

## TRANSFER ARTICULATION AGREEMENT

This TRANSFER ARTICULATION AGREEMENT (“**Agreement**”) is made between Colorado School of Mines with offices at 1500 Illinois St., Golden, CO 80401 (“**Mines**”) and the State of Colorado, Department of Higher Education, State Board for Community Colleges and Occupational Education, for the use and benefit of the Colorado Community College System with offices at 9101 E. Lowry Blvd. Denver, CO 80230 (“**CCCS**”). Mines and CCCS may each be referred to herein as “Party”, and collectively as “Parties”.

### RECITALS

- A. Mines is a public research university focused on science and engineering, where students and faculty together address the great challenges society faces today—particularly those related to the Earth, energy, and the environment.
- B. Each of the thirteen community colleges that constitute the CCCS (“**CCCS School**”) is a regionally-accredited post-secondary institution of higher learning that offers accredited programs that educate and qualify students to receive associate of arts (“**AA**”) and associate of science (“**AS**”) degrees, as well as other post-secondary degrees and certificates.
- C. The Parties wish to collaborate on the terms set forth in this Agreement to promote and facilitate a program (“**Mines Transfer Program**”) for the transfer of any student from a CCCS School (“**CCCS Student**”) to Mines so that such student may be able to complete the courses needed to earn a bachelor’s degree from Mines. In furtherance of this purpose, this Agreement, among other things, identifies the courses a CCCS Student must complete and any other requirements that must be satisfied in earning a CCCS Associate of Engineering Science (“**AES**”) degree in order to qualify for the Mines Transfer Program assurance specified in Section 1.1 below.

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth in this Agreement, the Parties agree as follows:

- 1. Elements of Mines Transfer Program.**
  - 1.1 A CCCS Student who meets the Mines transfer requirements outlined below will be considered for admission:
    - 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. Treatment of the AES degree will be evaluated for admission purposes using the course equivalencies established between CCCS and Mines. The explicit requirements for the AES from the CCCS are outlined in Appendix A.
  - D. Application procedures and deadlines: A transfer student should apply for admission to Mines at the beginning of the final quarter or semester of attendance at their CCCS institution. Application deadlines are listed on the Mines website at <https://www.mines.edu/undergraduate-admissions/transferstudents/>. 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
- 1.2 Any CCCS Student who is admitted to Mines through the Mines Transfer Program ("**CCCS Transfer Student**") will be subject to all of the remaining graduation requirements at Mines.
- 2. Transfers Outside the Mines Transfer Program.**
  - 2.1 Any CCCS Student who does not qualify for transfer to Mines under the Mines Transfer Program set forth in this Agreement may nevertheless apply to transfer to Mines and request that courses completed at a CCCS School be approved for credit in satisfaction of the course requirements for the Mines bachelor's degree program.
- 3. Rights and Obligations of Mines.**
  - 3.1 Mines will annually review and update each Transfer Guide and make them available on the Mines website.
  - 3.2 Mines shall have the sole right and authority to determine those CCCS courses that qualify for transfer under the Mines Transfer Program and whether a CCCS Student meets all of the requirements for admission to Mines.
  - 3.3 Both Parties acknowledge that it is typically in the best interest of the student to complete

their associate degree at his/her/their community college; both Parties will work together to support a student's completion of the associate degree at a CCCS college. Should a CCCS student transfer to Mines prior to completing their associate's degree, Mines will encourage students to send transcripts back to CCCS for consideration of awarding of the associates degree through a reverse transfer.

#### **4. Rights and Obligations of CCCS.**

4.1 CCCS shall provide to Mines information regarding courses available through any CCCS School.

4.2 CCCS and the applicable CCCS School shall have the sole right and authority to determine whether a CCCS student meets all the requirements that must be satisfied in order to receive a CCCS AA, AS, or AES degree, as applicable.

#### **5. Mutual Rights and Obligations of the Parties.**

5.1 Each Party reserves the right and authority to amend the conditions or requirements for admission, acceptance, retention, and eligibility to receive the academic degree in their respective programs that are the subject of this Agreement, at any time as may be necessary in the interests of the institution or the program, and in such event shall promptly give notice thereof to the other Party.

5.2 The Parties will collaborate with each other to promote the Mines Transfer Program by providing opportunities to communicate information about the Mines Transfer Program through the Parties' respective official websites. The Parties agree that any written materials, including online information, promoting the Mines Transfer Program shall be not be published or otherwise used without the prior written approval of both Parties.

5.3 The Parties shall undertake an annual evaluation of the collaboration supported by this Agreement and use the findings to improve the process for CCCS Student participation in the Mines Transfer Program.

