Pre-Engineering & Computer Science Transfer Guide

South Dakota School of Mines and Technology is a distinguished public university nestled in Rapid City, SD, dedicated to equipping students for success in science and engineering. For nearly two decades, South Dakota Mines has proudly held the title of "America's Best College Buys,” emphasizing our exceptional return on investment. Nearly all of our students find employments in their chosen career field or are accepted to graduate programs upon completion of their degrees.

This guide is designed to support students considering a transfer to South Dakota Mines. There may be additional courses at your community college that align seamlessly with our programs. We strongly recommend staying in touch with us throughout your transfer process to ensure a smooth transition and verify the transferability of your courses. Your journey to success starts here!

General transfer guidelines:
- Save the syllabi for your courses- they may be required to evaluate your transfer credit.
- You do not need to complete all the courses listed here before transferring.

Core Pre-Engineering and Computer Science Courses:
- Calculus I
- Calculus II
- Calculus III
- General Chemistry I + Lab
- English Composition I (MnTC Goal 1)
- English Composition II (MnTC Goal 1)
- Public Speaking (MnTC Goal 1)
- *SD Mines does not accept Interpersonal Communication

*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.

Biomedical Engineering:
- Differential Equations
- General Biology I + Lab
- General Chemistry I + Lab

Chemical Engineering:
- Differential Equations
- General Chemistry II + Lab
- Physics II (Calculus-based)

Civil Engineering:
- CADD
- Differential Equations
- General Chemistry II + Lab
- Statics

Computer Engineering:
- C++ based programming course
- Circuits
- Differential Equations
- Physics II (Calculus-based)

Computer Science:
- C++ based programming sequence

Electrical Engineering:
- C++ based programming course
- Circuits
- Differential Equations
- Physics II (Calculus-based)

Geological Engineering:
- CADD
- General Chemistry II + Lab
- Statics
- Differential Equations
- Physics II (Calculus-based)

Industrial Engineering & Engineering Management:
- Differential Equations
- Physics II (Calculus-based)
- General Psychology

Mechanical Engineering:
- C based programming course
- Differential Equations
- Statics
- Dynamics
- Physics II (Calculus-based)

Metallurgical Engineering:
- General Chemistry II + Lab
- C based programming course
- Differential Equations
- Physics II (Calculus-based)

Mining Engineering:
- Statics
- Dynamics
- Differential Equations
- Economics (Macro- or Micro-)

Contact us:
transfer@sdsmt.edu
605.394.2414

Visit:
sdsmt.edu/visit

Apply:
sdsmt.edu/apply
Science, Pre-Med & Business Transfer Guide

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This guide is designed to support students considering a transfer to South Dakota Mines. There may be additional courses at your community college that align seamlessly with our programs. We strongly recommend staying in touch with us throughout your transfer process to ensure a smooth transition and verify the transferability of your courses. Your journey to success starts here!

General transfer guidelines:
- Save the syllabi for your courses- they may be required to evaluate your transfer credit.
- You do not need to complete all the courses listed here before transferring.

Core Science, Pre-Med, and Business Courses:
- Calculus I
- Calculus II
- General Chemistry I + Lab
  *Mathematics students may take General Chemistry + Lab or General Biology + Lab
- English Composition I (MnTC Goal 1)
- English Composition II (MnTC Goal 1)
- Public Speaking (MnTC Goal 1)
  *SD Mines does not accept Interpersonal Communication
- 6 credits of Social Sciences (MnTC Goal 5)
- 6 credits of Humanities (MnTC Goal 6)

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.

Biology:
- General Biology I + Lab
- General Biology II + Lab
- General Chemistry II + Lab
- Physics I (Calculus-based)
- Physics II (Calculus-based)

Atmospheric Sciences:
- Calculus III
- C++ based programming course
- Differential Equations
- General Biology I + Lab
- General Chemistry II + Lab
- Physics I (Calculus-based)
- Physics II (Calculus-based)

Business Management in Technology:
- One Social Science course should be Microeconomics
- One Humanities course should be Intro to Logic
- Accounting

Chemistry:
- Differential Equations
- General Chemistry II + Lab
- Physics I (Calculus-based)
- Physics II (Calculus-based)

Geology:
- Calculus III
- C or C++ based programming course
- Physical Geology
- Physics I (Calculus-based)
- Physics II (Calculus-based)

Mathematics:
- Calculus III
- C++ based programming course
- Differential Equations
- General Biology I + Lab OR General Chemistry I + Lab
- Physics I (Calculus-based)
- Physics II (Calculus-based)

Pre-Med:
- Anatomy
- C or C++ based programming course
- General Biology I + Lab
- General Biology II + Lab
- General Chemistry II + Lab

Physics:
- Calculus III
- C++ based programming course
- Differential Equations
- Physics I (Calculus-based)
- Physics II (Calculus-based)