Twin Cities Campus
Accountancy M.Acc
Accounting
Curtis L. Carlson School of Management

Link to a list of faculty for this program.

Contact Information:
Master Programs in Accounting, 3-110 Carlson School of Management, 321 19th Avenue S, Minneapolis, MN 55455 (612-624-7511; fax: 612-626-7795)
Email: macct@umn.edu
Website: http://www.carlsonschool.umn.edu/master-accountancy

- Program Type: Master's
- Requirements for this program are current for Fall 2016
- Length of program in credits: 30 to 48
- This program does not require summer semesters for timely completion.
- Degree: Master of Accountancy

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The Master's of Accountancy (MAcc) program offers a 30-credit track for students with a degree in accounting or finance. It provides these students with an opportunity to enhance their management skills with graduate-level courses in accounting, finance, taxation, information systems, and supply chain and operations. Completing the MAcc program enables them to meet the 150 semester hour requirement for CPA certification. In addition, it provides finance majors the opportunity to take accounting courses, required to sit for the CPA examination, that were not taken for their bachelor's degree.

The MAcc program also offers a 48-credit track to students with a bachelor's degree in an academic discipline other than accounting. The eight required core courses include the necessary accounting courses needed to sit for the CPA examination.

Elective courses in the MAcc program cover a broad range of topics in accounting, taxation, finance, supply chain and operations, and information systems. The curriculum has been designed and developed by Carlson School of Management faculty with extensive input and ongoing consultation with executives from the professional community. This ensures relevant, practical, and challenging courses that enhance the students' professional development.

Students may choose to complete the program on a full-time or part-time basis. The majority of the courses are offered in the evenings (Monday-Thursday, 5:45-9:05 p.m.).

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
Other requirements to be completed before admission:
All applicants must have a bachelor's degree from an accredited college or university and a cumulative undergraduate grade point average of 3.0 (on a 4.0 scale) or higher.

Applicants with a bachelor's degree in accounting (or equivalent coursework) or finance are generally eligible for the 30-credit MAcc program.

Students who have a bachelor's degree in an academic discipline other than accounting or finance are eligible to apply for the MAcc program and take the 48-credit track. The following courses (or equivalents) are prerequisites to the MAcc courses: IDSC 3001 Information Systems, FINA 3001 Finance Fundamentals, ACCT 2050 Financial Accounting, ACCT 3001 Management Accounting, ACCT 5101 Intermediate Accounting I. They can be taken after being admitted to the MAcc program but do not apply to the 48-credit requirement. Coursework will be evaluated after applying.

Special Application Requirements:
Summer/Fall application deadline: February 1 priority, followed by rolling admission until program is full.
Spring application deadline: October 1 priority, followed by rolling admission until program is full.
Applicants must submit all application materials through the University's admission system. Application materials include:

Three letters of recommendation from persons qualified to evaluate most recent work and potential for graduate study.

A GMAT score that is not more than five years old is required. The GMAT score must be sent directly from GMAT to be considered official. Admitted Carlson School of Management undergraduate students will have the GMAT requirement waived.

For international students, the results from one of the following English language tests are required: TOEFL, IELTS, MELAB. TOEFL scores must be received directly from TOEFL. IELTS and MELAB scores must be received directly from the testing center.

For additional application details, review the M.Acc. admissions webpages.

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

**Program Requirements**

**Plan C:** Plan C requires 30 to 48 major credits and up to null credits outside the major. There is no final exam.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.8 is required for students to remain in good standing.

The MAcc program requires either 30 or 48 credits, depending on bachelor's degree. The 30-credit program includes 12 required credits from three core courses. The 48-credit program includes 30 required credits from eight core courses. Both programs also require 18 elective credits from a designated pool of courses in accounting, taxation, finance, information and decision sciences, and supply chain and operations.

Students in the 30-credit MAcc program are required to have completed the following courses (or equivalent courses) in their undergraduate program or in their MAcc program. If required to take any of these courses in the MAcc program, the number of elective credits is reduced by that number of credits.

ACCT 5102 Intermediate Accounting II, 4 cr
ACCT 5125W Auditing, 4 cr
ACCT 5135 Fundamentals of Federal Income Tax, 4 cr
BLAW 3058/6158 The Law of Contracts and Agency, 4 cr

**Required Courses for 30-Credit MAcc Program**

Students with an undergraduate degree in accounting or finance will complete the 30-credit MAcc program and take three required core courses (12 credits) in addition to 18 credits of electives.

ACCT 6601 - Internal Control (4.0 cr)
ACCT 6602 - Securities and Exchange Commission (SEC) and Standard Setting (4.0 cr)
IDSC 6003 - Accounting and Information Systems (4.0 cr)

**Required Courses for 48-Credit MAcc Program**

Students with an undergraduate degree in a field other than accounting or finance will complete the 48-credit MAcc program and take eight required core courses (30 credits) in addition to 18 credits of electives.

ACCT 5102 - Intermediate Accounting II (4.0 cr)
ACCT 5125W - Auditing Principles and Procedures [WI] (4.0 cr)
ACCT 5135 - Fundamentals of Federal Income Tax (4.0 cr)
ACCT 5201 - Intermediate Management Accounting (2.0 cr)
BLAW 6158 - The Law of Contracts and Agency (4.0 cr)
ACCT 6601 - Internal Control (4.0 cr)
ACCT 6602 - Securities and Exchange Commission (SEC) and Standard Setting (4.0 cr)
IDSC 6003 - Accounting and Information Systems (4.0 cr)

**Elective Courses (18 credits)**

Take 18 - 20 credit(s) from the following:
- ACCT 5126 - Internal Auditing (2.0 cr)
- ACCT 5180 - Consolidations and Advanced Reporting (2.0 cr)
• ACCT 5201 - Intermediate Management Accounting (2.0 cr)
• ACCT 5236 - Introduction to Taxation of Business (2.0 cr)
• ACCT 5310 - International Accounting (2.0 cr)
• ACCT 5420 - MAcc directed study (1.0 - 4.0 cr)
• ACCT 6603 - Advanced Auditing (4.0 cr)
• ACCT 6604 - Advanced Management Accounting (2.0 cr)
• ACCT 6605 - Negotiations for Financial Executives (2.0 cr)
• FINA 6121 - Debt Markets, Interest Rates, and Hedging (2.0 cr)
• FINA 6241 - Corporate Finance Analysis and Decisions (4.0 cr)
• FINA 6242 - Advanced Corporate Finance Analysis and Decisions (4.0 cr)
• FINA 6322 - Financial Modeling (2.0 cr)
• FINA 6341 - World Economy (4.0 cr)
• FINA 6522 - Introduction to Derivatives and Financial Risk Management (2.0 cr)
• FINA 6621 - International Financial Management (2.0 cr)
• IDSC 6423 - Enterprise Systems (2.0 cr)
• IDSC 6471 - Knowledge Management (2.0 cr)
• MBA 6120 - Data Analysis and Statistics for Managers (3.0 cr)
• MBT 5200 - Tax Accounting Methods and Periods (4.0 cr)
• MBT 5220 - Tax Research, Communication, and Practice (4.0 cr)
• MBT 5230 - Corporate Taxation I (2.0 cr)
• MBT 5346 - ASC 740 Computations and Analysis (2.0 cr)
• MBT 5370 - Taxation of Property Transactions (2.0 cr)
• MBT 5382 - Transfer Pricing (2.0 cr)
• SCO 6041 - Project Management (2.0 cr)
• SCO 6056 - Managing Supply Chain Operations (4.0 cr)
Twin Cities Campus
Business Administration M.B.A.
Graduate Business Career Center
Curtis L. Carlson School of Management

Link to a list of faculty for this program.

Contact Information:
M.B.A. Programs Office, 1-110 Carlson School of Management, 321 19th Avenue South, Minneapolis, MN 55455 (612-625-5555; fax: 612-626-7582)
Email: mba@umn.edu
Website: http://www.carlsonschool.umn.edu/MBA

- Program Type: Master's
- Requirements for this program are current for Fall 2016
- Length of program in credits: 48 to 65
- This program does not require summer semesters for timely completion.
- Degree: Master of Business Administration

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

At the Carlson School, students tailor their education to meet their career objectives. Supported by outstanding faculty, cutting-edge coursework, and extensive networking opportunities, students compile an impressive record of professional achievements even before they graduate.

The Carlson School offers several pathways to the master of business administration degree: the full-time MBA, the part-time MBA, the industry MBA, and the executive MBA. Dual degree programs are only available through the full-time MBA program. Please visit our website at http://www.carlsonschool.umn.edu/mba/ for more information.

The Carlson School's China executive MBA program is offered through a partnership between the Carlson School and Lingnan (University) College of Sun Yat-sen University. The Carlson School's Vienna executive MBA program is offered jointly with the Vienna University of Economics and Business (WU). For additional information on these two programs, please contact cgi@umn.edu.

Accreditation
This program is accredited by AACSB International.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)
- completely online (all program coursework can be completed online)
- primarily online (at least 80% of the instruction for the program is online with short, intensive periods of face-to-face coursework)
- partially online (between 50% to 80% of instruction is online)

Prerequisites for Admission
Applicants must have a bachelor's degree from an accredited college or university.

Other requirements to be completed before admission:
Please review the Admissions Checklist online for detailed admissions requirements.

Special Application Requirements:
Applicants must have an acceptable score on the GMAT or GRE. In addition, international students must have an acceptable score on the Test of English as a Foreign Language (TOEFL), the International Language Testing System (IELTS), or the Pearson Test of English Academic (PTE).

Candidates will be required to apply and be admitted to both degree programs separately.

Applicants must submit their test score(s) from the following:
- GMAT
- Pearson Test of English Academic (PTE Academic)
International applicants must submit score(s) from one of the following tests:

- TOEFL
- IELTS

Key to test abbreviations (GMAT, TOEFL, IELTS).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements

Plan C: Plan C requires 48 to 65 major credits and up to null credits outside the major. There is no final exam.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.80 is required for students to remain in good standing.

Joint- or Dual-degree Coursework: The Full-Time MBA program offers the following dual degree program options:
- MS-Applied Economics/MBA: up to 18 credits in common allowed;
- MS-Business Analytics/MBA: up to 22 credits in common allowed;
- MA-HRIR/MBA: up to 24 credits in common allowed;
- MHA/MBA: up to 24 credits in common allowed;
- MPP/MBA: up to 24 credits in common allowed;
- JD/MBA: up to 24 credits in common allowed;
- MD/MBA: up to 24 credits in common allowed;
- PharmD/MBA: up to 24 credits in common allowed.

For full complete Dual Degree information, visit http://carlsonschool.umn.edu/degrees/master-business-administration/dual-degrees.

Student may take a total of 24 credits in common among the academic programs.

Program Sub-plans

Students are required to complete one of the following sub-plans.

Students may not complete the program with more than one sub-plan.

Full-Time Master of Business Administration

The Carlson full-time MBA program offers an intense curriculum that gives students a distinct edge. They start by taking coordinated core courses that provide a sound foundation in essential managerial disciplines, while at the same time, customizing their education to fit their career paths. The full-time program involves a rigorous time commitment. While the amount of time spent on campus varies from 30-50 hours per week, all students are expected to complete the degree in two years with a minimum of 65 credits.

FT MBA Core Courses

- MBA 6030 - Financial Accounting (3.0 cr)
- MBA 6120 - Data Analysis and Statistics for Managers (3.0 cr)
- MBA 6140 - Managerial Economics (0.0 - 2.0 cr)
- MBA 6210 - Marketing Management (3.0 cr)
- MBA 6220 - Operations Management (3.0 cr)
- MBA 6230 - Financial Management (3.0 cr)
- MBA 6240 - Competing in a Data-Driven Digital Age (2.0 cr)
- MBA 6300 - Strategic Management (3.0 cr)
- MBA 6315 - The Ethical Environment of Business (2.0 cr)

Leadership Requirement

The total leadership credit requirement is 4 credits. MBA 6108 is completed throughout the first year for 1 credit, and MBA 6112 is completed throughout the second year for 1 credit. MBA 6110 is completed in spring of the first year for a total of 2 credits.

Take exactly 4 credit(s) from the following:

- MBA 6108 - Leading Self (0.0 - 1.0 cr)
- MBA 6110 - Leading Others (2.0 cr)
- MBA 6112 - Leading Organizations (0.0 - 0.5 cr)

Enterprise Requirement

All full-time MBA students are required to participate in one Enterprise program throughout their time in the program.

Take exactly 9 credit(s) from the following:

- MBA 6501 - Carlson Funds Enterprise: Growth (2.0 - 4.0 cr)
- MBA 6502 - Carlson Funds Enterprise: Fixed Income (2.0 - 4.0 cr)
- MBA 6503 - Carlson Ventures Enterprise (2.0 - 4.0 cr)
- MBA 6504 - Carlson Consulting Enterprise (2.0 - 4.0 cr)
- MBA 6505 - Carlson Brand Enterprise (2.0 - 4.0 cr)
International Experience

All full-time MBA students must participate in an international study abroad program or complete a course on campus that has been designated to meet this requirement. A minimum of 4 credits is required to fulfill this requirement.

Take 1 or more course(s) totaling 4 or more credit(s) from the following:

- IBUS 5140 - Vienna Summer Program in International Business (Graduate) (0.0 - 18.0 cr)
- IBUS 5150 - India Seminar: Managing in a Global Environment (4.0 cr)
- IBUS 5260 - Integrated Corporate Reporting and the Triple Bottom Line (4.0 cr)
- IBUS 5300 - International Business: Graduate Exchange BLOCK (0.0 - 18.0 cr)
- IBUS 5301 - Graduate Exchange in International Business - BLOCK (0.0 - 18.0 cr)
- IBUS 5302 - International Business: Graduate Exchange (0.0 - 18.0 cr)
- IBUS 5303 - International Business: Graduate Exchange (0.0 - 18.0 cr)
- IBUS 5304 - International Business: Graduate Exchange (0.0 - 18.0 cr)
- IBUS 5305 - International Business: Graduate Exchange (0.0 - 18.0 cr)
- IBUS 5306 - International Business: Graduate Exchange (0.0 - 18.0 cr)
- IBUS 5307 - International Business: Graduate Exchange (0.0 - 18.0 cr)
- IBUS 5308 - International Business: Graduate Exchange (0.0 - 18.0 cr)
- IBUS 5309 - International Business: Graduate Exchange (0.0 - 18.0 cr)
- IBUS 5310 - International Business: Graduate Exchange (0.0 - 18.0 cr)
- IBUS 5400 - Global Business Practicum (4.0 cr)
- IBUS 5605 - Shanghai Summer Program in International Business (Graduate) (0.0 - 18.0 cr)
- IBUS 6401 - Marketing in the Mayhem: Why Chile Thrives and How Argentina Tries (4.0 cr)
- IBUS 6402 - Economic Diversification: Moving Beyond Oil in UAE and Oman (4.0 cr)
- IBUS 6897 - MILI Global Valuation Lab (4.0 cr)
- IDSC 6465 - Global Sourcing of IT and IT Enabled Services (4.0 cr)
- MGMT 6305 - The International Environment of Business (4.0 cr)
- MKTG 6072 - International Marketing (4.0 cr)
- SCO 6081 - Global Operations Strategy (4.0 cr)
- MILI 6997 - MILI Global Valuation Lab (4.0 cr)

Full-Time MBA Electives

Electives not on this list must be approved by MBA Programs Office in order to count for degree requirements. Take 24 or more credit(s) from the following:

