



### **Twin Cities Campus**

## **Management Information Systems B.S.B.**

*Information & Decision Sciences*

### **Curtis L. Carlson School of Management**

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2020
- Required credits to graduate with this degree: 120
- Required credits within the major: 75 to 80
- Degree: Bachelor of Science in Business

The management information systems (MIS) major prepares students to plan for, design, use, and manage digital assets of an organization. Digital assets of a modern business environment involve not only technology but also the IT-enabled processes governing business activities as well as the associated information/knowledge acquisition, processing, synthesis, management, and transfer processes. MIS coursework prepares students to make better decisions by applying information technologies to solve business problems and transform enterprise operations and to innovate and manage business processes in different functional areas through the best use of the technological infrastructure of an organization. The collective impact of the coursework is to enable students to understand the role of technology in creating business opportunities and to acquire the skills necessary for the functional management of the tasks needed to secure those opportunities.

### **Program Delivery**

This program is available:

- via classroom (the majority of instruction is face-to-face)

### **Admission Requirements**

Freshman and transfer students are usually admitted to pre-major status before admission to this major

A GPA above 2.0 is preferred for the following:

- 3.00 transferring from another University of Minnesota college
- 3.00 transferring from outside the University

Students in the school have no restrictions on declaring the major but must complete the five-tool courses before continuing with the major requirements. Students from outside of the school must meet overall admission standards to enter this major, including completion of microeconomics, macroeconomics, and calculus prior to admission. Transfer students will also need to complete statistics and financial accounting before starting on the major coursework but may do so after admission.

For information about University of Minnesota admission requirements, visit the [Office of Admissions website](#).

### **Required prerequisites**

#### **Tool Courses**

##### **Microeconomics**

- [ECON 1101](#) - Principles of Microeconomics [SOCS, GP] (4.0 cr)
- or [APEC 1101](#) - Principles of Microeconomics [SOCS, GP] (4.0 cr)
- or [APEC 1101H](#) - Principles of Microeconomics [SOCS, GP] (4.0 cr)

##### **Macroeconomics**

- [ECON 1102](#) - Principles of Macroeconomics (4.0 cr)
- or [APEC 1102](#) - Principles of Macroeconomics (3.0 cr)

##### **Calculus**

- [MATH 1142](#) - Short Calculus [MATH] (4.0 cr)
- or [MATH 1271](#) - Calculus I [MATH] (4.0 cr)
- or [MATH 1571H](#) - Honors Calculus I [MATH] (4.0 cr)
- or [MATH 1371](#) - CSE Calculus I [MATH] (4.0 cr)

##### **Accounting**

- [ACCT 2050](#) - Introduction to Financial Reporting (4.0 cr)
- or [ACCT 2050H](#) - Honors: Introduction to Financial Reporting (4.0 cr)

##### **Statistics**

- [SCO 2550](#) - Business Statistics: Data Sources, Presentation, and Analysis (4.0 cr)
- or [STAT 3011](#) - Introduction to Statistical Analysis [MATH] (4.0 cr)
- or [STAT 3021](#) - Introduction to Probability and Statistics (3.0 cr)
- or [STAT 3022](#) - Data Analysis (4.0 cr)
- or [PSY 3801](#) - Introduction to Psychological Measurement and Data Analysis [MATH] (4.0 cr)



or [SOC 3811](#) - Social Statistics [MATH] (4.0 cr)  
or [IE 3521](#) - Statistics, Quality, and Reliability (4.0 cr)  
or [EE 3025](#) - Statistical Methods in Electrical and Computer Engineering (3.0 cr)  
or [CEGE 3102](#) - Uncertainty and Decision Analysis (3.0 cr)  
or [ANSC 3011](#) - Statistics for Animal Science (4.0 cr)  
or [STAT 4101](#) - Theory of Statistics I (4.0 cr)  
[STAT 4102](#) - Theory of Statistics II (4.0 cr)  
or [STAT 5101](#) - Theory of Statistics I (4.0 cr)  
[STAT 5102](#) - Theory of Statistics II (4.0 cr)  
or [MATH 5651](#) - Basic Theory of Probability and Statistics (4.0 cr)  
[MATH 5652](#) - Introduction to Stochastic Processes (4.0 cr)

## General Requirements

All students are required to complete general University and college requirements including writing and liberal education courses. For more information about University-wide requirements, see the [liberal education requirements](#). Required courses for the major or minor in which a student receives a D grade (with or without plus or minus) do not count toward the major or minor (including transfer courses).

