



MIN-DSCI: Minor in Data Science  
MIN-RIS: Minor in Robotics and Intelligent Systems  
MINASI-CS: Minor/ASI in Computer Science

*Updating courses to align with creation of new course sequence of CSCI 200 -> CSCI 220 in place of CSCI 261 -> CSCI 262.*

1.3 **ENGINEERING, DESIGN, AND SOCIETY**

[CIM 1/24; UGC 3/9]

**3 program changes:** BS-EGN: BS in Engineering

*The Bachelor of Science in Engineering Program supports students with a disciplinary background in Design Engineering through multi-disciplinary educational opportunities. Students within the program are required to take design courses every semester through the EDS department. Engineering Fundamentals courses together with more specific Engineering Elective courses deepen technical knowledge for the students. Focus Area electives provide an opportunity for the students to advance their knowledge in fields/areas of which they are most passionate. The focus on design engineering and the multi-disciplinary technical background of the students supports the Mines@150 mission through hands-on, active learning, engineering design, and multi-disciplinary teamwork.*

MIN-ECD: Minor in Engineering for Community Development

MIN-LSR: Minor in Leadership in Social Responsibility

*To facilitate pathway to graduation, use existing faculty courses more effectively, and maintain the two distinctive flavors of our minors, we proposed an updated structure to the two minors (see CIM page/agenda item).*

1.4 **HUMANITIES, ARTS, AND SOCIAL SCIENCE**

[CIM 1/24; UGC 3/9]

**1 program change:** MIN-CCC: Minor in Culture, Creativity, and Communication

*Course numbers have changed—they have been updated in the course lists for HASS303 (changed from HASS201 Spring2022), HASS 302 (changed from HASS300 Spring 2022).*

3:50-3:55 pm **Graduate Council**

Tina Voelker

**Programs for Vote** – Presented to Faculty Senate on 3/2/22

2.1 **MECHANICAL ENGINEERING**

[CIM 2/1; GC 3/2]

**1 program change:** CERTMS-ADVMAN: CERT & MS – Additive Manufacturing

*Changing the name of the MSNT program to Additive Manufacturing as recommended by advisory committee and in keeping with student feedback and interest.*

*Revising the MSNT Core Courses to reflect the focus on Additive Manufacturing.*

2.2 **PETROLEUM ENGINEERING**

[CIM 1/31; GC 3/2]

**1 program deactivation:** MP-PMPRS: Professional Masters in Petroleum Reservoir Systems

*The Professional Masters in Petroleum Reservoir Systems is recommended to be sunsetted. The program has attracted low applicant numbers primarily because the*

*Petroleum industry does not generally support the Professional Masters degree. Also, while the Professional Masters program was intended for working professionals, many of the applicants are not employed and those who enroll generally want to convert to a thesis-based MS once they begin the program. Due to the low enrollment in the program, the required classes draw low registration.*

*The participating departments, Geology and Geological Engineering, Geophysics and Petroleum Engineering are all in agreement on the sun-setting of the program. Currently enrolled students (4) will be supported until the completion of their program.*

2.3           **MINING ENGINEERING**  
[CIM 2/17; GC 3/2 (Consent Agenda)]  
**1 program change:**     MP-MEM: MP – Mining Engineering and Management  
*Minor cosmetic changes to the program language.*

2.4           **ELECTRICAL ENGINEERING**  
[CIM 2/18; GC 3/2 (Consent Agenda)]  
**1 program change:**     MSPHD-EE: MS & PhD – Electrical Engineering  
*Updated the “EPSE” track name to “PES” (Power and Energy Systems).*

**Programs for Presentation** – for vote on 4/26/22

2.5           **ECONOMICS AND BUSINESS**  
[CIM 2/17; GC 4/6]  
**1 program change:** MSPHD-ECO: MS & PhD – Mineral & Energy Economics  
*Adding language to the program to encourage applicants to the Mineral and Energy Economics (MEE) program by facilitating applications from Western Colorado University’s Bachelors of Energy Management program. The program will allow these students to complete the non-thesis Masters in MEE in one year by setting specific course requirements at Western Colorado University.*

2.6           **MECHANICAL ENGINEERING**  
[CIM 2/16; GC 4/6]  
**1 program change:** MSPHD-MECH: MS & PhD – Mechanical Engineering  
*Adding Online Modality to support an Online Mechanical Engineering Masters Non-Thesis degree. Actual start date would be Spring 2023, but not available as an option for the drop-down menu.*

3:55-4:00 pm   **Adjourn**

Sebnem Duzgun

Next meeting: April 26, 2:00-4:00 pm Brown 206 and Zoom Webinar.

