



To: Faculty Senate
From: Missouri S&T Campus Curricula Committee
Re: May 9, 2017 meeting

The Missouri S&T Campus Curricula Committee recommends to the Faculty Senate that the course changes requested on the following CC forms be approved:

File 1680.1	CER ENG 4220: Mechanical Properties of Ceramics
File 4413	CER ENG 4410: Introduction to Integrated Computational Materials Engineering
File 4414	CER ENG 6410: Advanced Integrated Computational Materials Engineering
File 537.1	COMP SCI 6303: Pervasive Computing
File 1741.1	COMP SCI 6600: Formal Methods in Computer Security
File 2186.1	ELEC ENG 2800: Electrical Circuits
File 90.1	ELEC ENG 3340: Basic Programmable Logic Controllers
File 4403	ELEC ENG 5325: Applied Nonlinear Control
File 4423	GEOLOGY 4085: Internship
File 4424	GEOLOGY 5085: Internship
File 4415	GEOLOGY 5681: Lidar Principles and Application
File 4425	GEOLOGY 6085: Internship
File 385.1	GEOLOGY 6651: Granite and Rhyolite Petrogenesis
File 1245.3	MECH ENG 5212: Introduction to Finite Element Analysis
File 1974.1	MET ENG 1210: Chemistry of Materials
File 874.1	MIN ENG 1912: Principles of Mining Engineering
File 2520.1	MIN ENG 2126: Introduction to Mining Safety
File 2268.1	MIN ENG 2412: Principles of Mineral Processing
File 1534.1	MIN ENG 2925: Surveying for Mineral Engineers
File 3913	MIN ENG 3913: Mineral Identification and Exploration
File 1944.6	MIN ENG 4096: Computer Aided Mine Design
File 1128.7	MIN ENG 4097: Capstone Design Project
File 2260.5	MIN ENG 4113: Mine Atmosphere Control
File 1302.5	MIN ENG 4512: Mine Management
File 1726.1	MIN ENG 4522: Ore Reserve Analysis and Geostatistics
File 1145.4	MIN ENG 4912: Mine Power and Drainage
File 1524.1	MIN ENG 4932: Underground Mining Methods and Equipment
File 682.1	MIN ENG 4933: Surface Mining Methods and Equipment
File 408.1	MIN ENG 5612: Principles of Explosives Engineering
File 300.1	MIN ENG 5913: Advanced Computer Aided Mine Design
File 134.1	NUC ENG 4259: Licensing of Nuclear Power Plants
File 2371.1	NUC ENG 4496: Nuclear System Design I
File 4421	PET ENG 2002: Cooperative Work Training



File 1367.4

SYS ENG 6103: Systems Life Cycle Costing

The Missouri S&T Campus Curricula Committee recommends to the Faculty Senate that the course and degree requirement changes requested on the following DC forms be approved:

File 146.17	BIO SC-BA: Biological Sciences BA
File 16.21	CHEM-BS: Chemistry BS
File 28.16	CMP SC-BS: Computer Science BS
File 29.9	CMP SC-MI: Computer Science Minor
File 149.21	CR ENG-BS: Ceramic Engineering BS
File 242	PROPOSED: Latin American Studies for Technical Applications Minor
File 95.16	MI ENG-BS: Mining Engineering BS
File 169.7	MI ENG-MS: Mining Engineering MS
File 90.24	MT ENG-BS: Metallurgical Engineering BS
File 192.15	PSYCH-BA: Psychology BA
File 193.17	PSYCH-BS: Psychology BS

For the information of the Faculty Senate, the following EC forms have been submitted by the University departments for an experimental course that will be offered in the near future:

File 4405	CIV ENG 5001.001: Wind Engineering
File 4404	CIV ENG 6001.005: Soil Mechanics for Unsaturated Soils
File 4412	CIV ENG 6001.006: Understanding Rheology of Cement-Based Materials
File 4419	COMP ENG 6001.001: Advanced Computational Intelligence
File 4410	COMP SCI 5001.001: Introduction to Deep Learning
File 4409	COMP SCI 5001.002: Introduction to Machine Learning
File 4397	ELEC ENG 5001.005: Design and Innovation for Engineers
File 4418	ELEC ENG 6001.003: Advanced Computational Intelligence
File 4401.3	ENGLISH 3001.004: Costa Rica in Text
File 4399	GEO ENG 5001.002: Research Methods in Groundwater and Surface Water
File 4398	PET ENG 6001.006: Advanced Digital Applications in Petroleum Engineering
File 4422	PET ENG 6001.005: Flow through Porous Media
File 4420	PET ENG 6001.007: Numerical Methods for Reservoir Simulation

Steve Raper was tentatively elected to be the Chair of the Campus Curricula Committee for 2017-18.

The Campus Curricula Committee proposes that the following resolution be adopted by the Faculty Senate for inclusion into all undergraduate engineering degree requirements:

The degree program shall include a minimum of 21 credit hours as follows:

- ENGLISH 1120
- HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200



- ECON 1100 or ECON 1200
- Communication Elective: ENGL 1160 or ENGL/TCH COM 1600 or ENGL 3560 or SP&M 1185
- The remaining minimum of 9 additional credit hours must be chosen from disciplines in the humanities and social sciences.* Humanities courses are defined as those in: Art, English and Technical Communication, Etymology, Foreign Languages, Music, Philosophy, Speech and Media Studies, and Theatre. Social Sciences courses are defined as those in: Economics, History, Political Science, and Psychology. Some curricula may require the completion of a specified number of upper-level Humanities/Social Sciences (H/SS) courses. Upper-level H/SS courses are defined as those at the 2000-level or above, and that require as a prerequisite the successful completion of a lower-level H/SS course. Study abroad courses may count as upper-level H/SS courses, even if they do not have a prerequisite. H/SS courses numbered 2001, 3001, and 4001 (experimental courses) may also be used to complete these elective requirements.

Courses in business, education, information science and technology, or any other discipline not listed above will **not** satisfy the humanities/social sciences elective requirement, although such courses may count toward general education requirements. Transfer credits from other universities in sociology and general humanities may count as humanities or social science electives.

*ENGL 1160, ENGL/TCH COM 1600, ENGL 3560, and SP&M 1185 do **not** count toward the remaining minimum of 9 additional credit hours in humanities/social sciences electives.

For full details of the above listed curriculum forms, see the May 9, 2017 meeting minutes of the Campus Curricula Committee at: <http://registrar.mst.edu/currcom/cccm meetings/>.

Ilene H. Morgan, Chair
Missouri S&T Campus Curricula Committee