



To: Faculty Senate
From: Missouri S&T Campus Curricula Committee
Re: December 5, 2018 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: 4219.8	ARCH ENG 4850: Building Electrical Systems
File: 2069.9	ARCH ENG 5820: Building Lighting Systems
File: 1195.7	CER ENG 3325: Ceramic Processing Lab II
File: 641.1	CIV ENG 3715: Fundamentals of Geotechnical Engineering
File: 98.1	CHEM ENG 1100: Computers And Chemical Engineering
File: 71.7	COMP ENG 5151: Digital Systems Design Laboratory
File: 569.1	PSYCH 4720: Psychology of Social Technology
File: 719.9	SYS ENG 6110: Optimization under Uncertainty

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: 143.28	ARC ENG-BS: Architectural Engineering BS
File: 116.5	PHYSIC-MI: Physics Minor

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: 4579	CER ENG 4001.003: Industrial Traditional Ceramics
File: 4554	MATH 6001.004: Nonlinear Optimization in Machine Learning
File: 4578	MUSIC 2001.001: Music Appreciation: Music of Latin America
File: 4569	PET ENG 4001.005: Unconventional Petroleum Resource Development

Presentation and discussion of the proposed undergraduate and graduate certificates' policies and procedures.

For full details of the above listed curriculum forms, see the December 5, 2018 meeting minutes of the Campus Curricula Committee at: <http://registrar.mst.edu/currcom/ccmeetings/>

Stephen A. Raper, Chair
Missouri S&T Campus Curricula Committee



To: Faculty Senate
From: Missouri S&T Campus Curricula Committee
Re: January 9, 2019 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: 4279.17	CHEM ENG 3111: Numerical Computing in Chemical and Biochemical Engineering
File: 4285.14	CHEM ENG 4091: Chemical Process Design I
File: 862.18	CHEM ENG 4097: Chemical Process Design II
File: 4284.8	CHEM ENG 4201: Biochemical Separations and Control Laboratory
File: 52.1	CHEM ENG 4300: Patent Law
File: 1629.1	CIV ENG 5156: Pavement Design
File: 649.2	COMP ENG 2210: Introduction to Digital Logic
File: 2.1	EDUC 1040: Perspectives In Education
File: 2494.7	EDUC 3203: Introduction to STEM Education
File 1758.5	EDUC 3216: Teaching Reading in Content Area
File: 4517.6	EDUC 3220: Teaching Science in the Elementary Classroom
File: 2541.8	EDUC 3221: Teaching Math in Elementary and Middle Schools
File: 176.1	EDUC 3280: Teaching Methods and Skills in the Content Areas
File: 1839.1	EDUC 3340: Current Issues in Educ: Performance Based Assessment, Intermediate
File: 4519.4	EDUC 3430: Literature for Children
File: 4518.3	EDUC 3530: Integrated Social Studies and Humanities for the Elementary Classroom
File: 1558.1	ELEC ENG 5810: Computational Intelligence
File: 826.1	IS&T 1750: Introduction to Management Information Systems
File: 2225.13	IS&T 3333: Data Networks and Information Security
File: 4407.13	IS&T 5520: Data Science and Machine Learning with Python
File: 1561.1	IS&T 5887: Human-Computer Interaction Evaluation
File: 1596.6	MET ENG 5150: Introduction to Metal Additive Manufacturing
File: 4583	POL SCI 4500: Geopolitics and International Security

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: 150.65 CH ENG-BS: Chemical Engineering 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: 4582	ELEC ENG 5001.007: Process Control System Safety, Security and Alarms
File: 4584	HISTORY 3001.007: World History



The Campus Curricula Committee recommends to the Faculty Senate, the adoption of the proposed undergraduate and graduate certificates' policies and procedures as an addendum to the Minor Creation Policy.

Minor Creation Policy Ad Hoc Committee Report

Introduction

The purpose for the Experimental Course (EC) process is to allow for development of modern degrees via new course content but also to help determine marketability and viability/cost effectiveness of the new courses. New or substantially different degree programs are subject to degree viability justification and approval by state agencies. New course creation can skip the EC process by making the course to be required within a degree program. Minor and certificate programs are useful marketing tools that exemplify uniqueness and value of the S&T campus to attract students but are elective and supportive to a program of study, not degree programs in their own right.