#### **6. FERPA Compliance and Confidentiality of Student Education Records and Personally Identifiable Information ("PII").**

6.1 The Parties shall comply with the Family Education Rights and Privacy Act (FERPA) with regard to collection and use of Student Education Records. Authorized employees of the Parties will have access to Student Education Records as defined under FERPA for eligible transfer students.

6.2 Mines shall use reasonable efforts to implement appropriate reasonable physical, administrative, and technical safeguards to prevent unauthorized use or disclosure of Student Education Records. Such measures will be no less protective than those used to secure Mine's own data of a similar type and in no event less than reasonable in view of the type and nature of

the data involved.

**7. Gramm-Leach-Bliley Act Compliance.**

- 7.1 The Parties shall comply with the Gramm-Leach-Bliley Act (GLBA) in their collection and use of student financial data. The Parties will use student financial data only for the purpose of fulfilling their respective duties under this Agreement for the student's benefit, and will not share such data with or disclose it to any third party except as provided for in this Agreement, required by law, or authorized in writing by the student.

**8. Data Sharing between the Parties.**

- 8.1 Information will be shared, in compliance with all applicable laws and regulations, as needed to allow transferring students to participate in the articulation/transfer program and to track student interest, persistence, and success.
- 8.2 Mines agrees to provide CCCS with certain de-identified data related to students participating in the Mines Transfer Program as more specifically outlined in Appendix B on an annual basis.

- 9. Legal Authority.** Each Party warrants that it possesses the legal authority to enter into this Agreement, and that it has taken all actions required by its procedures, by-laws, and/or applicable law to exercise that authority, and to lawfully authorize its undersigned signatory to execute this Agreement.

- 10. Accreditation.** Each Party warrants that as of the effective date of this Agreement, and during this Agreement's term, it is and will be fully accredited institutionally by a U.S. Department of Education recognized regional accrediting agency, which in the case of CCCS is the Higher Learning Commission and in the case of Mines is the Higher Learning Commission.

- 11. Independent Contractor Relationship.** The Parties shall perform their duties hereunder as independent contractors and not as employees, agents, or servants of each other. No agent or employee of either Party shall be or shall be deemed to be an agent or employee of the other. The Parties shall pay when due all required employment taxes and income tax and local head tax on any of its employees. The Parties acknowledge that they and their employees are not entitled to unemployment insurance benefits unless they or a third party provides such coverage and that the other Party does not pay for or otherwise provide such coverage. Neither Party shall have authorization, express or implied, to bind the other Party to any additional agreements, liabilities, or understandings, except as expressly set forth in this Agreement. Each Party shall be solely responsible for the acts or omissions of its employees and agents. Furthermore, this Agreement shall not be construed to create any partnership or joint venture between the Parties.

## 12. Insurance.

12.1 Notwithstanding any other provision of this Agreement to the contrary, no term or condition of this Agreement shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protection, or other provisions of the Colorado Governmental Immunity Act, §§ 24-10-101, et seq., C.R.S., as it now exists or is hereafter amended ("CGIA"). The Parties understand and agree that liability for claims for injuries to persons or property arising out of the negligence of CCCS, its departments, institutions, agencies, boards, officials and employees is controlled and limited by the provisions of the CGIA, as it now exists or is hereafter amended, and the risk management statutes, §§ 24-30-1501, et seq., C.R.S., as they now exist or are hereafter amended.

12.2 CCCS, as an entity of the State of Colorado, is self-insured for \$387,000 per person and \$1,093,000 per occurrence or such higher amounts as may be provided by law as more fully set forth in the Colorado Governmental Immunity Act, C.R.S. §§ 24-10-101, et seq. and State of Colorado Risk Management laws, C.R.S. §§ 24-30-1501, et. seq.

12.3 Mines shall maintain during the term of this Agreement (i) commercial general liability insurance coverage in the minimum amount of \$1,000,000 per occurrence and \$3,000,000 in the aggregate, and (ii) worker's compensation insurance and unemployment compensation insurance in the amounts required by law.

**13. Licenses, Permits, and Responsibilities.** Each Party warrants that, at the time of entering into this Agreement, each Party currently has in effect all necessary licenses, certifications, approvals, insurance, permits, and other requirements necessary to properly perform its obligations under this Agreement. Each Party also warrants that it will maintain all necessary licenses, certifications, approvals, insurance, permits, and other requirements necessary to properly perform its obligations under this Agreement. Additionally, all employees of either Party performing services under this Agreement shall hold the required licenses or certifications, if any, to perform their respective duties and responsibilities. Any revocation, withdrawal, or non-renewal of necessary licenses, certifications, approvals, insurance, permits, and other requirements necessary to properly perform under this Agreement shall be grounds for termination of this Agreement by any Party.

