Global Engineering Studies Minor

The Global Engineering Studies Minor allows you to document significant demonstrated global experiences and professional growth while at Purdue.

To qualify for this Minor, you will participate in a comprehensive program integrating on-campus and international/global experiences. To earn the Minor, you must complete a minimum of three (3) credit-hours of global engineering-related coursework plus one (1) credit-hour of ENGR 49700 – GEARE or Global Engineering re-entry/Minor capstone course. Students completing a signature LEAP (Long-term Engineering Abroad Program) or the GEARE program are only required to complete a sequence of three, 1-credit courses as explained below. In addition, you will complete a) any TWO options from the Global Engineering Experience (GEE) category listed below, and any ONE option from the second category (Other Global Experience); OR b) any THREE options from the GEE category.

Core Requirements
Choose from the following options

GEARE students:

- **ENGR 29700** – GEARE Global Engineering Orientation (1 credit-hour)
- ENGR 39700 – GEARE seminar; completed while abroad (1 credit-hour)
- ENGR 49700 – GEARE re-entry course (1 credit-hour)

NON-GEARE students completing a signature LEAP (Asia Pacific, Latin America, or Spain programs):

- **ENGR 29700** Global Engineering Orientation – Please enroll in the class section related to your LEAP: Asia Pacific or Latin America/Spain.
- COM 30301: Sentio Global Competence Certificate; completed while abroad (1 credit-hour)
- **ENGR 49700** – Global Engineering Re-entry/Minor capstone course (1 credit-hour)

NON-GEARE students without a signature LEAP:

- **ENGR 31000** - Engineering in Global Context (3 credit-hours)

OR **ENE 55400** - Globalization and Engineering (3 credit-hours)

OR **ENGR 10300**: Innovations for the Global Grand Engineering Challenges (1 credit-hour) **PLUS** one of the following:

- GEP 20000: Research and Design for the Global Grand Engineering Challenges (2 credit-hours)
- ENGR 29600: Cross-Cultural Leadership Skills for Engineers (2 credit-hours)

All non-GEARE students completing the minor without a signature LEAP must also take:

- **ENGR 49700** – Global Engineering Re-entry/Minor capstone course (1 credit-hour). This course involves preparation and presentation of final, culminating documentation of your global experiences and competency development while fulfilling the Minor requirements. You will create an electronic global engineering portfolio or a poster.
You are strongly encouraged to declare your intent to pursue the Minor during your second year at Purdue, and start completing some of the related coursework prior to any travel-based experiences (e.g., study, work, or research abroad). Detailed instructions and guidelines will be provided to you upon entry to the Minor. For questions about the minor, please contact gep@purdue.edu.

**Elective Requirements**

**Global Engineering Experiences (GEE) - Choose any two**

**LEAP**: Long-Term Engineering Abroad Program. One term of Purdue-approved study abroad program with 6 or more credits of engineering-related coursework at a strategic global university partner. NOTE: the signature LEAPs are showcased on this page and include East Asia, Latin America and Spain programs.

**STEP-Abroad**: Short-Term Engineering Program Abroad. A short-term study abroad experience offered by the College of Engineering, typically occurring during winter break, spring break, or Maymester. The program must involve enrollment in three (3) or more engineering credits.

**SURGE**: Summer Undergraduate Research in Global Engineering. See program’s page for current SURGE offerings. The duration of these programs is usually two or more months and they take place at strategic university partners worldwide.

**International Engineering Internship**: An international internship at a strategic global industry partner or under the auspices of a global organization, of duration two or more months.

**GEARE Research Term Abroad**: One term of research abroad (e.g., as in the Hannover or Clausthal programs).

**International Engineering Design Project**: Successful participation in at least 2 credits of project work with a global partner. The key objective is to enable and recognize the intense, personal experience of working with students and/or professionals from a different culture over an extended period of time on a project where the global context of the work is essential. As part of the project work, students must submit a written technical report and/or give an oral presentation. Most students will meet this requirement through participation in Global Design Teams (GEP 10000-GEP 40000), global EPICS (EPCS 10100-EPCS 41200), or a senior capstone project.

