- Second Language Requirement 17
- Service Center 9
- Special Examination 27
- Special Programs 10
- Statistics (OMS) 49
- Strategic Management 46
- Strategic Management Research Center 9
- Student Organizations 11
- Study Abroad 10
- Suspension 26
- Symbols, Course 36
- Transcript Symbols 25
- Transfer
  - Credits 20
  - Grades 26
- Transportation (see Logistics Management)
- Undergraduate Programs (see Baccalaureate Programs)

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