## 14. Compliance with Applicable Laws, Rules, and Regulations.

14.1 Each Party shall comply with any and all federal and state laws, rules and regulations, and county and municipal ordinances, rules and regulations applicable to each Party's performance of its obligations under this Agreement.

14.2 The Parties shall comply with all applicable federal and state anti-discrimination laws that prohibit discrimination on the basis of race, color, sex, age, religion, national origin, disability, or any other prohibited basis. In the event either Party, or any of its employees, agents or students is alleged to have violated any of such anti-discrimination laws while performing obligations

under this Agreement, the Parties agree to cooperate in conducting a subsequent investigation, including sharing investigative reports.

## **15. Termination.**

- 15.1 This Agreement shall continue until terminated by either Party (i) without cause by giving at least one hundred twenty (120) days prior written notice to the other Party; or (ii) with cause based upon a breach of this Agreement (other than a breach of Section 10 based upon the termination of a Party's accreditation) by giving written notice of termination to the breaching Party specifying the reason(s) therefor, and giving the breaching Party an opportunity to cure the breach within thirty (30) days of the date of such notice. Unless otherwise agreed to by the Parties in writing, this Agreement shall be deemed terminated at the expiration of such thirty (30) day period if the breach is not cured within that time.
- 15.2 Upon any termination of this Agreement, Mines shall have no obligation to allow any additional CCCS Student to participate in the Mines Transfer Program to receive the assurance provided in Section 1.1 of this Agreement.
- 15.3 In the event either Party's accreditation, as required by Section 10 hereof, is terminated, the Party whose accreditation is terminated shall promptly give notice thereof to the other Party, and this Agreement shall be deemed terminated as of the date such accreditation is terminated.

## **16. Representatives and Notices.**

- 16.1 For the purpose of providing a contact person for the general administration of this Agreement, the individuals identified below are hereby designated representatives of the respective Parties. Either Party may from time to time designate by notice in writing a new or substitute representative:
- For Mines: Provost
- For CCCS: Vice Chancellor for Academic and Student Affairs
- 16.2 All notices permitted or required to be given by the Parties hereunder shall be personally delivered, given by certified U.S. mail, postage prepaid, or delivered overnight by a nationally recognized courier service, delivery fee prepaid, to the individuals at the addresses set forth below. Either Party may from time to time designate by notice in writing substitute addresses or persons to whom such notices shall be sent.

For Mines:  
Colorado School of Mines  
1500 Illinois St.

Golden, CO  
Attn.: Richard Holz, Provost

For CCCS:  
Colorado Community College System  
9101 E. Lowry Blvd.  
Denver, CO 80230  
Attn.: Landon Pirius, Vice Chancellor for Academic and Student Affairs

17. **Assignment and Successors.** The Parties agree not to assign rights or delegate duties under this Agreement or subcontract any part of the performance required under this Agreement without the express written consent of the other, which shall not be unreasonably withheld. Except as herein otherwise provided, this Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective permitted successors and assigns.
18. **Entire Understanding.** This Agreement is intended as the complete integration of all understandings between the Parties with respect to the subject matter hereof. No prior or contemporaneous addition, deletion, or other amendment hereto shall have any force or affect whatsoever, unless embodied herein in writing. No subsequent novation, renewal, addition, deletion, or other amendment hereto shall have any force or effect unless embodied in a writing executed by the Parties and approved in accordance with applicable law.
19. **Modification and Amendment.** No modification of this Agreement shall be effective unless agreed to in writing by both Parties in an amendment to this Agreement that is properly executed by the Parties and approved in accordance with applicable law.
20. **No State Funds.** This Agreement does not involve the expenditure of State funds. Any obligation under this Agreement that would require the expenditure of State funds requires the approval of the State Controller and an amendment to this Agreement.
21. **Survival of Certain Contract Terms.** Notwithstanding anything herein to the contrary, the Parties understand and agree that all terms and conditions of this Agreement and any exhibit hereto which may require continued performance, compliance, or effect beyond the termination date of this Agreement shall survive such termination date and shall be enforceable as provided herein in the event of such failure to perform or comply by either Party.
22. **Severability.** If any of the provisions of this Agreement shall be held invalid or unenforceable, such invalidity or unenforceability shall not invalidate or render unenforceable the entire Agreement, but rather the entire Agreement shall be construed as if not containing the particular invalid or unenforceable provision or provisions, and the rights and obligations of the Parties shall be construed and enforced accordingly, to effectuate the essential intent and purposes of this Agreement.
23. **Waiver.** Neither Party may waive or release any of its rights or interests in this Agreement

except in writing. The failure of either Party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition. No waiver by either Party of any condition or term in any one or more instances shall be construed as a continuing waiver of such condition or term or of another condition or term.