Course viability is subject to the Chancellor Policy Memo II-30, as well as the respective policies of each college. While course enrollments of courses being developed within the EC process are more lenient than permanently numbered courses, it is expected that new courses with permanent numbers will meet viability policies. Minors are commonly created for the purposes specified above as an extension of a degree program, having required courses in common, which has no additional program cost since the courses are populated as required parts of the degree program. As such, minors created from degree programs are encouraged. Departments can choose to skip the EC process and create a new permanent course, e.g., when creating a minor, emphasis, or certificate, in addition to courses that are also to be required within a degree program.

Certificates are to undergo regular curriculum approval processes, subject to the following:

Undergraduate certificates must have one primary owner (i.e., degree program) that does not preclude co-listing and must consist of currently offered or already approved (i.e., hard numbered) courses. Experimental courses may not be included as a part of a proposed certificate program of study. Proposed certificate programs, once approved, shall not allow substitute courses except in extenuating circumstances. Such extenuating circumstances must be approved by the associated Dean of the College in which the certificate program resides or of Graduate Studies for graduate certificates. Approved certificates shall become effective in the Fall Semester of an academic year. Certificates already approved or in approval processes prior to creation of this policy shall be grandfathered as approved under their existing processes but any future changes to those or later certificates must follow the regular curriculum approval system/processes.

Proposed Certificate programs of study must be submitted to the Missouri Department of Higher Education (MDHE) for approval. Certificate proposals are to be submitted through the campus curriculum approval process in parallel with an MDHE submittal after approval by the associated Dean, and can be approved by



faculty senate and become a Certificate subject to MDHE approval. The action of MDHE shall be reported by the CCC at the FS meeting following MDHE approval or rejection of the Certificate.

Minor or Certificate with Permanent Course Creation

The goal is to underscore the excellence available in academic learning on campus but to not maintain those that do not attract students. Each degree program is allowed one minor or certificate program that requires no student population justification per year, having been ostensibly created from required courses of their degree program, but departments may create as many other minors or certificates as are reasonably populated. All current minor and certificate programs are included in any counting of minors and certificates that are not justified by population.

Minors or certificates can be used as a reason to create new classes that bypass the EC process provided there is a compelling reason for their creation. The campus curriculum committee (CCC) will recommend to the Senate those that are deemed compelling. All proposed permanent courses, those proposing non-experimental catalog numbers, must be required in the minor or certificate. No more than 6 credit hours of new permanent courses per year that bypass the EC process are allowed; any additional course credit hours bypassing the EC process must be well-justified.

Course Purging Policy

To avoid simply a bypassing of the EC process, minors and certificates and their respective courses shall be evaluated for number of students completing said minor and courses at a period of 5 years and assessed against the appropriate campus policy(ies). Minors and certificates and their courses required within the minor or certificate not meeting those policies are to be deactivated along with the new courses that were created outside the EC process when the minor or certificate was created unless the course has been taught successfully within the last 5 years.

Courses not taught are routinely purged from the catalog about every 10 years. At the 10 year review, any required courses for a degree program, minor, or certificate but having not been taught successfully during the last 10 years will be assessed by the campus curriculum committee for deactivation, along with the degree program, minor, or certificate requiring that course.

The committee tabled "*Admission to a discipline or department*" as an appropriate course prerequisite, for further discussion.



The remaining Spring 2019 Curricula meeting dates were discussed and approved.

February 6, 2019

March 6, 2019 (*if needed*)

April 3, 2019

May 8, 2019

August 14, 2019

For full details of the above listed curriculum forms, see the January 9, 2019 meeting minutes of the Campus Curricula Committee at: <http://registrar.mst.edu/currcom/cccm meetings/>

A handwritten signature in black ink that reads "Stephen A. Raper".

Stephen A. Raper, Chair
Missouri S&T Campus Curricula Committee