

Colorado School of Mines – GRADUATE COUNCIL MEETING AGENDA  
 January 24, 2024, 4:00 – 5:00 pm, via Zoom

**Attendees:**

**Voting Members:** 17 total (11 - majority needed for quorum). Quorum was present.

P	Soutir Bandyopadhyay (Chair)	P	Danielle Ostendorf (LB)	P	Andy Osborne (NSE)	P	Owen Hildreth (ME)
P	Adrienne Marshall (HSE)	P	Bettina Voelker (CH)		Jaeheon Lee (MN)	P	Jared Carbone (EB)
P	Yaoguo Li (GP)		Juan Lucena (EDS)	P	Jim Ranville (GC)	P	Pejman Tahmasebi (PE)
P	Suveen Mathaudhu (MME)	P	Nikki Farnsworth (CBE)	P	Ryan Venturelli (GE)	P	Dong Chen (CS)
P	Adrienne C. Kroepsch (HASS)	P	Yamuna Phal (EE)	P	Rena Zhu (GSG)	P	Samy Wu Fung
		P	Lori Tunstall (CEE)	P	Gabriel Walton (UCTE)	P	Uwe Griefe

**Other Regular Attendees and Guests**

P	Tim Barbari (OGS)		Carolyn Freedman (OGS)	P	Jenny Briggs (OGS)		Vibhuti Dave (UG)
	Wendy Adams (HNRS)		D. Scott Heath (RO)	P	Paul Myskiw (RO)		Roxane Aungst (OGS)
P	Sam Spiegel (Mines Online)		Suzanne Beach (Payne)		Jen Gagne (Grad Admissions)	P	Valerie Holt (AES)
	Jon Johnson (Mines Online)		Atef Elsherbeni (EE)		Richard Krahenbuhl (GP)	P	Kristeen Serracino (AA)
	Colin Schneider (RO)						

**Special Guest(s):** Sabina Schill, Cadi Gillette, Wendy Winter-Searcy, Erik Menke, Nanette Boyle, Sid Saleh

**Welcome**

Soutir Bandyopadhyay

**New Business**

**1.1**

**CSED**

[CIM 12/12]

**4 new courses:**

Sabina Schill

CSED530: COMPUTER SCIENCE PRACTICES AND TECHNOLOGICAL IMPACTS ON SOCIETY

*Providing Computer Science Teacher Education aligns with Mines@150 goals to produce differentiated and highly desired STEM education leaders and to become a leader in educating STEM students and professionals. Computer Science (CS) professionals are the most needed STEM professional in the workplace. Engineers, scientists, and mathematicians who know CS will be able to provide more effective expertise. Currently, Mines leads in Colorado innovatively providing needed pre-service teacher training for CS teacher educators. CS teachers with Mines degrees will be more likely to encourage students to attend Mines, creating a pipeline of students for the second most popular degree at Mines, CS. The proposed course will assist future CS teachers and engineers applying CS to understand the ethical implications of optimal and poor code. Students will also develop strategies to include ethical discussions in the software or engineering design cycle, as well as teach K-12 students CS professional practices and ethics. This is a residential course, meeting in-person 3 times each week.*

CSED535: COMPUTER SCIENCE TEACHING TECHNIQUES



**COLORADO SCHOOL OF MINES**  
 @ 150 | 1874-2024

*As a new pre-service Teach@Mines course for master’s students, CS Teaching Techniques aligns with Mines@150 plans regarding being an innovative STEM education leader, top of mind university, developing graduates who will have a profound and innovative impact on society. Currently, Mines offers the only CS undergraduate pre-service teacher licensure program in Colorado and one of the only programs nationally. In Colorado and nationally, an estimated 40 – 60% of all K-12 students have access to CS education. Our CS majors who pursue a Teaching minor with a focus on CS will be able to earn CS teaching licensure and also be academically qualified to teach K-12 math, science, and engineering. This is a residential course, meeting in-person 1 time each week.*

CSED564: CAPSTONE CURRICULUM DESIGN I – PRACTICUM

*Creating an opportunity for Mines students to become highly-qualified science, engineering, math, computer science or STEM teachers lies at the heart of the Mines@150 goals. Bringing students with technical backgrounds into our local classrooms allows these students to share their passion in a way that meets societal needs and at the same time builds their leadership and communication skills. Providing an option for Mines students to pursue teaching as a career will increase retention and recruitment, both by bringing in and retaining those who decide they want to teach as well as by placing informed Mines ambassadors into K-12 classrooms. Additionally, these courses are attractive to career changers who are looking to transition from technical careers into the teaching profession. This course is mixed face-to-face so that students may experience the classroom firsthand but can engage with their Mines’ instructor virtually.*