24. **Applicable Law and Venue for Dispute Resolution.** This Agreement shall be governed and construed exclusively in accordance with the laws of the State of Colorado, excluding its choice of law rules, and all claims relating to or arising out of this Agreement or the breach thereof, whether sounding in contract, tort or otherwise, shall likewise be governed exclusively by the laws of the State of Colorado, excluding its choice of law rules. Any controversy, claim, or dispute arising out of or related to this Agreement, or the breach thereof, shall be adjudicated in the courts of the county of Denver, Colorado, to which the parties consent to personal jurisdiction.
25. **Consortium Agreement Disclosures.** CCCS shall comply with the provisions of 34 C.F.R. § 668.5(e) and 34 C.F.R. § 668.43(a)(12) by providing each CCCS Transfer Student concurrently enrolled in a CCCS School and Mines under the Mines Transfer Program and each prospective student to the Mines Transfer Program a description of the written arrangements related to the Mines Transfer Program, including, but not limited to, the following information: (i) the portion of the educational program that the institution that grants the degree is not providing; (ii) the name and location of the institutions or organizations that are providing the portion of the educational program that the institution that grants the degree is not providing; (iii) the method of delivery of the portion of the educational program that the institution that grants the degree is not providing; and (iv) estimated additional costs CCCS Transfer Students may incur as the result of enrolling in an educational program that is provided, in part, under this Agreement.
26. **Force Majeure.** Neither Party shall be liable for failure to perform as required by this Agreement to the extent such failure to perform is due to circumstances reasonably beyond such Party's control, including, without limitation, failure of any legal, governmental, or accrediting agency approval required for full performance, any order, rule or regulation of any court or government agency, labor disturbances or labor disputes, wars, insurrections, terrorism or civil disorders, acts of God, or any other cause beyond the reasonable control of the Party whose performance is affected; provided, however, that the Party affected by such a condition shall promptly give notice to the other Party stating the nature of the condition, its anticipated duration, and any action being taken to avoid or minimize its effect. The suspension of performance shall be of no greater scope and no longer duration than is reasonably required, and the nonperforming Party shall use its commercially reasonable efforts to remedy its inability to perform; provided further, however, that in the

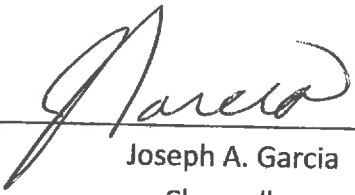


event the suspension of performance continues for more than thirty (30) days after the date of the occurrence, and such failure to perform would constitute a material breach of this Agreement in the absence of such force majeure event, the non-affected Party may terminate this Agreement immediately by written notice to the affected Party.

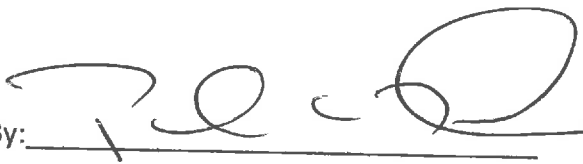
- 27. **Non-Exclusive Agreement.** This Agreement is non-exclusive and either Party may contract with third parties to provide other similar programs.
- 28. **Headings.** The section headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

**IN WITNESS WHEREOF**, the Parties have executed this Agreement on this \_\_\_\_ day of August, 2021.

State of Colorado, Department of Higher Education, State Board for Community Colleges and Occupational Education, for the use and benefit of Colorado Community College System

By:   
Joseph A. Garcia  
Chancellor

Colorado School of Mines

By:   
Paul C. Johnson  
President

## **Appendix A**

### **The CCCS Associates in Engineering Science (AES) for articulation with the Colorado School of Mines**

The Colorado School of Mines (Mines) is proposing the co-creation of a 2+3<sup>1</sup> Articulation agreement that encourages students from across the CCCS (plus CMC and Aims) to pursue opportunities at the Colorado School of Mines. We are mindful that there is a lot of untapped talent out there and that the cross-section of students who we would like to appeal to with this “pathway” represents students with (potentially) very different preparation prior to entry into the 2-year system.

