The curriculum committee of the EPICS program has approved the following new course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**EPCS 11100 FIRST YEAR PARTICIPATION IN EPICS**

Sem 1,2, Lee 0, Lab 2, Cr 1.

**Description:** Together, Engineering Projects in Community Service (EPICS) courses create a vertical project track under which students work in multidisciplinary teams on long-term engineering-based design projects. Projects of at least one year in duration are intended to solve real problems that are defined in consultation with “customers” from not-for-profit community and educational organizations. EPICS courses are open to students from all disciplines; each student contributes expertise in his/her academic discipline. Each team consists of a mix of first-year, sophomores, juniors, and seniors. Students are encouraged to participate in an EPICS project for two or more semesters. First-year students participating in EPICS gain insight into the specific project, and more generally, into the design and development process. They attend planning and reporting meetings with the customer and are expected to attend all team meetings. Under mentorship from upper level students and instructors, they perform and report on design tasks consistent with their level of discipline expertise.

**Reason:** This course will form part of the sequence of courses that uses two semesters of EPICS along with the companion course (ENGR 133) as option for the First-Year Engineering (FYE) curriculum. Instead of ENGR 13100 and 13200, students may take ENGR 13300 and two semesters of EPICS (this course and EPCS 12100). The course is identical in objectives and goals to the existing EPCS 10100 course; the new number will allow for tracking and auditing of whether students are using EPICS to meet FYE requirements or for other purposes (including elective credit). Typically, students will take EPCS 11100 and EPCS 11200 in subsequent semesters, along with ENGR 13300 in either semester. ENGR 13300 requires either EPCS 11000 or EPCS 12100 as a co-requisite. All Purdue students are eligible to take EPCS 11100, but students must be in FYE, Pre-ABE, or qualified students in Exploratory Studies in order to take ENGR 13300 and complete the sequence.

William Oakes, Director, EPICS Program
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

DEPARTMENT: EPICS          EFFECTIVE SESSION: Fall 2014

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

☐ 1. New course with supporting documents
☐ 2. Add existing course offered at another campus
☐ 3. Expiration of a course
☐ 4. Change in course number
☐ 5. Change in course title
☐ 6. Change in course credit/type
☐ 7. Change in course attributes (department head signature only)
☐ 8. Change in instructional hours
☐ 9. Change in course description
☐ 10. Change in course requisites
☐ 11. Change in semesters offered (department head signature only)
☐ 12. Transfer from one department to another

PROPOSED:

Subject Abbreviation: EPCS
Course Number: 11100
Long Title: First Year Participation in EPICS
Short Title: EPOS First Year Participation EPICS

EXISTING:

Subject Abbreviation: EPCS
Course Number: 11100

TERMS OF OFFERED:

☐ Summer
☐ Fall
☐ Spring

CAMPUS(ES) INVOLVED:

- N. Central
- Tech Statewide
- W. Lafayette

INSTRUCTOR:

- Calumet
- Cont Ed
- Ft. Wayne
- Indianapolis

CREDIT TYPE:

1. Fixed Credit: Cr. Hrs.: 3
2. Variable Credit Range: Minimum Cr. Hrs: (Check One) To Or
Maximum Cr. Hrs: Yes or No
3. Equivalent Credit: Yes or No
4. Maximum Repeatable Credit:

COURSE ATTRIBUTES:

☐ Pass/Not Pass Only
☐ Satisfactory/Unsatisfactory Only
☐ Repeatable 7 Week Title
☐ Maximum Repeatable Credit:
☐ Credit by Examination
☐ Honors
☐ Full Time Privilege
☐ Fees Coop Lab Rate Request
☐ Off Campus Experience

Schedule Type: Minutes % of Credit
Lecture Per Min Meetings Per
Per Week 1 15 53
Presentation
Laboratory 100 1 15 67
Lab Prep
Studio
Distance
Clinic
Experiential
Research
Ind. Study
Pract/Observe

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):

Together, Engineering Projects in Community Service (EPICS) courses create a vertical project track under which students work in multidisciplinary teams on long-term engineering-based design projects. Projects of at least one year in duration are intended to solve real problems that are defined in consultation with "customers" from not-for-profit community and educational organizations. EPICS courses are open to students from all disciplines; each student contributes expertise in his/her academic discipline. Each team consists of a mix of first-year, sophomores, juniors, and seniors. Students are encouraged to participate in an EPICS project for two or more semesters. First-year students participating in EPICS gain insight into the specific project, and more generally, into the design and development process. Under mentorship from upper level students and instructors, they perform and report upon design tasks consistent with their level of discipline expertise.

COURSE LEARNING OUTCOMES:

A student who successfully fulfills the course requirements with at least 3 credits of EPICS taken over 2 or more semesters will have demonstrated: 1) an ability to apply material from their discipline to the design of community-based projects 2) an understanding of design as a start-to-finish process 3) an ability to design and acquire the knowledge as a part of the problem-solving/design process 4) an awareness of the customer 5) an ability to function on multidisciplinary teams and an appreciation for the contributions from individuals from multiple disciplines 6) an ability to communicate effectively with audiences with widely-varying backgrounds 7) an awareness of professional ethics and responsibility 8) an appreciation of the role that their discipline can play in social contexts

Calumet Department Head
Date
Calumet School Dean
Date

Fort Wayne Department Head
Date
Fort Wayne School Dean
Date

Indianapolis Department Head
Date
Indianapolis School Dean
Date

North Central Faculty Senate Chair
Date
Vice Chancellor for Academic Affairs
Date

West Lafayette Department Head
Date
West Lafayette School Dean
Date

West Lafayette Registrar
Date

OFFICE OF THE REGISTRAR

APR 27, 2014

RECEIVED

5/28/14

LW 5/28/14