- ACCT 5180 - Consolidations and Advanced Reporting (2.0 cr)
- ACCT 6100 - Financial Statement Analysis (4.0 cr)
- ACCT 6160 [Inactive](2.0 cr)
- BLAW 6158 - The Law of Contracts and Agency (4.0 cr)
- ENTR 6020 - Business Formation (4.0 cr)
- ENTR 6021 - Preparing and Implementing the Business Plan (2.0 cr)
- ENTR 6036 - Managing the Growing Business (2.0 cr)
- ENTR 6037 - Corporate Venturing (2.0 cr)
- ENTR 6041 - Initiating New Product Design and Business Development (2.0 - 4.0 cr)
- ENTR 6042 - Implementing New Product Design and Business Development (4.0 cr)
- ENTR 6090 - Topics in Entrepreneurship (2.0 - 4.0 cr)
- FINA 6121 - Debt Markets, Interest Rates, and Hedging (2.0 cr)
- FINA 6122 - Financial Management of Depository Institutions (2.0 cr)
- FINA 6222 - Mergers and Acquisitions (2.0 cr)
- FINA 6241 - Corporate Finance Analysis and Decisions (4.0 cr)
- FINA 6242 - Advanced Corporate Finance Analysis and Decisions (4.0 cr)
- FINA 6321 - Portfolio Analysis and Management (2.0 cr)
- FINA 6322 - Financial Modeling (2.0 cr)
- FINA 6323 - Advanced Financial Modeling (2.0 cr)
- FINA 6324 - Securitization Markets (2.0 cr)
- FINA 6325 - Behavioral Finance (2.0 cr)
- FINA 6341 - World Economy (4.0 cr)
- FINA 6422 - Mergers and Acquisitions (2.0 - 4.0 cr)
- FINA 6522 - Introduction to Derivatives and Financial Risk Management (2.0 cr)
- FINA 6529 - Advanced Topics in Fixed Income and Derivatives (2.0 cr)
- FINA 6621 - International Financial Management (2.0 cr)
- IDSC 6050 - Information Technologies and Solutions (2.0 cr)
- IDSC 6423 - Enterprise Systems (2.0 cr)
- IDSC 6435 - Business Process Excellence (2.0 cr)
- IDSC 6442 - E-Sourcing and E-Auctions (2.0 cr)
- IDSC 6444 - Business Intelligence (2.0 cr)
- IDSC 6446 - Advanced Business Intelligence (2.0 cr)
- IDSC 6455 - Web 2.0: The Business of Social Media (2.0 cr)
- IDSC 6465 - Global Sourcing of IT and IT Enabled Services (4.0 cr)
- IDSC 6471 - Knowledge Management (2.0 cr)
- IDSC 6481 - Managerial Decision Making (2.0 cr)
• MBA 6235 - Managerial Accounting (2.0 cr)
• MBA 6990 - MBA Topics (2.0 cr)
• MCOM 5500 - Enhancing Your Executive Image in Business Communications (2.0 cr)
• MCOM 5510 - Persuasive Writing in Business (2.0 cr)
• MCOM 5530 - Strategies and Skills for Managerial Presentations (2.0 cr)
• MGMT 6031 - Industry Analysis and Competitive Strategy (4.0 cr)
• MGMT 6032 - Strategic Alliances (2.0 cr)
• MGMT 6033 - Managing the Strategy Process (2.0 cr)
• MGMT 6034 - Strategic Leadership (2.0 cr)
• MGMT 6035 - Complex and Cross-Cultural Negotiations (2.0 cr)
• MGMT 6040 - International Strategy and Organization (2.0 cr)
• MGMT 6050 - Management of Innovation and Change (2.0 cr)
• MGMT 6084 - Management of Groups (2.0 cr)
• MGMT 6085 - Corporate Strategy (4.0 cr)
• MGMT 6086 - Topics in Management (2.0 - 4.0 cr)
• MGMT 6305 - The International Environment of Business (4.0 cr)
• MGMT 6402 - Integrative Leadership: From Theory to Practice (3.0 cr)
• MGMT 6410 - Corporate Responsibility (2.0 cr)
• MILI 6235 - Pharmaceutical Industry: Business and Policy (2.0 cr)
• MILI 6421 - Topics: Medical Industry (2.0 cr)
• MILI 6562 - Information Technology in Health Care (2.0 cr)
• MILI 6589 - Medical Technology Evaluation and Market Research (2.0 cr)
• MILI 6726 - Medical Device Industry: Business and Public Policy (2.0 cr)
• MILI 6990 - The Health Care Marketplace (2.0 cr)
• MILI 6991 - Anatomy and Physiology for Managers (2.0 cr)
• MILI 6992 - Healthcare Delivery Innovations: Optimizing Cost and Quality (2.0 cr)
• MILI 6995 - Medical Industry Valuation Laboratory (2.0 cr)
• MKTG 6050 - Business Research Methods (2.0 cr)
• MKTG 6051 - Marketing Research (4.0 cr)
• MKTG 6055 - Buyer Behavior (4.0 cr)
• MKTG 6072 - International Marketing (4.0 cr)
• MKTG 6073 - Technology Marketing (2.0 cr)
• MKTG 6075 - Pricing Strategy (4.0 cr)
• MKTG 6078 - Advertising & Promotion (4.0 cr)
• MKTG 6082 - Brand Management (4.0 cr)
• MKTG 6084 - Persuasion and Influence (2.0 cr)
• MKTG 6085 - Harnessing Consumer Irrationality (2.0 cr)
• MKTG 6086 - Digital Marketing (2.0 cr)
• MKTG 6088 - Strategic Marketing (2.0 cr)
• MKTG 6090 - Marketing Topics (1.0 - 4.0 cr)
• SCO 6041 - Project Management (2.0 cr)
• SCO 6045 - Strategic Sourcing (2.0 cr)
• SCO 6048 - Logistics and Transportation (2.0 cr)
• SCO 6051 - Service Management (2.0 cr)
• SCO 6056 - Managing Supply Chain Operations (4.0 cr)
• SCO 6059 - Quality Management and Lean Six Sigma (4.0 cr)
• SCO 6072 - Managing Technologies in the Supply Chain (2.0 cr)
• SCO 6081 - Global Operations Strategy (4.0 cr)
• SCO 6090 - Sales, Inventory, and Operations Planning (2.0 cr)
• SCO 6091 - Process Improvement Methods (2.0 cr)
• SCO 6092 - Supply Chain Quality and Security (2.0 cr)
• SCO 6094 - Responsible Supply Chain Management (2.0 cr)
• SCO 6095 - Supply Chain Management in the Food and Agribusiness Sector (2.0 cr)
• SCO 6098 - Operations Excellence via Lean Thinking (2.0 cr)
• SCO 6191 - Big Data Analytics in Supply Chains (2.0 cr)
• SCO 6192 - Supply Chain Finance (2.0 cr)
• SCO 6850 - Topics in Operations and Management Science (2.0 - 4.0 cr)
• MILI 6997 - MILI Global Valuation Lab (4.0 cr)

Part-Time Master of Business Administration
The Carlson part-time MBA curriculum, which can be completed online, includes core courses that offer an in-depth study of the foundational and functional areas of business. Advanced electives, international study options, and specializations allow students to tailor a program that meets their long-term career goals. To graduate, students must earn 48-57 credits. The number of credits a student must complete is determined at the time of admission and is based on prior coursework and/or waiver exams taken prior to the
end of the first semester of enrollment.

**Core Courses**
Courses listed in recommended sequence.
- MBA 6300 - Strategic Management (3.0 cr)
- MBA 6120 - Data Analysis and Statistics for Managers (3.0 cr)
- MBA 6030 - Financial Accounting (3.0 cr)
- MBA 6220 - Operations Management (3.0 cr)
- MBA 6230 - Financial Management (3.0 cr)
- MBA 6210 - Marketing Management (3.0 cr)
- MBA 6035 - Managerial Accounting (3.0 cr)
- MBA 6110 - Leading Others (2.0 cr)
- MBA 6315 - The Ethical Environment of Business (2.0 cr)

**IT Requirement**
Choose 1 of the following (if both taken, 1 will count as elective)
- Take 1 or more course(s) from the following:
  - IDSC 6040 - Information Technology Management (2.0 cr)
  - IDSC 6050 - Information Technologies and Solutions (2.0 cr)

**Economics Requirement**
Choose 1 of the following (if both taken, 1 will count as elective). If choosing MBA 6140, it must be taken for 2 credits.
- Take 1 or more course(s) from the following:
  - MBA 6140 - Managerial Economics (0.0 - 2.0 cr)
  - FINA 6341 - World Economy (4.0 cr)

**International Experience**
Choose 1 of the following (if more than 1 course completed, remainder will count as elective credit(s)):
- Take 4 or more credit(s) from the following:
  - MGMT 6305 - The International Environment of Business (4.0 cr)
  - IDSC 6465 - Global Sourcing of IT and IT Enabled Services (4.0 cr)
  - SCO 6081 - Global Operations Strategy (4.0 cr)
  - MKTG 6072 - International Marketing (4.0 cr)
  - MILI 6997 - MILI Global Valuation Lab (4.0 cr)
  - IBUS 5140 - Vienna Summer Program in International Business (Graduate) (0.0 - 18.0 cr)
  - IBUS 5150 - India Seminar: Managing in a Global Environment (4.0 cr)
  - IBUS 5260 - Integrated Corporate Reporting and the Triple Bottom Line (4.0 cr)
  - IBUS 5400 - Global Business Practicum (4.0 cr)
  - IBUS 5605 - Shanghai Summer Program in International Business (Graduate) (0.0 - 18.0 cr)
  - IBUS 6307 - MILI Global Valuation Lab (4.0 cr)
  - IBUS 6402 - Economic Diversification: Moving Beyond Oil in UAE and Oman (4.0 cr)
  - IBUS 5300 - International Business: Graduate Exchange BLOCK (0.0 - 18.0 cr)
  - IBUS 5301 - Graduate Exchange in International Business - BLOCK (0.0 - 18.0 cr)
  - IBUS 5302 - International Business: Graduate Exchange (0.0 - 18.0 cr)
  - IBUS 5303 - International Business: Graduate Exchange (0.0 - 18.0 cr)
  - IBUS 5304 - International Business: Graduate Exchange (0.0 - 18.0 cr)
  - IBUS 5305 - International Business: Graduate Exchange (0.0 - 18.0 cr)
  - IBUS 5306 - International Business: Graduate Exchange (0.0 - 18.0 cr)
  - IBUS 5307 - International Business: Graduate Exchange (0.0 - 18.0 cr)
  - IBUS 5308 - International Business: Graduate Exchange (0.0 - 18.0 cr)
  - IBUS 5309 - International Business: Graduate Exchange (0.0 - 18.0 cr)
  - IBUS 5306 - International Business: Graduate Exchange (0.0 - 18.0 cr)

**Electives**
Electives not on this list must be approved by MBA Programs Office to count towards degree requirements.
- Take 24 or more credit(s) from the following:
  - ACCT 5180 - Consolidations and Advanced Reporting (2.0 cr)
  - ACCT 6100 - Financial Statement Analysis (4.0 cr)
  - ACCT 6160 [inactive](2.0 cr)
  - BLAW 6158 - The Law of Contracts and Agency (4.0 cr)
  - ENTR 6020 - Business Formation (4.0 cr)
  - ENTR 6021 - Preparing and Implementing the Business Plan (2.0 cr)
  - ENTR 6036 - Managing the Growing Business (2.0 cr)
  - ENTR 6037 - Corporate Venturing (2.0 cr)
  - ENTR 6041 - Initiating New Product Design and Business Development (2.0 - 4.0 cr)
  - ENTR 6042 - Implementing New Product Design and Business Development (4.0 cr)
  - ENTR 6090 - Topics in Entrepreneurship (2.0 - 4.0 cr)
  - FINA 6121 - Debt Markets, Interest Rates, and Hedging (2.0 cr)
  - FINA 6122 - Financial Management of Depository Institutions (2.0 cr)
  - FINA 6222 - Mergers and Acquisitions (2.0 cr)
  - FINA 6241 - Corporate Finance Analysis and Decisions (4.0 cr)
- FINA 6242 - Advanced Corporate Finance Analysis and Decisions (4.0 cr)
- FINA 6321 - Portfolio Analysis and Management (2.0 cr)
- FINA 6322 - Financial Modeling (2.0 cr)
- FINA 6323 - Advanced Financial Modeling (2.0 cr)
- FINA 6324 - Securitization Markets (2.0 cr)
- FINA 6325 - Behavioral Finance (2.0 cr)
- FINA 6341 - World Economy (4.0 cr)
- FINA 6422 - Mergers and Acquisitions (2.0 - 4.0 cr)
- FINA 6522 - Introduction to Derivatives and Financial Risk Management (2.0 cr)
- FINA 6529 - Advanced Topics in Fixed Income and Derivatives (2.0 cr)
- FINA 6621 - International Financial Management (2.0 cr)
- HRIR 6465 - Leadership and Personal Development (2.0 cr)
- IDSC 6040 - Information Technology Management (2.0 cr)
- IDSC 6050 - Information Technologies and Solutions (2.0 cr)
- IDSC 6423 - Enterprise Systems (2.0 cr)
- IDSC 6435 - Business Process Excellence (2.0 cr)
- IDSC 6442 - E-Sourcing and E-Auctions (2.0 cr)
- IDSC 6444 - Business Intelligence (2.0 cr)
- IDSC 6446 - Advanced Business Intelligence (2.0 cr)
- IDSC 6455 - Web 2.0: The Business of Social Media (2.0 cr)
- IDSC 6465 - Global Sourcing of IT and IT Enabled Services (4.0 cr)
- IDSC 6471 - Knowledge Management (2.0 cr)
- IDSC 6481 - Managerial Decision Making (2.0 cr)
- MBA 6990 - MBA Topics (2.0 cr)
- MCOM 5500 - Enhancing Your Executive Image in Business Communications (2.0 cr)
- MCOM 5510 - Persuasive Writing in Business (2.0 cr)
- MCOM 5530 - Strategies and Skills for Managerial Presentations (2.0 cr)
- MGMT 6004 - Negotiation Strategies (2.0 cr)
- MGMT 6031 - Industry Analysis and Competitive Strategy (4.0 cr)
- MGMT 6032 - Strategic Alliances (2.0 cr)
- MGMT 6033 - Managing the Strategy Process (2.0 cr)
- MGMT 6034 - Strategic Leadership (2.0 cr)
- MGMT 6035 - Complex and Cross-Cultural Negotiations (2.0 cr)
- MGMT 6040 - International Strategy and Organization (2.0 cr)
- MGMT 6050 - Management of Innovation and Change (2.0 cr)
- MGMT 6084 - Management of Groups (2.0 cr)
- MGMT 6085 - Corporate Strategy (4.0 cr)
- MGMT 6100 - Topics in Management (2.0 - 4.0 cr)
- MGMT 6305 - The International Environment of Business (4.0 cr)
- MGMT 6402 - Integrative Leadership: From Theory to Practice (3.0 cr)
- MGMT 6410 - Corporate Responsibility (2.0 cr)
- MILI 6235 - Pharmaceutical Industry: Business and Policy (2.0 cr)
- MILI 6421 - Topics: Medical Industry (2.0 cr)
- MILI 6562 - Information Technology in Health Care (2.0 cr)
- MILI 6589 - Medical Technology Evaluation and Market Research (2.0 cr)
- MILI 6726 - Medical Device Industry: Business and Public Policy (2.0 cr)
- MILI 6990 - The Health Care Marketplace (2.0 cr)
- MILI 6991 - Anatomy and Physiology for Managers (2.0 cr)
- MILI 6992 - Healthcare Delivery Innovations: Optimizing Cost and Quality (2.0 cr)
- MILI 6995 - Medical Industry Valuation Laboratory (2.0 cr)
- MILI 6997 - MILI Global Valuation Lab (4.0 cr)
- MKTG 6051 - Marketing Research (4.0 cr)
- MKTG 6055 - Buyer Behavior (4.0 cr)
- MKTG 6072 - International Marketing (4.0 cr)
- MKTG 6073 - Technology Marketing (2.0 cr)
- MKTG 6075 - Pricing Strategy (4.0 cr)
- MKTG 6078 - Advertising & Promotion (4.0 cr)
- MKTG 6082 - Brand Management (4.0 cr)
- MKTG 6084 - Persuasion and Influence (2.0 cr)
- MKTG 6085 - Harnessing Consumer Irrationality (2.0 cr)
- MKTG 6086 - Digital Marketing (2.0 cr)
- MKTG 6088 - Strategic Marketing (2.0 cr)
- MKTG 6090 - Marketing Topics (1.0 - 4.0 cr)
- SCO 6041 - Project Management (2.0 cr)
- SCO 6045 - Strategic Sourcing (2.0 cr)
Carlson Executive Master of Business Administration

The Carlson executive MBA is built on a foundation of time-tested business principles. By emphasizing a global perspective, the rigorous curriculum helps students develop a deeper understanding of theory and practice. Each class moves through the program together as a cohort, following set schedules. From orientation to graduation, it takes about 21 months to complete the program. Classes are held Fridays and Saturdays, predominantly on alternate weekends, 7:30 a.m. to 4:30 p.m., and do not meet during the summer.

