

Management Information Systems

Department Information

- **Department Location:**
Richard H. Barry Hall
- **Department Phone:**
701-231-8651
- **Department Web Site:**
www.ndsu.edu/business/departments/afis/ (<http://www.ndsu.edu/business/departments/afis/>)
- **Credential Offered:**
B.S.
- **Plan Of Study Sample:**
bulletin.ndsu.edu/programs-study/undergraduate/management-information-systems/#planofstudytext (<http://bulletin.ndsu.edu/programs-study/undergraduate/management-information-systems/#planofstudytext>)

Major Requirements

Major: Management Information Systems

Degree Type: B.S.

Minimum Credits Required for Degree: 120

University Degree Requirements

1. Satisfactory completion of all requirements of the curriculum in which one is enrolled.
2. Earn a minimum total of 120 credits in approved coursework. Some academic programs exceed this minimum.
3. Satisfactory completion of the general education requirements as specified by the university.
4. A minimum institutional GPA of 2.00 based on work taken at NDSU.
5. At least 36 credits presented for graduation must be in courses numbered 300 or higher.
6. Transfer Students: Must earn a minimum of 60 credits from a baccalaureate-degree granting or professional institution.
 - a. Of these 60, at least 36 must be NDSU resident credits as defined in #7.
 - b. Within the 36 resident credits, a minimum of 15 must be in courses numbered 300 or higher and 15 credits in the major field of study.
7. At least 36 credits must be NDSU resident credits. Resident credits include credits registered and paid for at NDSU.

For complete information, please refer to the Degree and Graduation Requirements (<http://catalog.ndsu.edu/academic-policies/undergraduate-policies/degree-and-graduation/>) section of this Bulletin.

University General Education Requirements

| Code | Title | Credits |
|--|-------------------------------------|-----------|
| Communication (C) | | 12 |
| ENGL 110 | College Composition I | |
| ENGL 120 | College Composition II | |
| COMM 110 | Fundamentals of Public Speaking | |
| | Upper Division Writing [†] | |
| Quantitative Reasoning (R) [†] | | 3 |
| Science and Technology (S) [†] | | 10 |
| Humanities and Fine Arts (A) [†] | | 6 |
| Social and Behavioral Sciences (B) [†] | | 6 |
| Wellness (W) [†] | | 2 |
| Cultural Diversity (D) ^{*†} | | |
| Global Perspectives (G) ^{**†} | | |
| Total Credits | | 39 |

* May be satisfied by completing courses in another General Education category.

† General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review major requirements to determine if specific courses can also satisfy these general education categories.

- A list of university approved general education courses and administrative policies are available here (<http://catalog.ndsu.edu/academic-policies/undergraduate-policies/general-education/#genedcoursestext>).

Major Requirements

| Code | Title | Credits |
|------|-------|---------|
|------|-------|---------|

All courses taken for the Management Information Systems Major require a grade of C or better. A minimum 2.5 cumulative GPA is required for admission to the professional program, to enroll in 300 - 400 level courses, and to graduate.

Admission to the Professional Program

| | | |
|-------------------------|---|---|
| COMM 110 | Fundamentals of Public Speaking (May satisfy general education category C) * | 3 |
| ENGL 120 | College Composition II (May satisfy general education category C) * | 3 |
| ECON 201 or ECON 202 | Principles of Microeconomics (May satisfy general education category B and G) * | 3 |
| MATH 144 | Mathematics for Business * | 4 |
| PSYC 111 or SOC 110 | Introduction to Psychology (May satisfy general education category B) * | 3 |

Management Information System Major Requirements

| | | |
|-------------------------|---|---|
| ACCT 200 | Elements of Accounting I * | 3 |
| ACCT 201 | Elements of Accounting II * | 3 |
| TL 116 | Business Software Applications | 3 |
| PHIL 216 | Business Ethics (May satisfy general education category A) * | 3 |
| STAT 330 | Introductory Statistics (May satisfy general education category R) * | 3 |
| STAT 331 | Regression Analysis * | 2 |
| CSCI 227 | Computing Fundamentals I (Fall) * | 3 |
| ECON 201 or ECON 202 | Principles of Microeconomics ² Principles of Macroeconomics | 3 |
| CSCI 228 | Computing Fundamentals II (Spring) * | 3 |
| ENGL 320 | Business and Professional Writing | 3 |

