

Early-Entry Pathway

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

ELECTRICAL ENGINEERING

If you are interested in a degree in electrical 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.

Introduction to Computing

ECE 173 | 4 credits

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.

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

General Chemistry I Lab

CHEM 121L | 1 credit

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.

General Chemistry II

CHEM 122 | 3 credits

General Education Category: S

Intermolecular forces, liquids, solids, kinetics, equilibria, acids and bases, solution chemistry, precipitation, thermodynamics, and electrochemistry. Prereq: CHEM 121.

Human Anatomy & Physiology I

BIOL 220 | 3 credits

General Education Category: S

An in-depth introduction to structure and function of human organ systems' cells, tissues, the integumentary system, the skeletal system, joints, muscle and muscular system, nervous tissue and nervous system, and the special senses.

Human Anatomy & Physiology II

BIOL 221 | 3 credits

General Education Category: Does not meet NDSU's general education requirements.

A continuation of BIOL 220, 220L; the endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems and development. Prereq: BIOL 220.

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.

View all pathway guides & a general education guide at >>

bit.ly/EE_pathways_guides.