CEMBA Program Requirements

The CEMBA program has a 49.5 credit program requirement.

CMBA 5810 - Introduction to Statistics and Business Analytics (3.0 cr)
CMBA 5811 - Financial Accounting (3.0 cr)
CMBA 5812 - Organizational Behavior (3.0 cr)
CMBA 5813 - Competing In The Digital Age (1.5 cr)
CMBA 5814 - Economics (1.5 cr)
CMBA 5815 - Marketing Management (3.0 cr)
CMBA 5816 - Strategic Management (3.0 cr)
CMBA 5817 - Financial Management (3.0 cr)
CMBA 5818 - Supply Chain and Operations (3.0 cr)
CMBA 5820 - Negotiation Strategies: Creative Solutions for Difficult Problems (3.0 cr)
CMBA 5821 - Managerial Accounting (3.0 cr)
CMBA 5822 - Leadership (1.5 cr)
CMBA 5823 - Competing Globally (3.0 cr)
CMBA 5824 - Corporate Responsibility & Ethics (1.5 cr)
CMBA 5825 - Strategic Marketing (3.0 cr)
CMBA 5826 - Corporate Strategy (1.5 cr)
CMBA 5827 - Advanced Financial Management (3.0 cr)
CMBA 5828 - International Residency - Study Abroad (1.5 cr)
CMBA 5829 - International Residency Global Virtual Team Project (1.5 cr)

Choose 2 courses from the following:
- CMBA 5830 - Advanced Management Topic Elective (1.5 cr)
- CMBA 5831 - Advanced Management Topic Elective (1.5 cr)
- CMBA 5832 - Advanced Management Topic Elective (1.5 cr)
- CMBA 5833 - Advanced Management Topics Elective (1.5 cr)

Industry Master of Business Administration

The Industry MBA is a one-year, predominantly online program designed for working professionals to obtain the fundamental business knowledge crucial for leading careers in the complex, rapidly evolving and highly regulated healthcare, energy, technology and finance industries. Courses will be taught by our nationally renowned expert faculty and executive-level professionals. Targeting the Washington DC area, this 48 credit program will deliver sophisticated management and leadership education for students immersed in legislative and policy matters.

Industry MBA Course Requirements

Take exactly 48 credit(s) from the following:
- IMBA 6004 - Negotiations (2.0 cr)
- IMBA 6030 - Financial Accounting (3.0 cr)
- IMBA 6110 - Leading Others (2.0 cr)
- IMBA 6120 - Data Analysis & Statistics (3.0 cr)
- IMBA 6140 - Managerial Economics (3.0 cr)
- IMBA 6210 - Marketing Management (3.0 cr)
• IMBA 6220 - Supply Chain Management (3.0 cr)
• IMBA 6230 - Financial Management (3.0 cr)
• IMBA 6240 - Data Analytics (3.0 cr)
• IMBA 6300 - Strategic Management (3.0 cr)
• IMBA 6315 - The Ethical Environment of Business (2.0 cr)
• IMBA 6401 - Industry Overview & Business Law (2.0 cr)
• IMBA 6402 - Industry Vertical: Technology (2.0 cr)
• IMBA 6403 - Industry Vertical: Energy (2.0 cr)
• IMBA 6404 - Industry Vertical: Finance (2.0 cr)
• IMBA 6405 - Industry Vertical: Health (2.0 cr)
• IMBA 6500 - Virtual Team Project (4.0 cr)
• IMBA 6501 - Industry MBA Capstone (4.0 cr)

China Executive M.B.A.
China Executive MBA Courses
51 credits required.
CHMB 5800 - Organizational Behavior (3.0 cr)
CHMB 5801 - Financial Accounting (3.0 cr)
CHMB 5802 - Statistics and Decision Making (3.0 cr)
CHMB 5803 - Operations Management (3.0 cr)
CHMB 5804 - Managerial Accounting (3.0 cr)
CHMB 5805 - Financial Management (3.0 cr)
CHMB 5806 - Marketing Management (3.0 cr)
CHMB 5807 - Business Strategy (3.0 cr)
CHMB 5808 - Strategic Marketing (3.0 cr)
CHMB 5809 - Advanced Financial Management (3.0 cr)
CHMB 5810 - International Environment (1.5 cr)
CHMB 5811 - Information Technology Management (3.0 cr)
CHMB 5813 - Ethics and Leadership (3.0 cr)
CHMB 5815 - International Human Resources Management (3.0 cr)
CHMB 5816 - International Residency (6.0 cr)
CHMB 5817 - China's Economy (1.5 cr)
CHMB 5818 - Law and Business (3.0 cr)

Vienna Masters of Business Administration
Vienna MBA Coursework Requirements
58 credits required
VMBA 5700 - Managerial Accounting (4.0 cr)
VMBA 5701 - Data Analysis and Decision Making (4.0 cr)
VMBA 5702 - Financial Management (4.0 cr)
VMBA 5703 - Marketing Management (4.0 cr)
VMBA 5704 - Managing People and Organizations (4.0 cr)
VMBA 5705 - Operations Management (4.0 cr)
VMBA 5706 - Business, Government, and Macroeconomics (4.0 cr)
VMBA 5707 - Economics in Transition (4.0 cr)
VMBA 5709 - Info Tech Mgmt (4.0 cr)
VMBA 5711 - Managing Globalization (Guangzhou) (4.0 cr)
VMBA 5712 - Strategies for a Global Company: an Integrative Perspective (6.0 cr)
VMBA 5713 - Negotiations and Conflict Management (4.0 cr)
VMBA 5714 - Financial Accounting (4.0 cr)
VMBA 5715 - Corporate and Entrepreneurial Strategy (4.0 cr)
Twin Cities Campus

Business Administration Minor
Curtis L. Carlson School of Management - Adm
Curtis L. Carlson School of Management

Link to a list of faculty for this program.

Contact Information:
PhD Program in Business Administration, Carlson School of Management, Suite 4-205, 321 19th Avenue South, Minneapolis, MN 55455 (612-624-0875 or 612-624-5065; fax 612-624-8221)
Email: brons003@umn.edu
Website: http://carlsonschool.umn.edu/degrees/phd

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2016
- Length of program in credits (Doctorate): 16
- This program does not require summer semesters for timely completion.
- None.

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The PhD program in business administration offers full-time advanced graduate education for students seeking academic placement at leading universities or research-oriented positions in business or government. The program is for individuals who have the intellectual capacity for advanced study, enjoy independent research and analytical thinking, and who wish to master a discipline within business administration.

Non-business administration doctoral students working toward a minor within the business administration program must complete a cohesive program of study in one of seven areas of specialization: accounting; finance; information and decision sciences (including the management information systems and decision science subfields); marketing; supply chain and operations; strategic management and entrepreneurship (covering the subfields of strategy, international management and entrepreneurship), and work and organizations (covering the subfields of industrial-organizational psychology, organizational behavior, personnel and labor economics, and industrial relations).

Accreditation
This program is accredited by AACSB International

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
University of Minnesota PhD student in a field other than business administration.

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements
Use of 4xxx courses towards program requirements is not permitted.

For each of the seven areas of concentration, a minimum of 16 credits is required. Coursework is selected in consultation with the PhD program office or the PhD coordinator of the student's chosen concentration area. Courses should be 8xxx-level, although up to 8 credits of 5xxx- and 7xxx-level coursework can be taken with the approval of the PhD and master's program offices.

Areas of Concentration

Accounting
Take 16 or more credit(s) from the following:

- **ACCT 8800** - Empirical Research: Topics I (2.0 cr)
- **ACCT 8801** - Empirical Research: Valuation (4.0 cr)
- **ACCT 8802** - Empirical Research: Capital Markets I (2.0 cr)
- **ACCT 8803** - Empirical Research: Capital Markets II (2.0 cr)
- **ACCT 8804** - Empirical Research Topics II (2.0 cr)
- **ACCT 8811** - Information Economics I (4.0 cr)
- **ACCT 8812** - Information Economics II (4.0 cr)
- **ACCT 8831** - Analytical Research Topics I (2.0 cr)
- **ACCT 8832** - Analytical Research Topics II (2.0 cr)

**-OR-**

**Finance**
Take 16 or more credit(s) from the following:

- **FINA 8802** - Theory of Capital Markets I: Discrete Time (2.0 cr)
- **FINA 8803** - Theory of Capital Markets II: Continuous Time (2.0 cr)
- **FINA 8804** - Advanced Continuous Time Finance (2.0 cr)
- **FINA 8810** - Topics in Asset Pricing (2.0 cr)
- **FINA 8812** - Corporate Finance I (2.0 cr)
- **FINA 8813** - Corporate Finance II (2.0 cr)
- **FINA 8820** - Topics in Corporate Finance (2.0 cr)
- **FINA 8822** - Empirical Methods in Finance (2.0 cr)
- **FINA 8823** - Empirical Corporate Finance (2.0 cr)
- **FINA 8890** - Seminar: Finance Topics (2.0 - 4.0 cr)

**-OR-**

**Information and Decision Sciences**
Take 16 or more credit(s) from the following:

- **IDSC 8511** - Conceptual Topics and Research Methods in Information and Decision Sciences (3.0 cr)
- **IDSC 8521** - System Development (3.0 cr)
- **IDSC 8531** - Organizational Theory and Research in Information Systems (3.0 cr)
- **IDSC 8541** - Introduction to Economics of Information Systems (3.0 cr)
- **IDSC 8721** - Behavioral Decision Theory (3.0 cr)
- **IDSC 8801** - Research Seminar in Information and Decision Sciences (2.0 cr)

**-OR-**

**Marketing**
Take 16 or more credit(s) from the following:

- **MKTG 8809** - Consumer Behavior Research Methods (2.0 cr)
- **MKTG 8810** - Consumer Behavior Special Topics (2.0 cr)
- **MKTG 8811** - Consumer Attitudes and Persuasion I (2.0 cr)
- **MKTG 8812** - Consumer Attitudes and Persuasion II (2.0 cr)
- **MKTG 8813** - Consumer Judgment and Decision Making I (2.0 cr)
- **MKTG 8814** - Consumer Judgment and Decision Making II (2.0 cr)
- **MKTG 8831** - Seminar: Inter-Organizational Relations (4.0 cr)
- **MKTG 8842** - Quantitative Modeling I (2.0 - 4.0 cr)
- **MKTG 8843** - Quantitative Modeling II (2.0 cr)
- **MKTG 8851** - Seminar: Marketing Management and Strategy I (2.0 cr)
- **MKTG 8852** - Marketing Management & Strategy II (2.0 cr)
- **MKTG 8890** - Seminar: Marketing Topics (1.0 - 4.0 cr)

**-OR-**

**Strategic Management and Entrepreneurship**
Take 16 or more credit(s) from the following:

- **MGMT 8101** - Theory Building and Research Design (4.0 cr)
- **MGMT 8202** - Seminar in International Management (4.0 cr)
- **MGMT 8301** - Seminar in Organizational Behavior (4.0 cr)
- **MGMT 8302** - Seminar in Organizations Theory (4.0 cr)
- **MGMT 8401** - Seminar in Strategy Content (2.0 - 4.0 cr)
- **MGMT 8402** - Seminar in Strategy Process (4.0 cr)
- **MGMT 8501** - Seminar in Entrepreneurship (4.0 cr)

**-OR-**

**Supply Chain and Operations**
Take 16 or more credit(s) from the following:
- SCO 8651 - Experimental Design (3.0 cr)
- SCO 8652 - Regression Analysis (3.0 cr)
- SCO 8711 - Research in Operations Strategy (3.0 cr)
- SCO 8721 - Management of Technological Operations (3.0 cr)
- SCO 8735 - Supply Chain Management (3.0 cr)
- SCO 8745 - Research on Quality Management (3.0 cr)
- SCO 8755 - Behavioral Operations (3.0 cr)

-OR-

Work and Organizations
Take 16 or more credit(s) from the following:
- HRIR 8801 - Core Seminar: Fundamentals of Economic Analysis for Work and Organizations (4.0 cr)
- HRIR 8802 - Core Seminar: Organizational Behavior (4.0 cr)
- HRIR 8803 - Core Seminar: Fundamentals of HR Research (4.0 cr)
- HRIR 8812 - Core Seminar: Research Methods in Work and Organizations (4.0 cr)
- HRIR 8820 - Seminar: Special Topics in Work and Organizations Research (2.0 cr)
- HRIR 8825 - Research Practicum/Workshop (1.0 cr)

Program Sub-plans
Students are required to complete one of the following sub-plans.
Students may not complete the program with more than one sub-plan.

Doctoral
Twin Cities Campus
Business Administration Ph.D.
Curtis L. Carlson School of Management - Adm
Curtis L. Carlson School of Management

Link to a list of faculty for this program.

Contact Information:
Carlson School of Management, Business Administration PhD Program, Suite 4-205, 321 19th Avenue South, Minneapolis, MN 55455
(612-624-0875; fax: 612-624-8221)
Email: brons003@umn.edu
Website: http://carlsonschool.umn.edu/degrees/phd

• Program Type: Doctorate
• Requirements for this program are current for Fall 2016
• Length of program in credits: 64 to 68
• This program does not require summer semesters for timely completion.
• Degree: Doctor of Philosophy

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

This program offers full-time advanced graduate education for students seeking academic placement at leading universities or research-oriented positions in business or government. The program is for individuals who have the intellectual capacity for advanced study, enjoy independent research and analytical thinking, and who wish to master a discipline within business administration.

Students choose to concentrate in one of seven areas of specialization: accounting; finance; information and decision sciences (including the management information systems and decision science subfields); marketing; supply chain and operations; strategic management and entrepreneurship (covering the subfields of strategy, entrepreneurship, and international management); and work and organizations (including the subfields of industrial-organizational psychology, organizational behavior, personnel and organizational economics, and industrial relations).

Accreditation
This program is accredited by Association to Advance Collegiate Schools of Business (AACSB)

Program Delivery
This program is available:
• via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants must have completed a four-year undergraduate degree in any relevant field of study.

Other requirements to be completed before admission:
Admission depends on the applicant's grades, test scores (GMAT or GRE), and strength of both the letters of recommendation and the statement of purpose.

Preferred minimum test scores are 650 on the GMAT; 1380 total of the verbal and quantitative sections of GRE General tests taken prior to August 2011, or 320 total on the revised GRE general test (August 2011 and after).

Special Application Requirements:
Applicants should submit the following items to the Carlson School of Management Ph.D. program office: (1) an official copy of the GMAT or GRE scores taken within the last five years; and (2) official TOEFL or IELTS scores (international applicants only) from a test taken within the last two years. All other application materials (official application, application fee, statement of purpose, resume/vita, three letters of recommendation and transcripts) should be entered directly or uploaded into the ApplyYourself online application system. The application deadline for all areas of concentration is December 15 each year for fall admission consideration. Applications are evaluated on a rolling basis beginning early in January. Admission decisions continue until available positions are filled.

Applicants must submit their test score(s) from the following:
• GRE
• GMAT
  - Total score: 650

International applicants must submit score(s) from one of the following tests:
• TOEFL
  - Internet Based - Total Score: 100
  - Internet Based - Speaking Score: 25
  - Paper Based - Total Score: 600
• IELTS
  - Total Score: 7

The preferred English language test is Test of English as Foreign Language

Key to test abbreviations (GRE, GMAT, TOEFL, IELTS).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements
24 to 28 credits are required in the major.
16 credits are required outside the major.
24 thesis credits are required.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.30 is required for students to remain in good standing.

At least 4 semesters must be completed before filing a Degree Program Form.

Degree requirements vary by area of concentration. Each student's coursework is determined in consultation with an advisor. Some areas may require a first-year examination or presentation.

Areas of Concentration

Accounting
Students pursuing the accounting concentration work under one of two accounting research paradigms: analytic or empirical.

