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

### DEPARTMENT  EPICS  EFFECTIVE SESSION  Spring 2010

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

- [x] New course with supporting documents
- [ ] Add existing course offered at another campus
- [ ] Expiration of a course
- [ ] Change in course number
- [ ] Change in course title
- [ ] Change in course credit/type
- [x] Change in course attributes (department head signature only)
- [ ] Change in instructional hours
- [ ] Change in course description
- [ ] Change in course requisites
- [ ] Change in semesters offered (department head signature only)
- [x] Transfer from one department to another

### PROPOSED:
- **Subject Abbreviation:** EPICS
- **Course Number:** 40200
- **Long Title:** Senior Participation in EPICS

### EXISTING:
- **Subject Abbreviation:** EPICS
- **Course Number:** 40200
- **Long Title:** Senior Participation in EPICS

### TERMS OFFERED:
- [x] Summer
- [ ] Fall
- [x] Spring

### CAMPUS(ES) INVOLVED:
- [x] Calumet
- [ ] Cont Ed
- [ ] Ft. Wayne
- [ ] Indianapolis
- [ ] Tech Statewide
- [ ] W. Lafayette

### CREDIT TYPE:
- **Fixed Credit:** 2

### COURSE ATTRIBUTES:
- [ ] Pass/Not Pass Only
- [ ] Satisfactory/Unsatisfactory Only
- [ ] Repeatable
- [x] 6 Registration Approval Type
- [ ] Department
- [ ] Instructor
- [ ] 7 Variable Title
- [ ] 8 Honors
- [ ] 9 Full Time Privilege
- [ ] 10 Off Campus Experience

### SCHEDULE TYPE:
- **Lecture:** 5U
- **Recitation:**
- **Presentation:**
- **Laboratory:** 100
- **Lab Prep:**
- **Studio:**
- **Istance:**
- **Experiential:**
- **Research:**
- **Ind. Study:**
- **Prac/Oberv:**

### WEEKS OFFERED:
- **Total:** b
- **% of Credit Allocated:** 33%

### COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):
See Attached

This change is to allow Purdue Columbus site this course offering.

### COURSE LEARNING OUTCOMES:
See Attached

### SIGNATURES:
- **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 School Dean**
  - Date
- **North Central Vice Chancellor for Academic Affairs**
  - Date
- **West Lafayette Department Head**
  - Date
- **West Lafayette College/School Dean**
  - Date
- **West Lafayette Registrar**
  - Date

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

DEPARTMENT EPICS EFFECTIVE SESSION Spring 2010

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

- New course with supporting documents
- Add existing course offered at another campus
- Expiration of a course
- Change in course number
- Change in course title
- Change in course credit type
- Change in course attributes (department head signature only)
- Change in instructional hours
- Change in course description
- Change in course requisites
- Change in semesters offered (department head signature only)
- Transfer from one department to another

PROPOSED:

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th>EPCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number</td>
<td>40200</td>
</tr>
<tr>
<td>Long Title</td>
<td>Senior Participation in EPICS</td>
</tr>
<tr>
<td>Short Title</td>
<td>Abbreviated title will be entered by the Office of the Registrar inXml. (50 CHARACTERS ONLY)</td>
</tr>
</tbody>
</table>

EXISTING:

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th>EPCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number</td>
<td>40200</td>
</tr>
</tbody>
</table>

TERMS OFFERED

- Summer
- Fall
- Spring

CAMPUS(ES) INVOLVED

- Calumet
- Cont Ed
- Tech Statewide
- Ft. Wayne
- W. Lafayette
- Indianapolis

CREDIT TYPE

<table>
<thead>
<tr>
<th>Schedule Type</th>
<th>Minutes Per Mth</th>
<th>Meetings Per Week</th>
<th>Weeks Offered</th>
<th>% of Credit Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>50</td>
<td>1</td>
<td>5</td>
<td>33%</td>
</tr>
<tr>
<td>Recitation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
<td>100</td>
<td>1</td>
<td>10</td>
<td>67%</td>
</tr>
<tr>
<td>Lab Prep</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiential</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ind. Study</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pract/Obser</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COURSE ATTRIBUTES: Check All That Apply

1. Pass/Not Pass Only
2. Satisfactory/Unsatisfactory Only
3. Repeatability
   - Department
   - Instructor
4. Credit by Examination
   - Department
   - Instructor
5. Special Fees
   - Department
   - Instructor
6. Registration Approval Type
7. Variable Title
8. Honors
9. Full Time Privilege
10. Off Campus Experience

See Attached

This change is to allow Purdue Columbus site this course offering.

*COURSE LEARNING OUTCOMES

See Attached

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 School Dean Date
North Central Vp Chancellor for Academic Affairs Date

West Lafayette Department Head Date
West Lafayette College/School Dean Date
West Lafayette Registrar Date

OFFICE OF THE REGISTRAR
TO: The Engineering Faculty
FROM: The EPICS Curriculum Committee
RE: New EPCS Course Numbers

The EPICS Curriculum Committee has approved the following new course number. This action is now submitted to the Engineering Faculty with a recommendation for approval.

EPCS 402 SENIOR PARTICIPATION IN EPICS
Offered Fall and Spring, Summer by special arrangement. Credit 2.
Prerequisite: Senior standing.

Course Description: Continuation of EPCS courses (see EPCS 101). Seniors are responsible for the management tasks of planning and organizing their team project activity. They are expected to contribute expertise from their discipline to the design of the team’s projects throughout most of the design process phases of problem identification, specification development, design, production, and deployment. Seniors will also meet with the customer and mentor the freshman, sophomores and juniors. Seniors using EPCS 401/402 to fulfill capstone or design requirements where approved for their major may be required to satisfy additional course requirements specified by their degree program. EPCS 402 is offered for 2 credits. The EPICS procedures manual provides information on expected relative workload for EPCS 401 and EPCS 402 students. May be repeated for credit. May not be taken concurrently with EPCS 401.

