NDSU | OFFICE OF TEACHING AND LEARNING

Early-Entry Pathway

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

AGRICULTURE AND BIOSYSTEMS ENGINEERING

If you are interested in a degree in agriculture and biosystems engineering, you can take some 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.

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.

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.

Engineering Mechanics I
ME 221 | 3 credits
General Education Category: Does not meet NDSU's general education requirements.

Scaler and vector approaches to trusses, frames and machines, internal forces, friction forces, center of gravity, centroid, and moment inertia. Prereq: MATH 165.

Engineering Mechanics II
ME 222 | 3 credits
General Education Category: Does not meet NDSU's general education requirements.

Dynamics of particles and rigid bodies, work energy, impulse-momentum, principles of conservation of energy and momentum. Prereq: ME 221, MATH 166.

Mechanics of Materials
ME 223 | 3 credits
General Education Category: Does not meet NDSU's general education requirements.

Introduction to stress, strain, and their relationships; torsion of circular shafts, bending stresses, deflection of beams, stress transformations. Prereq: ME 221.

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 >> **bit.ly/EE_pathways_guides**.

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