Early-Entry Pathway

Welcome to North Dakota State University's Early-Entry Pathways program.

MANAGEMENT INFORMATION SYSTEMS

If you are interested in a degree in management information systems, you can take early-entry courses to get started on your degree. Early-entry courses listed meet the requirements or electives of this major. These courses may be used to meet your general education requirements as well. We suggest you also review the list of recommended general education courses.

College Composition I
ENGL 110 | 3 credits
General Education Category: C

Guided practice in the reading and writing of various genres for different situations and audiences. Includes research on the web and in the library. Prereq: English placement.

College Composition II
ENGL 120 | 3 credits
General Education Category: C

Advanced practice in reading and writing of various genres for different situations and audiences. Includes field research, collaboration, and visual communication. Prereq: ENGL 110 or placement

Fundamentals of Public Speaking
COMM 110 | 3 credits
General Education Category: C

Theory and practice of public speaking with emphasis on content, organization, language, delivery, and critical evaluation of messages.

Mathematics for Business
MATH 144 | 4 credits
General Education Category: Does not meet NDSU's general education requirements.

Mathematics of finance, linear programming and its applications in business, limits, continuity, derivatives, implicit and logarithmic differentiation, higher order derivatives, optimization and extrema, partial differentiation, extreme values of functions of two variables.

Introduction to Sociology
SOC 110 | 3 credits
General Education Category: B

Introductory analysis of the nature of society, the interrelationship of its component groups, and the process whereby society persists and changes.

Introduction to Psychology
PSYC 111 | 3 credits
General Education Category: B

Survey of the scientific study of behavior and mental processes.

Principles of Macroeconomics
ECON 202 | 3 credits
General Education Category: B

Aggregate income and employment analysis; business cycles, unemployment, inflation and economic growth; fiscal policy; money and monetary policy; the U.S. economy and the world economy.

Principles of Microeconomics
ECON 201 | 3 credits
General Education Category: B

Nature, method, and scope of economic analysis; economic scarcity, resources, specialization of labor; supply-demand analysis; production and cost analysis; product and resource market structures; distribution of income; international trade.

Business Ethics
PHIL 216 | 3 credits
General Education Category: A & G

Many of the central moral issues of business, such as consumer rights, advertising, employee rights, and business competition, are examined in light of the major ethical theories, such as Utilitarianism, Kantianism, and Relativism.

Elements of Accounting I
ACCT 200 | 3 credits
General Education Category: Does not meet NDSU's general education requirements.

An introduction to accounting to enable the student to achieve a working knowledge of accounting and its uses. Emphasizes the basic concepts and approaches of accounting applied to businesses, the accounting cycle, and the preparation of the income statement and balance sheet. Co-req: TL 116.

Elements of Accounting II
ACCT 201 | 3 credits
General Education Category: Does not meet NDSU's general education requirements.

Emphasizes the use of accounting information as a basis for decision-making. Topics include the statement of cash flows, financial statement analysis, and managerial accounting (budgeting, job-order costing, cost-volume-profit analysis, short-term decision making, and capital budgeting). Prereq: ACCT 200.

Business Software Applications
TL 116 | 3 credits
General Education Category: S

Instruction on the use of popular spreadsheet and database software applications including how and when to apply the features of these types of applications to address a variety of business problems. Content emphasizes leveraging widely used business tools via hands-on activities. Credit will be awarded only for TL 116, MIS 116, CSCI 114, or CSCI 116 but not more than one.

Introductory Statistics
STATS 330 | 3 credits
General Education Category: Does not meet NDSU's general education requirements.

Frequency tables, histograms, probability, well-known probability distributions, one and two sample tests of hypotheses, confidence intervals, and contingency tables. Prereq: Algebra 2, MATH 103, MATH 104, MATH 107 OR placement into MATH 105, MATH 146, MATH 165.

TRACKS
You may also choose courses from one of the following tracks.

INFORMATION TECHNOLOGY

Computer Science 1
CSCI 160 | 4 credits
Instructor: Dr. Pratap Kotala
General Education Category: S

Introduction to computer science including problem solving, algorithm development, and structured programming in a high-level language. Emphasis on design, coding, testing, and documentation of programs using accepted standards of style. Prereq: MATH 103.

Computer Science II
CSCI 161 | 4 Credits
General Education Category: Does not meet NDSU's general education requirements.

Continuation of CSCI 160 that emphasizes more advanced programming language features and basic data structures. Students will learn to incorporate advanced programming features such as Interfaces and Generics into the programs they develop. Prereq: CSCI 160.

Intermediate Visual BASIC
CSCI 172 | 3 credits
General Education Category: Does not meet NDSU's general education requirements.

Elements of Visual Basic for those with previous programming background. Topics include fundamental constructs, Active X controls, file processing, database management, and SQL. Prereq: one semester/experience in any programming language.

Introduction to Computing
ECE 173 | 4 credits
General Education Category: Does not meet NDSU's general education requirements.

Programming in a high level language with applications to engineering computation, analysis, and design. 3 lectures, 1 2-hour laboratory. Prereq: MATH 103 or higher.

Modern Software Development
CSCI 213 | 3 credits
General Education Category: Does not meet NDSU's general education requirements.

This course provides students with exposure to, and practice with a modern software development environment. Students do individual projects covering all the major phases of prescriptive software development including: requirements engineering, design, construction, testing and debugging. Prereq: CSCI 161.

Computing Fundamentals in Python I
CSCI 227 | 3 credits
General Education Category: Does not meet NDSU's general education requirements.

Introduction to programming concepts, with focus on flow control, basic data structures, and functions. The course is the first in a three-course sequence using the Python programming language. Prereq: MATH 103 or MATH 107.

Computing Fundamentals in Python II
CSCI 228 | 3 credits
General Education Category: Does not meet NDSU's general education requirements.

Introduction to programming concepts, with focus on the object-oriented programming paradigm, linear data structures, positional lists, iterators, and basic algorithm analysis. The course is second in a three-course sequence using the Python programming language.

BUSINESS ANALYTICS

Introduction to Computing
ECE 173 | 4 credits
General Education Category: Does not meet NDSU's general education requirements.

Programming in a high level language with applications to engineering computation, analysis, and design. 3 lectures, 1 2-hour laboratory. Prereq: MATH 103 or higher.

Computer Science 1
CSCI 160 | 4 credits
Instructor: Dr. Pratap Kotala
General Education Category: S

Introduction to computer science including problem solving, algorithm development, and structured programming in a high-level language. Emphasis on design, coding, testing, and documentation of programs using accepted standards of style. Prereq: MATH 103.

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NDSU | CONTINUED LEARNING