REASON:

The Engineering Projects in Community Service (EPICS) courses are currently offered under 18 different course numbers within 9 different disciplines. The new course numbers aim to reflect the multidisciplinary nature of the course while also easing the registration difficulties of multiple, co-listed course numbers. Each participating department/school would determine how their students’ credits in EPICS count toward graduation requirements.

Normally Offered: Each Fall, Spring. Offered Summer by special arrangement.


Recommended Reference(s): None.
Course 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:

i. an ability to apply material from their discipline to the design of community-based projects
ii. an understanding of design as a start-to-finish process
iii. an ability to identify and acquire new knowledge as a part of the problem-solving/design process
iv. an awareness of the customer
v. an ability to function on multidisciplinary teams and an appreciation for the contributions from individuals from multiple disciplines
vi. an ability to communicate effectively with audiences with widely-varying backgrounds
vii. an awareness of professional ethics and responsibility
viii. an appreciation of the role that their discipline can play in social contexts

Lecture Outline:

Weeks Lectures
1-15 All EPICS students have a common lecture hour. Lecture topics include the design process, verbal and written communication, project management and planning, ethical and legal issues in engineering design, entrepreneurship, intellectual property, team dynamics and leadership and community involvement. Lectures are supplemented with sessions on specific technical topics relevant to the projects.

Lab Outline:

Week Major Course Milestones
2 Semester Project Plan
3 Personal Semester Goals
   Project Charters (new projects); Project Demonstration (continuing projects); Review of Design Notebooks; Delivery Review of Projects to be Delivered Week 4.
4 5 - 6 Continued Progress on Projects and Project Documentation.
7 Internal Design Review; oral or poster presentation
8 Peer evaluation and self assessment; Review of Design Notebooks.
9 - 10 Continued Progress on Projects and Project Documentation
   Project Design Review; Delivery Review of Projects to be Delivered Week 11.
11 12 - 14 Continued Progress on Projects and Project Documentation.
Team Report; Review of Design Notebooks; Peer evaluation and self assessment

Final Team Presentation
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF A COURSE

D'PARTMENT: EPCS EFFECTIVE SESSION 02/05

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
8. Change in instructional hours
9. Change in course description
10. Change in course requisites
11. Change in semesters offered

PROPOSED:

Subject Abbreviation EPCS
Course Number 402
Long Title Senior Participation in EPICS
Short Title Sr Part in EPICS
Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)

COURSE ATTRIBUTES: Check All That Apply:

1. Pass/Not Pass Only
2. Satisfactory/Unsatisfactory Only
3. Repeatable
4. Credit by Examination
5. Designator Required
6. Special Fees

TERMS OFFERED:
Check All That Apply:
Summer [ ] Fall [x] Spring [ ]

CAMPUS(ES) INVOLVED
Calumet [ ] Indianapolis [ ] Fort Wayne [ ]
W Lafayette [ ] N Central [ ] Cont Ed [ ]
Tech Statewide [ ]

CREDIT TYPE
1. Fixed Credit: Cr. Hrs. [ ] 2
2. Variable Credit Range:
   Minimum Cr. Hrs. [ ]
   (Check One) To [ ] Or [ ]
   Maximum Cr. Hrs.

3. Equivalent Credit: Yes [ ] No [ ]
4. Thesis Credit: Yes [ ] No [ ]

INSTRUCTIONAL TYPE

<table>
<thead>
<tr>
<th>Minutes</th>
<th>Meetings</th>
<th>Weeks</th>
<th>% of Credit</th>
<th>Delivery Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Min</td>
<td>Per Week</td>
<td>Offered</td>
<td>Allocated</td>
<td>(Asyn. Or Syn.)</td>
</tr>
<tr>
<td>50</td>
<td>1</td>
<td>10</td>
<td>33%</td>
<td>Syn</td>
</tr>
</tbody>
</table>

LABORKATION

<table>
<thead>
<tr>
<th>Minutes</th>
<th>Meetings</th>
<th>Weeks</th>
<th>% of Credit</th>
<th>Delivery Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Min</td>
<td>Per Week</td>
<td>Offered</td>
<td>Allocated</td>
<td>(Asyn. Or Syn.)</td>
</tr>
<tr>
<td>100</td>
<td>1</td>
<td>15</td>
<td>67%</td>
<td>Syn</td>
</tr>
</tbody>
</table>

DelIVERY MEDIUM (Audio, Internet, Live, Text-Based, Video)

7. Registration Approval Type
   Department [ ] Instructor [ ]
   8. Variable Title [ ]
   9. Remedial [ ]
   10. Honors [ ]
   11. Full Time Privilege [ ]
   12. Off Campus Experience [ ]

COURSE DESCRIPTION (INCLUDE REQUISITES):

Please see attached.

Calumet Undergrad Curriculum Committee Date

Fort Wayne Department Head Date

Indianapolis Department Head Date

North Central Department Head Date

West Lafayette Department Head Date

Graduate Area Committee Convener Date

Calumet Department Head Date

Fort Wayne School Dean Date

Indianapolis School Dean Date

North Central Chancellor Date

West Lafayette School Dean Date

Graduate Dean Date

Calumet School Dean Date

Fort Wayne Chancellor Date

Undergrad Curriculum Committee Date

Date Approved by Graduate Council

Graduate Council Secretary Date

West Lafayette Registrar Date

OFFICE OF THE REGISTRAR