CSED565: CAPSTONE CURRICULUM DESIGN II – STUDENT TEACHING

*Creating an opportunity for Mines students to become highly-qualified science, engineering, math, computer science or STEM teachers lies at the heart of the Mines@150 goals. Bringing students with technical backgrounds into our local classrooms allows these students to share their passion in a way that meets societal needs and at the same time builds their leadership and communication skills. Providing an option for Mines students to pursue teaching as a career will increase retention and recruitment, both by bringing in and retaining those who decide they want to teach as well as by placing informed Mines ambassadors into K-12 classrooms. Additionally, these courses are attractive to career changers who are looking to transition from technical careers into the teaching profession. This course is mixed face-to-face so that students may experience the classroom firsthand but engage with their Mines’ instructor virtually.*

1.2

**MAED**

Sabina Schill

[CIM 12/12]

**1 course deactivation:**

MAED535: COMPUTER SCIENCE TEACHING TECHNIQUES

*We are also proposing some new Computer Science Education (CSED) courses that are currently being taught under the Math Science Education (MAED) course prefix. We are simply aiming to separate Computer Science from Math via a new course code prefix.*

With Teach@Mines, we are introducing these courses with new course codes to provide more clarity to students to take courses specific to their licensure that we offer at Mines.



**COLORADO SCHOOL OF MINES**  
**@ 150 | 1874-2024**

**1.3****CCUS**

Erik Menke

[CIM 11/16]

**1 new course:**

CCUS598: CLASS VI WELL DESIGN AND PERMITTING

*This course is an addition to the CCUS graduate certificate program. As the CCUS certificate program has expanded into a potential stacked certificate or ultimately a master's degree, additional course content is needed. This course focuses on the development of Class VI wells used in CCUS projects. The course is being added as a request of the CCUS team to expand topics in the well construction area.*

This is an addition to the CCUS graduate program. The faculty as well as external people thought it would be a strong and valuable course for students.

[CIM 11/30]

**2 course changes:**

CCUS525: BIOLOGICAL CARBON CAPTURE AND CONVERSION

*Added pre-requisites to course after discussion with Tina Voelker.*

CCUS530: THE KINETICS OF CARBON DIOXIDE REACTIONS

*Added pre-requisites to course after discussion with Tina Voelker.*

Tina is not familiar with these changes. We spoke about prerequisites back in October but there was no follow up. There is a bigger issue here that courses are proposed with a program, but they are not from our department. Erik Menke, who is a member of the Chemistry department, submitted these changes on CIM so we can reach out to him as well to present during the next meeting. Kristeen will be able to update that inside of CIM so that Geophysics is no longer attached to CCUS changes.

These will need to be changed in CIM as new courses CCUS525 and CCUS530 because that will change as they are presented. We will continue to discuss it at the next Graduate Council meeting.

**1.5****CSM**

Wendy Winter-Searcy

[CIM 12/21]

**1 new course:**

CSM550: NAVIGATING THE CAREER SEARCH FOR GRADUATE STUDENTS

*Professional development for graduate students is an imperative to provide a signature experience for graduate students electing to enroll at Mines. Evidence exists that graduate students would appreciate and benefit from a customized career-oriented course. The content from CSM 250 Engineering Your Career Path will be adapted for a graduate student audience, whether Masters Non-Thesis, Thesis, or PhD, with an emphasis on paths in industry, research, or academia. The undergraduate course has been offered successfully for the past eight years.*

The Career Center has offered an equivalent course at the undergraduate level for about eight years, CSM250. The undergraduate course is offered both in fall and spring with four sections which are typically full. We have a few graduate students that enroll every semester and during their student evaluations, we received feedback that they would appreciate a course like this that is more customized to their job search and career search process, whether they are going into academia, research, or industry. Therefore, we would



**COLORADO SCHOOL OF MINES**  
@ 150 | 1874-2024

like to propose this course that is designed specifically for graduate students to develop their professional development and career skills.

**Question:** What is the credit hour of the course?

**Answer:** It is a 1-credit hour course.

**Question:** Who is teaching the course?

**Answer:** This would be taught by the Career Center professional staff. The CSM250 course is taught by the staff in the Career Center as well as some campus partners.

