

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.



William Oakes, Director, EPICS Program

APPROVED BY THE SCHOOLS OF ENGINEERING
 BY THE ENGINEERING
 CURRICULUM COMMITTEE

ECS Minutes 4/8/14

Date 4/8/14

PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

EPCS 12100

201510

EFD 38-14

DEPARTMENT EPICS EFFECTIVE SESSION Fall 2014

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

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

PROPOSED:		EXISTING:		TERMS OFFERED Check All That Apply:	
Subject Abbreviation	<u>EPCS</u>	Subject Abbreviation	<u>EPCS</u>	<input type="checkbox"/> Summer	<input checked="" type="checkbox"/> Fall <input checked="" type="checkbox"/> Spring
Course Number	<u>12100</u>	Course Number	<u>12100</u>	CAMPUS(ES) INVOLVED	
Long Title	<u>First Year Participation In EPICS</u>		<input type="checkbox"/> Calumet	<input type="checkbox"/> N. Central	
Short Title	<u>EPCS First Yr Participation EPICS II</u>		<input type="checkbox"/> Cont Ed	<input type="checkbox"/> Tech Statewide	
		<input type="checkbox"/> Ft. Wayne	<input checked="" type="checkbox"/> W. Lafayette	<input type="checkbox"/> Indianapolis	

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

CREDIT TYPE		COURSE ATTRIBUTES: Check All That Apply			
1. Fixed Credit: Cr. Hrs.	<u>1</u>	<input type="checkbox"/> 1. Pass/Not Pass Only	<input type="checkbox"/> 6. Registration Approval Type	Department	<input type="checkbox"/> Instructor
2. Variable Credit Range:		<input type="checkbox"/> 2. Satisfactory/Unsatisfactory Only			
Minimum Cr. Hrs		<input type="checkbox"/> 3. Repeatable	<input type="checkbox"/> 7. Variable Title		
(Check One) To <input type="checkbox"/> Or <input type="checkbox"/>		Maximum Repeatable Credit:	<input type="checkbox"/> 8. Honors		
Maximum Cr. Hrs		<input type="checkbox"/> 4. Credit by Examination	<input type="checkbox"/> 9. Full Time Privilege		
3. Equivalent Credit: Yes <input type="checkbox"/>	<input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	<input type="checkbox"/> 5. Fees <input type="checkbox"/> Coop <input type="checkbox"/> Lab <input type="checkbox"/> Rate Request	<input type="checkbox"/> 10. Off Campus Experience		

Schedule Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated
Lecture	60	1	5	33
Recitation				
Presentation				
Laboratory	100	1	16	67
Lab Prep				
Studio				
Distance				
Clinic				
Experiential				
Research				
Ind. Study				
Pract/Observ				

Cross-Listed Courses

OFFICE OF THE REGISTRAR

APR 22 2014

RECEIVED

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. 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. 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	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
<u>Michelle Decker</u>	<u>3/18/14</u>	<u>Michael P. Brown</u>	<u>4/19/14</u>
West Lafayette Department Head	Date	West Lafayette College/School Dean	Date
		<u>West Lafayette Registrar</u>	<u>5/5/14</u>

OFFICE OF THE REGISTRAR

LAM 4/24/14