

TRANSFER AGREEMENT (MOU)

METROPOLITAN STATE UNIVERSITY OF DENVER

AND

COLORADO SCHOOL MINES

DATE

May 12, 2022



Paul C. Johnson, President



Janine Davidson, President

Transfer Agreement Memorandum of Understanding  
Between  
Colorado School of Mines and Metropolitan State University of Denver

THIS MEMORANDUM OF UNDERSTANDING (MOU) is entered by and between the Colorado School of Mines (hereinafter “Mines”) and the Metropolitan State University of Denver (hereinafter “MSU Denver”). Mines and MSUD may hereinafter be referred to as the party, parties, institution, or institutions.

WHEREAS, the mission of Mines is to offer, among other programs, a Bachelor of Science (B.S.) degree in Electrical Engineering (hereinafter “EE”); and,

WHEREAS, the mission of MSUD is to provide a high-quality, accessible, enriching education that prepares students for successful careers, post-graduate education, and lifelong learning in a multicultural, global, and technological society, including a B.S. degree offering in Electrical Engineering Technology (hereinafter “EET”) within the department of Engineering and Engineering Technology (hereinafter “EAET”); and

WHEREAS, the purpose of this MOU is to collaborate in the development and implementation of a transfer agreement aimed at increasing opportunities for and participation in undergraduate STEM education, specifically in the fields of EE and EET at these institutions. Mines and MSU Denver will work jointly to create an admissions and transfer framework with the goal of improving diversity, access and participation in EE at Mines and EET at MSU Denver.

NOW THEREFORE, The Parties agree to the following:

### **Introduction**

This document describes admissions and transfer procedures as well as course equivalencies between Colorado School of Mines (Mines) and the Metropolitan State University of Denver (MSU Denver), and is intended for use by students who wish to transfer their transfer from the EET degree program at MSUD to EE at Mines prior to completion of Bachelors Degree in EE at MSU Denver. This guide contains the following information:

- 1) Guaranteed admissions at MSU Denver,
- 2) Admission criteria and procedures at Mines
- 3) Policies on the transfer of credit at Mines,
- 4) Review and update of this agreement,
- 5) Course equivalencies between MSU Denver and Mines,
- 6) Program and degree requirements at MSU Denver and Mines

### **I. Guaranteed Admission at MSUD**

First-Time College and Transfer Students who have been denied admissions to Mines and who have indicated an interest in pursuing a degree in EE will be notified by the Mines Admissions office that they are eligible for automatic admissions to the EET program at MSU Denver, wherein they will be able to complete the EET degree in its entirety at MSU Denver or, upon meeting the requirements specified in II, be guaranteed admissions to the EE program at Mines.

These students will be notified through a mutually agreed upon letter, found in Appendix A.

## II. Admission Criteria and Procedures at Mines

- A. Admissions Requirements: Colorado School of Mines seeks to admit a diverse and dynamic student population representative of the state of Colorado, the nation and beyond. Mines admits students who have demonstrated the ability to accomplish classroom and laboratory work and benefit from our programs. Admission is competitive and the decision to admit a student is based on our confidence in one's ability to earn a degree at Mines.

An applicant to Mines is considered to be a transfer student if he/she/they has enrolled in coursework at another college after graduating from high school. The minimum requirements for admission consideration for all transfer students is outlined in the Mines catalog. The catalog that is in effect at the time of the student's initial enrollment at Mines will be used in determining admission.

- B. Treatment of GPA: The grade point average of the transfer student for admission purposes will be as computed by the Mines Admissions Office and will be performed in accordance with the established procedures outlined in the version of the Mines Catalog that is in effect at the time of the student's initial enrollment at Mines. Once admitted and enrolled at Mines, the calculation of the student's grade point average will be determined only from the courses completed at Mines.
- C. Application procedures and deadlines: A transfer student should apply for admission to Mines at the beginning of the final semester of attendance at MSUD. Application deadlines are listed on the Mines website at <https://www.mines.edu/undergraduate-admissions/transfer-students/>. The application will be evaluated upon receipt of the completed application form, high school transcript or copy of the GED, transcripts covering all work taken from each university or college attended, and a list of courses in progress. All of these materials must be received at Mines no later than 28 days prior to the date of registration for the semester in which the student plans to enroll. Mines Admissions will notify the student about his/her/their admission status. Admission is subject to satisfactory completion of current courses in progress and submission of a final, complete transcript.
- D. Guaranteed transfer admissions from EET at MSU Denver to EE at Mines: Students in the EET program at MSU Denver who meet the following requirement will be guaranteed admission into the EE program at Mines:
1. The student must have completed a minimum of 45 credit hours at MSUD that include 26.0 – 27.0 credit hours from the following courses:
    - MTH 1410 (for MATH 111 at Mines)
    - MTH 2410 (for MATH 112 at Mines)
    - MTH 2420 (for MATH 213 at Mines)
    - PHY 2311 **and** PHY 2321 (for PHGN 100 at Mines)
    - CHE1800 **and** CHE1801 (for CHGN121 at Mines)
    - One of the following distributed science requirements at Mines:
      - BIO1080 and BIO 1090 (for CBEN110 at Mines)
      - CHE1810 **and** CHE1811 (for CHGN122 at Mines)
      - CS1030 (for CSCI101 and CSCI102 at Mines) – *Preferred Option for EE*
      - GEL1010 (for GEGN101 at Mines)
      - PHY 2331 **and** PHY 2341 (for PHGN 200 at Mines) – *Preferred Option for EE*
  2. The student must have an overall GPA of at least 3.25 in coursework completed at MSU Denver. Students with a GPA below 3.25, may be considered for admission but their admission will not be guaranteed.