**Comment:** Many grants are paying tuition for courses specifically counted toward the degrees. If the new tuition model goes into effect, that will get rid of the flat rate, and they may be more cognizant of what they are paying for. Some may support it, and some may not if it is not actually counting toward their degree.

**Comment:** We have discussed some options for that and are open to some possible ways to make it feasible for students to be able to take this course.

**Question:** Shouldn't this be a service that is offered through the Career Center instead of a cost for credit?

**Answer:** Yes, the service is available on an individual basis for graduate students. The advantage of offering it in a course format is packaging all the material so it is a complete offering so that students can gain the skills they might not otherwise pick up along the way. We do the same for undergraduate students where we have a course available and workshop not for credit. By far, the class gets better attendance and better evaluations so we do feel the formalizing of this material into a course is something that would be unique to Mines and would be a signature student experience to enhance their professional development.

1.6

QBE

Nanette Boyle

[CIM 1/10]

**1 program change:**

MSPHD-IBIO: MS & PHD IN  
QUANTITATIVE BIOSCIENCES AND  
ENGINEERING

*The QBE department was unable to find an instructor for BIOL501 the students were told to register for physical biochemistry CHGN 598B. After a staff meeting, the department has decided to make this a permanent change. A new course number will need to be created once this goes through Grad Council.*

We want to swap Advanced Biochemistry for Physical Biochemistry. The reason behind this is we are having a hard time staffing Advanced Biochemistry because of some loss of faculty in that area. Physical Biochemistry is also more quantitative, so it fits in better with the QBE program. The permanent course number for Physical Biochemistry is CHGN535.

### Curriculum Item(s) for Council Vote

2.1

EDNS

Sid Saleh

[CIM 11/10]

**2 new courses:**

INNO544: INNOV8X CREATE DSCI

*This is a 1-credit hour course offered in collaboration with the Data Science program under the auspices of the McNeil Center for Entrepreneurship & Innovation. This course meets concurrently with the existing Innov8x Create course 544 for the first five weeks.*

**MOTION:** The motion to approve the INNO544 new course was moved by Uwe and seconded by Tina. The INNO544 new course was approved with 18 approved, 0 opposed, and 1 abstention.



**COLORADO SCHOOL OF  
MINES**  
@ 150 | 1874-2024

INNO598: INNOV8X STUDIO

*Innov8x Studio is a safe demonstration space where startup teams engage potential beneficiaries and customers in solution design to address problems. This is a hands-on studio allowing students to practice launching an innovation initiative or startup and acquire their first beneficiary or paying customer (early adopters).*

**Question:** Is the 598 the permanent course number you are hoping to get because that could cause confusion?

**Answer:** We are waiting to assign a course number.

**Question:** What does the academic structure look like around the student startup idea so that it feels like a class instead of students just doing a startup on their own?

**Answer:** Students must go through a market process and achieve certain milestones. They will also have to reach out to people to try to test their product/service/idea. Students must fully develop the service/product so that they are ready for their first customer so there is a definite structure to it. Students need to iterate until they achieve the result they are looking for.

**Question:** How many credits is INNO598?

**Answer:** The request is for it to be variable between 1 and 3 credits. Some people just want to have it as a 1-credit course. They are allowed to spend less time than those who are spending 3 credits. Some want to put more time into it so it would be a 3-credit class.

**Comment:** It will be important to note the credit variability somewhere.

**Comment:** Ther reason it is important to give them credit for this is because, as you all know, 9 out of 10 startups fail. It is nice that they show that they have tried to do that because the experience in and of itself is extremely valuable in the industry.

**Question:** Since it is a variable credit course, will it be repeatable for credit

**Answer:** Yes. Students can repeat it because if they hit a milestone and are making traction, there is no reason stop it.

**Question:** Some programs may not want to allow more than 3 credits of this course counted towards their degree. Are you okay with program limiting how many credits could count towards their degree?

**Answer:** Some students say that they are not taking the course because they need it counted toward their degree, but instead, they take it because it provides the structure to follow on their startup idea. Whether they receive credit toward their degree will be between the student and their program.

**MOTION:** The motion to approve the INNO544 new course was moved by Uwe and seconded by Tina. The INNO544 new course was approved with 15 approved, 0 opposed, and 2 abstentions.

<b>2.2</b>	<b>MECHANICAL ENGINEERING</b> [CIM 11/18] <b>1 course change:</b> <i>Update catalog description and topics to align with curriculum being taught.</i>	Owen Hildreth  MEGN517: NONLINEAR MATERIAL BEHAVIOR
------------	--	---

**MOTION:** The motion to approve the MEGN517 course change was moved by Uwe and seconded by Yaoguo. The MEGN517 course changed was approved unanimously with 20 approved, 0 opposed, and 0 abstentions.