Admission to the Professional Program required prior to taking the following courses

| | | |
|----------|--|---|
| FIN 320 | Principles of Finance ¹ | 3 |
| MGMT 320 | Foundations of Management ¹ | 3 |
| MGMT 360 | Operations Management | 3 |
| MRKT 320 | Foundations of Marketing ¹ | 3 |
| BUSN 430 | Legal and Social Environment of Business ¹ | 3 |
| BUSN 489 | Strategic Management (Capstone Course) ¹ | 3 |
| MIS 320 | Management Information Systems ¹ | 3 |
| MIS 315 | System Analysis and Design (requires a grade of C or better) | 3 |
| MIS 350 | Enterprise Systems | 3 |
| MIS 375 | Database Design for Business Application (S) | 3 |
| MIS 376 | Data and Telecommunications Administration (F) | 3 |
| MIS 470 | Information Systems (S) | 3 |
| CSCI 312 | Survey of Programming Languages (F) | 3 |

Management Information Systems Practicum

Student must complete one of the following options: 3

| | | |
|----------|--|--|
| MIS 397 | Fe/Coop Ed/Internship | |
| MIS 413 | MIS Service Internship | |
| MGMT 470 | Entrepreneurship/Small Business Management | |
| AGEC 371 | Export Management | |

Elective Requirements for MIS Major (Elective courses can only be used to fulfill ONE requirement) **

| | |
|--|--|
| 1) Programming Elective: Select one course from the following or an intermediate or advanced CSCI course that was not the teaching language of CSCI 227 or CSCI 228. | 3 |
| CSCI 125 | Beginning COBOL |
| CSCI 172 | Intermediate Visual BASIC |
| CSCI 213 | Modern Software Development |
| CSCI 371 | Web Scripting Languages |
| ECE 173 | Introduction to Computing |
| 2) Technology Elective I: Any 300-400 level CSCI or MIS class not used to satisfy another MIS program requirement or | 3 |
| ECE 173 | Introduction to Computing |
| ECE 275 | Digital Design |
| CSCI 125 | Beginning COBOL |
| CSCI 172 | Intermediate Visual BASIC |
| CSCI 213 | Modern Software Development (if not taken as a programming elective) |
| CSCI 222 | Discrete Mathematics |
| CSCI 277 | Introduction to UNIX |
| CSCI 345 | Topics on Personal Computers |
| CSCI 371 | Web Scripting Languages |
| CSCI 469 | Network Security |
| CSCI 473 | Foundations of the Digital Enterprise |
| CSCI 488 | Human-Computer Interaction |
| CSCI 489 | Social Implications of Computers |
| MIS 340 | Applied Business Intelligence |
| MIS 412 | Computer Crime, Forensics, and Investigation |
| MIS 460 | Enterprise Infrastructure I |
| MIS 479 | Business Data Mining and Predictive Analytics |
| IME 456 | Program and Project Management |
| 3) Technology Elective II: Take two courses from IME 456 or any 300 or 400 level CSCI or MIS course not used to satisfy another MIS major requirement | 6 |
| 4) Business Elective: Any 300-400 level CoB course not used to satisfy other major requirements, CSCI 473, or ECON 324. (Excludes internships, study abroad, LEAD courses & MIS 371; includes courses cross-listed with CoB courses) | 3 |

Total Credits **102**

- * Pre-college and pre-management information systems major courses. A grade of 'C' or better for pre-college and pre-management information systems major courses is required for admission into the Management Information Systems major.
- ¹ Denotes Common Body of Knowledge (CBK) course.
- ² Take course not taken prior to admission to professional program

