Colorado School of Mines – GRADUATE COUNCIL MEETING MINUTES January 18, 4:00 – 5:00 pm, via Zoom

Attendees:

Voting Members: 23 total (12 - majority needed for quorum). Quorum was present

Р	Bettina Voelker (Chair)	Α	Christine Baker (LB)	Р	Andy Osborne (NSE)	Ρ	Owen Hildreth (ME)
Р	Eric Anderson (HSE)	Р	Soutir Bandyopadhyay	Р	Jamal Rostami (MN)	Р	Michael Heeley (EB)
			(AMS)				
Р	Jeffrey Shragge (GP)	Р	Juan Lucena (EDS)	Р	Jim Ranville (GC)	Ρ	Luis Zerpa (PE)
Р	Kester Clarke (MME)	Р	Uwe Greife (PH)	Р	Danica Roth (GE)	Р	Dong Chen (CS)
Α	Jay Straker (HASS)	Р	Dave Marr (CBE)	Р	Liam Witteman (GSG)	Р	Lori Tunstall (CEE)
Р	Christine Morrison (CH)	Α	Atef Elsherbeni (EE)	Α	Gabriel Walton (UCTE)		

Other Regular Attendees and Guests

	•						
Р	Tim Barbari (OGS)	Р	Carolyn Freedman (OGS)	Α	Jenny Briggs (OGS)	Α	Mara Green (AA)
Α	Wendy Adams (HNRS)	Α	D. Scott Heath (RO)	Р	Paul Myskiw (RO)	Α	Roxane Aungst (OGS)
Α	Sam Spiegel (Mines	Α	Suzanne Beach (Payne)	Α	Jen Gagne (
	Online)				Grad Admissions)		

Special Guest(s):

Welcome Tina Voelker

Briefings and Information Items

Office of Graduate Studies

Tim Barbari

Announcement to department heads and IGP directors sent on top off fellowships. Barbari noted this is the first year doing top off fellowships; fellowship to be done on rolling nomination basis and with the goal to distribute to as many departments as possible. Barbari had received two nominations.

Registrar's Office Paul Myskiw

A new degree audit specialist has been hired; position in charge of encoding degree audits in Degree Works for undergraduate and graduate students. Myskiw noted there had been a need for a full-time position.

 Question on who the new specialist is; Myskiw reported Rachel Bishop will be taking on the position.

Myskiw reported cleaning advisee lists Fall 2022 and making sure lists were accurate for students engaged at Mines. Advisee lists will be sent to advisors to review.

Graduate Student Government

Liam Witteman

No updates from Graduate Student Government. Meetings begin again the week of 1/24.

Non-Compliance with HLC Assumed Practices

Tim Barbari

Graduate Programs and Combined Programs

Barbari reintroduced language at the 1/4 Council meeting on only double-counting 500-level and higher courses toward a graduate degree to fall in line with HLC Assumed Practices.

Barbari met with Undergraduate Council and did not receive much feedback. Barbari noted much of the Undergraduate Catalog references the Graduate Catalog language and does not need to be duplicated.



Undergraduate majors with combined programs have language on double counting six credits, but does not specify the level. Barbari noted half of the programs do not have language on 500-levels as technical electives and suggested language to include 500-levels.

Question on if the 500-level requirements is only for double-counted courses; Barbari noted the
first step is easing away from double counting 400-levels toward a graduate degree. Barbari
would not add additional changes to the 2023-2024 Catalog.

Barbari reported the HLC liaison was emphatic 400-level courses counting toward a graduate degree having evidence of graduate-level content associated with the 400-level course.

Question on when implementation would affect undergraduates; Barbari estimated the change would impact students that are admitted into a graduate program in Fall 2023. Councilor suggested an exception period be drafted to provide time to acclimate to the change, this document could then be provided to departments for planning. Councilor suggested a longer exception period due to not knowing what cross listed 500-level courses could look like and other factors.

Myskiw reported there has been a recent change on how institutional undergraduate aid is used. Initially, only four years of institutional undergraduate aid could be used for undergraduate courses only. This has been shifted to include four years of institutional aid that can be used for graduate courses, as well.

Items for Council Vote – from 1/4/23

1.1 PHYSICS

Uwe Greife

[CIM 12/13; Provost 12/13]

1 new program: MSNT-PH: Master of Science (non-thesis) Applied Physics Addition

The addition of a non-thesis MS program to our Physics program aligns with the goals of Mines at 150, in particular

- Be a top-of-mind and first-choice university for students, public and private partners, and faculty and staff.
- Expand offerings and diversify delivery, in particular for professionally oriented pre and post graduate education.
- Grow the scale and impact of research, focus on thematic strengths, develop a more social research culture, diversity funding sources.

The non-thesis program can offer our combined students a more accessible method to get a MS degree in Applied Physics

Greife provided context on the proposal of a non-thesis master's degree in applied physics; noted that some students going into industry may find it a beneficial option and it may assist students that are not benefiting from research.

MOTION: To approve the new program MSNT-PH: Master of Science (non-thesis) Applied Physics Addition by Hildreth, seconded by Heeley. Motion passed unanimously.



New Business

2.1 MINING ENGINEERING

Jamal Rostami

[CIM 1/17; Provost 1/17]

1 program change: MSPHD-ERSE: MS and PhD Program in Earth Resources Science

and Engineering

Dept of Mining engineering offers MS and PhD degrees under Earth Resource Development Engineering (ERDE). This program allows faculty in our dept to recruit and advise students from various engineering backgrounds to work on mining and minerals related topics. There has been much demand and inquiry to allow students with science background to join the program and work on these topics. ERDE by nature is multidisciplinary and we are opening it to the possibility of having students with Science background to join the program. With this change, we are also proposing to change the name of the program to "Earth Resources Science and Engineering (ERSE)".