<b>2.3</b>	<b>GE</b> [CIM 11/28]	Gabriel Walton
------------	--------------------------	----------------



**COLORADO SCHOOL OF MINES**  
**@ 150 | 1874-2024**

**1 new course:**

GEGN572: ENGINEERING GEOLOGY AND  
GEOTECHNICS

*Create a 500-level version of 468 since graduate students will not be able to count 400-level courses starting next academic year.*

**MOTION:** The motion to approve the GEGN572 new course was moved by Uwe and seconded by Gabe. The GEGN572 new course was approved unanimously with 19 approved, 0 opposed, and 0 abstentions.

**1 program change:**

MEMSPHD-GEE: ME, MS, & PHD IN GEOLOGY &  
GEOLOGICAL ENGINEERING

*Change master's language to clarify the number of required course credits (and to be consistent with the PhD language).*

**MOTION:** The motion to approve the MEMSPHD-GEE program change was moved by Uwe and seconded by Gabe. The MEMSPHD-GEE program change was approved unanimously with 19 approved, 0 opposed, and 0 abstentions.

**Continued Business**

**3.1 Elimination of 4xx Courses for Graduate Credit**

Tim Barbari

Please see the files distributed earlier today. In the past, I shared files that were sorted by course in terms of the 400-level and the impact in percentage of 400-level courses that are part of the total amount of credits that our graduate students take. Today, I also wanted to share this information by program to demonstrate which programs are most impacted by this and where we need the most attention.

You can see the number of course registrations at the 400-level (column B) compared to the amount at the graduate or 500/600-level (column C) as well as the percentage of 400-level courses by program (column E). There are a handful of departments and programs where column E is in the double digits that will be the most impacted by this change. At the bottom of the spreadsheet there are totals which show that between 7 and 8% of course registrations in Spring 2023 were at the 400-level. I thought this percentage would be much higher, but it can be reduced further. This is already in the works as departments have already started to initiate activity to either cross-list courses, change courses to the 500-level, or just eliminate the courses overall.

I have also shared some of the courses that have the highest enrollment. For spring, I defined that as two or more and then how this number has already been reduced based on what is potentially available or already cross-listed. Courses in black show 400-level courses that students are registering for even though there is already a 500-level on the books. This shows an advising issue more than anything else. The courses in blue are ones that have already been cross-listed and put into CIM. Computer Science recently put in their CIM submission that takes out 400-level courses that they have as required. There is only a small number of these, but it makes a significant difference in the number that is impacted in terms of reducing the 400-level course. The courses in gray are where I see an opportunity to elevate the course number from 400 to 500. We understand that the number will never be driven down to zero



**COLORADO SCHOOL OF  
MINES**  
@ 150 | 1874-2024



because students need 400-level courses for prerequisites and students will take 400-level courses for research purposes. The proposed changes account for those so students can take those courses for those purposes but not necessarily as it counts toward the actual credit that is required for the degree.

The policy itself is in two pieces. It eliminates the nine credits hours of 400-level so that only 500-level courses. Students can still take 400-level courses if necessary or out of interest, but they will not necessarily count towards the degree requirements. For example, for a PhD student where the credit requirement might be 24 credits out of 72, there's enough capacity in there if grants are picking up the tuition. They can take some of the courses that would not be included in the degree audit part of the requirements for the degree. With combined degree programs, this policy simplifies the language greatly since we have significant confusion in this area.

As a reminder, HLC has been a driver of this because their accepted practice is to have graduate courses only for graduate degrees. They presented two options to us. We can cross-list, which they are fine with. Or, if you are going to use 400-level courses, there must be some graduate level content associated with them. I think the cross-listing option is an easier route than having every 400-level course come back through graduate council with the additional graduate level content. We could also simply elevate 400-level courses that are commonly taken by both undergraduate and graduate students to the 500-level. This will simplify advising since we would have fewer course exceptions and cleaner transcripts.

We do have some inconsistent policies in the way we have been allowing 400-level courses to count. For example, we will allow our own 400-level course to count in something, but if a student took the exact same course elsewhere with the same syllabus, we would not transfer that in. If you look at other institutions' transfer policies, they tend to be in line with how they address their own credits that count towards a graduate degree. We also need to start thinking about combined programs which are about substituting graduate courses for undergraduate courses, not identifying 400-level courses that a graduate program will deem okay. This is not in the spirit of how HLC wants these set up, and that is why I borrowed the language directly from HLC.