Required Accounting Coursework
Take all of the following for 24 credits:
ACCT 8800 - Empirical Research: Topics I (2.0 cr)
ACCT 8801 - Empirical Research-Valuation (4.0 cr)
ACCT 8802 - Empirical Research - Capital Markets I (2.0 cr)
ACCT 8803 - Empirical Research: Capital Markets II (2.0 cr)
ACCT 8804 - Empirical Research Topics II (2.0 cr)
ACCT 8811 - Information Economics I (4.0 cr)
ACCT 8812 - Information Economics II (4.0 cr)
ACCT 8831 - Analytical Research Topics I (2.0 cr)
ACCT 8832 - Analytical Research Topics II (2.0 cr)

Supporting/Methodology Coursework
Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested coursework is listed below.
Take 16 or more credit(s) from the following:
• APEC 8001 - Applied Microeconomic Analysis of Consumer Choice and Consumer Demand (2.0 cr)
• APEC 8002 - Applied Microeconomic Analysis of Production and Choice Under Uncertainty (2.0 cr)
• APEC 8003 - Applied Microeconomic Analysis of Game Theory and Information (2.0 cr)
• APEC 8004 - Applied Microeconomic Analysis of Social Choice and Welfare (2.0 cr)
• APEC 8211 - Econometric Analysis I (4.0 cr)
• APEC 8212 - Econometric Analysis II (4.0 cr)
• CSOM 8101 - Methods and Topics in Applied Economics (2.0 - 4.0 cr)
• ECON 8001 - Microeconomic Analysis (2.0 cr)
• ECON 8002 - Microeconomic Analysis (2.0 cr)
• ECON 8003 - Microeconomic Analysis (2.0 cr)
• ECON 8004 - Microeconomic Analysis (2.0 cr)
• ECON 8205 - Applied Econometrics (2.0 cr)
• FINA 8802 - Theory of Capital Markets I: Discrete Time (2.0 cr)
• FINA 8812 - Corporate Finance I (2.0 cr)
• FINA 8813 - Corporate Finance II (2.0 cr)
• FINA 8822 - Empirical Methods in Finance (2.0 cr)
• FINA 8823 - Empirical Corporate Finance (2.0 cr)
• MATH 5651 - Basic Theory of Probability and Statistics (4.0 cr)
• PUBH 6325 - Data Processing with PC-SAS (1.0 cr)
• STAT 5102 - Theory of Statistics II (4.0 cr)
• STAT 8101 - Theory of Statistics I (3.0 cr)
• ACCT 8892 - Readings in Accounting (1.0 - 8.0 cr)
• ACCT 8894 - Research in Accounting (1.0 - 8.0 cr)

Thesis Credits
Take at least 24 doctoral thesis credits.
BA 8888 - Thesis Credit: Doctoral (1.0 - 24.0 cr)

-OR-

Finance
Finance is viewed as a subfield of economics. Students achieve a strong foundation in economic theory and empirical methods.

Required Finance Coursework
Take at least 20 credits from the following list. FINA 8810, 8820, and 8890 may be taken more than once.
FINA 8802 - Theory of Capital Markets I: Discrete Time (2.0 cr)
FINA 8803 - Theory of Capital Markets II: Continuous Time (2.0 cr)
FINA 8804 - Advanced Continuous Time Finance (2.0 cr)
FINA 8810 - Topics in Asset Pricing (2.0 cr)
FINA 8812 - Corporate Finance I (2.0 cr)
FINA 8813 - Corporate Finance II (2.0 cr)
FINA 8820 - Topics in Corporate Finance (2.0 cr)
FINA 8822 - Empirical Methods in Finance (2.0 cr)
FINA 8823 - Empirical Corporate Finance (2.0 cr)
FINA 8890 - Seminar: Finance Topics (2.0 - 4.0 cr)

Additional Required Finance Coursework (8 credits required)
Take one of the following sequences of economics courses:

8001-04 sequence
ECON 8001 - Microeconomic Analysis (2.0 cr)
ECON 8002 - Microeconomic Analysis (2.0 cr)
ECON 8003 - Microeconomic Analysis (2.0 cr)
ECON 8004 - Microeconomic Analysis (2.0 cr)

or 8101-04 sequence
ECON 8101 - Microeconomic Theory (2.0 cr)
ECON 8102 - Microeconomic Theory (2.0 cr)
ECON 8103 - Microeconomic Theory (2.0 cr)
ECON 8104 - Microeconomic Theory (2.0 cr)

Supporting/Methdology Coursework (16 credit minimum)
Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested coursework is listed below.
Take 16 or more credit(s) from the following:
• ACCT 8812 - Information Economics II (4.0 cr)
• ACCT 8831 - Analytical Research Topics I (2.0 cr)
• ACCT 8832 - Analytical Research Topics II (2.0 cr)
• APEC 8211 - Econometric Analysis I (4.0 cr)
• APEC 8212 - Econometric Analysis II (4.0 cr)
• ECON 8001 - Microeconomic Analysis (2.0 cr)
• ECON 8002 - Microeconomic Analysis (2.0 cr)
• ECON 8003 - Microeconomic Analysis (2.0 cr)
• ECON 8004 - Microeconomic Analysis (2.0 cr)
• ECON 8101 - Microeconomic Theory (2.0 cr)
• ECON 8102 - Microeconomic Theory (2.0 cr)
• ECON 8103 - Microeconomic Theory (2.0 cr)
• ECON 8104 - Microeconomic Theory (2.0 cr)
• ECON 8105 - Macroeconomic Theory (2.0 cr)
• ECON 8106 - Macroeconomic Theory (2.0 cr)
• ECON 8107 - Macroeconomic Theory (2.0 cr)
• ECON 8108 - Macroeconomic Theory (2.0 cr)
• ECON 8181 - Advanced Topics in Microeconomics (2.0 cr)
• ECON 8182 - Advanced Topics in Microeconomics (2.0 cr)
• ECON 8185 - Advanced Topics in Macroeconomics (2.0 cr)
• ECON 8191 - Workshop in Mathematical Economics (1.0 - 3.0 cr)
• ECON 8201 - Econometric Analysis (2.0 cr)
• ECON 8205 - Applied Econometrics (2.0 cr)
• ECON 8206 - Applied Econometrics (2.0 cr)
• ECON 8207 - Applied Econometrics (2.0 cr)
• ECON 8208 - Applied Econometrics (2.0 cr)
• ECON 8211 - Econometrics (2.0 cr)
• ECON 8212 - Econometrics (2.0 cr)
• ECON 8501 - Wages and Employment (2.0 cr)
• ECON 8601 - Industrial Organization and Government Regulation (2.0 cr)
• ECON 8602 - Industrial Organization and Government Regulation (2.0 cr)
• ECON 8701 - Monetary Economics (2.0 cr)
• ECON 8702 - Monetary Economics (2.0 cr)
• ECON 8704 - Financial Economics (2.0 cr)
• ECON 8705 - Financial Economics (2.0 cr)
• MATH 8601 - Real Analysis (3.0 cr)
• FINA 8892 - Independent Study in Finance (1.0 - 8.0 cr)
• FINA 8894 - Directed Research in Finance (1.0 - 8.0 cr)

Thesis Credits (24 credits minimum)
Take at least 24 doctoral thesis credits.
BA 8888 - Thesis Credit: Doctoral (1.0 - 24.0 cr)

- OR -

Information and Decision Sciences
Students complete all offered IDSc PhD seminars, including the topics course 8801, which should be taken at least twice (total of 19 IDSc PhD credits). Other major area credits include APEC 8211 and 8212 (8 credits).

Required IDSc PhD Coursework (19 credits minimum)
Take all of the following courses. IDSC 8801 must be taken at least twice.
IDSC 8511 - Conceptual Topics and Research Methods in Information and Decision Sciences (3.0 cr)
IDSC 8521 - System Development (3.0 cr)
IDSC 8531 - Organizational Theory and Research in Information Systems (3.0 cr)
IDSC 8541 - Introduction to Economics of Information Systems (3.0 cr)
IDSC 8721 - Behavioral Decision Theory (3.0 cr)
IDSC 8801 - Research Seminar in Information and Decision Sciences (2.0 cr)

Additional IDSc Required Coursework (8 credits minimum)
Take the following APEC methodology courses for a total of 8 credits:
APEC 8211 - Econometric Analysis I (4.0 cr)
APEC 8212 - Econometric Analysis II (4.0 cr)

Supporting/Methodology Coursework (16 credits minimum)
Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested coursework is listed below. Take 16 or more credit(s) from the following:
• APEC 8001 - Applied Microeconomic Analysis of Consumer Choice and Consumer Demand (2.0 cr)
• APEC 8002 - Applied Microeconomic Analysis of Production and Choice Under Uncertainty (2.0 cr)
• APEC 8003 - Applied Microeconomic Analysis of Game Theory and Information (2.0 cr)
• APEC 8206 - Dynamic Optimization: Applications in Economics and Management (3.0 cr)
• CSCI 5980 - Special Topics in Computer Science (1.0 - 3.0 cr)
• CSCI 8551 - Intelligent Agents (3.0 cr)
• CSCI 8980 - Special Advanced Topics in Computer Science (1.0 - 3.0 cr)
• CSOM 8101 - Methods and Topics in Applied Economics (2.0 - 4.0 cr)
• ECON 8581 - Advanced Topics in Labor Economics (2.0 cr)
• ECON 8601 - Industrial Organization and Government Regulation (2.0 cr)
• ECON 8602 - Industrial Organization and Government Regulation (2.0 cr)
• EPSY 8262 - Statistical Methods in Education II (3.0 cr)
• EPSY 8264 - Advanced Multiple Regression Analysis (3.0 cr)
• EPSY 8267 - Applied Multivariate Analysis (3.0 cr)
• EPSY 8268 - Hierarchical Linear Modeling in Educational Research (3.0 cr)
• EPSY 8291 - Advanced Statistical Computing and Data Analysis (3.0 cr)
• MGMT 8101 - Theory Building and Research Design (4.0 cr)
• MGMT 8301 - Seminar in Organizational Behavior (4.0 cr)
• MGMT 8302 - Seminar in Organizations Theory (4.0 cr)
• PSY 5018H - Mathematical Models of Human Behavior (3.0 cr)
• PSY 5862 - Psychological Measurement: Theory and Methods (3.0 cr)

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Information current as of December 20, 2016
• PSY 5993 - Research Laboratory in Psychology (3.0 cr)
• PSY 8201 - Social Cognition (3.0 cr)
• PSY 8960 - Graduate Seminar in Psychology (1.0 - 4.0 cr)
• PUBH 6470 - SAS Procedures and Data Analysis (3.0 cr)
• PUBH 7430 - Statistical Methods for Correlated Data (3.0 cr)
• PUBH 8442 - Bayesian Decision Theory and Data Analysis (3.0 cr)
• SCO 8652 - Regression Analysis (3.0 cr)
• SCO 8721 - Management of Technological Operations (3.0 cr)
• IDSC 8892 - Readings in Information and Decision Sciences (1.0 - 8.0 cr)
• IDSC 8894 - Graduate Research in Information and Decision Sciences (1.0 - 8.0 cr)

Thesis Credits (24 credits minimum)
Take at least 24 doctoral thesis credits.
BA 8888 - Thesis Credit: Doctoral (1.0 - 24.0 cr)
-OR-

Marketing
Students pursuing the marketing concentration focus on one of two tracks: consumer behavior or marketing quantitative/marketing strategy.

Consumer Behavior Concentration (24 credits minimum)
Take all of the following courses, including at least 8 credits of MKTG 8810, for a total of 18 credits. In addition, take at least 6 credits from the quantitative/marketing strategy concentration course list.
Take 18 or more credit(s) from the following:
• MKTG 8809 - Consumer Behavior Research Methods (2.0 cr)
• MKTG 8810 - Consumer Behavior Special Topics (2.0 cr)
• MKTG 8811 - Consumer Attitudes and Persuasion I (2.0 cr)
• MKTG 8812 - Consumer Attitudes and Persuasion II (2.0 cr)
• MKTG 8813 - Consumer Judgment and Decision Making I (2.0 cr)
• MKTG 8814 - Consumer Judgment and Decision Making II (2.0 cr)

Quantitative/Marketing Strategy Concentration (24 credits minimum)
Take 12 credits, which can include up to 4 credits of MKTG 8890, from the following list. In addition, take at least 12 credits from the consumer behavior concentration course list.
Take 12 or more credit(s) from the following:
• MKTG 8831 - Seminar: Inter-Organizational Relations (4.0 cr)
• MKTG 8842 - Quantitative Modeling I (2.0 - 4.0 cr)
• MKTG 8843 - Quantitative Modeling II (2.0 cr)
• MKTG 8851 - Seminar: Marketing Management and Strategy I (2.0 cr)
• MKTG 8852 - Marketing Management & Strategy II (2.0 cr)
• MKTG 8890 - Seminar: Marketing Topics (1.0 - 4.0 cr)

Supporting/Methodology Coursework (16 credits minimum)
Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested courses are listed below.
ACCT 8811 - Information Economics I (4.0 cr)
ACCT 8831 - Analytical Research Topics I (2.0 cr)
APEC 8211 - Econometric Analysis I (4.0 cr)
APEC 8212 - Econometric Analysis II (4.0 cr)
CSOM 8101 - Methods and Topics in Applied Economics (2.0 - 4.0 cr)
ECON 8001 - Microeconomic Analysis (2.0 cr)
ECON 8002 - Microeconomic Analysis (2.0 cr)
ECON 8003 - Microeconomic Analysis (2.0 cr)
ECON 8004 - Microeconomic Analysis (2.0 cr)
ECON 8101 - Microeconomic Theory (2.0 cr)
ECON 8103 - Microeconomic Theory (2.0 cr)
ECON 8104 - Microeconomic Theory (2.0 cr)
ECON 8118 - Noncooperative Game Theory (2.0 cr)
ECON 8119 - Cooperative Game Theory (2.0 cr)
ECON 8191 - Workshop in Mathematical Economics (1.0 - 3.0 cr)
ECON 8205 - Applied Econometrics (2.0 cr)
ECON 8206 - Applied Econometrics (2.0 cr)
ECON 8207 - Applied Econometrics (2.0 cr)
ECON 8208 - Applied Econometrics (2.0 cr)
ECON 8211 - Econometrics (2.0 cr)
ECON 8212 - Econometrics (2.0 cr)
ECON 8601 - Industrial Organization and Government Regulation (2.0 cr)
ECON 8602 - Industrial Organization and Government Regulation (2.0 cr)
ECON 8603 - Industrial Organization and Government Regulation (2.0 cr)
EPSY 5221 - Principles of Educational and Psychological Measurement (3.0 cr)
EPSY 5245 - Advanced Survey Data Analysis for Categorical and Rating Scale Data (1.0 cr)
EPSY 5261 - Introductory Statistical Methods (3.0 cr)
EPSY 5262 - Intermediate Statistical Methods (3.0 cr)
EPSY 8261 - Statistical Methods in Education I (3.0 cr)
EPSY 8262 - Statistical Methods in Education II (3.0 cr)
EPSY 8264 - Advanced Multiple Regression Analysis (3.0 cr)
EPSY 8267 - Applied Multivariate Analysis (3.0 cr)
IDSC 8721 - Behavioral Decision Theory (3.0 cr)
MSBA 6440 - Data-Driven Experimentation and Measurement (3.0 cr)
PSY 5202 - Attitudes and Social Behavior (3.0 cr)
PSY 5204 - Psychology of Interpersonal Relationships (3.0 cr)
PSY 5207 - Personality and Social Behavior (3.0 cr)
PSY 5862 - Psychological Measurement: Theory and Methods (3.0 cr)
PSY 8203 - Impression Management (3.0 cr)
PSY 8208 - Social Psychology: The Self (3.0 cr)
PSY 8209 - Research Methods in Social Psychology (3.0 cr)
PSY 8935 - Readings in Behavioral Genetics and Individual Differences Psychology (1.0 cr)
PSY 8960 - Graduate Seminar in Psychology (1.0 - 4.0 cr)
STAT 5021 - Statistical Analysis (4.0 cr)
STAT 5303 - Designing Experiments (4.0 cr)
MKTG 8892 - Readings in Marketing (1.0 - 8.0 cr)
MKTG 8894 - Graduate Research in Marketing (1.0 - 8.0 cr)

Thesis Credits
Take at least 24 doctoral thesis credits.
BA 8888 - Thesis Credit: Doctoral (1.0 - 24.0 cr)

-OR-

Supply Chain and Operations
Students complete coursework in the areas of operations and supply chain management.

