

BUILDING CAPACITY [§]GLOBAL LEARNING

NAFSA

Association of International Educators



Learning to Work Across Cultures at Home and Abroad: Formats and Best Practices

Brent K. Jesiek, Ph.D. (bjesiek@purdue.edu) Associate Professor, Purdue University



Source: Educating Globally Competent Difference Makers: A Report of the Global Competency Task Force, Purdue University (2015)

Pathways for Global Learning

Experiential/Going Abroad

- Global Service Learning*
- Global Research Experience
- Global Work Experience
- Study Abroad Short-term
- Study Abroad Long-term

Other Curricular Elements

- Global Credits (akin to Honors Credits)
- Certificates and/or Minor

Curricular/On Campus

- General Ed. Requirements
- Free/Unrestricted Electives
- Embedded Outcomes
- Professional Seminar Courses
- Global Learning Community
- Co/Extracurricular Activities*
- Engineering Courses
 - Course modules, assignments

International Educators

- Team/group assignments
- Capstone projects
- Labs

* May involve on and/or off campus experiences

Toward 100% Global Competency in Engineering: Vision and Targets

Broadly, have 100% of students participating in at least 1-2 targeted interventions every year while at Purdue. Specifically:

- Increase number of first-year engineering students who have at least one experience working on a diverse multi-national/cultural project team and/or global design project from current level of about 75% to <u>95% or greater</u>.
- Increase coverage of intercultural effectiveness and related topics to <u>100%</u> of all professional seminar courses offered in the College of Engineering.
- Provide diverse teaming experiences and/or exposure to intercultural effectiveness and related topics in <u>at least 33%</u> of core engineering courses.
- <u>At least 50%</u> of students completing senior/capstone projects will work as members of diverse multi-national/cultural teams, and/or work on projects with global/international design dimensions.
- Increase participation in off-campus global programs (i.e., those involving study, research, work, and service abroad) from 22% to at least 33%.



International Educators

Global Engineering Studies Minor at Purdue University



Core Requirements

- ENGR31000 Engineering in Global Context (3 cr, Fall/Spring)
- ENGR49700 Global Engineering Re-entry (1 cr, Fall/Spring)

Global Engineering Experience – Choose any two:

- Engineering Term Abroad (ETA) One term, 6+ cr. of technical coursework
- Departmental Study Abroad Short-term engineering study abroad, 3+ cr.
- International Engineering Internship At least 2+ months duration
- Research Abroad One term of research abroad (inc. summer programs)
- International Engineering Design Project EPICS, GDT, Capstone; 2+ cr.

Other Global Experience – Choose one, OR a third GEE:

- Traditional Study Abroad One term study abroad (non-technical)
- Language Proficiency 12 credits up to 202 level, non-native
- Cultural Knowledge 12 credits of approved coursework



Learning Community: Global Engineering Cultures & Practice

Structure and Main Features

- Program specifically for first-semester engineering students
- Seek roughly even mix of domestic and international students
- Optional residential component (50-75% typically opt in)
- Students co-enrolled in the following courses:
 - ENGR10300 Global Engineering Practice & Design (seminar, 1 cr)
 - ENGR13100 Ideas to Innovation I (required course, 2 cr)
 - ENGL106/106I First-Year Composition (required course, 3 cr)

•Other activities including study tables, field trips, semester showcase

Best Practices for Global Learning in STEM Fields (and beyond)

- Provide frequent opportunities for reflection and mentoring
- Multiple studies show larger gains in intercultural learning for students who work closely with a mentor and/or participate in structured reflection activities
- Many examples of effective reflection models, prompts, activities, etc.
- Leverage established frameworks for intercultural learning
- Developmental Model of Intercultural Sensitivity (DMIS) and Intercultural Development Inventory (IDI), including group and individual debriefs with QA
- Hofstede's Cultural Dimensions Theory and 6-D model of culture
- Meaningfully integrate disciplinary and cultural learning
- Sample learning outcome from ENGR30100 course: "Recognize how national differences are important in engineering work, including by comparing and contrasting different national histories, cultures, and styles of engineering"



International Educators