3. The student must intend to study EE at Mines upon admission and declare this interest in their application.

### **III. Transfer of Credit into Mines**

- A. Policies for accepting grades in transfer: No course with a final grade less than “C” will be accepted for transfer credit. Transfer credit earned at MSU Denver will have the grade of “T” assigned on the student’s permanent record at Mines. No grade points will be recorded for these courses and they will not affect the Mines grade point average.
- B. Treatment of advanced placement and non-traditional methods of awarding credit: Advanced Placement, International Baccalaureate, graded proficiency exams, and other non-traditional methods of awarding credit will be handled on a case-by-case and course-by-course basis. Equivalencies between such courses or credit and existing courses at Mines will be made by the Registrar’s Office and the relevant academic department(s). The current AP and IP credit guidelines can be found at <https://www.mines.edu/registrar/transfer-credit/>. No credit is granted for CLEP or vocational courses.
- C. Maximum number of hours accepted in transfer: The total number of hours required to complete a degree program at Mines varies, depending on the degree granting department. Minimum Mines credit hour requirements for residency and upper-division courses are provided in Section II-D below. All courses listed in the Transfer Guide (Appendices B-D) will be transferred in direct substitution for the designated Mines courses if needed for that degree program. Courses other than those listed in Appendices B-D will be evaluated on a course-by-course basis, and credit granted where the course is judged to be the equivalent of an analogous Mines course or applicable to free elective credit. Hours will be awarded based on hours completed in the original course.
- D. Residency and upper-division course credit requirements: A minimum of 30 hours of credit in 300 and 400-level technical courses (as defined by the specific degree programs listed in the Mines Catalog in effect at the time of the student’s initial Mines enrollment) must be completed in residence at Mines. At least 15 of these 30 hours must be taken in the senior year.
- E. Accreditation requirements for transfer of credit: Twelve engineering degree programs at Mines are accredited by the Accreditation Board for Engineering and Technology (ABET). Mines has determined that the MSU Denver courses listed in Appendices B-D are the curricular equivalent of the designated Mines courses. In the case of substitution to this prescribed equivalency agreement, such changes must be made with the full consent of the Registrar’s Office on behalf of Academic Affairs at Mines in order to assure compliance with ABET requirements for curricular distribution.
- F. Early Transfer: To avoid loss of credit and other transfer problems, the timing of transfer application should be discussed with advisors at both institutions. The curricular structure and content at Mines builds on fundamentals developed during the Mines lower-division core courses; it is to the student’s advantage to obtain this background at the earliest possible date. The courses listed in Appendix B are required for all degree programs at Mines; completion of these courses prior to transfer may be very beneficial for the student.
- G. Maximum age of credit: Courses meeting the guidelines stated above and taken within five years of the student’s application for transfer will automatically be granted transfer credit in accordance with the procedures stated here-in. Courses taken between five and ten years prior to application for transfer will be evaluated on a course-by-course basis by the Mines Registrar’s Office and faculty from the relevant academic department(s). In general, courses taken more than ten years

prior to the student's application for admission will not be considered for transfer credit.

H. Currently Enrolled Student at Mines: The articulation of transfer credit detailed in this agreement is applicable to MSUD students who apply to and are accepted into Mines. This articulation does not apply to currently enrolled Mines students, who will be required to request approval for transfer credit according to policies in place for Mines students.