## Program Requirements

At least 50% (23 cr) of the upper division major credits must be completed at the University of Minnesota Twin Cities campus.

### Lower Division Requirements

#### Management

Students entering the program as freshmen or sophomores take MGMT 1001. Students who transfer in as juniors complete MGMT 3001 instead.

[MGMT 1001](#) - Contemporary Management (3.0 cr)  
or [MGMT 1001H](#) - Honors: Contemporary Management (3.0 cr)  
or [MGMT 3001](#) - Fundamentals of Management (3.0 cr)

#### Corporate Responsibility

[MGMT 1005](#) - Corporate Responsibility and Ethics [CIV] (3.0 cr)  
or [MGMT 1005H](#) - Corporate Responsibility and Ethics [CIV] (3.0 cr)

#### Psychology

[PSY 1001](#) - Introduction to Psychology [SOCS] (4.0 cr)  
or [PSY 1001H](#) - Honors Introduction to Psychology [SOCS] (4.0 cr)

#### Career Skills

[BA 3000](#) - Career Skills (1.0 cr)  
or [IBUS 3006](#) - Global Career Skills (2.0 cr)

### Immersion Core

Students complete the Immersion Core as a cohort.

While not currently required, students are strongly encouraged to complete BA 1001 Analyzing Business Problems Using Excel, prior to taking the Immersion Core.

[SCO 3001](#) - Supply Chain and Operations (3.0 cr)  
[MGMT 3004](#) - Business Strategy (3.0 cr)  
[FINA 3001](#) - Finance Fundamentals (3.0 cr)  
or [FINA 3001H](#) - Honors: Finance Fundamentals (3.0 cr)  
[MKTG 3001](#) - Principles of Marketing (3.0 cr)  
or [MKTG 3001H](#) - Honors: Principles of Marketing (3.0 cr)

### Additional Core Requirements

#### Information Systems

[IDSC 3001](#) - Introduction to Information Technology in Business (3.0 cr)  
or [IDSC 3001H](#) - Honors: Information Systems for Business Processes and Management (3.0 cr)

#### Human Resources

[HRIR 3021](#) - Human Resource Management and Strategy (3.0 cr)  
or [HRIR 3021H](#) - Honors: Human Resource Management and Strategy (3.0 cr)  
or [IBUS 3021](#) - Human Resource Management and Strategy in Australia (4.0 cr)

#### Managerial Accounting

[ACCT 3001](#) - Introduction to Management Accounting (3.0 cr)  
or [IBUS 3002](#) - Managerial Accounting in Argentina and Chile (4.0 cr)

#### Business Communication

[MGMT 3033W](#) - Business Communication [WI] (3.0 cr)



or [IBUS 3033W](#) - Business Communication in Spain [WI] (4.0 cr)

### Major Courses

- [IDSC 3101](#) - Introduction to Programming (2.0 cr)
- [IDSC 3102](#) - Intermediate Programming (2.0 cr)
- [IDSC 3103](#) - Data Modeling and Databases (2.0 cr)
- [IDSC 3104](#) - Enterprise Systems (2.0 cr)
- [IDSC 3202](#) - Analysis and Modeling of Business Systems (4.0 cr)
- [IDSC 4204W](#) - Strategic Information Technology Management [WI] (4.0 cr)
- [IDSC 4301](#) - MIS in Action: A Capstone Course (2.0 cr)

### Electives

IDSc 4493, Directed Study in Information Systems, may be considered for elective credit with department approval. Case competition credit may not fulfill elective credit.

