



COLORADO SCHOOL OF MINES

PRE-ENGINEERING TRANSFER AGREEMENT FOR COMMUNITY COLLEGE STUDENTS

Contact Information:

<http://www.mines.edu/UndergraduateTransfer>

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303-273-3220 or Toll Free 888-446-9489

This agreement is designed for Colorado community college students planning to transfer to Colorado School of Mines for a bachelor's degree with a major in an engineering discipline. This agreement identifies community college courses that will apply to the baccalaureate degree.

If you plan to complete an engineering bachelor's degree, recognize that:

1. You should transfer into the bachelor's program after you take the courses outlined below. Transfer hours beyond the credits below are not guaranteed to apply toward the engineering degree.
2. It is imperative that you contact an engineering advisor at the 4-year institution by the end of the first semester to clarify course work appropriate for your intended engineering major and to identify the community college courses and GPA necessary to meet the competitive admission requirements.
3. If your Colorado community college has an agreement with the 4-year institution, follow that agreement rather than this one.

Mathematics Skills: For community college students with strong math skills, it is usually better to transfer Colorado School of Mines after completion of the courses below. Students who are not ready for Calculus I should consider working toward the associate degree while working with both 2-yr and 4-yr advisors on the selection of courses appropriate for transfer into an engineering program. Completion of the [gtPathways general education curriculum](#) will enhance transferability should the student switch from an engineering track to a liberal arts track.

Transfer Recommendations: A bachelor's degree in engineering is a demanding and prescribed curriculum that may take 6-8 semesters of coursework independent of the credit hours transferred from the community college. Transfer students should carefully review admission standards and guidelines, which are online at <http://www.mines.edu/UndergraduateTransfer>. Always consult an academic advisor at your community college AND at Colorado School of Mines.

Students who wish to continue their education at the community college beyond the number of credits in the pre-engineering program below should explore with both 2-yr and 4-yr advisors how their graduation timeline, COF stipend, and financial aid will be affected. Courses not listed in this document are evaluated by the Mines Admissions Office and faculty from the relevant academic department(s) on a course-by-course basis. Credit will be granted where the course is judged to be the equivalent of an analogous Mines course. Certain courses that are granted transfer credit may not be directly applicable for meeting Mines departmental degree requirements and may be transferred as free elective credit

Guarantees and Limitations: Students who successfully complete (minimum C grade) the prescribed pre-engineering curriculum:

- are eligible to apply for admission at Colorado School of Mines
- are responsible for meeting all admission requirements at CSM
- are not guaranteed admission at Colorado School of Mines
- are guaranteed, once admitted, application of the transfer hours below to either lower division general education, course work required for the engineering major, or elective credit
- must consult with the 4-year institution's engineering program to utilize AP or IB credits. CSM does not accept CLEP credits.
- must consult with Colorado School of Mines' engineering program for course work credits beyond those prescribed below, as additional courses are major specific and Colorado School of Mines may restrict the number of community college transfer credits that apply to the degree.



Please note that this curriculum neither fulfills the gtPathways general education curriculum nor the associate degree requirements at the community college.

Required Courses Applicable to Engineering Majors (including free electives)			30-31
General Education Knowledge Area	Credit Hours	Community College (CCCS) Course No.	Course Title and gtPathways Category
Art & Humanities, History <u>or</u> Social & Behavioral Science	6		200-level GT-HI1 , GT-AH1 , GT-AH2 , GT-AH3 or GT-SS1 , GT-SS2 , or GT-SS3 and 100-level courses World Language courses <u>may</u> fulfill humanities and social sciences requirements at Mines. Students should contact a Mines advisor and refer to the <i>Bulletin</i> information at http://lais.mines.edu/LAIS-HSS-Requirements to obtain information regarding course transfer.
Natural & Physical Sciences	5	PHY 211	Physics: Calculus-based I (GT-SC1)
	5	CHE 111	General College Chemistry I with Lab (GT-SC1)
Mathematics	5	MAT 201	Calculus I (GT-MA1)
Mathematics – Calculus II*	5	MAT 202	Calculus II (GT-MA1)
Mathematics – Calculus III**	4	MAT 203	Calculus III (GT-MA1)
	5	Or MAT 204 (PREFERRED)	Calculus III with Engineering Applications (GT-MA1)
<p>*Students are strongly encouraged to complete the Calculus II and III sequence at the same institution. Due to the unique nature of the Calculus curriculum at the Colorado School of Mines, transfer credit for Calculus II and III will only be granted if both courses have been successfully completed prior to transfer and provided that the Calculus III course being transferred is equivalent in content to CSM's <i>MATH213: Calculus for Scientists and Engineers III</i>. Should it be necessary, CSM has created short-form courses to bridge from the highest-level Calculus course being transferred to the CSM curriculum. These courses are designed to have a minimal impact on transfer students while insuring that they have the same foundation as all CSM undergraduates.</p>			

Elective Courses			0-30
<p>Elective courses must be selected in consultation with the engineering advising office at Mines to verify they will transfer and apply to the student's chosen major requirements. Community college students are advised not to break up course sequences. For example, in majors that require both PHY 211 and PHY 212 or MAT 201 and MAT 202 student should complete the sequences at the community college before transferring.</p>			
Advanced Mathematics	3	MAT 255	Linear Algebra
	4	MAT 261	Differential Equations with Engineering Applications (GT-MA1)
	4	MAT 265	Differential Equations (GT-MA1)
	4	MAT 266	Differential Equations with Linear Algebra
Science	5	BIO 111	General College Biology I with Lab (GT-SC1)*
	5	BIO 112	General College Biology II with Lab (GT-SC1)
	5	CHE 112	General College Chemistry II with Lab (GT-SC1)*
	4	GEY 111	Physical Geology with Lab*
	5	PHY 212	Physics: Calculus-based II (GT-SC1)*
Computer Science	4	CSC 160	Computer Science I (Language)
	4	CSC 161	Computer Science II (Language)
	3	CSC 233	Object-Oriented Programming (Language)
	4	CSC 234	C++ Programming
	3	CSC 240	Java Programming
Computer Aided Drafting	3	CAD 101	Computer Aided Drafting I
	3	CAD 102	Computer Aided Drafting II
	3	CAD 201	CAD/Custom
	3	CAD 202	Computer Aided Drafting/3D
Public Speaking	3	COM 115	Public Speaking
<p>*These courses count as required distributed science courses for some majors. Please consult the Mines <i>Bulletin</i> (http://bulletin.mines.edu/undergraduate/undergraduateinformation/distributedcore/) or an advisor at Mines for additional information.</p>			

If there is disagreement regarding the transferability of credits for coursework or a degree occurs between a student and a receiving two-year or four-year institution, students may file a complaint at <http://highered.colorado.gov/Academics/Complaints/default.html>