I. Transfer appeals process

- a. Procedures for appeal of any decision dealing with student transfer between Colorado Public Institutions are specified by the State of Colorado. For information go to <http://highered.colorado.gov/dhedefault.html>.

#### **IV. Review and update of this agreement**

This agreement will expire three years from the effective date noted on the first page. Metropolitan State University of Denver and the Colorado School of Mines will review this agreement at least every three years to ensure that the course information is current, in order to facilitate the successful transfer of students.

**Appendix A**  
**Acceptance Letter from MSUD (to be reviewed periodically and modified as necessary)**

Date:

Name:

Dear \_\_\_\_\_,

With your interest in Electrical Engineering, we want to share information about a new transfer program with Metropolitan State University of Denver (MSU Denver) and Colorado School of Mines. MSU Denver will offer you **automatic admission** into their Bachelor of Science degree in Electrical Engineering Technology (EET) in the department of Engineering and Engineering Technology (EAET). You can either complete this EET degree at MSU Denver or complete at least 45 credit hours in this degree and apply for guaranteed transfer to Colorado School of Mines to complete your Bachelor of Science in Electrical Engineering degree.\*

The [EET Bachelor of Science degree program](#) provides each graduate with a comprehensive foundation of technical knowledge in circuit analysis, electronics, digital logic, computers, software, communications and control systems. The program is accredited by ABET (Accreditation Board for Engineering and Technology) and emphasizes the application of current technology. It includes a significant amount of hands-on, laboratory experience and provides graduates with the knowledge and skills needed to become productive members in their professional careers. Graduates of this degree program are not technicians but are applied engineers sometimes called technologists.

For more information about this opportunity, please send an email to [the MSU engineering department advisors](#).

Regards,

Dale Gaubatz  
Executive Director of Admissions

\*You must have an overall GPA of at least a 3.25/4.0 in coursework completed at MSU Denver, including a handful of explicitly required courses in the Mines Core curriculum, and must intend to study Electrical Engineering at Colorado School of Mines upon admission and declare this interest in your application.

## Appendix B Required Course Equivalencies

The following Core and Distributed Core courses are required for the EE degree program at Mines.

<i>Colorado School of Mines Courses</i>			<i>MSU Denver Equivalent Courses</i>		
<b>Course ID</b>	<b>Name</b>	<b>Credit Hours</b>	<b>Course ID</b>	<b>Name</b>	<b>Credit Hours</b>
MATH111 <sup>1</sup>	Calculus I	4	MTH1410 <sup>1</sup>	Calculus I	4
MATH112 <sup>1</sup>	Calculus II	4	MTH2410 <sup>1</sup>	Calculus II	4
MATH213 <sup>1</sup>	Calculus III	4	MTH2420 <sup>1</sup>	Calculus III	4
MATH225	Differential Equations	3	MTH3420	Differential Equations	4
CHGN121	Principles of Chemistry I	4	CHE1800 <b>and</b> CHE1801	Gen. Chemistry I Gen. Chemistry I Lab	4 1
PHGN100	Physics I	4.5	PHY2311 <b>and</b> PHY2321	Gen. Physics I Gen. Physics I Lab	4 1
PHGN200	Physics II	4.5	PHY2331 <b>and</b> PHY2341	Gen. Physics II Gen. Physics II Lab	4 1
CSCI101 CSCI102	Intro to Comp. Sci. <b>and</b> Intro to Python	3 1	CS1030	Comp. Science Principles	4
EBGN201 <sup>2</sup>	Principles of Economics	3	ECO2010 <sup>2</sup> <b>or</b> ECO2020 <sup>2</sup>	Principles of Macroeconomics Principles of Microeconomics	3
HASS100	Nature & Human Values	4	ENG1020 <sup>3</sup> <b>and</b> HASS1XX <sup>3</sup>	Research & Argument Writing <b>and</b> NHV Short Form	3
CSM101	Freshman Seminar	0.5	Waived for students who have completed 30 or more hours at the college level.		
PAGNI-IV	Physical Education I-IV <sup>4</sup>	2	HPLXXX	1 Physical Education Course	2
HASS100, HASS200 and Distributed H&SS requirements <sup>5</sup>		Up to 13	In consultation with the Humanities, arts and Social Sciences (HASS) department at Mines, students may submit coursework for transfer review for the HASS100 and HASS200 courses in the Mines Core. Additionally, students may submit coursework for up to 6 additional credit hours to meet the H&SS Core requirements at Mines from the following options: Up to 6 credits of foreign language at 100 to 200 level. 200 level or above literature, history, humanities, political science, social science, etc. not listed above (i.e., excludes courses used to meet HASS200 or EBGN201 requirements)		

<sup>1</sup> Students should take the Calculus I, II and III sequence at the same institution.

