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

**DEPARTMENT**
Office of Professional Practice

**EFFECTIVE SESSION**
F2014

**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
- [ ] Expansion 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:**

- **Subject Abbreviation:** ENGR
- **Course Number:** 29701 - 29702
- **Long Title:** Global Engineering Orientation-GEARE
- **Short Title:** Global EngOrientation - GEARE

Abbreviated title will be entered by the Office of the Registrar if confirmed. (20 CHARACTERS ONLY)

**TERMS OFFERED:**

- [x] Summer
- [ ] Fall
- [ ] Spring

**CAMPUS(ES) INVOLVED:**

- [ ] Calumet
- [ ] Cont Ed
- [x] N. Central
- [ ] FL Wayne
- [ ] Tech Statewide
- [x] W. Lafayette
- [ ] Indianapolis

**CREDIT TYPE:**

<table>
<thead>
<tr>
<th>Schedule Type</th>
<th>Minutes</th>
<th>Meetings Per Week</th>
<th>% of Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Recitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Prep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ind. Study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pract/Observ</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COURSE ATTRIBUTES:**

- [x] Instructor
- [ ] 6 Registration Approval Type
- [ ] 7 Variable Title
- [ ] 8 Honors
- [ ] 9 Full Time Privilege
- [ ] 10 Off Campus Experience

**COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):**

Forum in preparation of study and work abroad as part of undergraduate GEARE program. Understanding of cultural differences and collaborating across cultural boundaries, professionalism and ethics in foreign work and academic environments, leadership and teamwork options in foreign environments. Restrictions: GEARE students only Prerequisite: Junior standing Permission of instructor is required.

**COURSE LEARNING OUTCOMES**

The instructor will serve as the facilitating body to moderate the progress of the students through the course and assess outcomes through group discussion, attendance, on final report and one case study group presentation. Students will be provided with foundation in global engineering communication skills, outline teamwork and leadership opportunities available through participation in the global engineering community, be provided with globally diverse and multicultural experiences and discuss case studies to prepare them for upcoming international internships and semester study abroad, identify resources available for academic studies and industrial work experience abroad, and develop a strong ethical framework and cultural sensitivity to prepare for the global professional workplace.

**Cross-Listed Courses**

**RECEIVED**

FEB 4 2014

OFFICE OF THE REGISTRAR

**Calumet Department Head**

**Calumet School Dean**

**Fort Wayne Department Head**

**Fort Wayne School Dean**

**Indianapolis Department Head**

**Indianapolis School Dean**

**North Central Faculty Senate Chair**

**Vice Chancellor for Academic Affairs**

**West Lafayette Department Head**

**West Lafayette College/School Dean**

**West Lafayette Registrar**

**Sandra Schaffner 2/20/14**

**Lam 2/19/14**
**PURDUE UNIVERSITY**  
REQUEST FOR ADDITION, EXPIRATION,  
OR REVISION OF AN UNDERGRADUATE COURSE  
(10000-40000 LEVEL)  

**DEPARTMENT**: Office of Professional Practice  
**EFFECTIVE SESSION**: SS2013  
**TERMS OFFERED**: Check All That Apply:  
- Summer  
- Fall  
- Spring  

**PROPOSED**  
**Subject Abbreviation**: ENGR  
**Course Number**: 39799  
**Long Title**: GEARE Domestic Internship  
**Short Title**: GEARE Domestic Internship  
**Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)**  

<table>
<thead>
<tr>
<th>CREDIT TYPE</th>
<th>COURSE ATTRIBUTES: Check All That Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fixed Credit: Cr. Hrs. 0</td>
<td>6. Registration Approval Type Department Instructor</td>
</tr>
<tr>
<td>2. Variable Credit Range:</td>
<td>7. Variable Title</td>
</tr>
<tr>
<td>Minimum Cr. Hrs (Check One)</td>
<td>8. Honors</td>
</tr>
<tr>
<td>Maximum Cr. Hrs</td>
<td>9. Full Time Privilege</td>
</tr>
<tr>
<td>Maximum Repeatable Credit:</td>
<td>10. Off Campus Experience</td>
</tr>
<tr>
<td>3. Equivalent Credit: Yes</td>
<td>Include comment to explain fee</td>
</tr>
</tbody>
</table>

