# Colorado School of Mines –FACULTY SENATE MEETING AGENDA March 28, 2:00 – 4:00 pm, Guggenheim Boardroom via Zoom

| <u>Time</u>  | Item<br>Information Session   | <u>Presenter</u> |  |  |
|--|---|------------------|--|--|
| 2:00-2:05 pm   | Welcome   | Jeff King        |  |  |
| 2:05-2:10 pm   | Approval of Minutes – March 14, 2023<br>Approval of the Agenda  | Jeff King        |  |  |
| 2:10-2:15 pm   | Academic Affairs Announcements  | Rick Holz        |  |  |
| 2:15-2:20 pm   | Registrar's Office Announcements  | Paul Myskiw      |  |  |
| 2:20-2:30 pm   | <b>Committee Reports and Presentations</b><br>Faculty Contracts<br>Student Signature Experience<br>Chat GPT and AI University Committee<br>2024 Welcome Week Task Force   |                  |  |  |
| 2:30-2:40 pm   | Council Reports<br>Undergraduate Council<br>Graduate Council<br>• Appendix C – Graduate Curriculum Items for Senate Presentation<br>Research Council  |                  |  |  |
| Business Session   |   |                  |  |  |
| 2:40-2:50 pm   | <b>Confirmations and Appointments</b><br>Conflict of Interest Committee<br>Parking Advisory Committee   | Cristian Ciobanu |  |  |
| 2:50-3:50 pm   | <b>Undergraduate Council</b><br>Student Life CORE Changes<br>Core Curriculum Draft Catalog Language<br>Appendix A – CORE Curriculum Items for Senate Vote<br>Appendix B – Non-CORE Curriculum Items for Senate Vote | Joe Horan        |  |  |
| 3:50-3:55 pm   | <b>Graduate Council</b><br>Appendix D – Graduate Curriculum Items for Senate Vote   | Tina Voelker     |  |  |
| 3:55-4:00 pm <b>Adjourn</b> Jeff King<br>Next meeting: April 11, 2:00-4:00 pm in the Guggenheim Boardroom and Zoom. Please send agenda items to Mara<br>Green ( <u>mgreen1@mines.edu</u> ) 1 week prior. |   |                  |  |  |



# <u>Appendix A</u> <u>CORE Curriculum Items for Senate Vote</u> from 3/14/23

| 1.1 | APPLIED MATHEMATICS & STATISTICS<br>[CIM 2/27; UGC 3/15]  | APPLIED MATHEMATICS & STATISTICS |  |  |
|-----|---|----------------------------------|--|--|
|     | <b>1 program change</b> : BS-AMS: BS in Applied Mathematics and Statistics<br>THE FOLLOWING ARE NEW CORE CHANGES: We will drop 3 hours of free elective credit<br>Not much else will change for us in the new core. The new flow chart has been input. A<br>the same time, we will remove MATH530 from the elective lists for the CAM and STAT<br>degrees (that is a service course containing material already required in other major<br>classes) | t                                |  |  |
| 1.2 | CIVIL & ENVIRONMENTAL ENGINEERING<br>[CIM 3/6]  |                                  |  |  |
|     | <b>3 program change</b> : BS-CE: BS in Civil Engineering<br>BS-CONSTR: BS in Construction Engineering<br>BS-EVE: BS in Environmental Engineering  |                                  |  |  |
|     | Core course flowchart changes.  |                                  |  |  |
| 1.3 | CHEMICAL & BIOLOGICAL ENGINEERING<br>[CIM 2/13; UGC 3/1]  |                                  |  |  |
|     | <b>1 program change</b> : BS-CHE: BS in Chemical Engineering<br>Updating program requirements in accordance with core revision.   |                                  |  |  |
| 1.4 | CHEMISTRY<br>[CIM 2/24; UGC 3/15]   |                                  |  |  |
|     | <b>1 program change</b> : BS-CHM: BS in Chemistry<br>Updated flowchart to include new core requirements: Chemistry track, Environmental<br>Chemistry track, Biochemistry track, BS in Biochemistry.   |                                  |  |  |
| 1.5 | ECONOMICS & BUSINESS<br>[CIM 3/1]   |                                  |  |  |
|     | 2 program changes: BS-BEMS: BS in Business Engineering and Management Science<br>BS-ECO: BS in Economics  | e                                |  |  |
|     | Core revision; course flowchart updated.  |                                  |  |  |
| 1.6 | ENGINEERING, DESIGN, AND SOCIETY<br>[CIM 2/24; UGC 3/15]  |                                  |  |  |
|     | <b>1 program change</b> : BS-EGN: BS in Design Engineering Updates to program due to core revisions.  |                                  |  |  |
| 1.7 | GEOLOGY & GEOLOGICAL ENGINEERING<br>[CIM 3/1]   |                                  |  |  |
|     | <b>1 program change</b> : BS-GLE: BS in Geological Engineering<br>Changes are related to meeting the changes in core curriculum being implemented in<br>2023-24, also reducing required credit hours to 133 from 137.5.   |                                  |  |  |

1.8 **GEOPHYSICS** 



### [CIM 2/15; UGC 3/1]

**1 program change:** BS-GPE: BS in Geophysical Engineering The GP department conducted an update on core courses to fit the campus-wide adjustment. The department also proposes the addition of six tracks that would guide our undergraduate students in their course selection and career development. This is an approach that has been adopted by various other programs, such as Mechanical Engineering.