Take 2 or more course(s) totaling 4 or more credit(s) from the following:

- [IBUS 3055](#) - Innovating with Technology: Global IT Entrepreneurship in Action (4.0 cr)
- [IDSC 3511](#) - Pitching Business Strategy (2.0 cr)
- [IDSC 4161](#) - Python for Business Applications (2.0 cr)
- [IDSC 4401](#) - Information Security (2.0 cr)
- [IDSC 4411](#) - Information Technology Governance and Assurance (2.0 cr)
- [IDSC 4431](#) - Advanced Database Design (2.0 cr)
- [IDSC 4441](#) - Electronic Commerce (2.0 cr)
- [IDSC 4444](#) - Descriptive and Predictive Analytics (2.0 cr)
- [IDSC 4455](#) - Web 2.0: The Business of Social Media (2.0 cr)
- [IDSC 4471](#) - Agile Methods (2.0 cr)
- [IDSC 4490](#) - Information Systems Special Topics (2.0 cr)

### International Experience

Students must complete an international experience as part of the program requirements. Short term or semester-length programs may be used to meet this requirement. Students participate in International Experience (IE) 101 early in their program to begin planning.

### Upper-division Writing Intensive within the major

Students are required to take one upper-division writing intensive course within the major. If that requirement has not been satisfied within the core major requirements, students must choose one course from the following list. Some of these courses may also fulfill other major requirements.

Take 0 - 1 course(s) from the following:

- [IDSC 4204W](#) - Strategic Information Technology Management [WI] (4.0 cr)
- [MGMT 3033W](#) - Business Communication [WI] (3.0 cr)
- [IBUS 3033W](#) - Business Communication in Spain [WI] (4.0 cr)

## Program Sub-plans

A sub-plan is not required for this program.

### Integrated BS in Business/Master in HRIR

This integrated program provides a unique opportunity for Carlson students to obtain an advanced degree more quickly and prepare themselves to lead in the shifting landscape of the global marketplace. The integrated program would allow Carlson undergraduate students to complete both their B.S.B. and their MHRIR in a total of five years.

Students will follow a normal Carlson undergraduate curriculum for their first three years. They would apply for the MHRIR program by February 1st of their junior year and they would begin the MHRIR program as part of the MHRIR first-year cohort in the fall of their senior year. The senior year would have the integrated program students in all the first-year MHRIR core courses and the remaining undergraduate courses to complete their undergraduate degree.

Twelve credits of the MHRIR first-year would be applied to the undergraduate degree, including HRIR 6301, 6701, and 6501. Thirteen credits would apply to the M.HRIR degree, including HRIR 6001, 6401, 6441, and 6805.

Students will finish their MHRIR in the fifth year of the integrated program.

HRIR minors: please note that HRIR 6301 is considered equivalent to HRIR 3031 and 3032, HRIR 6401 and 6441 are equivalent to HRIR 3041 and 3042, HRIR 6701 is equivalent to HRIR 3071 and 3072, and HRIR 6501 is equivalent to HRIR 3051. It is recommended that students do not take the equivalent undergraduate HRIR courses if they plan to pursue the integrated degree.



**BSB/Masters Human Resources and Industrial Relations**

Students in the BSB/M.HRIR integrated degree program should complete the following courses in their senior year. These courses meet requirements for the Masters in Human Resources and Industrial Relations and twelve credits of the BSB Human Resources major/minor.

**Fall semester, Year 4**

[HRIR 6301](#) - Staffing, Training, and Development (4.0 cr)

[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 6805](#) - HRIR Leadership Practicum (0.5 cr)

**Spring semester, Year 4**

HRIR 6805 is taken both terms.

[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 6701](#) - Labor Relations and Collective Bargaining (4.0 cr)

[HRIR 6501](#) - Compensation and Benefits (4.0 cr)