**SCHEDULE TYPE**  
- Lecture  
- Recitation  
- Presentation  
- Laboratory  
- Lab Prep  
- Studio  
- Distance  
- Clinic  
- Experiential  
- Research  
- Ind. Study  
- Pract/Observ

**COURSE DESCRIPTION**  
INCLUDE REQUIRMENTS/RESTRICTIONS:

Sem. 1, 2 or SS, cr. 0  
Restrictions: GEARE students only  
Prerequisite: Sophomore standing or consent of instructor  
Domestic internship experience for GEARE program. Program coordinated by Office of Professional Practice with cooperation of participating employers. Students to obtain professional practice with domestic employers within industry, government or small business.

**COURSE LEARNING OUTCOMES**  
The Assistant Director of Global Professional Practice Programs in the Office of Professional Practice serves as the facilitating body to (1) moderate the progress of students through the requirements of the GEARE program requirements and (2) assess course outcomes via student evaluation of work sessions and work session technical report.

**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 College School Dean**  
**Date**  
**West Lafayette Registrar**  
**Date**

**OFFICE OF THE REGISTRAR**  
**RECEIVED**  
**FEB 04, 2014**  
**OFFICE OF THE REGISTRAR**  
**4PM 2/9/14**
**Request for Addition, Expiration, or Revision of an Undergraduate Course**

**Department:** Office of Professional Practice

**Effective Session:** SP2013

**Course Details**

**Subject Abbreviation:** ENGR  
**Course Number:** 39899

**Course Title:** GEARE Global Internship

**Course Attributes:**
- 1. Pass/Not Pass Only
- 2. Satisfactory/Unsatisfactory Only
- 3. Repeatable
- 4. Credit by Examination
- 5. Fee
- 6. Registration Approval Type
- 7. Variable Title

**Credit Type:**
- 1. Fixed Credit: 0 Cr. Hrs.
- 2. Variable Credit Range: None
- 3. Equivalent Credit: Yes

**Schedule Details:**
- Lecture: 0 Per Mtg, 0 Weeks, 0% of Credit
- Recitation: 0 Per Mtg, 0 Weeks, 0% of Credit
- Presentation: 0 Per Mtg, 0 Weeks, 0% of Credit
- Laboratory: 0 Per Mtg, 0 Weeks, 0% of Credit
- Lab Prep: 0 Per Mtg, 0 Weeks, 0% of Credit
- Studio: 0 Per Mtg, 0 Weeks, 0% of Credit
- Distance: 0 Per Mtg, 0 Weeks, 0% of Credit
- Clinic: 0 Per Mtg, 0 Weeks, 0% of Credit
- Experiential: 0 Per Mtg, 100% of Credit
- Research: 0 Per Mtg, 0 Weeks, 0% of Credit
- Ind. Study: 0 Per Mtg, 0 Weeks, 0% of Credit
- Prac/Observ: 0 Per Mtg, 0 Weeks, 0% of Credit

**Course Description:**
Global internship experience for GEARE students only. Prerequisite: Junior standing or consent of instructor.

**Course Learning Outcomes:**
The Assistant Director of Global Professional Practice Programs in the Office of Professional Practice serves as the facilitating body to (1) moderate the progress of students through the requirements of the GEARE program requirements and (2) assess course outcomes via student evaluation of work sessions and work session technical report.