With this in mind, we propose a degree program modelled on our agreement with RRCC that is flexible enough to (i) conform to our existing arrangement with RRCC and (ii) be accessible to students whose background requires some degree of remediation to prepare for courses in the existing RRCC agreement while still providing an educational experience designed to articulate with the curriculum at Mines. To this end, we are proposing a 60 credit hour AES, consisting of 22 credit hours of General Education Credits (1 English course, 1 Philosophy Course, 1 Arts and Humanities/History course, 1 Social Sciences course, 1 Laboratory Science course and 1 Mathematics course). Beyond these 22 hours, there is considerable flexibility in specifying the remainder of the 60 credits in the AES.

Additionally, through the Mines-CCCS Transfer Articulation Agreement (MOU) being developed in association with the AES degree, we hope to establish a reverse transfer protocol that is opt-out and will be triggered upon the completion of a fixed number of credit hours at Mines to ensure that eligible students (under the Articulation Agreement) who transfer to Mines prior to AES degree completion will be awarded the AES degree upon completion of the degree requirements based on their completed coursework at Mines. This will require some additional thought as well as approval from CDHE but may serve as a model for targeted opt-out reverse transfer protocols in other highly-specialized MOUs.

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<sup>1</sup> Students completing the AES should have a pathway to graduate from Mines in no more than 3 years beyond the AES degree. Students completing coursework that maximizes the articulation of transfer credit may even be able to complete a Mines degree within 2 years beyond the AES.

## **Associate of Engineering Science (AES) Degree Requirements (60.0 Hrs):**

### **General Education Requirements (22.0 Hrs)<sup>2</sup>:**

- 1) ENG122 – English Composition II (3.0) **OR** ENG131 – Technical Writing (3.0)
- 2) PHI 218 – Environmental Ethics (3.0)<sup>3</sup> [Mines HASS100]
- 3) HIS247 – 20<sup>th</sup> Century World History **OR** SOC207 – Environmental Sociology (3.0) **OR** POS225 – Comparative Government (3.0) **OR** LIT202 – World Lit after 1600 (3.0)<sup>4</sup> [Mines HASS200]
- 4) ECO201 – Principles of Macroeconomics (3.0) **OR** ECO202 – Principles of Microeconomics (3.0)<sup>5</sup> [Mines EBG201]
- 5) MAT201 – Calculus I (5.0)<sup>6</sup> [Mines MATH111]
- 6) CHE111 – College Chemistry I (5.0)<sup>7</sup> [Mines CHGN121]

### **Engineering Science Requirements (24.0-27.0 Hrs)<sup>8</sup>:**

- 1) 3 additional semester of Mathematics courses from
  - a. MAT202 – Calculus II (5.0) [Mines MATH112]
  - b. MAT203 – Calculus III (4.0) **OR**  
MAT204 – Calculus III with Engineering Applications (5.0)<sup>9</sup> [Mines MATH213]
  - c. MAT261 – Differential Equations with Engineering Applications (4.0)<sup>10</sup> **OR**  
MAT265 – Differential Equations (3.0) **OR**  
MAT266 – Differential Equations with Linear Algebra (4.0) [Mines MATH225]
- 2) 2 additional semesters of Laboratory Science courses from
  - a. BIO111 – Biology I (5.0) [Mines CBEN110]
  - b. CHE112 – College Chemistry II (5.0) [Mines CHGN122]
  - c. GEY111 – Physical Geology (4.0) [Mines GEGN101]
  - d. PHY211 – Physics I (5.0) [Mines PHGN100]
  - e. PHY212 – Physics II (5.0) [Mines PHGN200]
- 3) EGT140 – Introduction to Design and Engineering Applications (3.0)<sup>11</sup> [Mines EDNS151]

<sup>2</sup> This set of GE courses can be meaningfully transferred in for 17.0 credit hours of explicitly required courses in the existing Mines Core. The extra 5.0 hours would be eligible for Free Elective credit at Mines.

<sup>3</sup> Either ENG122 or ENG131 plus PHI218 currently transfer in as HASS100 in the existing Mines Core.

<sup>4</sup> Any one of these courses transfers in as HASS200 in the existing Mines Core.

<sup>5</sup> The faculty in Economics and Business at Mines have agreed to accept either ECO201 or ECO202 rather than requiring both. It is their intention to assess the impact of this change over the next 2-3 years prior to permanently changing transfer policies around this course.

<sup>6</sup> While there will be four math courses required in total, we include Calculus I in the Gen Ed requirements since it is the entry-level mathematics course at Mines. Depending on mathematics placement on entry to the CCCS, a given student will complete the mathematics requirement in AES by taking an appropriate combination courses prerequisite to MAT201 (which will count toward the AES but not the Mines degree) or subsequent to MAT201 (which will count toward both the AES and the Mines degree).

<sup>7</sup> Chemistry I (with lab) is required of all majors at Mines and CHE111 has already been approved as equivalent to CHGN121 in the existing Mines Core.