<sup>2</sup> EBGN201 credit at Mines would be granted for completion of either ECO2010 or ECO2020 at MSU Denver.

<sup>3</sup> HASS100 credit at Mines would be granted for Completion of ENG1020 at MSU Denver plus successful completion of HASS1XX – Nature and Human Values Short Form at Mines.

<sup>4</sup> Each student at Colorado School of Mines is required to complete 4 separate semesters of Physical Education as a graduation requirement. The Physical Education requirement does not apply to students with DD 214 (veterans) or students whose first day of enrollment at Mines comes when the student is 26 years of age or older. Students transferring into Mines under this Articulation Agreement who need to fulfill the Physical Education requirement will have the 4 separate semester requirement waived and will be able to transfer in 2 credit hours of Physical Education from the Community College system for the 2 credit hours required in the Mines Core Curriculum.

<sup>5</sup> Three additional Humanities and Social Sciences credits must be taken at the 400 level at Mines. Students should consult the Mines Catalog to determine which courses may satisfy this requirement. These could also fulfill the General Studies Arts & Humanities requirement and the General Studies Social & Behavioral Science II requirement at MSU Denver.

## Appendix C

### Distributed Science Course Equivalencies

In addition to the courses listed in Appendix B, every Electrical Engineering student at Mines must also take one of the following distributed science courses. Each degree program at Mines dictates which of the three distributed science courses are acceptable for that program; please consult the Mines *Catalog* or an advisor at Mines for additional information.

<i>Colorado School of Mines Courses</i>			<i>MSU Denver Equivalent Courses</i>		
<b>Course ID</b>	<b>Name</b>	<b>Credit Hours</b>	<b>Course ID</b>	<b>Name</b>	<b>Credit Hours</b>
CBEN110	Fundamentals of Biology I	4	BIO1080 <b>and</b> BIO1090	General Biology I General Biology Lab I	3 1
CHGN122	Principles of Chemistry II	4	CHE1810 <b>and</b> CHE1811	General Chemistry II General Chemistry II Lab	4 1
GEGN101	Earth and Env. Systems	4	GEL1010	Physical Geology	4

## Appendix D

### Additional Course Equivalencies

Mines will accept the following courses from MSU Denver students with no additional review, provided the student has earned a grade of “C” or higher in these courses. Note that these courses do not count for core curriculum credit at Mines, but may apply to free electives or fulfill degree requirements for the EE degree. View the Mines *Catalog* for additional details.

<i>Colorado School of Mines Courses</i>			<i>MSU Denver Equivalent Courses</i>		
<b>Course ID</b>	<b>Name</b>	<b>Credit Hours</b>	<b>Course ID</b>	<b>Name</b>	<b>Credit Hours</b>
MATH332	Linear Algebra	3	MTH3140	Linear Algebra	4
MATH201	Probability & Statistics	3	MTH3210	Probability & Statistics	4
CBEN120	Fundamentals of Biology II	4	BIO1081 <b>and</b> BIO1091	General Biology II Fund. Of Biology Lab II	3 1
EENG281	Intro to Electrical Circuits...	3	EET1140 <b>and</b> EET1150	Circuits I Circuits II	4 4



## APPENDIX E

### Contacts

Gus Greivel, Assistant Dean of Transfer Student Enrollment and Articulation, Colorado School of Mines, [ggreivel@mines.edu](mailto:ggreivel@mines.edu)

Danielle Dworak, Transfer Enrollment Coordinator, Colorado School of Mines, [ddworak@mines.edu](mailto:ddworak@mines.edu)

Paul Myskiw, Registrar, Colorado School of Mines, [registrar@mines.edu](mailto:registrar@mines.edu)

Colin Schneider, Transfer Evaluation Coordinator, Colorado School of Mines, [transfer@mines.edu](mailto:transfer@mines.edu)

Katie Ludwin, Associate Director for First Year and Transfer Advising, Colorado School of Mines, [kludwin@mines.edu](mailto:kludwin@mines.edu)

Dixie Cirillo, Associate Athletic Director, Colorado School of Mines, [dcirillo@mines.edu](mailto:dcirillo@mines.edu)  
(for any questions from students interested in varsity athletics at Mines)

Peter Aean, Professor and Department Head, EE at Mines, [paaen@mines.edu](mailto:paaen@mines.edu)

Fred Barlow, Professor and Chair, EET at MSUD, [fbarlow1@msudenver.edu](mailto:fbarlow1@msudenver.edu)