**Question:** What does it mean by student registration on your spreadsheet? The numbers seem to be too small.

**Answer:** Those are the number of course registrations that currently have students. For example, chemistry has two programs with chemistry and applied chemistry, physics and applied physics.

**Question:** Should we re-consider our transfer policies for incoming students to transfer in 400-level courses? Should we consider having language that allows students to transfer 400-level credits towards their graduate degree?

**Answer:** We are one of the few schools that still have this inconsistency. We should try to have our accepted transfer credits mirror our transfer policy.

**Question:** Priorly, there was concern about the last HLC visit. Can you provide a brief on what HLC said?

**Answer:** During our last HLC visit, it did not come up about our current transfer policy, and we did not get dinged on this issue. It has come up at other institutions in the area.

**Comment:** HLC guidelines are clear that graduate programs should only consist of graduate courses, and combined programs are advanced, undergraduate students taking advanced graduate course work. There's also language about the extent of double counting or sharding credit for two degrees.



**COLORADO SCHOOL OF  
MINES**  
@ 150 | 1874-2024

**Question:** What is the recommended approach for the combined programs? Do the students need to get approval to take 500-level courses in a combined program?

**Answer:** This is where advising plays a key role. Once the policy is clear in the catalog and it is clear for combined students that they need to substitute 500-level, that is where advising needs to be transparent to the students that those are the courses they need to register for. Once students are officially admitted to the combined program, there is a process for registration. When we changed the policy a few years ago, the settlement was that graduate faculty would grant permission on a case-by-case basis. There are a few examples of specific courses that have removed the restriction and allowed undergraduates to register without getting additional permission.

**Comment:** Paul and I have suggested that we send out a list of 400-level courses and ask departments, which ones do we want to cross-list or elevate to a 500-level? To streamline the process through CIM, we will create the cross-listed number or 500-level course and present them as a whole to Graduate Council.

**Question:** I want to make sure the language around where it says, “the 500-level course must be used” is clear. Will students understand what it means by use versus register for?

**Answer:** That is a good point. “Must register for” is a better choice of words.

### 3.2 Discussion on GSG proposal

Rena Zhu

As a reminder, this is a proposal for graduate students who are on an RA contract. The general purpose behind this is based on our discussion and my personal knowledge of how things are run at Mines. Approximately 80%-90% of graduate students and faculty do not need this language to operate daily and to discuss leave. However, the intent and hope of this language is to provide a guideline when students cannot reach an agreement with their advisor/faculty. For example, an international student might want to go back home to celebrate one of their holidays, and their advisor is not being flexible in allowing a request for time off. In that case, standard language will be helpful in assisting the student. This would also help clarify wording for faculty.

Graduate Council feedback included clearing confusion about whether graduate students are trying to be treated as employees, if there is current language on this already, or if it would be best not to set an amount for leave to encourage flexibility. In the new draft, we define the start and end of the work period for a graduate student who is on an RA contract. This should adhere to the start and end date of the respective contract but may vary for those on an RA contract who are also teaching. We then further clarify that during campus holidays (when campus is closed) are considered a day off for graduate students. For additional time off, the current language does not provide a clear expectation for the student or faculty, so the change in language is to establish a minimum recommendation.

We have provided two options. The first option defines time off in hours. It defines graduate students (GSRA) having an FTE (full time equivalent) of 4 hours per workday. The second option defines time off in days. I would love to get feedback on which of these options might be more intuitive or easier to understand.

**Comment:** The first option states “40 hours per AY,” which means academic year. I believe you will want to change this to 40 hours per calendar year since you include summer in the subsequent sentence.



**COLORADO SCHOOL OF  
MINES**  
@ 150 | 1874-2024



**Comment:** Although the second one is simpler, the first one more appropriately addresses the complexities of the GSRA scenario. It is important that this distinguishes the RA position (20 hours per week) and other potential research duties that fall under 707, for example. Most graduate students are probably spending 20 hours per week for their RA position and 20 hours per week for degree completion work. We need to be cautious about how that is worded because if a student requests a week off, would they still be required to work on their thesis during that time.

**Comment:** I think this is why many universities use days instead of hours because usually when a student wants a day off, they also want the day off from the 707 part, not just the RA part.

**Comment:** In that case, the second option has a discrepancy in that it is functionally twice as much time off (80 hours per calendar year).