<sup>8</sup> Depending on choice of mathematics and science courses, the Engineering Science Requirements would constitute between 24.0 (MATH202,203,265 and GEY111) and 28.0 (MAT166,202,204 and non-GEY science option). Depending on mathematics courses, this set of courses can meaningfully be transferred in for ??-?? credit hours of explicitly defined coursework at Mines. Excluding MAT121 and MAT166, any additional credit hours would be eligible for Free Elective credit at Mines.

<sup>9</sup> If possible, Mines would prefer that the student take MAT204 for Calculus III credit as this course's syllabus is most consistent with our course.

<sup>10</sup> If possible, Mines would prefer that the student take MAT261 for Differential Equations credit as this course's syllabus is most consistent with our course.

<sup>11</sup> Currently the only course that satisfies the EDS department learning outcomes for this course at Mines is EGT140 (offered at RRCC). Mines plans to host faculty workshops to facilitate development of other design courses in the CCCS curriculum (EGG140 for example) to insure that those courses are satisfactory for transfer to Mines for EDNS151 credit. Once EDS at Mines signs off on additional courses as satisfactory, those courses will be added as options under item 3) in the Engineering Sciences Requirements.

**Electives (11.0-14.0 Hrs) – chosen based on program(s) of interest at Mines<sup>12</sup>:**

- 1) Any of the following mathematics and laboratory science courses not being applied to the Engineering Science requirements
  - a. MAT135 – Introduction to Statistics (3.0) [Mines MATH201]
  - b. BIO111 – Biology I (5.0) [Mines CBEN110]
  - c. CHE112 – College Chemistry II (5.0) [Mines CHGN122]
  - d. GEY111 – Physical Geology (4.0) [Mines GEGN101]
  - e. PHY211 – Physics I (5.0) [Mines PHGN100]
  - f. PHY212 – Physics II (5.0) [Mines PHGN200]
- 2) Other Engineering-Specific courses developed in collaboration between Mines and CCCS faculty, including
  - a. EGG211 – Statics (3.0) [Mines CEEN241]
  - b. EGG212 – Dynamics (3.0) [Mines MEGN315]
  - c. Other future courses developed in collaboration between CCCS and Mines faculty.

(Students interested in a degree program requiring one or more of these courses and who have the prerequisites to complete these courses are strongly encouraged to include them, as appropriate, in their AES degree. Students at a CCCS campus that does not offer these courses may have the opportunity to enroll remotely in the courses at a campus that does offer them. CCCS Advisors should be able to direct students to these course opportunities where appropriate.)<sup>15</sup>
- 3) CSC119 – Introduction to Programming (3.0) AND either  
CNG124 – Networking I OR CIS243 – Intro to SQL (3.0)<sup>17</sup> [Mines CSCI101]
- 4) CSC160 – Computer Science I (4.0) [Mines CSCI261]
- 5) CSC161 – Computer Science II (4.0) [Mines CSCI262]
- 6) PE Activities (2.0)<sup>18</sup> [Mines 4 semester Physical Activities requirement waived, but still need 2 hrs]
- 7) Foreign Language, Literature, History, Humanities, Political Science, Social Science<sup>20</sup> ( $\leq 6.0$ ) [Mines H&SS Mid-Level Core Curriculum Requirement]

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<sup>12</sup> Elective credit hour requirement is dependent on choice of Engineering Science Requirements. General Education Requirements, Engineering Science Requirements and Electives should sum to at least 60.0 hours.

<sup>15</sup> Mines faculty are currently collaborating on the development of a few such courses with 2-year partners. If possible, these course opportunities may be extended system-wide via summer professional development opportunities at Mines of real-time remote delivery options.

<sup>17</sup> Both CSC 119 and (CNG 124 or CSC 145) must be taken to receive credit for CSCI 101.

<sup>18</sup> Each student at Colorado School of Mines is required to complete 4 separate semesters of Physical Education as a graduation requirement, totaling 2.0 credit hours. 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. Additionally, for students transferring into Mines under an articulation agreement associated with the AES, the 4 separate semesters requirement is waived and 2.0 credit hours of transferred physical education coursework will satisfy the existing Mines Core Curriculum degree requirement.

<sup>20</sup> 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.

## APPENDIX A – MINES CORE CURRICULUM & THE ASSOCIATES IN ENGINEERING SCIENCES

The Core Curriculum at Mines forms the foundation for advanced study in the major fields. It is designed to give students the fundamental knowledge and skills they will need and put to use in their majors and in careers after graduation. Core courses provide students with fundamental technical, mathematical, and writing skills. In Core courses, students learn basic scientific procedures, principles, concepts, laws, and theories relevant to all applied sciences. In addition, Core courses in the humanities and social sciences help students develop interdisciplinary perspectives on the ethical, social, and cultural contexts within which engineering takes place.