Required SCO Coursework (25 credits minimum)
Take the following courses for a total of 25 credits:
SCO 8651 - Experimental Design (3.0 cr)
SCO 8652 - Regression Analysis (3.0 cr)
SCO 8711 - Research in Operations Strategy (3.0 cr)
SCO 8721 - Management of Technological Operations (3.0 cr)
SCO 8735 - Supply Chain Management (3.0 cr)
SCO 8745 - Research on Quality Management (3.0 cr)
SCO 8755 - Behavioral Operations (3.0 cr)
MGT 8101 - Theory Building and Research Design (4.0 cr)

Supporting/Methodology Coursework (16 credits minimum)
Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested coursework is listed below.
Take 16 or more credit(s) from the following:
• APEC 8206 - Dynamic Optimization: Applications in Economics and Management (3.0 cr)
• APEC 8211 - Econometric Analysis I (4.0 cr)
• APEC 8212 - Econometric Analysis II (4.0 cr)
• APEC 8602 - Economics of the Environment (3.0 cr)
• EPSY 8262 - Statistical Methods in Education II (3.0 cr)
• EPSY 8266 - Statistical Analysis Using Structural Equation Methods (3.0 cr)
• EPSY 8269 - Hierarchical Linear Modeling in Educational Research (3.0 cr)
• GRAD 8101 - Teaching in Higher Education (3.0 cr)
• HHR 8802 - Core Seminar: Organizational Behavior (4.0 cr)
• MGMT 8302 - Seminar in Organizations Theory (4.0 cr)
• MKTG 8842 - Quantitative Modeling I (2.0 - 4.0 cr)
• MKTG 8843 - Quantitative Modeling II (2.0 cr)
• PA 5032 - Regression Analysis (2.0 cr)
• PA 5033 - Multivariate Techniques (2.0 cr)
• PUBH 7405 - Biostatistics: Regression (4.0 cr)
• PUBH 7406 - Advanced Regression and Design (4.0 cr)
• PUBH 7440 - Introduction to Bayesian Analysis (3.0 cr)
• PUBH 7475 - Statistical Learning and Data Mining (3.0 cr)
• PUBH 8475 - Statistical Learning and Data Mining (3.0 cr)
• PUBH 8804 - Advanced Quantitative Methods Seminar (3.0 cr)
• SOC 5811 - Social Statistics for Graduate Students [MATH] (4.0 cr)
• STAT 5021 - Statistical Analysis (4.0 cr)
• STAT 5101 - Theory of Statistics I (4.0 cr)
• STAT 5102 - Theory of Statistics II (4.0 cr)
• STAT 5302 - Applied Regression Analysis (4.0 cr)
• STAT 5421 - Analysis of Categorical Data (3.0 cr)
• STAT 5701 - Statistical Computing (3.0 cr)
• STAT 8051 - Advanced Regression Techniques: linear, nonlinear and nonparametric methods (3.0 cr)
• STAT 8311 - Linear Models (4.0 cr)
• SCO 8892 - Readings in Operations and Management Science (1.0 - 8.0 cr)
• SCO 8894 - Graduate Research in Operations and Management Science (1.0 - 8.0 cr)

Thesis Credits (24 credits minimum)
Take at least 24 doctoral thesis credits.
BA 8888 - Thesis Credit: Doctoral (1.0 - 24.0 cr)

-OR-

Strategic Management and Entrepreneurship
Students focus on leadership, strategy, and entrepreneurship connecting the external worlds of competition and collaboration.

Required SME Coursework (12 credits minimum)
Take all of the following courses, including 4 credits of MGMT 8401.
• MGMT 8302 - Seminar in Organizations Theory (4.0 cr)
• MGMT 8401 - Seminar in Strategy Content (2.0 - 4.0 cr)
• MGMT 8402 - Seminar in Strategy Process (4.0 cr)

Additional Required Coursework (11 credits)
Take 11 or more credit(s) from the following:
• APEC 8211 - Econometric Analysis I (4.0 cr)
• GRAD 8101 - Teaching in Higher Education (3.0 cr)
• MGMT 8101 - Theory Building and Research Design (4.0 cr)

SME Electives (4 credits)
Take one of the following courses:
• MGMT 8202 - Seminar in International Management (4.0 cr)
• MGMT 8501 - Seminar in Entrepreneurship (4.0 cr)

Supporting/Methodology Coursework (16 credits minimum)
Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested coursework is listed below.
Take 16 or more credit(s) from the following:
• APEC 8001 - Applied Microeconomic Analysis of Consumer Choice and Consumer Demand (2.0 cr)
• APEC 8003 - Applied Microeconomic Analysis of Game Theory and Information (2.0 cr)
• APEC 8004 - Applied Microeconomic Analysis of Social Choice and Welfare (2.0 cr)
• APEC 8211 - Econometric Analysis I (4.0 cr)
• APEC 8212 - Econometric Analysis II (4.0 cr)
• CSCI 5980 - Special Topics in Computer Science (1.0 - 3.0 cr)
• CSCI 8101 - Methods and Topics in Applied Economics (2.0 - 4.0 cr)
• EPSY 8261 - Statistical Methods in Education I (3.0 cr)
• EPSY 8262 - Statistical Methods in Education II (3.0 cr)
• EPSY 8264 - Advanced Multiple Regression Analysis (3.0 cr)
• EPSY 8268 - Hierarchical Linear Modeling in Educational Research (3.0 cr)
• EPSY 8282 - Statistical Analysis of Longitudinal Data (3.0 cr)
• FINA 8823 - Empirical Corporate Finance (2.0 cr)
• GRAD 8101 - Teaching in Higher Education (3.0 cr)
• HINF 5502 - Programming Essentials Python 3 (1.0 cr)
• MATH 5651 - Basic Theory of Probability and Statistics (4.0 cr)
• MGMT 8894 - Graduate Research in Management Theory and Administration (1.0 - 8.0 cr)
• POL 8106 - Quantitative Political Science I (3.0 cr)
• PUBH 8804 - Advanced Quantitative Methods Seminar (3.0 cr)
• PUBH 8811 - Research Methods in Health Care (3.0 cr)
• SOC 8412 - Social Network Analysis: Theory and Methods (3.0 cr)
• SOC 8701 - Sociological Theory (4.0 cr)
• SOC 8721 - Theories of Social Psychology (3.0 cr)
• SOC 8735 - Sociology of Culture (3.0 cr)
• SOC 8801 - Sociological Research Methods (4.0 cr)
• SOC 8811 - Advanced Social Statistics (4.0 cr)
• SOC 8890 - Advanced Topics in Research Methods (2.0 - 3.0 cr)
• STAT 8051 - Advanced Regression Techniques: linear, nonlinear and nonparametric methods (3.0 cr)

Thesis Credits (24 credits minimum)
Take at least 24 doctoral thesis credits.
Work and Organizations

Students complete multidisciplinary coursework covering organizational behavior, human resource management, organizational economics, personnel economics, labor relations, and related areas.

Required WOrg Coursework (24-28 credits)

Take 24-28 credits from the following list. Take HRIR 8820 2-4 times for a total of 4-8 credits. Take HRIR 8825 4 times for a total of 4 credits.

Take 24 - 26 credit(s) from the following:
• HRIR 8801 - Core Seminar: Fundamentals of Economic Analysis for Work and Organizations (4.0 cr)
• HRIR 8802 - Core Seminar: Organizational Behavior (4.0 cr)
• HRIR 8803 - Core Seminar: Fundamentals of HR Research (4.0 cr)
• HRIR 8812 - Core Seminar: Research Methods in Work and Organizations (4.0 cr)
• HRIR 8820 - Seminar: Special Topics in Work and Organizations Research (2.0 cr)
• HRIR 8825 - Research Practicum/Workshop (1.0 cr)
• PSY 5862 - Psychological Measurement: Theory and Methods (3.0 cr)

Supporting/Methodology Coursework (16 credits minimum)

Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested coursework is listed below.

Take 16 or more credit(s) from the following:
• APEC 8003 - Applied Microeconomic Analysis of Game Theory and Information (2.0 cr)
• APEC 8211 - Econometric Analysis I (4.0 cr)
• APEC 8212 - Econometric Analysis II (4.0 cr)
• APEC 8501 - Labor Economics I (2.0 cr)
• APEC 8502 - Labor Economics II (2.0 cr)
• CSOM 8101 - Methods and Topics in Applied Economics (2.0 - 4.0 cr)
• ECON 8205 - Applied Econometrics (2.0 cr)
• ECON 8206 - Applied Econometrics (2.0 cr)
• EPSY 5247 - Qualitative Methods in Educational Psychology (3.0 cr)
• EPSY 5261 - Introductory Statistical Methods (3.0 cr)
• EPSY 8264 - Advanced Multiple Regression Analysis (3.0 cr)
• EPSY 8266 - Statistical Analysis Using Structural Equation Methods (3.0 cr)
• EPSY 8268 - Hierarchical Linear Modeling in Educational Research (3.0 cr)
• EPSY 8282 - Statistical Analysis of Longitudinal Data (3.0 cr)
• MGMT 8101 - Theory Building and Research Design (4.0 cr)
• MGMT 8301 - Seminar in Organizational Behavior (4.0 cr)
• PSY 8208 - Social Psychology: The Self (3.0 cr)
• PSY 8604 - Personality Assessment (3.0 cr)
• PSY 8701 - Seminar in Industrial and Organizational Psychology I (3.0 cr)
• PSY 8702 - Seminar in Industrial and Organizational Psychology II (3.0 cr)
• PSY 8960 - Graduate Seminar in Psychology (1.0 - 4.0 cr)
• PUBH 6724 - The Health Care System and Public Health (3.0 cr)
• PUBH 6832 - Economics of the Health Care System (3.0 cr)
• PUBH 6861 - Health Insurance (2.0 cr)
• SOC 8590 - Topics in Life Course Sociology (3.0 cr)
• HRIR 8991 - Independent Study in Human Resources and Industrial Relations (1.0 - 8.0 cr)

Thesis Credits (24 credits minimum)

Take at least 24 doctoral thesis credits.
• BA 8888 - Thesis Credit: Doctoral (1.0 - 24.0 cr)
Twin Cities Campus
Business Analytics M.S.
Information & Decision Sciences
Curtis L. Carlson School of Management

Link to a list of faculty for this program.

Contact Information:
Phone: 612-301-1191

- Program Type: Master's
- Requirements for this program are current for Fall 2016
- Length of program in credits: 45
- This program requires summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The M.S. in Business Analytics program provides a strong foundation in data analytics by bringing together a diverse body of knowledge from consumer behavior, risk management, operations research, optimization, information systems, computer science, applied statistics, and decision theory for the purpose of data-driven business decision making in both public and private sectors.

Students who graduate from this 45-credit program will have the deep quantitative capabilities and technical expertise to create business and social value by extracting useful insights and applying them in a variety of career settings. The Business Analytics M.S. can be completed in one year of full-time study, or in three years part-time.

Accreditation
This program is accredited by This program is STEM approved.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
Applicants must have a bachelor's degree from an accredited college or university.

Other requirements to be completed before admission:
- Completion of some programming courses preferred.
- Applicants must have completed at least one semester college-level Calculus course with a grade of "C" or better (or grade equivalent).
- Work experience is not required, but preferred.

Special Application Requirements:
Applicants must submit all application materials through the University's admissions system. Application materials include:
- A GMAT or GRE General Test that is not more than five years old, with an acceptable score.
- For international students, an acceptable score on the Test of English as a Foreign Language (TOEFL) International Language Testing System (IELTS).
- Names and contact information for three references in the online application.
- A personal statement of career goals, and objectives for pursuing a Business Analytics M.S. degree. The personal statement questions are the following:
  Briefly describe your short-term and long-term career goals. Why are you choosing to pursue a Business Analytics M.S. degree at this time in your career, and what are you hoping to accomplish by doing so? Why are you interested in pursuing a Business Analytics M.S. degree at the Carlson School of Management? What do you feel makes you a strong candidate for the program? How will you contribute to the Business Analytics M.S. Program overall? Applicants must submit a current resume that includes job responsibilities and accomplishments in the online application.
- Applicants may choose to submit an essay to comment on any item(s) in their application they consider worthy of further explanation.
- Applicants may be required to complete an admissions interview, which are by invitation only.
Applicants must submit their test score(s) from the following:

- GRE
- GMAT

International applicants must submit score(s) from one of the following tests:

- TOEFL
- IELTS

Key to test abbreviations (GRE, GMAT, TOEFL, IELTS).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements

**Plan C:** Plan C requires 45 major credits and up to null credits outside the major. There is no final exam. A capstone project is required.

**Capstone Project:** Students will engage in an experiential learning application of the analytics methodologies, techniques, and tools learned throughout the program to a real-world problem. The final project will consist of the development and presentation of results, interpretations, insights, and recommendations.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.8 is required for students to remain in good standing.

Some business/basic technical requirements can be waived for students with degrees in related business areas/computer science.

**Business/Management Fundamentals (12 credits)**
- Financial Accounting (3 cr)
- Data Analysis and Statistics for Managers (3 cr)
- Analytics for Competitive Advantage (3 cr)

At least one of the following:
- Marketing Management (3 cr)
- Operations Management (3 cr)
- Strategic Management (3 cr)
- Financial Management (3 cr)

**Technical Fundamentals (12 credits)**
- Programming & Application Development (3 cr)
- Data Management, Databases, and Data Warehousing (3 cr)
- Harvesting Big Data (3 cr)
- Project Management, Leadership, Communications & Team Dynamics (3 cr)

**Specialty Courses (15 credits)**
- Exploratory Data Analytics & Visualization (3 cr)
- Predictive Analytics (3 cr)
- Advanced Issues in Business Analytics (3 cr)
- Data-Driven Experimentation and Measurement (3 cr)
- Modeling and Heuristics for Decision Making Support (3 cr)
**Twin Cities Campus**

**Business Research M.S.**
Curtis L. Carlson School of Management - Adm
Curtis L. Carlson School of Management

Link to a list of faculty for this program.

**Contact Information:**
Business Administration PhD Program, Suite 4-205, 321-19th Avenue South, Minneapolis, MN 55455 (Phone: 612-624-0875; Fax: 612-624-8221)
Email: brons003@umn.edu
Website: http://www.carlsonschool.umn.edu/phd-ba/

- Program Type: Master's
- Requirements for this program are current for Fall 2016
- Length of program in credits: 40 to 44
- This program does not require summer semesters for timely completion.
- No
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The business research MS is a terminal master's degree option restricted to eligible business administration PhD students who do not complete the doctoral degree. Applications to the business research MS are not otherwise considered.

**Program Delivery**
This program is available:
- via classroom (the majority of instruction is face-to-face)

**Prerequisites for Admission**
The preferred undergraduate GPA for admittance to the program is 3.00.

Other requirements to be completed before admission:
Applicants must be current business administration PhD students who have completed all required core, concentration, and supporting coursework for the doctoral degree. The preliminary written examination must have been passed at the master's level, based on a set of criteria approved by the Carlson School PhD Committee comprising members from all seven areas of concentration.

Applicants must submit their test score(s) from the following:
- **GRE**
  - General Test - Verbal Reasoning: 160
  - General Test - Quantitative Reasoning: 160
- **GMAT**
  - Total score: 650

International applicants must submit score(s) from one of the following tests:
- **TOEFL**
  - Internet Based - Total Score: 100
  - Paper Based - Total Score: 600

Key to test abbreviations (GRE, GMAT, TOEFL).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

**Program Requirements**
**Plan C:** Plan C requires 24 to 28 major credits and 16 credits outside the major. There is no final exam.

This program may be completed with a minor.
Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.3 is required for students to remain in good standing.

At least 4 semesters must be completed before filing a Degree Program Form.

**Areas of Concentration**

Students select one of seven areas of concentration. Concentration areas may require a first-year examination/presentation in addition to other program requirements.

**Accounting**

Students pursuing the accounting concentration must work under one of two accounting research paradigms: analytic or empirical.