**Comment:** The scenario of RA/TA contract happens regularly, so we would need to consider how things are dealt not only with the advisor, but with the department as well.

**Comment:** Graduate students on standard RA/TA contracts are considered employees of Mines at a 50%, part-time level. They are also considered full-time students.

**Comment:** My concern is to check in with HR and Legal. I would not want time off to accrue from year to year. I am unsure what index is going to pay for the time off.

**Comment:** Discussion with HR/Legal will be the next step after receiving input on the proposal.

**Comment:** Every university I have researched has a “use or lose it” policy with time off in the contract period.

**Comment:** We would also need to figure out the accounting on this. Who is recording this? Is it HR?

**Comment:** That would also be included as a next step.

**Comment:** My biggest concern is I do not think this is solving your problem because it still requires time off approval which may still be denied by the advisor due to a pending project or report.

**Comment:** This proposal would not bypass getting supervisor approval, but to provide a standard if there is a conflict.

**Comment:** The next step after receiving council input is to go to HR and discuss what can be done within Workday and can we mirror the process of students requesting for time off from their advisor as regular employees do with their supervisors?

4:55-5:00 pm **Adjourn**

Next meeting: January 24, 2024, 4:00-5:00 via Zoom. Please send all agenda items to Soutir Bandyopadhyay ([sbandyopadhyay@mines.edu](mailto:sbandyopadhyay@mines.edu)) and Kristeen Serracino ([kristeen.serracino@mines.edu](mailto:kristeen.serracino@mines.edu)) 1 week in advance

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

**MAED**  
[CIM 12/12]  
**2 course change:**

Sabina Schill

MAED564: CAPSTONE CURRICULUM  
DESIGN I



**COLORADO SCHOOL OF  
MINES**  
@ 150 | 1874-2024

*Updating pre- and co-requisite so that they match across T@M capstone courses in SCED, MAED, and CSED. Additionally, the original pre- and co-requisites anticipated students progressing through courses in a linear fashion; however, many students organize their schedules to take multiple T@M courses. These new pre- and co-requisites provide more flexibility to students to complete the courses in a way that fits their schedules and remain accurate as to the expected prior knowledge students need for these courses.*

[CIM 1/8]

MAED565: CAPSTONE CURRICULUM  
DESIGN II

*Updating pre- and co-requisite so that they match across T@M capstone courses in SCED, MAED, and CSED. Additionally, the original pre- and co-requisites anticipated students progressing through courses in a linear fashion; however, many students organize their schedules to take multiple T@M courses. These new pre- and co-requisites provide more flexibility to students to complete the courses in a way that fits their schedules and remain accurate as to the expected prior knowledge students need for these courses.*

**SCED**

Sabina Schill

[CIM 12/13]

**2 course change:**

SCED564: CAPSTONE CURRICULUM  
DESIGN I

*Updating pre- and co-requisite so that they match across T@M capstone courses in SCED, MAED, and CSED. Additionally, the original pre- and co-requisites anticipated students progressing through courses in a linear fashion; however, many students organize their schedules to take multiple T@M courses. These new pre- and co-requisites provide more flexibility to students to complete the courses in a way that fits their schedules and remain accurate as to the expected prior knowledge students need for these courses.*

[CIM 1/8]

SCED565: CAPSTONE CURRICULUM  
DESIGN II

*Updating pre- and co-requisite so that they match across T@M capstone courses in SCED, MAED, and CSED. Additionally, the original pre- and co-requisites anticipated students progressing through courses in a linear fashion; however, many students organize their schedules to take multiple T@M courses. These new pre- and co-requisites provide more flexibility to students to complete the courses in a way that fits their schedules and remain accurate as to the expected prior knowledge students need for these courses.*

**ENERGY**

Valerie Holt

[CIM 1/9]

**1 new course:**

ENGY693: AES GRADUATE STUDENT  
SEMINAR

*Adding PhD Seminar course to engage PhDs in research presentations.*

**1 program change:**

MSPHD-AES: MS & PHD IN ADVANCED  
ENERGY SYSTEMS

*Minor program changes to clean up language. Adding PhD Seminar to engage PhDs in research presentation*

This is a half-credit graduate seminar for the AES PhD students. We have been offering it as a special topics and are attempting to formalize the course number as presented.



**COLORADO SCHOOL OF  
MINES**  
@ 150 | 1874-2024

4.1

Approval of Minutes – January 17, 2024

Soutir Bandyopadhyay



COLORADO SCHOOL OF  
**MINES**  
@ 150 | 1874-2024