

## REQUEST TO COLLEGE CURRICULUM COMMITTEE FOR CURRICULAR IMPROVEMENTS

DEPARTMENT: Chemical and Paper Engineering

PROPOSED EFFECTIVE SEMESTER: Spring 2016

COLLEGE: Engineering and Applied Sciences

## PROPOSED IMPROVEMENTS

## Academic Program

- ☐ New degree\*  
☐ New major\*  
☐ New curriculum\*  
☐ New concentration\*  
☐ New certificate  
☐ New minor  
☐ Revised major  
☐ Revised minor  
☐ Admission requirements  
☐ Graduation requirements  
☐ Deletion ☐ Transfer  
☐ Other (explain\*\*)

## Substantive Course Changes

- ☒ New course  
☐ Pre or Co-requisites  
☐ Deletion (required by others)  
☐ Course #, different level  
☐ Credit hours  
☐ Enrollment restriction  
☐ Course-level restriction  
☐ Prefix ☐ Title and description  
 (attach current & proposed)  
☐ General education (select one)  
 Not Applicable  
☐ Other (explain\*\*)

## Misc. Course Changes

- ☐ Title  
☐ Description (attach current & proposed)  
☐ Deletion (not required by others)  
☐ Course #, same level  
☒ Variable credit  
☐ Credit/no credit  
☐ Cross-listing  
☐ COGE reapproval  
☐ Other (explain\*\*)

## \*\* Other:

Title of degree, curriculum, major, minor, concentration, or certificate: Chemical Engineering

Existing course prefix and #: Proposed course prefix and #: CHEG 5950 Credit hours: 1 - 3 hrs

Existing course title:

Proposed course title: Topics in Chemical Engineering

## Existing course prerequisite &amp; co-requisite(s):

Proposed course prerequisite(s) Approved application and department approval.

If there are multiple prerequisites, connect with "and" or "or". To remove prerequisites, enter "none."

## Proposed course co-requisite(s)

If there are multiple corequisites, they are always joined by "and."

## Proposed course prerequisite(s) that can also be taken concurrently:

## Is there a minimum grade for the prerequisites or corequisites?

The default grades are D for undergraduates and C for graduates.

## Major/minor or classification restrictions:

List the Banner 4 character codes and whether they should be included or excluded.

For 5000 level prerequisites &amp; corequisites: Do these apply to: (circle one) undergraduates graduates both

## Specifications for University Schedule of Classes:

a. Course title (maximum of 30 spaces): Topics in Chemical Engineering

b. Multi-topic course: ☐ No ☒ Yesc. Repeatable for credit: ☐ No ☒ Yesd. Mandatory credit/no credit: ☒ No ☐ Yes

e. Type of class and contact hours per week (check type and indicate hours as appropriate)

1. ☐ Lecture3. ☒ Lecture/lab/discussion Var5. ☐ Independent study2. ☐ Lab or discussion4. ☐ Seminar or ☐ studio6. ☐ Supervision or practicum

CIP Code (Registrar's use only):

Chair/Director

Date 03.18.2015

Chair, College Curriculum Committee

Date

Dean

Date:

Graduate Dean:

Date

Curriculum Manager: Return to dean ☐ Date

Forward to:

Date

Chair, COGE/ PEB / FS President

Date

## FOR PROPOSALS REQUIRING GSC/USC REVIEW:

\* ☐ Approve ☐ Disapprove

Chair, GSC/USC

Date

\* ☐ Approve ☐ Disapprove

Provost

Date

1. Explain briefly and clearly the proposed improvement.

CHEG 5950 is an elective course for upperclassmen and graduate students to incorporate topics of interest that are not available in other current course offerings.

2. Rationale. Give your reason(s) for the proposed improvement. (If your proposal includes prerequisites, justify those, too.)

CHEG 5950 will allow upperclass and graduate students to enroll in a joint course covering topics not available elsewhere in the curriculum. The connections made between students may result in more undergraduate students becoming involved in research projects, and/or increasing their interest in future graduate studies. The prerequisite requirement of Department Approval will allow the course instructor to ensure that students have an adequate background, and allow students from outside the department to enroll if they have the background needed.

3. Effect on other colleges, departments or programs. If consultation with others is required, attach evidence of consultation and support. If objections have been raised, document the resolution. Demonstrate that the program you propose is not a duplication of an existing one.

The course may include topics of interest to students outside the department. Possible course topics include environmental sustainability, biomedical engineering, or biosynthesis. The prerequisite requirement of Department Approval will allow students from outside the department to enroll if they have the background needed for the topics that the course will be offering.

4. Effect on your department's programs. Show how the proposed change fits with other departmental offerings.

The proposed change allows upperclass and graduate students to enroll in a joint course that will incorporate topics not currently available elsewhere in the curriculum.

5. Effects on enrolled students: Are program conflicts avoided? Will your proposal make it easier or harder for students to meet graduation requirements? Can students complete the program in a reasonable time? Show that you have considered scheduling needs and demands on students' time. If a required course will be offered during summer only, provide a rationale.

There are no conflicts with current programs and the time to degree is not affected.

6. Student or external market demand. What is your anticipated student audience? What evidence of student or market demand or need exists? What is the estimated enrollment? What other factors make your proposal beneficial to students?

Requests from currently enrolled students to have instruction in topics not offered in the current curriculum.

7. Effects on resources. Explain how your proposal would affect department and University resources, including faculty, equipment, space, technology, and library holdings. Tell how you will staff additions to the program. If more advising will be needed, how will you provide for it? How often will course(s) be offered? What will be the initial one-time costs and the ongoing base-funding costs for the proposed program? (Attach additional pages, as necessary.)

We anticipate this course being offered once per academic year, which will need to be accounted for in the workload of the current faculty members.

8. General education criteria. For a general education course, indicate how this course will meet the criteria for the area or proficiency. (See the General Education Policy for descriptions of each area and proficiency and the criteria. Attach additional pages as necessary. Attach a syllabus if (a) proposing a new course, (b) requesting certification for baccalaureate-level writing, or (c) requesting reapproval of an existing course.)

Not applicable.

9. List the learning outcomes for the proposed course or the revised or proposed major, minor, or concentration. These are the outcomes that the department will use for future assessments of the course or program.

Learning outcomes will be related to the topics being offered, and cannot be universally stated at this time.

10. Describe how this curriculum change is a response to assessment outcomes that are part of a departmental or college assessment plan or informal assessment activities.

Response to student requests.

11. (Undergraduate proposals only) Describe, in detail, how this curriculum change affects transfer articulation for Michigan community colleges. For course changes, include detail on necessary changes to transfer articulation from Michigan community college courses. For new majors or minors, describe transfer guidelines to be developed with Michigan community colleges. For revisions to majors or minors, describe necessary revisions to Michigan community college guidelines. Department chairs should seek assistance from college advising directors or from the admissions office in completing this section.

Not applicable.

### Catalog Copy

## CHEG 5950 - Topics in Chemical Engineering

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A specialized course dealing with some particular area of chemical engineering not included in other course offerings.

**Prerequisites & Corequisites:** Prerequisites: Department approval.

**Credits:** 1 to 3 hours

**Notes:** Open to Upperclass and Graduate students. This course may be repeated for credit with a different topic to a total of six credit hours.