**Undergraduate Council approved new courses**

BIOL301: Introduction to Quantitative Biology II  
CBEN455: International Genetic Engineered Machine Seminar  
CSCI220: Data Structures and Algorithms  
ENGY475: Introduction to Nuclear Engineering

**Undergraduate Council approved course changes**

CSCI274: Introduction to Linux Operating System – *Addition of prerequisite: CSCI200 or CSCI261*

CSCI290: Programming Challenges I – *Addition of prerequisite: CSCI200 or CSCI261*

CSCI303: Introduction to Data Science – *Addition of prerequisite: CSCI200*

CSCI306: Software Engineering – *Addition of prerequisite: CSCI220 with a grade of C- or higher OR CSCI262 with a grade of C- or higher*

CSCI341: Computer Organization – *Addition of prerequisite: CSCI200 or CSCI261 AND co-requisite CSCI262*

CSCI403: Data Base Management – *Addition of prerequisite: CSCI200 with a grade of C- or higher OR CSCI262 with a C- or higher*

CSCI404: Artificial Intelligence – *Addition of prerequisite: CSCI220 with a grade of C- or higher OR CSCI262 with a grade of C- or higher*

CSCI406: Algorithms – *Addition of prerequisite: CSCI220 with a grade of C- or higher OR CSCI262 with a grade of C- or higher AND MATH213*

CSCI432: Robot Ethics – *Addition of prerequisite: CSCI200 or CSCI262*

CSCI436: Human-Robot Interaction – *Addition of prerequisite: CSCI200 or CSCI262, and MATH201*

CSCI437: Introduction to Computer Vision – *Addition of prerequisite: CSCI200*

CSCI440: Parallel Computing for Scientists and Engineers – *Addition of prerequisite: CSCI200 with a grade of C- or higher OR CSCI262 with a grade of C- or higher, AND CSCI431*

CSCI441: Computer Graphics – *Addition of prerequisite: CSCI220 OR CSCI262 with a grade of C- or higher*

CSCI442: Operating Systems – *Addition of prerequisite: CSCI220 with a grade of C- or higher OR CSCI262 with a grade of C- or higher, AND CSCI274, AND CSCI341*

CSCI446: Web Applications – *Addition of Prerequisite: CSCI220*

CSCI470: Introduction to Machine Learning – *Addition of prerequisite: CSCI200 or CSCI261*

CSCI471: Computer Networks I – *Addition of prerequisite: CSCI220 or CSCI262, and CSCI274*

CSCI473: Human-Centered Robotics – *Addition of prerequisite: CSCI220 or CSCI262*

CSCI474: Introduction to Cryptography – *Addition of prerequisite: CSCI220 or CSCI262, and CSCI358 and MATH334 or MATH335 or MATH201*

CSCI475: Information Security and Privacy – *Addition of prerequisite: CSCI220 or CSCI262*

CSCI478: Introduction to Bioinformatics – *Addition of prerequisite: CSCI200*

DSCI403: Introduction to Data Science – *Update to prerequisites to align with changes to CSCI303 (cross-listed course)*

DSCI470: Introduction to Machine Learning – *Update to prerequisites to align with CSCI470 (cross-listed course)*

EDNS191: Introduction to Integrative Design – *Update to course name (Integrative Design Studio IA) and course description for more clarity on course topics and content. No substantial changes to course.*

EDNS192: Design and Human Values – *Update to course name (Integrative Design Studio IB) and course description for more clarity on course topics and content. No substantial changes to course.*

EDNS200: Design Communications – *Update to course name (Communication) and course description for more clarity on course topics and content. No substantial changes to course.*

EDNS291: Design Unleashed – *Update to course name (Integrative Design Studio IIA) and course description for more clarity on course topics and content. No substantial changes to course.*

EDNS292: Design for Globalized World – *Update to course name (Integrative Design Studio IIB) and course description for more clarity on course topics and content. No substantial changes to course.*

EDNS391: Design & Modeling of Integrated Systems – *Update to course name (Integrative Design Studio IIIA) and course description for more clarity on course topics and content. No substantial changes to course.*

EDNS392: Synthesize Design Identity – *Update to course name (Integrative Design Studio IIIB) and course description for more clarity on course topics and content. No substantial changes to course.*

MATH201: Introduction to Statistics – *Change to course description, reduce prerequisites to MATH112*

MATH424: Introduction to Applied Statistics – *Addition of prerequisite: MATH335*

MATH432: Spatial Statistics – *Addition of prerequisite: MATH332 and MATH335*

MATH436: Advanced Statistical Modeling – *Addition of prerequisite: MATH332*

MATH437: Multivariate Analysis – *Addition of prerequisite: MATH201, MATH332, MATH342, MATH424*

MATH438: Stochastic Models – *Addition of prerequisite: MATH332*

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**Graduate Council approved course changes**

GEGN582: Integrated Surface Water Hydrology – *Removal of GEGN466/467 from prerequisites list and moved to co-requisites*

PHGN566: Modern Optical Engineering – *Removal of PHGN462 from prerequisites*

EBGN559: Supply Chain Analytics – *Name change from Supply Chain Management → Supply Chain Analytics*