#### 1.9 MECHANICAL ENGINEERING

[CIM 3/1]

**1 program change**: BS-MECH: BS in Mechanical Engineering

- 1. Changes according to Mines CORE adjustment.
- 2. Electives list updated (added/removed).
- 3. GPA calculation course list trimmed down.
- 4. Tracks courses updated. 5. Minors and ASI text and credit hours corrections.

## 1.10 METALLURGICAL & MATERIALS ENGINEERING

[CIM 2/16; UGC 3/8]

 1 program change:
 BS-CERE: BS in Ceramic Engineering

 BS-MME: BS in Metallurgical and Materials Engineering

Program grid changes to reflect updates in response to core changes.

### 1.11 MINING ENGINEERING

[CIM 3/1]

**1 program change**: BS-MNE: BS in Mining Engineering *Updates to the course flowchart reflecting core revisions.* 

# 1.12 **PETROLEUM ENGINEERING**

[CIM 2/22; UGC 3/8]

**2 program changes**: BS-PTE: BS in Petroleum Engineering

These changes are to meet the new core curriculum requirements.

MIN-PTDA: Minor in Petroleum Data Analytics

We are updating the requirements to reflect changes in the core curriculum and the discontinuation of some courses previously listed as part of this minor.

### 1.13 **PHYSICS**

[CIM 2/24; UGC 3/15]

**1 program change:** BS-PHE: BS in Engineering Physics These changes will better match our undergraduate Engineering Physics degree with the larger campus changes in our core curriculum. Changes to flowchart.

## 1.14 QUANTITATIVE BIOSCIENCES AND ENGINEERING

[CIM 2/23; UGC 3/8]**1 program change**:BS-QBE: BS in Quantitative Biosciences and EngineeringUpdates to course flowchart.

#### 1.15 HUMANITIES, ARTS, AND SOCIAL SCIENCES [CIM 3/1; UGC 3/15]



**1 course change**: HASS100: NATURE AND HUMAN VALUES *Credit change from 4 to 3 hours.* 



### <u>Appendix B</u> <u>Non-CORE Curriculum Items for Senate Vote</u> from 3/14/23

2.1 MECHANICAL ENGINEERING [CIM 2/27; UGC 3/15] 1 program change: MIN-AERO: Aerospace Engineering Minor *Courses added to list.* 

# 2.2 **ELECTRICAL ENGINEERING**

[CIM 2/19; UGC 3/8]

**1 program change**: MINASI-EE: Minor/ASI in Electrical Engineering We are being specific about which courses students have to take to get a minor within the Catalog language.

## 2.3 **PHYSICS**

[CIM 3/3; UGC 3/15] **1 program deactivation**: MIN-BPHYS: Minor in Biophysics *No longer offering the program.* 



## Appendix C Graduate Curriculum Items for Senate Presentation

# 3.1 ECONOMICS AND BUSINESS

 

 [CIM 3/1; GC 3/15 (Consent Agenda)]

 1 program change:
 MS-ETM-NT: Engineering and Technology Management (ETM) Master of Science

 Catalog language changes to align with HLC.



### <u>Appendix D</u> <u>Graduate Curriculum Items for Senate Vote</u> from 3/14/23

## 4.1 CHEMISTRY

[CIM 2/8; GC 3/1]

**1 program change:** MPMSPHD-CH: MP, MS & PhD – Chemistry Number of course credits for MS degree was decreased from 24 to 18 credits, so that it now matches the number of credits required for the PhD degree.

## 4.2 COMPUTER SCIENCE

[CIM 2/6; GC 3/1]

**1 program change**: MSPHD-CS: MS & PhD – Computer Science Change prerequisite requirements based on core changes in undergraduate Catalog.

### 4.3 ENGINEERING, DESIGN, AND SOCIETY

[CIM 2/14]

**1 program change**: MSCR-HES: Humanitarian Engineering and Science *Changes to the program are:* 

Replacing two core courses: Adding EDNS 515, Intro to Science & Technology Studies (a currently existing, but renamed course) to replace EDNS 590 Risks in HES. Adding EDNS 579 Community Based Research Methods (a new graduate level version of this course) to replace the 400 level of this course. Adding HASS 590, Energy & Society and EDNS 590 Risks in HES to the Elective List.

## 4.4 GEOLOGY & GEOLOGICAL ENGINEERING

[CIM 2/7; GC 3/15]

**1 program change:** CRMS-GISG: GIS & GeoInformatics – Certificates and MSNT *GIS Programs. Because this is newly formed into the GIS Master's Degree as an ONLINE degree, there are a few changes for this program.* 

# 4.5 **GEOPHYSICS**

[CIM 1/31; GC 3/1]

1 program change: XCR-PEGP: Graduate Certificate in Energy Geophysics We are requesting both a name and programmatic change for the existing Graduate *Certificate in Geophysics. The name change is also consistent with market research* (including by Mines personnel) that finds "energy" to be a more compelling term than "petroleum" with the demographic most likely to enter the Graduate Certificate program. Thus, it is likely to have broader appeal and likely increase enrollment. The programmatic change would allow us to broaden the types of courses offered in this program beyond petroleum (i.e., distributed fiber optic sensing; carbon capture, utilization, and storage), and provide a path for future extensions in the direction of geothermal, geophysical engineering (e.g., solar and wind resources), and locating the minerals required for the energy transition. It would also provide prospective students with greater flexibility in designing a graduate certificate program that is better aligned with their career goals and objectives. Finally, we note that all the listed courses already exist as online 8-week asynchronous courses; thus, there is minimal overhead for contributing faculty associated with this proposed name and programmatic change.