**Required Accounting Coursework (24 credits minimum)**

Take the following 24 credits:

- ACCT 8800 - Empirical Research: Topics I (2.0 cr)
- ACCT 8801 - Empirical Research: Valuation (4.0 cr)
- ACCT 8802 - Empirical Research: Capital Markets I (2.0 cr)
- ACCT 8803 - Empirical Research: Capital Markets II (2.0 cr)
- ACCT 8804 - Empirical Research Topics II (2.0 cr)
- ACCT 8811 - Information Economics I (4.0 cr)
- ACCT 8812 - Information Economics II (4.0 cr)
- ACCT 8831 - Analytical Research Topics I (2.0 cr)
- ACCT 8832 - Analytical Research Topics II (2.0 cr)

**Supporting/Methodology Coursework (16 credits minimum)**

Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested coursework is listed below.

Take 16 or more credits from the following:

- APEC 8001 - Applied Microeconomic Analysis of Consumer Choice and Consumer Demand (2.0 cr)
- APEC 8002 - Applied Microeconomic Analysis of Production and Choice Under Uncertainty (2.0 cr)
- APEC 8003 - Applied Microeconomic Analysis of Game Theory and Information (2.0 cr)
- APEC 8004 - Applied Microeconomic Analysis of Social Choice and Welfare (2.0 cr)
- APEC 8211 - Econometric Analysis I (4.0 cr)
- APEC 8212 - Econometric Analysis II (4.0 cr)
- CSOM 8101 - Methods and Topics in Applied Economics (2.0 - 4.0 cr)
- ECON 8001 - Microeconomic Analysis (2.0 cr)
- ECON 8002 - Microeconomic Analysis (2.0 cr)
- ECON 8003 - Microeconomic Analysis (2.0 cr)
- ECON 8004 - Microeconomic Analysis (2.0 cr)
- ECON 8205 - Applied Econometrics (2.0 cr)
- FINA 8802 - Theory of Capital Markets I: Discrete Time (2.0 cr)
- FINA 8812 - Corporate Finance I (2.0 cr)
- FINA 8813 - Corporate Finance II (2.0 cr)
- FINA 8822 - Empirical Methods in Finance (2.0 cr)
- FINA 8823 - Empirical Corporate Finance (2.0 cr)
- MATH 4603 - Advanced Calculus I (4.0 cr)
- MATH 4604 - Advanced Calculus II (4.0 cr)
- MATH 5651 - Basic Theory of Probability and Statistics (4.0 cr)
- PUBH 6325 - Data Processing with PC-SAS (1.0 cr)
- STAT 5102 - Theory of Statistics II (4.0 cr)
- STAT 8101 - Theory of Statistics I (3.0 cr)
- ACCT 8892 - Readings in Accounting (1.0 - 8.0 cr)
- ACCT 8894 - Research in Accounting (1.0 - 8.0 cr)

-OR-

**Finance**

Finance is viewed as a subfield of economics. Students achieve a strong foundation in economic theory and empirical methods.

**Required Finance Coursework (20 credits minimum)**

Take at least 20 credits from the following list. FINA 8810, 8820, and 8890 may be taken more than once.

- FINA 8802 - Theory of Capital Markets I: Discrete Time (2.0 cr)
- FINA 8803 - Theory of Capital Markets II: Continuous Time (2.0 cr)
- FINA 8804 - Advanced Continuous Time Finance (2.0 cr)
- FINA 8810 - Topics in Asset Pricing (2.0 cr)
- FINA 8812 - Corporate Finance I (2.0 cr)
- FINA 8813 - Corporate Finance II (2.0 cr)
- FINA 8820 - Topics in Corporate Finance (2.0 cr)
FINA 8822 - Empirical Methods in Finance (2.0 cr)
FINA 8823 - Empirical Corporate Finance (2.0 cr)
FINA 8890 - Seminar: Finance Topics (2.0 - 4.0 cr)

**Additional Required Finance Coursework (8 credits required)**

Take one of the following sequence of economics courses:

- **8001-04 Sequence**
  - ECON 8001 - Microeconomic Analysis (2.0 cr)
  - ECON 8002 - Microeconomic Analysis (2.0 cr)
  - ECON 8003 - Microeconomic Analysis (2.0 cr)
  - ECON 8004 - Microeconomic Analysis (2.0 cr)

- **or 8101-04 Sequence**
  - ECON 8101 - Microeconomic Theory (2.0 cr)
  - ECON 8102 - Microeconomic Theory (2.0 cr)
  - ECON 8103 - Microeconomic Theory (2.0 cr)
  - ECON 8104 - Microeconomic Theory (2.0 cr)

**Supporting/Methodology Coursework (16 credits minimum)**

Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested courses are listed below.

Take 16 or more credit(s) from the following:

- ACCT 8812 - Information Economics II (4.0 cr)
- ACCT 8831 - Analytical Research Topics I (2.0 cr)
- ACCT 8832 - Analytical Research Topics II (2.0 cr)
- APEC 8211 - Econometric Analysis I (4.0 cr)
- APEC 8212 - Econometric Analysis II (4.0 cr)
- ECON 8001 - Microeconomic Analysis (2.0 cr)
- ECON 8002 - Microeconomic Analysis (2.0 cr)
- ECON 8003 - Microeconomic Analysis (2.0 cr)
- ECON 8004 - Microeconomic Analysis (2.0 cr)
- ECON 8101 - Microeconomic Theory (2.0 cr)
- ECON 8102 - Microeconomic Theory (2.0 cr)
- ECON 8103 - Microeconomic Theory (2.0 cr)
- ECON 8104 - Microeconomic Theory (2.0 cr)
- ECON 8105 - Macroeconomic Theory (2.0 cr)
- ECON 8106 - Macroeconomic Theory (2.0 cr)
- ECON 8107 - Macroeconomic Theory (2.0 cr)
- ECON 8108 - Macroeconomic Theory (2.0 cr)
- ECON 8181 - Advanced Topics in Microeconomics (2.0 cr)
- ECON 8182 - Advanced Topics in Microeconomics (2.0 cr)
- ECON 8185 - Advanced Topics in Macroeconomics (2.0 cr)
- ECON 8191 - Workshop in Mathematical Economics (1.0 - 3.0 cr)
- ECON 8201 - Econometric Analysis (2.0 cr)
- ECON 8205 - Applied Econometrics (2.0 cr)
- ECON 8206 - Applied Econometrics (2.0 cr)
- ECON 8207 - Applied Econometrics (2.0 cr)
- ECON 8208 - Applied Econometrics (2.0 cr)
- ECON 8211 - Econometrics (2.0 cr)
- ECON 8212 - Econometrics (2.0 cr)
- ECON 8501 - Wages and Employment (2.0 cr)
- ECON 8601 - Industrial Organization and Government Regulation (2.0 cr)
- ECON 8602 - Industrial Organization and Government Regulation (2.0 cr)
- ECON 8701 - Monetary Economics (2.0 cr)
- ECON 8702 - Monetary Economics (2.0 cr)
- ECON 8704 - Financial Economics (2.0 cr)
- ECON 8705 - Financial Economics (2.0 cr)
- MATH 8601 - Real Analysis (3.0 cr)
- FINA 8892 - Independent Study in Finance (1.0 - 8.0 cr)
- FINA 8894 - Directed Research in Finance (1.0 - 8.0 cr)

-OR-

**Information and Decision Sciences**

Students conduct theoretical and empirical research that addresses the role, impact, and development of IT innovations from a business perspective in business process, organizational, and market contexts.

**Required IDSc Coursework (19 credits minimum)**

Take all of the following courses. IDSC 8801 must be taken at least twice.

- IDSC 8511 - Conceptual Topics and Research Methods in Information and Decision Sciences (3.0 cr)
- IDSC 8521 - System Development (3.0 cr)
IDSC 8531 - Organizational Theory and Research in Information Systems (3.0 cr)
IDSC 8541 - Introduction to Economics of Information Systems (3.0 cr)
IDSC 8721 - Behavioral Decision Theory (3.0 cr)
IDSC 8801 - Research Seminar in Information and Decision Sciences (2.0 cr)

Additional IDSc Required Coursework (8 credits)
Take the following APEC methodology courses for a total of 8 credits:
APEC 8211 - Econometric Analysis I (4.0 cr)
APEC 8212 - Econometric Analysis II (4.0 cr)

Supporting/Methodology Coursework (16 credits minimum)
Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested courses are listed below.
Take 16 or more credit(s) from the following:
- APEC 8001 - Applied Microeconomic Analysis of Consumer Choice and Consumer Demand (2.0 cr)
- APEC 8002 - Applied Microeconomic Analysis of Production and Choice Under Uncertainty (2.0 cr)
- APEC 8003 - Applied Microeconomic Analysis of Game Theory and Information (2.0 cr)
- APEC 8206 - Dynamic Optimization: Applications in Economics and Management (3.0 cr)
- CSCI 5980 - Special Topics in Computer Science (1.0 - 3.0 cr)
- CSCI 8551 - Intelligent Agents (3.0 cr)
- CSCI 8980 - Special Advanced Topics in Computer Science (1.0 - 3.0 cr)
- CSOM 8101 - Methods and Topics in Applied Economics (2.0 - 4.0 cr)
- ECON 8581 - Advanced Topics in Labor Economics (2.0 cr)
- ECON 8601 - Industrial Organization and Government Regulation (2.0 cr)
- ECON 8602 - Industrial Organization and Government Regulation (2.0 cr)
- EPSY 8262 - Statistical Methods in Education II (3.0 cr)
- EPSY 8264 - Advanced Multiple Regression Analysis (3.0 cr)
- EPSY 8267 - Applied Multivariate Analysis (3.0 cr)
- EPSY 8268 - Hierarchical Linear Modeling in Educational Research (3.0 cr)
- EPSY 8281 - Advanced Statistical Computing and Data Analysis (3.0 cr)
- MGMT 8101 - Theory Building and Research Design (4.0 cr)
- MGMT 8301 - Seminar in Organizational Behavior (4.0 cr)
- MGMT 8302 - Seminar in Organizations Theory (4.0 cr)
- PSY 5018H - Mathematical Models of Human Behavior (3.0 cr)
- PSY 5862 - Psychological Measurement: Theory and Methods (3.0 cr)
- PSY 5993 - Research Laboratory in Psychology (3.0 cr)
- PSY 8201 - Social Cognition (3.0 cr)
- PSY 8960 - Graduate Seminar in Psychology (1.0 - 4.0 cr)
- PUBH 6470 - SAS Procedures and Data Analysis (3.0 cr)
- PUBH 7430 - Statistical Methods for Correlated Data (3.0 cr)
- PUBH 8442 - Bayesian Decision Theory and Data Analysis (3.0 cr)
- SCO 8652 - Regression Analysis (3.0 cr)
- SCO 8721 - Management of Technological Operations (3.0 cr)
- IDSC 8890 - Readings in Information and Decision Sciences (1.0 - 4.0 cr)
- IDSC 8892 - Graduate Research in Information and Decision Sciences (1.0 - 8.0 cr)

Marketing
Students pursuing the marketing concentration choose one of two focus areas: consumer behavior or quantitative marketing strategy.

Consumer Behavior Concentration (24 credits minimum)
Take all of the following courses, including at least 8 credits of MKTG 8810, for a total of 18 credits. In addition, take at least 6 credits from the quantitative/marketing strategy concentration course list.
Take 18 or more credit(s) from the following:
- MKTG 8809 - Consumer Behavior Research Methods (2.0 cr)
- MKTG 8810 - Consumer Behavior Special Topics (2.0 cr)
- MKTG 8811 - Consumer Attitudes and Persuasion I (2.0 cr)
- MKTG 8812 - Consumer Attitudes and Persuasion II (2.0 cr)
- MKTG 8813 - Consumer Judgment and Decision Making I (2.0 cr)
- MKTG 8814 - Consumer Judgment and Decision Making II (2.0 cr)

or Quantitative/Marketing Strategy Concentration (24 credits minimum)
Take 12 credits, which can include up to 4 credits of MKTG 8890, from the following list. In addition, take at least 12 credits from the consumer behavior concentration course list.
Take 12 or more credit(s) from the following:
- MKTG 8831 - Seminar: Inter-Organizational Relations (4.0 cr)
- MKTG 8842 - Quantitative Modeling I (2.0 - 4.0 cr)
- MKTG 8843 - Quantitative Modeling II (2.0 cr)
- MKTG 8851 - Seminar: Marketing Management and Strategy I (2.0 cr)
Supporting/Methodology Coursework (16 credits minimum)
Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested courses are listed below.

ACCT 8811 - Information Economics I (4.0 cr)
ACCT 8831 - Analytical Research Topics I (2.0 cr)
APEC 8211 - Econometric Analysis I (4.0 cr)
APEC 8212 - Econometric Analysis II (4.0 cr)
CSOM 8101 - Methods and Topics in Applied Economics (2.0 - 4.0 cr)
ECON 8001 - Microeconomic Analysis (2.0 cr)
ECON 8002 - Microeconomic Analysis (2.0 cr)
ECON 8003 - Microeconomic Analysis (2.0 cr)
ECON 8004 - Microeconomic Analysis (2.0 cr)
ECON 8101 - Microeconomic Theory (2.0 cr)
ECON 8103 - Microeconomic Theory (2.0 cr)
ECON 8104 - Microeconomic Theory (2.0 cr)
ECON 8118 - Noncooperative Game Theory (2.0 cr)
ECON 8119 - Cooperative Game Theory (2.0 cr)
ECON 8191 - Workshop in Mathematical Economics (1.0 - 3.0 cr)
ECON 8205 - Applied Econometrics (2.0 cr)
ECON 8206 - Applied Econometrics (2.0 cr)
ECON 8207 - Applied Econometrics (2.0 cr)
ECON 8208 - Applied Econometrics (2.0 cr)
ECON 8211 - Econometrics (2.0 cr)
ECON 8212 - Econometrics (2.0 cr)
ECON 8601 - Industrial Organization and Government Regulation (2.0 cr)
ECON 8602 - Industrial Organization and Government Regulation (2.0 cr)
ECON 8603 - Industrial Organization and Government Regulation (2.0 cr)
EPSY 5221 - Principles of Educational and Psychological Measurement (3.0 cr)
EPSY 5245 - Advanced Survey Data Analysis for Categorical and Rating Scale Data (1.0 cr)
EPSY 5261 - Introductory Statistical Methods (3.0 cr)
EPSY 5262 - Intermediate Statistical Methods (3.0 cr)
EPSY 8261 - Statistical Methods in Education I (3.0 cr)
EPSY 8262 - Statistical Methods in Education II (3.0 cr)
EPSY 8264 - Advanced Multiple Regression Analysis (3.0 cr)
EPSY 8267 - Applied Multivariate Analysis (3.0 cr)
IDSIC 8721 - Behavioral Decision Theory (3.0 cr)
MSBA 6440 - Data-Driven Experimentation and Measurement (3.0 cr)
PSY 5202 - Attitudes and Social Behavior (3.0 cr)
PSY 5204 - Psychology of Interpersonal Relationships (3.0 cr)
PSY 5207 - Personality and Social Behavior (3.0 cr)
PSY 5862 - Psychological Measurement: Theory and Methods (3.0 cr)
PSY 8203 - Impression Management (3.0 cr)
PSY 8208 - Social Psychology: The Self (3.0 cr)
PSY 8209 - Research Methods in Social Psychology (3.0 cr)
PSY 8935 - Readings in Behavioral Genetics and Individual Differences Psychology (1.0 cr)
PSY 8960 - Graduate Seminar in Psychology (1.0 - 4.0 cr)
STAT 5021 - Statistical Analysis (4.0 cr)
STAT 5303 - Designing Experiments (4.0 cr)
MKTG 8892 - Readings in Marketing (1.0 - 8.0 cr)
MKTG 8894 - Graduate Research in Marketing (1.0 - 8.0 cr)

-OR-

Supply Chain and Operations
Students complete coursework in the areas of operations and supply chain management.