**Approval Signatures:**
- Calumet Department Head: 10/11/13
- Fort Wayne Department Head: 10/11/13
- Indianapolis Department Head: 10/11/13
- North Central Faculty Senate Chair: 10/11/13
- Vice Chancellor for Academic Affairs: 10/11/13
- West Lafayette Department Head: 10/11/13

**Office of the Registrar:**
- Calumet: 10/11/13
- Fort Wayne: 10/11/13
- Indianapolis: 10/11/13
- North Central: 10/11/13
- Vice Chancellor: 10/11/13
- West Lafayette: 10/11/13
TO: Engineering Faculty
FROM: Office of Professional Practice
SUBJECT: New Professional Practice Courses ENGR 29700, ENGR 39799, and ENGR 39899

The Office of Professional Practice has approved the following new courses relating to the GEARE program. In September 2009 it was determined that OPP will be the official administrative unit for the GEARE program, including communication of GEARE acceptance, maintaining student records, facilitating internships, teaching orientation course, and administering program assessment. As part of this responsibility, completion of domestic and global internships needs to be verified.

This action is now submitted to Engineering Faculty with a recommendation for approval.

**ENGR 29700**: Global Engineering Orientation-GEARE
- Sem. 1, cr. 1.
- Restrictions: GEARE students only
- Prerequisite: Junior standing or consent of instructor

Preparation for GEARE experience abroad. Permission of instructor is required.

**ENGR 39799**: GEARE Domestic Internship
- Sem. 1,2, SS, Cr. 0
- Restrictions: GEARE Students only
- Prerequisite: Sophomore standing or consent of instructor

To obtain professional practice with domestic employers within industry, government, or small business.

**ENGR 39899**: GEARE Global Internship
- Sem. 1,2 SS, Cr. 0
- Restrictions GEARE students only
- Prerequisite: Junior standing or consent of instructor

To obtain professional practice with global employers within industry, government, or small business

**RATIONALE**: To allow appropriate administration of the GEARE program and tracking of its requirements by the Office of Professional Practice.

Eckhard Groll, Dr. Eng.
Director of Office of Professional Practice
Reilly Professor of Mechanical Engineering

APPROVED FOR THE FACULTY OF THE SCHOOLS OF ENGINEERING BY THE ENGINEERING CURRICULUM COMMITTEE
ECC Minutes 28/14
Date 28/14
Chairman ECC 28/14
GEARE ME-OPP Meeting
Monday December 12, 2011

Present: Eckhard Groll, Jim Jones, Jerry Matthews, Yating Haller, Dianna Atkinson, Chuck Krousgrill and Cindy Quillen

1. GEARE TRADEMARK

Prof. Groll will contact Dan Hirleman about the status of the GEARE Trademark. (Note: There is no trademark on GEARE. In the meantime, Prof. Hirleman has withdrawn his request to use the GEARE name for a program at UC Merced.)

2. GEARE REQUIREMENTS

The GEARE calendar was approved. Prof. Groll’s goal is to have students accepted into the program and monitored as to their progress. The students’ POS will need to be updated to reflect the GEARE requirements. The student will need to update their POS anytime changes are made. To admit students in the sophomore year, the POS will need to be checked by OPP to verify that 12 credit hours of foreign language can be completed before spring of the junior year.

Checks should be done at beginning of sophomore year to verify language requirements are on track and that GPA is still 3.0 or above. At the beginning of the junior year in addition to the language and GPA requirements, the completion of the domestic internship needs to be verified. At the beginning of the senior year, completion of the international internship needs to be checked. Students who do not meet requirements will be dropped from the GEARE program, but are still eligible for the minor. For the GPA requirement, it was proposed that there is a gray-zone between a GPA of 2.8 (or 2.9) and 3.0 where exceptions can be made. However, below a minimum GPA of 2.8 or 2.9, GEARE students should not be allowed to participate. OPP will arrange a GEARE Coordinators meeting to determine the exact minimum GPA.

For students to successfully participate in GEARE, they will need to help find their domestic and international internships. We need to let them know that we can’t guarantee the internships although we will try to help them as much as we can.

Prof. Groll would like to give a certificate to the students who successfully complete the GEARE requirements. It was agreed that the GEARE requirements are:

- 12 credit hours in a foreign language program to be completed before studying abroad,
- participation in a 1-credit hour cultural orientation seminar course
- one US summer internship to be completed before going abroad (minimum of 10 weeks),
- one semester of study abroad with a minimum of 12 credit hours,
- one international internship in the same language as the semester study abroad (minimum of 10 weeks), and
- participation in a global design team project for at least one semester (minimum of 3 credit hours).

