

HIGH SCHOOL DUAL CREDIT

GATEWAY TO ENGINEERING

ARE YOU INTERESTED IN ENGINEERING? VIEW THE FOLLOWING MAJORS AVAILABLE AT SOUTH DAKOTA'S PUBLIC UNIVERSITIES AND GET A HEAD START WITH HIGH SCHOOL DUAL CREDIT (HSDC).

POTENTIAL DEGREES:

SOUTH DAKOTA MINES

Biomedical Engineering
Chemical Engineering
Civil Engineering
Computer Engineering
Electrical Engineering
Geological Engineering
Industrial Engineering & Engineering Management
Mechanical Engineering
Metallurgical Engineering
Mining Engineering

SOUTH DAKOTA STATE UNIVERSITY

Agricultural and Biosystems Engineering
Civil Engineering
Computer Science
Concrete Industry Management
Construction Management
Electrical Engineering
Electronics Engineering Technology
Mechanical Engineering
Operations Management

Note: Some courses may only be available during one semester; make sure to research this when creating your certificate plan.

CERTIFICATE PLAN

If you're considering a career in engineering, below are some courses we recommend.

SCIENCE

Take one of the following:

CHEM 112/L General Chemistry I w/Lab
PHYS 207/207L Fundamentals of Physics I w/Lab

ENGINEERING

Take one of the following:

GE101 Intro to Engineering & Technical Professions
GES 130/130L Intro to Engineering and Science

MATH

Take one of the following:

MATH 115 Precalculus
MATH 116 Engineering Precalculus w/Lab
MATH 121 Survey of Calculus
MATH 123 Calculus I

INDIVIDUAL STUDENT OUTCOMES

- Define a problem and apply appropriate techniques to obtain valid solutions.
- Analyze available facts, evidence, and observations and apply rational, unbiased analysis to form judgments.
- Systematically explore and investigate complex issues to develop well-supported conclusions.



**UPON COMPLETION: UNDERGRADUATE
GATEWAY TO ENGINEERING CERTIFICATE**