TO: The Faculty of the College of Engineering
FROM: The EPICS Curriculum Committee of the College of Engineering
RE: New Undergraduate Course, EPCS 12100 First Year Participation in EPICS

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 12100 FIRST YEAR PARTICIPATION IN EPICS
Sem 1,2, Lec 0, Lab 2, Cr 1,
Pre-requisite: EPCS 11100, Concurrent Pre-requisite: ENGR 13300

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. EPCS 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 upon 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 (EPCS 11100 and this course). 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, and this course requires ENGR 13300 as a concurrent prerequisite. Because of constraints on ENGR 13300, students must be in FYE, Pre-ABE, or be qualified Exploratory Studies students to register for this course.

[Signature]
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: 12100
Long Title: First Year Participation In EPICS
Short Title: EPCS First Yr Participation EPICS II

EXISTING:
Subject Abbreviation: EPCS
Course Number: 12100

TERMS OFFERED: Check All That Apply:
Summer ☐ Fall ☒ Spring ☐

CAMPUS(ES) INVOLVED:
Calumet ☐ N Central ☐
Cont Ed ☐ Tech Statewide ☐
Pf. Wayne ☐ W. Lafayette ☐
Indy ☐

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

CREDIT TYPE
1. Fixed Credit: Cr. Hrs.: 1
2. Variable Credit Range: Minimum Cr. Hrs: (Check One) ☐ To ☐ Or ☐ maximum Cr. Hrs: 3. Equivalent Credit: Yes ☐
4. Credit by Examination: No ☐
5. Fees: ☐ Lab Rate: 

COURSE ATTRIBUTES: Check All That Apply
1. Pass/Not Pass Only ☐ 6. Registration Approval Type ☐
2. Satisfactory/Unsatisfactory Only ☐ 7. Variable Title ☐
3. Repeatable ☐ 8. Honors ☐
4. Maximum Repeatable Credit: ☐
5. Fees: ☐ Lab Rate: Request ☐

Schedule Type: Lecture Recitation Presentation Laboratory Lab Prep Studio Distance Clinic Experiential Research Ind. Study Prac/Observ

Weeks Offered: b

% of Credit Allocated: 33%

Cross-Listed Courses

RECEIVED:
OFFICE OF THE REGISTRAR

APR 22 2014

COURSE DESCRIPTION (INCLUDE REQUIREMENTS/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 collaboration 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 identify and acquire new 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

Fort Wayne Department Head Date

Indianapolis Department Head Date

North Central Faculty Senate Chair Date

West Lafayette Department Head Date

OFFICE OF THE REGISTRAR

WEST LAFAYETTE, INDIANA 47907-1001

APRIL 22, 2014