

### **South Dakota Mines**

# Pre-Engineering and Computer Science Transfer Guide

The South Dakota School of Mines and Technology is a public university in Rapid City, SD, that prepares students to succeed in science and engineering fields. South Dakota Mines has been ranked one of "America's Best College Buys" for almost 20 years for our return on investment. Students have consistently earned over a 95% placement rate into their field of study after completing their Bachelor's degree.

96% 79% \$66,516

Placement Internship Experience Avg. Starting Salary

This guide is meant to assist students interested in transferring to South Dakota Mines. There may be other courses that you could take at your community college that will transfer to South Dakota Mines- it is recommended that you contact us throughout your transfer process to ensure your courses will transfer.

### General transfer guidelines:

- Save the syllabi for your courses- they may be required to evaluate your transfer credit.
- You typically need a "C" or higher grade to transfer a course.
- You do not need to complete all the courses listed here before transferring.

### Core Pre-Engineering and Computer Science Courses:

- MATH 2200 Calculus I
- MATH 2205 Calculus II
- MATH 2210 Calculus III
- CHEM 1020 General Chemistry I + Lab
- ENGL 1010 English I
- ENGL 2005 Technical Writing
- CO/M 1010 Intro to Public Speaking
  - \*SD Mines does not accept Interpersonal Communication
- 6 credits of Social Sciences in two subject areas
   \*Corresponds to most courses in the Social and Behavioral Sciences and US & WY Constitutions general education categories.
- 6 credits of Humanities in two subject areas

  \*Corresponds to most courses in the Global Diversity, Humanities, Foreign Language, and Visual and Performing Arts general education categories.
- PHYS 1310 College Physics I

You may want to consider taking some specialized courses toward your major requirements, in addition to these core courses.—Additional potential transfer courses are listed by major in the next column.

#### Want to know more?

Research our degrees, apply for admission, or schedule a visit on our website! www.sdsmt.edu



### Biomedical Engineering:

- MATH 2310 Applied Differential Equations I
- BIOL 1010 General Biology I
- CHEM 1030 General Chemistry II

### Chemical Engineering:

- MATH 2310 Applied Differential Equations I
- CHEM 1030 General Chemistry II
- PHYS 1320 College Physics II

### Civil Engineering:

- ENTK 2500 Computer Aided Drafting I
- MATH 2310 Applied Differential Equations I
- CHEM 1030 General Chemistry II
- · ES 2110 Statics

#### Computer Engineering:

- · C++ based programming course
- Circuits
- · MATH 2310 Applied Differential Equations I
- PHYS 1320 College Physics II

### Computer Science:

C++ based programming sequence

### Electrical Engineering:

- C++ based programming course
- Circuits
- MATH 2310 Applied Differential Equations I
- PHYS 1320 College Physics II

### Geological Engineering:

- ENTK 2500 Computer Aided Drafting I
- CHEM 1030 General Chemistry II
- ES 2110 Statics
- · MATH 2310 Applied Differential Equations I
- PHYS 1320 College Physics II

### Industrial Engineering & Engineering Management:

- MATH 2310 Applied Differential Equations I
- PHYS 1320 College Physics II
- PSYC 1000 General Psychology

### Mechanical Engineering:

- C based programming course
- MATH 2310 Applied Differential Equations I
- ES 2110 Statics
- ES 2120 Dynamics
- PHYS 1320 College Physics II

### Metallurgical Engineering:

- CHEM 1030 General Chemistry II
- C based programming course
- MATH 2310 Applied Differential Equations I
- PHYS 1320 College Physics II

### Mining Engineering:

- ES 2110 Statics
- · ES 2120 Dynamics
- MATH 2310 Applied Differential Equations I
- · Economics (Macro- or Micro-)



## **South Dakota Mines**

### Science, Pre-Med, and Business Transfer Guide

The South Dakota School of Mines and Technology is a public university in Rapid City, SD, that prepares students to succeed in science and engineering fields. South Dakota Mines has been ranked one of "America's Best College Buys" for almost 20 years for our return on investment. Students have consistently earned over a 95% placement rate into their field of study after completing their Bachelor's degree.

96% 79% \$66,516

Placement Internship Experience Avg. Starting Salary

This guide is meant to assist students interested in transferring to South Dakota Mines. There may be other courses that you could take at your community college that will transfer to South Dakota Mines- it is recommended that you contact us throughout your transfer process to ensure your courses will transfer.

### General transfer guidelines:

- Save the syllabi for your courses- they may be required to evaluate your transfer credit.
- You typically need a "C" or higher grade to transfer a course.
- You do not need to complete all the courses listed here before transferring.

### Core Science, Pre-Med, and Business Courses:

- MATH 2200 Calculus I
- MATH 2205 Calculus II
- CHEM 1020 General Chemistry I + Lab
   \*Mathematics students may take General Chemistry + Lab or
   General Biology + Lab
- ENGL 1010 English I
- ENGL 2005 Technical Writing
- CO/M 1010 Intro to Public Speaking
  - \*SD Mines does not accept Interpersonal Communication
- 6 credits of Social Sciences in two subject areas
   \*Corresponds to most courses in the Social and Behavioral Sciences and US & WY Constitutions general education categories.
- 6 credits of Humanities in two subject areas
   \*Corresponds to most courses in the Global Diversity, Humanities, Foreign Language, and Visual and Performing Arts general education categories.

You may want to consider taking some specialized courses toward your major requirements, in addition to these core courses. Additional potential transfer courses are listed by major in the next column.

### Want to know more?

Research our degrees, apply for admission, or schedule a visit on our website! www.sdsmt.edu

### Transferology<sup>™</sup>

### Applied Biological Sciences:

- BIOL 1010 General Biology I
- BIOL 2020 General Biology II
- · CHEM 1030 General Chemistry II
- PHYS 1310 College Physics I
- PHYS 1320 College Physics II

### Atmospheric Sciences:

- MATH 2210 Calculus III
- C++ based programming course
- MATH 2310 Applied Differential Equations I
- BIOL 1010 General Biology I
- CHEM 1030 General Chemistry II
- PHYS 1310 College Physics I
- PHYS 1320 College Physics II

### Business Management in Technology:

- One Social Science course should be Microeconomics
- One Humanities course should be Intro to Logic
- Accounting

### Chemistry:

- MATH 2310 Applied Differential Equations I
- CHEM 1030 General Chemistry II
- PHYS 1310 College Physics I
- PHYS 1320 College Physics II

### Geology:

- MATH 2210 Calculus III
- C or C++ based programming course
- · GEOL 1100 Physical Geology
- PHYS 1310 College Physics I
- PHYS 1320 College Physics II

#### Mathematics:

- MATH 2210 Calculus III
- · C++ based programming course
- MATH 2310 Applied Differential Equations I
- BIOL 1010 General Biology I OR General Chemistry I + Lab
- PHYS 1310 College Physics I
- PHYS 1320 College Physics II

### Pre-Med:

- Anatomy
- C or C++ based programming course
- BIOL 1010 General Biology I
- BIOL 2020 General Biology II
- CHEM 1030 General Chemistry II

### Physics:

- MATH 2210 Calculus III
- · C++ based programming course
- MATH 2310 Applied Differential Equations I
- PHYS 1310 College Physics I
- PHYS 1320 College Physics II