# **Early-Entry Pathway**

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

#### SOFTWARE ENGINEERING

If you are interested in a degree in software engineering, you can take early-entry courses to get started on this 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.

## Introduction to Electrical & Computer Engineering

ECE 111 | 3 credits Category: Does not meet NDSU's general education requirements.

Introduction to electrical and computer engineering problem solving, design and professional issues. 3 lectures. Prereq: MATH 103.

#### Calculus I

MATH 165 | 4 credits General Education Category: R

Limits, continuity, differentiation, Mean Value Theorem, integration, Fundamental Theorem of Calculus and applications. Prereq: MATH 105, MATH 107 or placement.

#### **General Chemistry I**

CHEM 121 | 3 credits General Education Category: S

Matter, measurement, atoms, ions, molecules, reactions, chemical calculations, thermochemistry, bonding, molecular geometry, periodicity, and gases. Prereq or Co-req: MATH 103, MATH 107 or Math placement.

#### Circuit Analysis I

EE 206 | 4 credits Category: Does not meet NDSU's general education requirements.

Linear electric circuits. Component models, circuit laws, transient analysis, design issues, computer tools. 3 lectures, 1 two-hour recitation/laboratory. Prereq: MATH 166 with a grade of C or better. Co-req: MATH 129.

#### **Concepts of Biology**

BIOL 111 | 3 credits General Education Category: S

Introduction to a wide range of biological topics, from the organism, ecology, and evolution to the cell, molecular biology, and genetics. For credit as a lecture/lab pair, students should take BIOL 100L as a co-requisite.

#### **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.

### NOTES

View all pathway guides & a general education guide at >> <a href="mailto:bit.ly/EE\_pathways\_guides">bit.ly/EE\_pathways\_guides</a>.