In brief this program change involves:

- Change the requirements for ERDE admission so that students from non-engineering backgrounds can also be admitted without having to fulfill the requirements for an engineering undergraduate degree
- Change the name of ERDE Earth Resource Development Engineering to ERSE Earth Resources Science and Engineering

Program currently named Earth Resource Development Engineering (ERDE). Rostami reported this is an interdisciplinary program that can take anyone that may not have a mining engineering degree or background while working with faculty in the mining department. Few students have a science background, not necessarily engineering. Decision had been made to change the name from ERDE to Earth Resources Science and Engineering (ERSE) to include science and engineering backgrounds.

Question if this qualifies as a new program; Myskiw noted that so long as the CIP code or
instructional classification defined by the federal government does not change then only new
codes on the system side are created alongside the term in which the change becomes effective.

If new students would like to change the name of their degree, they can select which Catalog to work through.

2.2 MECHANICAL ENGINEERING

Owen Hildreth

[CIM 12/13]

1 program change: MSPHD-MECH: MS & PhD – Mechanical Engineering Updating list of approved Research Core Courses to ensure that enough courses are taught so that students can graduate on time.

Masters or PhD degrees need to take three of four research core courses. MECH found there were issues supplying enough of these core courses for students to graduate on time; department going through the process of solving this long term.

To each core course, additional courses that are consistently taught every year at the 500-level have been added. Students are asked to investigate an area of their choosing.



Question on courses that are not within the MEGN prefix; Hildreth noted the FEGN and AMFG prefixes live within the department.

2.3 **GEOPHYSICS**

Jeffrey Shragge

[CIM 1/10]

1 program change: MPMSPHD-GP: MP, MS & PhD – Geophysics & Geophysical

Engineering

The structure of the GP graduate degrees is currently over-prescriptive in the courses required to satisfy the three presently listed coursework focus areas of theory, applied and computation. This structure also appears to downplay the importance of the "Earth and Space" focus area by not required such coursework in the GP graduate degree programs. We are seeking a programmatic change that affords GP graduate students (and their committees) a greater flexibility in choosing the courses to fulfill their GP graduate degree program and is better tailored to our student's specific research and career goals. We are also looking to rebalance the degree emphasis by requiring coursework in the "Earth and Space" focus area in addition to the three others identified above. These modifications are consistent with the recent broadening the scope of the departmental research and teaching activities over the past few years. In addition, through this programmatic change the GP Department will be expanding the offerings and diversifying the delivery of GP graduate program available to students, which is consistent with the stated Mines@150 goals.

Shragge took on representation of GP for Ebru Bozdag.

Three specific classes are listed that encourage students to take courses in focus areas of theory, applied, and computation. Department noted this may be overly prescriptive and may not fit into every student's research program.

Question if any of the coursework is falling outside of GP; Shragge noted a majority are housed within GP.

Adjourn Tina Voelker

Meeting adjourned: 5:01 pm.

Next meeting: February 1, 4:00-5:00 pm via Zoom. Please send all agenda items to Mara Green

(mgreen1@mines.edu) 1 week in advance.



<u>Consent Agenda</u> The following proposals will <u>not</u> be discussed unless specifically requested by Council. Please review the following items. With no objections, approval is implied and items will be processed accordingly.

4.1 **Approval of Minutes** – December 7, 2022

Tina Voelker

4.2 **CHEMISTRY**

Christine Morrison

[CIM 1/12]

6 course changes: CHGC505: INTRODUCTION TO ENVIRONMENTAL CHEMISTRY *Updating preregs to include CHGN125 a suitable substitution for CHGN122.*

CHGC508: ANALYTICAL GEOCHEMISTRY

Updating prereqs: "Enrolled in grad or certificate program, CHGN122 or CHGN125, GEGN101, CHGN335 or equivalent."

CHGC509: INTRODUCTION TO AQUEOUS GEOCHEMISTRY

Updating to include current CHGN209 prefix and add CBEN210 as an appropriate prereq. **This course is listed in the prereqs of GEGN586 and GEGN683**.

CHGN511: APPLIED RADIOCHEMISTRY

Updated prereqs to remove CHGN121 because it will have already been taken if the CHGN122 prereq is met. Added CHGN125 as a suitable substitution for CHGN122.

CHGN536: ADVANCED POLYMER SYNTHESIS

Replacing obsolete ChEN prefix (ChEN415) with CBEN prefix (CBEN415).

CHGN625: MOLECULAR SIMULATION

Updating preregs: "CBEN509 or equivalent, and recommend CBEN610 or equivalent."

4.2.1 [CIM 1/18]

1 course deactivation: CHGC562: MICROBIOLOGY AND THE ENVIRONMENT This course has not been taught in the last 5 years, and the department does not foresee teaching the course again. Request from C. Morrison 1/18/23

4.3 **COMPUTER SCIENCE**

Jeffrey Paone

[CIM 1/4]

1 course change: CSCI573: ROBOT PROGRAMMING AND PERCEPTION Updating responsible faculty member, title, and description to accurately reflect course content. Previous course title "Human-Centered Robotics".

4.4 MECHANICAL ENGINEERING

Owen Hildreth

[CIM 1/17]

1 course change: MEGN517: INELASTIC CONSTITUTIVE RELATIONS Update to Catalog description and topics to align with curriculum being taught.

4.5 **CHEMISTRY**

Andrew Osborne

[CIM 1/16]

2 course changes: NUGN510: INTRODUCTION TO NUCLEAR REATOR PHYSICS

NUGN520: INTRODUCTION TO NUCLEAR REACTOR THERMAL-

HYDRAULICS

Update to obsolete prerequisite information: Removal of ENGY498, added ENGY475, MEGN475.