The variety of courses in the Core Curriculum also provide students with opportunities to develop skills in problem solving, critical thinking, teamwork, design, and communication. Students who complete the Core are well prepared to be lifelong learners and leaders who can work effectively in an increasingly globalized world.

The Core Curriculum has three parts, the details of which can be found below. All CSM students complete the courses in the Common Core. Courses required in the Science Requirement and Engineering Requirement vary according to the major field of study. Finally, all students have a number of Free Elective courses. Free Electives are usually taken in the last two years.

Refer to the Degree Requirements section for each major program under Undergraduate Programs and Departments for a listing of Core courses students should take each semester.

### OVERVIEW: CORE COURSE REQUIREMENTS

Core & distributed course requirements for Bachelor of Science degrees are comprised of the following four groups:

1. **Core Curriculum** - Students in all degree programs are required to complete all course requirements listed in this group.
2. **Humanities & Social Sciences (H&SS) Requirement** - Students in all degree programs are required to complete all course requirements listed in this group.
3. **Distributed Science Requirement** - Students in all degree programs are required to complete a minimum of three courses as prescribed by the specific degree program.
4. **Engineering Requirement** - Engineering Requirements are applicable to undergraduate students in engineering disciplines as specified by the degree program. See Department and Division program descriptions in this Catalog for specific courses required.

The Core Curriculum:

Core requirements are applicable to all undergraduate students:

**In Mathematics and the Basic Sciences**

<u>MATH111</u>	CALC FOR SCIENTISTS AND ENGINEERS I	4.0
<u>MATH112</u>	CALC FOR SCIENTISTS AND ENGINEERS II	4.0
<u>MATH213</u>	CALC FOR SCIENTISTS AND ENGINEERS III	4.0
<u>MATH225</u>	DIFFERENTIAL EQUATIONS	3.0
<u>CHGN121</u>	PRINCIPLES OF CHEMISTRY I	4.0
<u>PHGN100</u>	PHYSICS I - MECHANICS	4.5

**In Design**

<u>EDNS151</u>	DESIGN I	3.0
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**In Physical Activity (four separate semesters including the following) \***

PAGN Elective	PHYSICAL ACTIVITY COURSE	0.5
PAGN Elective	PHYSICAL ACTIVITY COURSE	0.5
PAGN Elective	PHYSICAL ACTIVITY COURSE	0.5
PAGN Elective	PHYSICAL ACTIVITY COURSE	0.5

**In Freshman Orientation & Success**

<u>CSM101</u>	FRESHMAN SUCCESS SEMINAR	0.5
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**Free Electives \*\***

Minimum of 9.0 Semester Hours	9.0
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<b>Total Semester Hrs</b>	<b>38.0</b>
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\* A minimum of 2.0 credit hours. See the Physical Education and Athletics section for specifics.

\*\* A minimum of 9.0 hours of Free Elective are included with each degree-granting program.

1. The choice must not be in conflict with any Graduation Requirements.
2. Free electives to satisfy degree requirements may not exceed three semester hours (3.0) in activity courses such as band, choir, studio art, physical activity, and varsity athletics courses combined.
3. Transfer credits used for free electives must comply with the transfer credit guidelines.

## Humanities & Social Sciences (H&SS) Requirement

All Mines undergraduate students are required to satisfy a Humanities & Social Sciences (H&SS) Core requirement as one component of Mines' Core Curriculum. The H&SS Core requirement includes 19 credit hours of courses ranging from first-year to senior-level and offered by a variety of academic units across campus. The H&SS Core includes both specified and restricted-elective course requirements as described below.

### Core Required Courses\*

<u>HASS100</u>	NATURE AND HUMAN VALUES	4.0
<u>HASS200</u>	GLOBAL STUDIES	3.0
<u>EBGN201</u>	PRINCIPLES OF ECONOMICS	3.0
MID-LEVEL ELECTIVE	Two courses from the approved list of requirements **	6.0
400-LEVEL ELECTIVE	One course at the 400-level from the approved list of requirements **	3.0
<b>Total Semester Hrs</b>		<b>19.0</b>

\* These course requirements are modified for students in the following programs: Thorson Honors, McBride Honors, and Bachelor of Science in Engineering (BSE). Students in these programs can find program-specific requirements within the relevant program sections of this catalog.