Required SCO Coursework (25 credits minimum)
Take the following courses for a total of 25 credits:
SCO 8651 - Experimental Design (3.0 cr)
SCO 8652 - Regression Analysis (3.0 cr)
SCO 8711 - Research in Operations Strategy (3.0 cr)
SCO 8721 - Management of Technological Operations (3.0 cr)
SCO 8735 - Supply Chain Management (3.0 cr)
SCO 8745 - Research on Quality Management (3.0 cr)
SCO 8755 - Behavioral Operations (3.0 cr)
MGMT 8101 - Theory Building and Research Design (4.0 cr)
Supporting/Methodology Coursework (16 credits minimum)
Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested courses are listed below.
Take 16 or more credit(s) from the following:
• APEC 8206 - Dynamic Optimization: Applications in Economics and Management (3.0 cr)
• APEC 8211 - Econometric Analysis I (4.0 cr)
• APEC 8212 - Econometric Analysis II (4.0 cr)
• APEC 8602 - Economics of the Environment (3.0 cr)
• EPSY 8262 - Statistical Methods in Education II (3.0 cr)
• EPSY 8266 - Statistical Analysis Using Structural Equation Methods (3.0 cr)
• EPSY 8268 - Hierarchical Linear Modeling in Educational Research (3.0 cr)
• GRAD 8101 - Teaching in Higher Education (3.0 cr)
• HRIR 8802 - Core Seminar: Organizational Behavior (4.0 cr)
• MGMT 8302 - Seminar in Organizations Theory (4.0 cr)
• MKTG 8842 - Quantitative Modeling I (2.0 - 4.0 cr)
• MKTG 8843 - Quantitative Modeling II (2.0 cr)
• PA 5032 - Regression Analysis (2.0 cr)
• PA 5033 - Multivariate Techniques (2.0 cr)
• PUBH 7405 - Biostatistics: Regression (4.0 cr)
• PUBH 7406 - Advanced Regression and Design (4.0 cr)
• PUBH 7440 - Introduction to Bayesian Analysis (3.0 cr)
• PUBH 7475 - Statistical Learning and Data Mining (3.0 cr)
• PUBH 8475 - Statistical Learning and Data Mining (3.0 cr)
• PUBH 8804 - Advanced Quantitative Methods Seminar (3.0 cr)
• SOC 5811 - Social Statistics for Graduate Students [MATH] (4.0 cr)
• STAT 5021 - Statistical Analysis (4.0 cr)
• STAT 5101 - Theory of Statistics I (4.0 cr)
• STAT 5102 - Theory of Statistics II (4.0 cr)
• STAT 5302 - Applied Regression Analysis (4.0 cr)
• STAT 5421 - Analysis of Categorical Data (3.0 cr)
• STAT 5701 - Statistical Computing (3.0 cr)
• STAT 8051 - Advanced Regression Techniques: linear, nonlinear and nonparametric methods (3.0 cr)
• STAT 8311 - Linear Models (4.0 cr)
• SCO 8892 - Readings in Operations and Management Science (1.0 - 8.0 cr)
• SCO 8894 - Graduate Research in Operations and Management Science (1.0 - 8.0 cr)

Strategic Management and Entrepreneurship
Students focus on leadership, strategy, and entrepreneurship connecting the external worlds of competition and collaboration.
Required SME Coursework (12 credits minimum)
Take all of the following courses, including 4 credits of MGMT 8401.
• MGMT 8302 - Seminar in Organizations Theory (4.0 cr)
• MGMT 8401 - Seminar in Strategy Content (2.0 - 4.0 cr)
• MGMT 8402 - Seminar in Strategy Process (4.0 cr)
Additional Required Coursework (11 credits)
At least 7 credits from the following list, and 4 elective credits, are required.
Take 7 or more credit(s) from the following:
• APEC 8211 - Econometric Analysis I (4.0 cr)
• GRAD 8101 - Teaching in Higher Education (3.0 cr)
• MGMT 8101 - Theory Building and Research Design (4.0 cr)
SME Electives (4 credits)
Take one of the following courses:
• MGMT 8202 - Seminar in International Management (4.0 cr)
• MGMT 8501 - Seminar in Entrepreneurship (4.0 cr)

Supporting/Methodology Coursework (16 credits minimum)
Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested courses are listed below.
Take 16 or more credit(s) from the following:
• APEC 8001 - Applied Microeconomic Analysis of Consumer Choice and Consumer Demand (2.0 cr)
• APEC 8003 - Applied Microeconomic Analysis of Game Theory and Information (2.0 cr)
• APEC 8004 - Applied Microeconomic Analysis of Social Choice and Welfare (2.0 cr)
• APEC 8211 - Econometric Analysis I (4.0 cr)
• APEC 8212 - Econometric Analysis II (4.0 cr)
• CSCI 5980 - Special Topics in Computer Science (1.0 - 3.0 cr)
• CSOM 8101 - Methods and Topics in Applied Economics (2.0 - 4.0 cr)
• EPSY 8261 - Statistical Methods in Education I (3.0 cr)
• EPSY 8262 - Statistical Methods in Education II (3.0 cr)
EPSY 8264 - Advanced Multiple Regression Analysis (3.0 cr)
EPSY 8268 - Hierarchical Linear Modeling in Educational Research (3.0 cr)
FINA 8823 - Empirical Corporate Finance (2.0 cr)
HINF 5502 - Programming Essentials Python 3 (1.0 cr)
MATH 5651 - Basic Theory of Probability and Statistics (4.0 cr)
MGMT 8892 - Readings in Management Theory and Administration (1.0 - 8.0 cr)
MGMT 8894 - Graduate Research in Management Theory and Administration (1.0 - 8.0 cr)
MKTG 8831 - Seminar: Inter-Organizational Relations (4.0 cr)
PA 8302 - Applied Policy Analysis (4.0 cr)
POL 8106 - Quantitative Political Science I (3.0 cr)
PUBH 8804 - Advanced Quantitative Methods Seminar (3.0 cr)
PUBH 8811 - Research Methods in Health Care (3.0 cr)
SOC 8412 - Social Network Analysis: Theory and Methods (3.0 cr)
SOC 8701 - Sociological Theory (4.0 cr)
SOC 8721 - Theories of Social Psychology (3.0 cr)
SOC 8735 - Sociology of Culture (3.0 cr)
SOC 8801 - Sociological Research Methods (4.0 cr)
SOC 8811 - Advanced Social Statistics (4.0 cr)
SOC 8890 - Advanced Topics in Research Methods (2.0 - 3.0 cr)
STAT 8051 - Advanced Regression Techniques: linear, nonlinear and nonparametric methods (3.0 cr)

-OR-

Work and Organizations

Students complete multidisciplinary coursework covering organizational behavior, human resource management, organizational economics, personnel economics, labor relations, and related areas.

Required WOrg Coursework (24-28 credits minimum)

Take 24-28 credits from the following list. Take HRIR 8820 2-4 times for a total of 4-8 credits. Take HRIR 8825 4 times for a total of 4 credits.

Take 24 - 28 credit(s) from the following:
- HRIR 8801 - Core Seminar: Fundamentals of Economic Analysis for Work and Organizations (4.0 cr)
- HRIR 8802 - Core Seminar: Organizational Behavior (4.0 cr)
- HRIR 8803 - Core Seminar: Fundamentals of HR Research (4.0 cr)
- HRIR 8812 - Core Seminar: Research Methods in Work and Organizations (4.0 cr)
- HRIR 8820 - Seminar: Special Topics in Work and Organizations Research (2.0 cr)
- HRIR 8825 - Research Practicum/Workshop (1.0 cr)
- PSY 5862 - Psychological Measurement: Theory and Methods (3.0 cr)

Supporting/Methodology Coursework (16 credits minimum)

Courses must be chosen in consultation with the advisor or PhD coordinator. Suggested coursework is listed below.

Take 16 or more credit(s) from the following:
- APEC 8003 - Applied Microeconomic Analysis of Game Theory and Information (2.0 cr)
- APEC 8211 - Econometric Analysis I (4.0 cr)
- APEC 8212 - Econometric Analysis II (4.0 cr)
- APEC 8501 - Labor Economics I (2.0 cr)
- APEC 8502 - Labor Economics II (2.0 cr)
- CSOM 8101 - Methods and Topics in Applied Economics (2.0 - 4.0 cr)
- ECON 8205 - Applied Econometrics (2.0 cr)
- ECON 8206 - Applied Econometrics (2.0 cr)
- EPSY 5247 - Qualitative Methods in Educational Psychology (3.0 cr)
- EPSY 5261 - Introductory Statistical Methods (3.0 cr)
- EPSY 8264 - Advanced Multiple Regression Analysis (3.0 cr)
- EPSY 8266 - Statistical Analysis Using Structural Equation Methods (3.0 cr)
- EPSY 8268 - Hierarchical Linear Modeling in Educational Research (3.0 cr)
- EPSY 8282 - Statistical Analysis of Longitudinal Data (3.0 cr)
- MGMT 8101 - Theory Building and Research Design (4.0 cr)
- MGMT 8301 - Seminar in Organizational Behavior (4.0 cr)
- PSY 8208 - Social Psychology: The Self (3.0 cr)
- PSY 8664 - Personality Assessment (3.0 cr)
- PSY 8701 - Seminar in Industrial and Organizational Psychology I (3.0 cr)
- PSY 8702 - Seminar in Industrial and Organizational Psychology II (3.0 cr)
- PSY 8880 - Graduate Seminar in Psychology (1.0 - 4.0 cr)
- PUBH 6724 - The Health Care System and Public Health (3.0 cr)
- PUBH 6832 - Economics of the Health Care System (3.0 cr)
- PUBH 6861 - Health Insurance (2.0 cr)
- SOC 8590 - Topics in Life Course Sociology (3.0 cr)
- HRIR 8991 - Independent Study in Human Resources and Industrial Relations (1.0 - 8.0 cr)
Twin Cities Campus

Business Taxation M.B.T.

Accounting

Curtis L. Carlson School of Management

Link to a list of faculty for this program.

Contact Information:
Masters Programs in Accounting, 3-110 Carlson School of Management, 321 19th Avenue South, Minneapolis, MN 55455 (612-624-7511; fax: 612-626-7795).
Email: mbt@umn.edu
Website: http://www.carlsonschool.umn.edu/master-business-taxation

- Program Type: Master's
- Requirements for this program are current for Fall 2016
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Business Taxation

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

As one of the premier graduate tax programs in the nation, the Carlson School Master of Business Taxation (MBT) program helps students acquire a conceptual understanding of taxation, and develop technical competence in the practical application of the rules of taxation in business. In addition, courses in government and economic tax policy, tax negotiations, and tax technology and analytics provide breadth to complement the technical tax courses.

The program gives students a chance to learn from world-class faculty who are distinguished professionals with extensive real-life experience. The faculty have in-depth knowledge of the tax industry and work closely with the Twin Cities business community. Combining rigorous coursework and top faculty from the tax community brings a broad perspective into the relationship between tax and business issues, which helps prepare graduates for greater responsibilities in business management and consulting.

Courses are offered in the evenings (Monday-Thursday, 5:45-9:05 p.m.), accommodating both part-time and full-time students. Historically, more than 80 percent of students are employed in the business community and take courses on a part-time basis. To free tax professionals from coursework responsibilities during the busiest part of tax season, no courses meet during the spring semester from early March through April 15.

Students enrolled part-time can expect to complete the program in approximately three years. Students enrolled full-time can complete the program in a shorter period.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

Required prerequisites

Introduction to Accounting
- ACCT 2050 - Introduction to Financial Reporting (4.0 cr)
  or equivalent course taken at another institution

Introduction to Federal Income Tax
- ACCT 5135 - Fundamentals of Federal Income Tax (4.0 cr)
  or equivalent course at another institution

Other requirements to be completed before admission:
Applicants must have a bachelor's degree from an accredited college or university.

The following required prerequisite courses may be taken after being admitted to the MBT program but must be taken before being eligible to take any MBT courses.

Special Application Requirements:

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The University of Minnesota is an equal opportunity educator and employer.
Information current as of December 20, 2016
Fall application deadline: June 15  
Spring application deadline: October 15  
Summer application deadline: March 15  

Applicants must submit all application materials through the University's admission system.  

A GMAT or LSAT (Law School Admission Test) score that is not more than five years old is required. The GMAT score must be sent directly from GMAT to be considered official. The GMAT requirement will be waived for domestic students in the following cases: 1) applicant has a CPA license (either active or inactive), 2) applicant has at least two years of relevant U.S. based tax-related work experience within the prior five years, or 3) applicant is a Carlson School accounting graduate within the prior five years. In order for the waiver to apply, the applicant must have a minimum 3.0 undergraduate GPA from an accredited university.

Applicants may submit their copy of their LSAT score to the MBT office.

For international applicants, the results from one of the following English language tests are required: TOEFL, IELTS, MELAB. TOEFL scores must be received directly from TOEFL. IELTS and MELAB scores must be received directly from the testing center.

For additional application details, review the M.B.T. admissions webpages.

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

**Program Requirements**

**Plan C:** Plan C requires 30 major credits and up to null credits outside the major. The is no final exam.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 3.00 is required for students to remain in good standing.

The MBT program requires 30 credits, including 12 required credits in specified courses and 18 elective credits. **ACCT 2050 Introduction to Financial Reporting** and **ACCT 5135 Fundamentals of Federal Income Tax** or equivalent courses are prerequisites to taking MBT courses. Students without these prerequisites may be admitted to the program, but these prerequisites must be completed before MBT courses are taken.

**BLAW 3058 The Law of Contracts and Agency:** All students are required to have completed this course or an equivalent college-level course at some point in their academic career before graduating with an MBT degree.

**Required Business Taxation Courses (12 credits)**

- MBT 5220 - Tax Research, Communication, and Practice (4.0 cr)
- MBT 5200 - Tax Accounting Methods and Periods (4.0 cr)
- MBT 5230 - Corporate Taxation I (2.0 cr)
- MBT 5500 - Business, Government, and Economic Tax Policy (2.0 cr)

**Elective Business Taxation Courses (18 credits)**

In some cases, other graduate-level courses may be taken in place of an MBT elective course with prior approval from the MBT director.

Take exactly 18 credit(s) from the following:

- MBT 5223 - Tax-exempt Organizations (2.0 cr)
- MBT 5226 - Negotiation Techniques in Taxation (2.0 cr)
- MBT 5323 - Mergers and Acquisitions I (2.0 cr)
- MBT 5333 - Tax Aspects of Consolidated Returns (2.0 cr)
- MBT 5335 - Taxation of the Small Business Corporation (2.0 cr)
- MBT 5340 - Taxation of Partners and Partnerships (2.0 cr)
- MBT 5346 - ASC 740 Computations and Analysis (2.0 cr)
- MBT 5347 - Tax Technology and Analytics Fundamentals (2.0 cr)
- MBT 5348 - Advanced ASC 740 Concepts (2.0 cr)
- MBT 5350 - Wealth Transfer I (Estates and Gifts) (2.0 cr)
- MBT 5353 - Trusts and Estates (2.0 cr)
- MBT 5360 - State and Local Taxation (2.0 cr)
- MBT 5363 - Compensation and Benefits (2.0 cr)
• MBT 5370 - Taxation of Property Transactions (2.0 cr)
• MBT 5380 - Tax Aspects of International Business I (2.0 cr)
• MBT 5381 - Tax Aspects of International Business II (2.0 cr)
• MBT 5382 - Transfer Pricing (2.0 cr)
Twin Cities Campus
Finance M.S.
Finance
Curtis L. Carlson School of Management

Link to a list of faculty for this program.

Contact Information:
Phone: 612-625-5555

- Program Type: Master's
- Requirements for this program are current for Fall 2016
- Length of program in credits: 39
- This program requires summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The 39-credit master of science program in finance provides students with an advanced understanding of the tools and methods used in businesses and in financial markets. The program focuses on combining financial theory with quantitative and computational methods and real-world applications. Students who graduate from this one-year, full-time graduate program will be able to analyze and interpret complex financial data and communicate its implications. Successful applicants begin their M.S. studies in summer (June).

Accreditation
This program is accredited by AACSB International. The M.S. program in Finance is STEM designated.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
Other requirements to be completed before admission:
- University level courses in calculus and statistics are required.
- Linear algebra is recommended, but not required.
- Work experience is not required, but preferred.