**Other Global Experience - Choose one, OR select a third option from the GEE list**

**Non-Engineering Study Abroad Experiences**: Participating in any traditional Purdue-approved study abroad program. These are programs offered by a different college at Purdue, for example, a summer study abroad program in Madrid offered by the Spanish department to earn Spanish credits and learn about the culture.

**Language Proficiency**: Demonstrate proficiency in a second language up to the 202 course level in at least one non-native language. The 12 credit-hour requirement includes credits established by examination. This requirement will normally be completed before you participate in study or professional practice experiences abroad. Note: a total of 3 credit-hours of language must be taken at the Purdue-WL campus.

**Cultural Knowledge**: Demonstrate proficiency in an understanding of cultures by completing 12 credits of coursework in culture-oriented courses (see appendix A below). A total of 6 credit-hours can include credits established by examination. Note: a minimum of 6 credit-hours must be taken at the Purdue-WL campus.

**Language and Cultural Knowledge combo**: Demonstrate proficiency in an understanding of cultures by completing 12 credits of coursework in a second, non-native language and/or in culture-oriented courses (see appendix A below). For instance, you can complete 6 credit-hours of a second language and 6 credit-hours of a culture-oriented course; or 9 credit-hours of a language, plus 3 credit-hours of a culture-oriented course. Note: a minimum of 6 credit-hours must be taken at the Purdue-WL campus.

**Other Requirements**

**Grades**: A grade of "C" or better in all courses that are counted toward the minor.
Notes

1 Students who leave the GEARE program without completing the global internship/research requirement may still be able to complete the Global Engineering Studies Minor. For details see: "Completing the Global Engineering Studies Minor after withdrawing from GEARE."

Appendix A: Cultural Knowledge Courses

NOTE: This is a representative rather than complete list of Cultural Knowledge courses. For questions, please contact gen@purdue.edu.

African

HIST 21000 - The Making Of Modern Africa
HIST 44100 - Africa In The Twentieth Century

Arabic

ARAB 23000 - Arab Women Writers
ARAB 28000 - Arabic Culture
HIST 24300 - South Asian History And Civilizations
HIST 24600 - Modern Middle East And North Africa

Chinese

CHNS 28000 - Topics in Chinese Civilization and Culture
HIST 34000 - Modern China
HIST 24100 - East Asia In The Modern World
HIST 35900 - Gender In East Asian History

Classics

GREK 10200 - Ancient Greek Level II
GREK 20200 - Ancient Greek Level IV

European

HIST 10300 - Introduction To The Medieval World
HIST 10400 - Introduction To The Modern World
HIST 32900 - History Of Women In Modern Europe
HIST 33700 - Europe In The Age Of The Cold War
HIST 40300 - Europe In The Reformation
HIST 41300 - Modern European Imperialism: Repression and Resistance

French

FR 33000 - French Cinema
HIST 40500 - The French Revolution And Napoleon
German

GER 28000 - German Special Topics
HIST 32300 - German History
GER 323: German for Science and Engineering

Italian

ITAL 28100 - The Italian Renaissance And Its Impact On Western Civilization
ITAL 33000 - The Italian Cinema
ITAL 33300 - The Spirit Of Italian Comedy
ITAL 33500 - Italian-American Cinema

Japanese

JPNS 28000 - Introduction To Modern Japanese Civilization
HIST 34300 - Traditional Japan
HIST 34400 - History Of Modern Japan

Latin American

HIST 27100 - Introduction To Colonial Latin American History (1492-1810)
HIST 27200 - Introduction To Modern Latin American History (1810 To The Present)

Russian

RUSS 33000 - Russian And East European Cinema

Spanish

SPAN 33000 - Spanish And Latin American Cinema
SPAN 398: Spanish for Engineering and Technology