\*\* The additional 9 credit hours of mid-level and 400-level electives must meet the following requirements:

- At least 3 credit hours must be at the 400 level.
- At least 3 credit hours must have a HASS (Humanities, Arts, and Social Sciences) course code.
- No more than 6 credit hours can have the LIFL (Foreign Languages) course code.
- Courses with the LIMU (Music) course code cannot be used to satisfy this requirement.
- HASS498 special topic courses can be used to satisfy this requirement. EBG498 and EDNS498 special topic courses will be determined to satisfy this requirement on a course-by-course basis, and that determination will be made prior to the beginning of the term the course is offered.
- Except for foreign languages, no AP or IB credit can be used to meet this requirement. (AP/IB credits will be applied as free electives.)
- Single majors in Economics cannot use courses with the EBG course code to satisfy this requirement.

Courses that satisfy the Humanities & Social Sciences (H&SS) Core Restricted Electives requirement are offered by several academic units. The various course codes and their respective academic division or department can be found in the table below:

COURSE CODE	COURSE TITLE
EBGN	Economics & Business
EDNS	Engineering, Design, and Society
HASS	Humanities, Arts, and Social Sciences
HNRS	Honors
LIFL	Foreign Language
PEGN	Petroleum Engineering

Key to Subject Codes

With the exception of HASS, LIFL and HNRS, not all courses with these codes count toward the Humanities & Social Sciences (H&SS) Core Restricted Electives requirement.



APPENDIX B – RECOMMENDED COURSE PLAN FOR THE ASSOCIATES IN ENGINEERING SCIENCES FOR TRANSFER TO MINES

**1<sup>st</sup> Semester:**

MAT201 <sup>1</sup> (5.0)	CHE111 <sup>1</sup> (5.0)	ENG122 <sup>2</sup> (3.0)	ECO201 (3.0)		<b>16.0 at CC</b>
MATH111 (4.0)	CHGN121 (4.0)		EBGN201 (3.0)	Free Elect. (4.0)	<b>15.0 at Mines</b>

**2<sup>nd</sup> Semester:**

MAT202 <sup>1</sup> (5.0)	PHY211 <sup>1</sup> (5.0)	PHI218 <sup>2</sup> (3.0)	EGT140 (3.0)		<b>16.0 at CC</b>
MATH112 (4.0)	PHGN100 (4.5)	HASS100 (4.0)	EDNS151 (3.0)	Free Elect. (1.5)	<b>17.0 at Mines</b>

**3<sup>rd</sup> Semester:**

MAT204 <sup>1</sup> (5.0)	PHY212 <sup>3</sup> (5.0)	HIS247 <sup>4</sup> (3.0)	Phys Ed (1.0)		<b>14.0 at CC</b>
MATH213 (4.0)	PHGN200 (4.5)	HASS200 (3.0)	PA I&II (1.0)	Free Elect. (1.5)	<b>14.0 at Mines</b>

**4<sup>th</sup> Semester:**

MAT261 <sup>1</sup> (4.0)	CHE112 <sup>3</sup> (5.0)	Eng. Elect <sup>5</sup> (4.0)	Phys Ed (1.0)		<b>14.0 at CC</b>
MATH225 (3.0)	CHGN122 (4.0)	Mines Equiv (3.0)	PA III&IV (1.0)	Free Elect. (3.0)	<b>14.0 at Mines</b>

<sup>1</sup> In instances where the CCCS course has more credit hours assigned to it than the equivalent course at Mines, the appropriate number of credit hours will be applied to the Mines course and any excess credit hours will be applied to Free Elective at Mines.

<sup>2</sup> Students should take either ENG122 or ENG131 in combination with PHI218 to earn transfer credit for HASS100 at Mines. 1 credit hour of the ENG course and 3 credit hours of PHI218 will be applied to the 4 credits for HASS100 at Mines. The remaining 2 credit hours are applied to Free Elective at Mines.

<sup>3</sup> Second laboratory science requirement should be taken. Choice of course is dependent on the program of interest at Mines. In general, CHGN122 and PHGN200 are acceptable distributed science electives for almost every degree program at Mines.

<sup>4</sup> Pick an appropriate course to meet the HASS200 requirement at Mines.

<sup>5</sup> Pick an appropriate engineering elective course based on program of interest at Mines.

## APPENDIX B

The following is a list of de-identified data to be produced by Mines to CCCS on an annual basis for purposes of tracking student success in the Mines Transfer Program based on demographics:

- Continued enrollment vs. no longer enrolled
- Cumulative GPA
- Attempted credits
- Cumulative credits
- Earned credential
- Disaggregated by race/ethnicity and gender
- Disaggregated by program
- Comparison success data for non-transfer students