Special Application Requirements:
Applicants must submit all application materials through the University's admissions system. Application materials include:
- A GMAT or GRE General Test that is not more than five years old, with an acceptable score.
- For international students, an acceptable score on the Test of English as a Foreign Language (TOEFL) International Language Testing System (IELTS).
- Three letters of recommendations need to be submitted through the online application.
- A personal statement of career goals, and objectives for pursuing a M.S. Finance degree. The personal statement questions are the following: Briefly describe your short-term and long-term career goals. Why are you choosing to pursue an M.S. in Finance at this time in your career, and what are you hoping to accomplish by doing so? Why are you interested in pursuing an M.S. degree in Finance at the Carlson School of Management? What do you feel makes you a strong candidate for the program? How will you contribute to the M.S. in Finance program overall? Applicants must submit a current resume that includes job responsibilities and accomplishments in the online application.
- Applicants may choose to submit an essay to comment on any item(s) in their application they consider worthy of further explanation.
- Applicants may be required to complete an admissions interview, which are by invitation only.

Applicants must submit their test score(s) from the following:
- GRE
- GMAT

International applicants must submit score(s) from one of the following tests:
- TOEFL
IELTS

Key to test abbreviations (GRE, GMAT, TOEFL, IELTS).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements

Plan C: Plan C requires 39 major credits and up to null credits outside the major. The is no final exam.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.8 is required for students to remain in good standing.

Required Courses: Summer (11 credits)
- MSF 6421 - Computing for Finance: Excel/VBA I & II (4.0 cr)
- MSF 6221 - Fundamentals of Finance I (2.0 cr)
- MSF 6222 - Fundamentals of Finance II (2.0 cr)
- MSF 6031 - Financial Accounting (3.0 cr)

Required Courses: Fall (16 credits)
- MSF 6422 - Financial Econometrics and Computational Methods I (2.0 cr)
- MSF 6223 - Fundamentals of Finance III (2.0 cr)
- MSF 6022 - Financial Statement Analysis (2.0 cr)
- MSF 6021 - Communications for Finance (2.0 cr)
- MSF 6423 - Financial Econometrics and Computational Methods II (2.0 cr)
- MSF 6621 - Finance within the Macroeconomy (2.0 cr)
- MSF 6121 - Fixed Income and Securities (2.0 cr)

Required Courses: Spring (8 credits)
- MSF 6821 - Experiential Learning I: Corporate Valuation (2.0 cr)
- MSF 6522 - Derivatives and Risk Management (2.0 cr)
- MSF 6321 - Quantitative Portfolio Analysis (2.0 cr)
- MSF 6822 - Experiential Learning II: Financial Data Analysis (2.0 cr)

Electives (4 credits)
- Students can select from the following electives or graduate courses offered by other departments in the business school upon approval.
  - FINA 6325 - Behavioral Finance (2.0 cr)
  - FINA 6621 - International Financial Management (2.0 cr)
  - FINA 6222 - Mergers and Acquisitions (2.0 cr)
  - FINA 6122 - Financial Management of Depository Institutions (2.0 cr)
  - FINA 6324 - Securitization Markets (2.0 cr)
  - FINA 8803 - Theory of Capital Markets II: Continuous Time (2.0 cr)

Non-Credit Courses

Noncredit 1: On occasion, external speakers will be brought in to enhance the experiential learning component of the M.S. finance program. Students are required to attend such meetings, and their participation will be assessed on a pass/fail basis.

Noncredit 2: Students will be required to pass the online ethics module from the Chartered Financial Analyst Institute by the end of the summer. Successful completion will be a requirement of the Fundamentals of Finance II course.
Twin Cities Campus
Human Resources and Industrial Relations M.A.
CSOM Work & Organizations, Industrial Relations Center
Curtis L. Carlson School of Management

Link to a list of faculty for this program.

Contact Information:
Center for Human Resources and Labor Studies, Suite 3-300 Carlson School of Management, 321 19th Avenue South, Minneapolis, MN 55455 (612-624-2500; fax: 612-624-8360)
Email: hrirgrad@umn.edu
Website: http://www.csom.umn.edu/master-human-resources

• Program Type: Master's
• Requirements for this program are current for Fall 2016
• Length of program in credits: 48
• This program does not require summer semesters for timely completion.
• Degree: Master of Arts

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

Human resources and industrial relations (HRIR) students study the employment relationship. Teaching and research are guided by the belief that the employment relationship must be investigated through the lenses of different disciplines using systems thinking. The professional master of arts degree is for individuals interested in private and public sector careers in human resource management, labor relations, and related fields.

The curriculum is structured around the core HRIR areas of staffing, training, and development; compensation and benefits; and labor relations and collective bargaining. It is rooted in key concepts from the social and behavioral sciences and business, such as organizational behavior and theory, labor market analysis, leadership, and strategy. Quantitative analysis of employment problems and issues are also included. Master's candidates are encouraged to choose electives to support a generalist orientation with key business knowledge.

Accreditation
This program is accredited by Association to Advance Collegiate Schools of Business (AACSB).

Program Delivery
This program is available:
• via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
Other requirements to be completed before admission:
Entering students have undergraduate degrees in many subjects ranging from the fine arts to engineering. The most common undergraduate majors of incoming students are in the areas of psychology, business, economics, human resource development, and speech communication.

An undergraduate course in microeconomics must be completed with a grade of at least C before enrolling.

Special Application Requirements:
Applicants must submit three letters of recommendation, a complete set of transcripts, a résumé, a personal statement and GRE or GMAT scores. Applicants whose native language is not English must also submit score results from the TOEFL or IELTS.

Students may enter the full-time M.A. program in the fall and the part-time M.A. program in either the fall or spring semesters. The application deadlines are June 15 for fall admission and October 15 for spring admission. The M.A. financial aid deadline for fall semester is February 1. Applicants are encouraged to apply early.

Applicants must submit their test score(s) from the following:
• GRE
• GMAT
International applicants must submit score(s) from one of the following tests:

- **TOEFL**
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550

- **IELTS**
  - Total Score: 6.5
  - Reading Score: 6.5
  - Writing Score: 6.5

Key to test abbreviations (GRE, GMAT, TOEFL, IELTS).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

**Program Requirements**

**Plan C:** Plan C requires 40 major credits and 8 credits outside the major. There is no final exam.

This program may be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

The MA is offered as a coursework-only program with day (full-time) and evening (part-time) options. Major coursework includes 6001, 6111, 6301, 6401, 6441, 6501, 6701, 6801, and elective credits in HRIR. At least 8 credits must be earned in related fields. Commonly selected related fields include accounting, finance, operations management, managerial communications, economics, human resource development, law, psychology, public affairs, sociology, and research methods.

**Core Courses**

24 credits required

- **HRIR 6001** - Business Principles for the HRIR Professional (4.0 cr)
- **HRIR 6111** - Using Data and Metrics in Human Resources and Industrial Relations (4.0 cr)
- **HRIR 6301** - Staffing, Training, and Development (4.0 cr)
- **HRIR 6401** - Organizational Theory Foundations of High-Impact HRIR (2.0 cr)
- **HRIR 6441** - Organizational Behavior Foundations of High-Impact HRIR (2.0 cr)
- **HRIR 6501** - Compensation and Benefits (4.0 cr)
- **HRIR 6701** - Labor Relations and Collective Bargaining (4.0 cr)

**Capstone**

- **HRIR 6801** - HRIR in Practice: Strategy, Execution, and Ethics (2.0 cr)

**Economic Issues Analysis**

2 credits required

- **HRIR 5655** - Public Policies on Work and Pay (3.0 cr)
  
  or  
  **HRIR 5662** - Personnel Economics (2.0 cr)

**Electives**

Take 20 or more credit(s) including 2 or more sub-requirements(s) from the following:

**HRIR Electives**

- Take 12 or more credit(s) from the following:
  - **HRIR 5000** - Topics in Human Resources and Industrial Relations (2.0 cr)
  - **HRIR 5222** - Managing Diversity (2.0 cr)
  - **HRIR 5252** - Employment and Labor Law for the HRIR Professional (2.0 cr)
  - **HRIR 5442** - Employee Performance Management: Strategies, Systems, and Skills (2.0 cr)
  - **HRIR 5443** - Principles of Effective Coaching (2.0 cr)
  - **HRIR 6000** - Graduate Topics in Human Resources and Industrial Relations (1.0 - 8.0 cr)
  - **HRIR 6114** - Human Resource Information Systems (2.0 cr)
• HRIR 6223 - International Human Resource Management (2.0 cr)
• HRIR 6302 - Staffing and Selection: Strategic and Operational Concerns (2.0 cr)
• HRIR 6303 - Employee Training: Creating a Learning Organization (2.0 cr)
• HRIR 6304 - Employee Development: Creating a Competitive Advantage (2.0 cr)
• HRIR 6444 - Employee Motivation, Engagement, and Well-being (2.0 cr)
• HRIR 6465 - Leadership and Personal Development (2.0 cr)
• HRIR 6484 - Management of Groups (2.0 cr)
• HRIR 6502 - Compensation Theory and Applications (2.0 cr)
• HRIR 6503 - Employer-Sponsored Employee Benefit Programs (2.0 cr)
• HRIR 6504 - Executive Compensation (2.0 cr)
• HRIR 5992 - Independent Study in Human Resources and Industrial Relations (1.0 - 8.0 cr)

• Related Field
  Take 8 or more credit(s) from the following:
  • MCOM 5400 - Managerial Communications for the HR Professional (2.0 cr)
  • MBA 6030 - Financial Accounting (3.0 cr)
  • MBA 6220 - Operations Management (3.0 cr)
  • MBA 6230 - Financial Management (3.0 cr)
  • MBA 6210 - Marketing Management (3.0 cr)
  • MBA 6300 - Strategic Management (3.0 cr)
  • MBA 6315 - The Ethical Environment of Business (2.0 cr)
  • MCOM 5510 - Persuasive Writing in Business (2.0 cr)
  • MGMT 6004 - Negotiation Strategies (2.0 cr)
  • MGMT 6033 - Managing the Strategy Process (2.0 cr)
  • MGMT 6040 - International Strategy and Organization (2.0 cr)
  • MGMT 6050 - Management of Innovation and Change (2.0 cr)
  • OLPD 5048 - Cross-Cultural Perspectives on Leadership (3.0 cr)
  • OLPD 5201 - Strategies for Teaching Adults (3.0 cr)
  • OLPD 5202 - Perspectives of Adult Learning and Development (3.0 cr)
  • OLPD 5310 - Data-Driven Decision Making I (1.0 cr)
  • OLPD 5611 - Facilitation and Meeting Skills (1.0 cr)
  • OLPD 5616 - Training on the Internet (3.0 cr)
  • OLPD 5619 - Planning and Decision-Making Skills (1.0 cr)
  • OLPD 5816 - Distance Learning in Adult Education and Training (3.0 cr)
  • OLPD 5822 - Work-Based Learning Practices (3.0 cr)
  • OLPD 5829 - Course Development for Business and Industry (2.0 cr)
  • IDSC 6471 - Knowledge Management (2.0 cr)
  • IDSC 6040 - Information Technology Management (2.0 cr)
  • IDSC 6481 - Managerial Decision Making (2.0 cr)
  • LAW 6203 - Labor Law (2.0 cr)
  • LAW 6631 - Employment Discrimination (3.0 cr)
  • LAW 6632 - Employment Law (3.0 cr)
  • LAW 6833 - Alternative Dispute Resolution (2.0 - 3.0 cr)
  • LAW 6954 - Comparative Labor and Employment Law (2.0 cr)
  • MILI 6992 - Healthcare Delivery Innovations: Optimizing Cost and Quality (2.0 cr)
  • PA 5251 - Strategic Planning and Management (3.0 cr)
  • PA 5301 - Strategic Planning and Management (3.0 cr)
  • PA 5401 - Poverty, Inequality, and Public Policy (3.0 cr)
  • PUBH 6102 - Issues in Environmental Health (2.0 cr)
  • PUBH 6104 - Environmental Health Effects (2.0 cr)
  • PUBH 6120 - Injury Prevention in the Workplace, Community, and Home (2.0 cr)
  • PUBH 6170 - Introduction to Occupational Health and Safety (3.0 cr)
  • PUBH 6542 - Management of Health Care Organizations (3.0 cr)
  • PUBH 6700 - Foundations of Public Health (3.0 cr)
  • SCO 6041 - Project Management (2.0 cr)
  • IBUS 5xxx
  • IBUS 6xxx

Joint- or Dual-degree Coursework: MBA/MA-HRIR
Student may take a total of 24 credits in common among the academic programs.

Program Sub-plans
A sub-plan is not required for this program.
Students may not complete the program with more than one sub-plan.
Twin Cities Campus
Supply Chain Management M.S.
Supply Chain & Operations
Curtis L. Carlson School of Management

Link to a list of faculty for this program.

Contact Information:
Phone: 612-625-5555

- Program Type: Master's
- Requirements for this program are current for Fall 2016
- Length of program in credits: 32
- This program requires summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The one-year, 32-credit MS degree in supply chain management will provide students with an end-to-end view of supply chain and will develop both their strategic and analytical capabilities needed to manage supply chains. The hallmarks of this MS degree will include leadership development as a programmatic theme, global immersion, corporate social responsibility and the flexibility to focus on supply chain management in specific industry sectors that are foundational to the economy of the State of Minnesota such as health care and medical devices, food and agribusiness, and retail.

Accreditation
This program is accredited by AACSB. The M.S. in Supply Chain Management is STEM designated.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
Other requirements to be completed before admission:
Work experience is not required, but preferred.

Special Application Requirements:
Applicants must submit all application materials through the University's admissions system. Application materials include:
- A GMAT or GRE General Test that is not more than five years old, with an acceptable score.
- For international students, an acceptable score on the Test of English as a Foreign Language (TOEFL) International Language Testing System (iELTS).
- Three letters of recommendations need to be submitted through the online application.
- A personal statement of career goals, and objectives for pursuing a M.S. degree in Supply Chain Management. The personal statement questions are the following: Briefly describe your short-term and long-term career goals. Why are you choosing to pursue an M.S. in Supply Chain Management at this time in your career, and what are you hoping to accomplish by doing so? Why are you interested in pursuing an M.S. degree in Supply Chain Management at the Carlson School of Management? What do you feel makes you a strong candidate for the program? How will you contribute to the M.S. in Supply Chain Management program overall? Applicants must submit a current resume that includes job responsibilities and accomplishments in the online application.
- Applicants may choose to submit an essay to comment on any item(s) in their application they consider worthy of further explanation.
- Applicants may be required to complete an admissions interview, which are by invitation only.

Applicants must submit their test score(s) from the following:
- GRE
- GMAT

International applicants must submit score(s) from one of the following tests:
- TOEFL
- iELTS
Key to test abbreviations (GRE, GMAT, TOEFL, IELTS).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements

Plan C: Plan C requires 32 major credits and up to null credits outside the major. The is no final exam.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.8 is required for students to remain in good standing.

Core Courses: Fall (12 credits)
- SCO 6290 - Managing Supply Chain Operations (4.0 cr)
- SCO 6190 - Statistics (2.0 cr)
- SCO 6191 - Big Data Analytics in Supply Chains (2.0 cr)
- SCO 6098 - Operations Excellence via Lean Thinking (2.0 cr)
- SCO 6090 - Sales, Inventory, and Operations Planning (2.0 cr)

Core Courses: Spring (8 credits)
- SCO 6072 - Managing Technologies in the Supply Chain (2.0 cr)
- SCO 6094 - Responsible Supply Chain Management (2.0 cr)
- SCO 6045 - Strategic Sourcing (2.0 cr)
- SCO 6048 - Logistics and Transportation (2.0 cr)

Core Courses: Summer (6 credits)
- SCO 6192 - Supply Chain Finance (2.0 cr)
- SCO 6292 - Global Operations Capstone (4.0 cr)

Core Course: Leadership Development - All Year (Fall, Spring and Summer) (2 credits)
- SCO 6291 - Leadership Development (0.0 - 2.0 cr)

Spring Electives (4 credits)
- SCO 6095 - Supply Chain Management in the Food and Agribusiness Sector (2.0 cr)
- SCO 6096 - Supply Chain Management in the Health Care and Medical Devices Sector (2.0 cr)
- SCO 6097 - Supply Chain Management in the Retail Sector (2.0 cr)
- SCO 6041 - Project Management (2.0 cr)
- SCO 6092 - Supply Chain Quality and Security (2.0 cr)
- SCO 6093 - Negotiations in Supply Chain (2.0 cr)