



He went on to start the NM Tech chapter of Engineers Without Borders. Mr. Schafer designed the Dine college tutor program.

The **Cramer Awards** are given to the male and female seniors graduating in engineering who rank highest in scholarship. Zahra Ghanbari of Materials Engineering is headed to Golden, Colo., where she has been accepted into a master's program at Colorado School of Mines. David Burkhard is truly a rare breed. He finished his studies with a perfect 4.0 GPA with a bachelor's in Mineral Engineering.

The **Founder's Award** is given to the graduate student who has made an outstanding contribution through

semester. This will affect Mineral Engineering students that are required to take 203 by freeing up one credit. It is possible that Mineral Engineering will have their students take the new Mineralogy course in addition to, or instead of, Erth 203. The former option is similar to the Mineral Engineering requirements in the EES curriculum prior to our shift to the new curriculum, which were mineralogy and structural geology (a significant part of the latter is now covered on Erth 203).

For Erth majors, we would hope that Mineralogy would be taken as soon as possible in their course work after a 100 level class. This could be done by making it a co-requisite for courses particularly 204. It would not be possible to make it a co-req for 203 as Petroleum Engineering students would not need to take it.

with fieldwork requirements for other Earth Science majors. These changes assume that the changes above to Erth 2xx (Mineralogy), Erth 203-206 and Erth 3 0 have been approved. Changes are underlined below

**Bachelor of Science in Earth Science with Volcanology Option**

Minimum credit hours required 130

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4 EARTH 201 (bio)

- A 100 level EARTH course and associated lab (4)
- EARTH 201 (4), EARTH 202 (4), EARTH 203 (4), EARTH 204 (4), EARTH 205 (1), EARTH 300 (3), EARTH 325 (3), EARTH 340 (3), EARTH 460 (3), EARTH 430 (2)
- **EARTH 440 (4) EARTH 440 & 440L (4)**, EARTH 441 (1), EARTH 442 (1), EARTH 443 (1), EARTH 444 (2), EARTH 445 (2)
- Math 231 (4), Math 233 (3), Math 335 (3)
- Earth science electives, minimum 6 credit hours in courses numbered 300 and above
- CHEM 311 & 311L (4), ENVS 412 (3), CSE 113 & 113L (4)
- Electives to complete 130 credit hours

**Bachelor of Science in Earth Science with Hydrology Option, Odd Numbered Years**

(Note GECC = General Education Core Curriculum, see page 7)

- 4 CHEM 121 & 121L (general)
- 4 MATH 131 (calculus)
- 3 ENGL 111 (college English)
- 4 A 100 level EARTH class and associated lab
- 15 Total credit hours

- 4 CHEM 122 & 122L (general)
- 4 MATH 132 (calculus)
- 3 ENGL 112 (college English)
- 4 EARTH 203 (crust)
- 15 Total credit hours

- 5 PHYS 121 & 121L (general)
- 4 MATH 231 (calculus III)
- 4 EARTH 204 (whole Earth)
- 1 EARTH 205 (practicum)
- 3 EARTH 300 (geochemistry)
- 17 Total credit hours

- 5 PHYS 122 & 122L (general)
- 3 Math 335 (differential equations)
- 4 CSE 113 (programming)
- 4 EARTH 201 (bio)
- 16 Total credit hours

- 3 Social Science GECC Area 4
- 3 MATH 233 (statistics)
- 4 EARTH 202 (surface)
- 4 CHEM 311 & 311L (quant)
- 3 Humanities GECC Area 5
- 17 Total credit hours

- 3 Social Science GECC Area 4
- 3 Humanities GECC Area 5
- 3 ENGL 341 (technical writing)
- 3 EARTH 340 (global change hydrology)
- 3 ENVS 412 (intro GIS)
- 15 Total credit hours



6 EARTH 4 3 (field mapping), EARTH 4 4 (surficial mapping), EARTH 4 5 (met&struct mapping)  
6 Humanities/Social Science GECC Area 6  
3 EARTH 325 (near surface geophysics)  
4 EARTH 440-4 EARTH 440 & 440L (hydr theory & field)  
3 Earth science elective  
16 Total credit hours

4 Electives to reach 130 credit hours  
3 Earth science elective  
1 EARTH 441 (hydrogeology)  
1 EARTH 442 (vadose zone proc.)  
1 EARTH 443 (atm dynam & rainfall)  
3 EARTH 46 (evol of Earth)  
13 Total credit hours

**Bachelor of Science in Earth Science with Hydrology  
Option, Even Numbered Years**

(Note GECC - General Education Core Curriculum, see page 7)

4 CHEM 121 & 121L (general)

3 EARTH 325 (near surface)  
17 Total credit hours

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 4 CHEM 121 & 121L (general)  
 4 MATH 131 (calculus)  
 3 ENGL 111 (college English)  
 4 EARTH 101 & 101L (earth processes)  
 15 Total credit hours

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 4 CHEM 122 & 122L (general)  
 4 MATH 132 (calculus)  
 3 ENGL 112 (college English)  
 4 EARTH 201 (bio)  
 15 Total credit hours

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 1 PETR 101 (intro)  
 5 PHYS 121 & 121L (general)  
 3 ENGL 341 (technical writing)  
 4 EARTH 202 (surface)  
 1 EARTH 205 (practicum)  
 3 Social Science GECC Area 4  
 17 Total hours

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17 Total credit hours

**iv. Volcanology option** Dr. Axen moved for a change in order to provide field alignment with other areas of geology. This course change serves to split paleontology from volcanology.

There was no discussion and the motion passed.

Dr. Engler asked for clarification. The changes voted on today effecting the Earth and Environmental Science Catalogue impact only undergraduate programs. Changes to the Graduate courses will need to be approved by Graduate Council before presentation to the Faculty Senate.