Degree Requirements and Notes

- Students follow the published curricula for management information systems program of study from the semester/year of entrance in the College of Business to graduation provided enrollment at NDSU has not been discontinued for more than one year. Students who change their major are subject to meeting the curricular requirements in effect at the time the new major is declared.
- Business courses from programs that do not hold AACSB International accreditation cannot be used for major or minor requirements in the College of Business (CoB); such courses may be eligible for use as free electives.
- The CoB accepts a maximum of nine credits of non-NDSU 300-400 level business courses from AACSB programs with approval of the department.
- Admission to the MIS major is required to enroll in the advanced 300 or 400 level courses in the CoB.
- A grade of 'C' or better is required in transfer courses accepted for ACCT 200 Elements of Accounting I and ACCT 201 Elements of Accounting II and all 300-400 level accounting, business administration, finance, management, management information systems, and marketing courses.
- A letter grade must be earned in any course that fulfills a major requirement (with the exception of some practicum options).
- Requirements for graduation are those in existence at the time of admission to the MIS major.
- Of the credits completed in residence at least 30 credits must be in 300-400 level CoB courses.
- Students must be accepted to the MIS major prior to the completion of the last 30 credits in 300 and 400 level CoB courses.
- A Business Administration minor is NOT offered with this major.

- For multiple majors within the CoB, at least 15 unique credits of 300-400 level CoB courses must exist between the majors.
- Prerequisite for Management Information Systems Practicum: MIS 320 with a grade of C or better.

Minor Requirements

Minor: Management Information Systems

Required Credits: 21

Students should refer to www.ndsu.edu/business (<https://www.ndsu.edu/business/>) for information on declaring the minor with the CoB.

| Code | Title | Credits |
|---|--|--------------|
| Requirements | | |
| MGMT 320 | Foundations of Management | 3 |
| MIS 315 | System Analysis and Design | 3 |
| MIS 375 | Database Design for Business Application * | 3 |
| or CSCI 366 | Database Systems | |
| MIS 376 | Data and Telecommunications Administration * | 3 |
| or CSCI 459 | Foundations of Computer Networks | |
| CSCI 227 | Computing Fundamentals I ** | 3-4 |
| or CSCI 160 | Computer Science I | |
| Select one of the following: | | 3 |
| ACCT 420 | Accounting Information Systems | |
| MIS 470 | Information Systems | |
| Or an MIS advisor-approved CoB course that is MIS related | | |
| Select one of the following: | | 3 |
| An MIS adviser approved 300-400 level CSCI course | | |
| Or one of the following: | | |
| CSCI 122 | Visual BASIC | |
| CSCI 161 | Computer Science II | |
| CSCI 172 | Intermediate Visual BASIC | |
| CSCI 228 | Computing Fundamentals II ** | |
| Total Credits | | 21-22 |

* Students who take CSCI 366 Database Systems & CSCI 459 Foundations of Computer Networks, must select an additional MIS advisor-approved CoB course.

** It is strongly recommended that students who take CSCI 227 select CSCI 228 as their elective in preparation for MIS 315.

Minor Requirements and Notes

- A minimum of 9 credits must be completed in the CoB.
- Approval forms must be submitted after completed CSCI 227 Computing Fundamentals I or CSCI 160 Computer Science I.
- To be accepted into the minor program, students must have a 2.50 institutional cumulative GPA. To complete a minor, students must earn at least a 2.50 GPA that is based on the courses used to satisfy the minor requirements. Courses may not be taken pass/fail.
- If the cumulative GPA falls below the 2.50 after acceptance into the program, the student will not be allowed to register for the CoB courses until the cumulative GPA returns to 2.50 or above.
- Students are subject to the minor requirements in effect during the year in which the minor was approved.
- Minors must satisfy all course prerequisites.
- Approval for a minor does not guarantee enrollment in specific courses.
- Graduation with a minor in Management Information Systems requires a grade of 'C' or better in all courses required for the minor.