Each discipline will determine which option they will accept as fulfilling the global design team project. Possible options are: GEP global design project, senior capstone design course with the GEARE students or other international teammates, or independent senior project course on a design project with global focus. The international teammate requirement will need to be monitored to make sure it doesn’t become trivial. OPP will propose and monitor these requirements as the GEARE model, but OPP will not be able to prohibit disciplines from making exceptions.

3. ME GEARE PARTNERS

Prof. Groll asks that there be at least 4 country options for ME majors: Germany, China, Spain and an English speaking country. Vellore Institute of Technology in India or University of Queensland in Australia were discussed as options. An English opportunity is needed for students studying languages such as Japanese or Italian.

We will reiterate to the GEARE students the importance of working with the respective academic disciplines.

4. OTHER TOPICS

Prof. Groll proposed that a GEARE senior design course be developed for GEARE students in all disciplines. The class will have to take into account the disciplines senior capstone design course requirements.

Prof. Groll announced his interim appointment as the Interim Assistant Dean for Research in the College of Engineering. He will not be teaching next spring. He will meet with Prof. Jones to discuss a replacement for the senior design course.

It was discussed as to which students should be taking Yating Haller’s GEARE orientation class and which students should be taking Dianne Atkinson’s China ETA orientation class. Until there is a significant block of non-GEARE students for another country, the present status quo will be maintained. All of the GEARE students will take Yating Haller’s class, and all of the China ETA students will take Dianne Atkinson’s class. Yating will allow non-China ETA students to audit the class, until the numbers grow. The course offerings will be reevaluated at that time.
Global Engineering Alliance for Research and Education (GEARE)

Organizational Chart

- OPP will be the official administrative unit for GEARE program
- OPP will serve as the main contact with Programs of Study Abroad
- Each school will have a GEARE Faculty Coordinator and assigned assistant

Communication of GEARE application/ acceptance; Maintain student records

GEARE Faculty Coordinators

Monitor Plan of Study and grades; Facilitate internships

OPP
Eckhard Groll/ Yating Chang

Communication of GEARE acceptance; Maintain student records; Facilitate internships; Send email updates, Teach orientation course; Administer program assessment; Network with GEARE alumni; Coordinate with various units

Communication of study abroad approval and admission to exchange university at 5th Semester

Programs for Study Abroad

Communication of GEARE participation to study abroad at 5th Semester
# GEARE Coordinators and Assistants

**AAE**
- Bill Anderson 62658  wanderso@purdue.edu
- Marc Williams 45137  wiliams@purdue.edu

**ABE**
- John Lumkes 41173  lumkes@purdue.edu
- Martin Okos 41211  okos@purdue.edu

**BME**
- Andrew Brightman 63537  aob@purdue.edu
- Jeremy Hale 47871  hale2@purdue.edu

**CHE**
- Jim Litster 40756  jlitster@purdue.edu
- Zoltan Nagy 40734  zk nagy@purdue.edu

**CE**
- Marta Lah 62379  mlah@purdue.edu
- Becky Hull 62379  bhull@purdue.edu

**ECE**
- Jeff Gray 43390  gravi@purdue.edu
- Cindy Quillen 43391  cquillen@purdue.edu

**IDE**
- Philip Wankat 47422  wankat@purdue.edu

**EEE**
- John Sutherland 69697  jwsuther@purdue.edu
- Tammi Thayer 67238  thayert@purdue.edu

**IE**
- Pat Brunese 49611  pbrunese@purdue.edu
- Vince Duffy 66658  duffy@purdue.edu

**MSE**
- Vicki Cline 44103  vicline@purdue.edu

**ME**
- Chuck Krousgrill 45738  krousgrri@purdue.edu
- Jerry Matthews 45702  jmatthew@purdue.edu

**NE**
- Anter El-Azab 66864  aelazab@purdue.edu
- Chrystal Randler 45749  crandler@purdue.edu