

Office of the Provost

Office of the Provost

Burton D. Morgan Center for Entrepreneurship

Certificate

Entrepreneurship and Innovation Certificate

About the Program

This Certificate in Entrepreneurship and Innovation Program teaches students in **all academic majors** how to turn their innovative ideas into action. Through courses and experiential programs, students learn how to put their creativity to work in the development of products, technologies and organizations that create value in society.

As a participant in Purdue's largest cross-campus program, students will:

- Learn how to identify, evaluate and develop new venture opportunities
- Develop viable business models through market research and financial analyses
- Acquire the business literacy and professional skills demanded by all employers in the contemporary economy

Designed like a minor, the program is administered through the Office of the Provost and is governed by a faculty advisory committee representing each of Purdue's colleges. It is housed in the Burton D. Morgan Center for Entrepreneurship in Discovery Park.

Certificate in Entrepreneurship and Innovation Website

Requirements for the Certificate (15 credits)

Purdue's Certificate in Entrepreneurship and Innovation Program is designed with flexibility in mind.

To participate in the Program, students simply need to enroll in the first required core course, ENTR 20000.

In some cases, students will be permitted to substitute an additional capstone for one of the required option courses. A grade of C- or higher is required for ENTR designated courses.

Required Core Courses (6 credits)

The intent of required core courses is to provide students with fundamental language, knowledge, leadership and communication skills related to entrepreneurship and innovation. The content in these courses answer the questions "what is entrepreneurship" and "how do you do entrepreneurship". These required courses are offered solely by the Certificate in Entrepreneurship and Innovation Program.

- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures (pre-req ENTR 20000) or

- ENTR 31500 - Business Planning For Social Entrepreneurship (pre-req ENTR 20000)

Option Courses - Choose Two (6 credits)

The intent of option courses is to provide students with discipline or industry/market-specific depth in areas which are relevant to entrepreneurship and/or innovation. Option courses are offered by departments across the university as well as the Certificate in Entrepreneurship and Innovation Program.

Entrepreneurship and Innovation Certificate Option Course List

Capstone Courses or Experiences- Choose One (3 credits)

The intent of capstone courses or experiences is to provide students with hands-on, real-world, entrepreneurial or innovation related experiences, which can include developing business plans for new business ventures, or involvement in product innovation and technology commercialization processes. Capstone courses and experiential programs are offered by departments across the university as well as the Certificate in Entrepreneurship and Innovation Program.

Entrepreneurship and Innovation Certificate Capstone Course List

Notes

- ENTR designated courses may be contracted to fulfill Honors courses requirements.
- For more information contact: Rita Baker, Coordinating Academic Advisor, 765-496-7912, bakerr@purdue.edu

Disclaimer

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Information and Library Science

Purdue Systems Collaboratory

See [Systems Certificate](#) for more information about the certificate.

[Purdue Systems Collaboratory website](#)

Certificate

Systems Certificate

About the Program

The purpose of the Certificate in Systems is to educate undergraduate students with a set of cognitive competencies, tools and methods that can be applied to a broad range of complex and challenging issues. The graduates of the program will be well prepared to create and execute transdisciplinary processes that result in systems responsive to stakeholders' needs. The program has three dimensions:

- **Convergence of Knowledge:** Students learn about foundational principles that span the different system domains, identifying common principles for systems, akin to the natural laws governing physical sciences. This is an essential step in furthering the ability to model, design, and manage complex systems.
- **Human Dimension:** Students practice advanced human-centric methods to build systems for large-scale societal applications, and methods to support decision-making for designing and operating complex systems.
- **Systems Perspective:** The certificate focus is on educating "systems thinkers". Students will be trained in liberal arts, mathematical concepts, the latest in computational architectures and tools, understanding human decision-making, policy, and exposed to the complexities of functioning in a globally distributed real- world enterprise.

Purdue Systems Collaboratory Website

Requirements for the Certificate (15 credits)

Required Courses (9 credits)

- SYS 30000 - It's A Complex World - Addressing Global Challenges
- SYS 35000 - Systems Theories And Approaches
- SYS 40000 - Science And Technology Policy

Supplemental Courses -Choose Two (6 credits)

- Systems Certificate Supplemental Courses List

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Office of Professional Practice

Minor

Global Engineering Studies Minor

The Global Engineering Studies Minor is designed for engineering students to be able to document significant demonstrated global experience and professional growth while at Purdue.

To qualify for this Minor, students will participate in a comprehensive program integrating substantial on-campus and international (non-native) experiences. To earn the Minor, students must complete ENGR 31000 - Engineering In Global Context as a core requirement. They will also select and complete: a) any TWO options from the first (Global Engineering Experience) category listed below, and any ONE option from the second (Other Global Experience) category, OR b) any THREE options from the first category (Global Engineering Experience). As a final core requirement, students must enroll in and complete ENGR 49700 - Global Engineering Re-Entry.

Requirements for the Minor

Core Requirements

- **ENGR 31000 - Engineering In Global Context** - Students are strongly encouraged to take this course within a year of declaring their intent to pursue the Minor, and prior to any travel-based experiences (e.g., study, work, or research abroad). Students permitted to take ENE 55400 (Globalization and Engineering) may use it as a substitute for this course. Students in the GEARE program may substitute ME 29700 (Global Engineering Orientation - GEARE) for this course.*
- **ENGR 49700 - Global Engineering Re-Entry** - Involves preparation and presentation of final, culminating documentation of the student's experiences and competency development while fulfilling the Minor requirements, such as in the form of an electronic portfolio or poster. Detailed instructions and guidelines related to this requirement are provided to students upon entry to the Minor. For questions about enrolling in ENGR49700, please contact gep@purdue.edu.

Elective Requirements

Global Engineering Experience - Choose Two

- **Engineering Term Abroad** - One term of study abroad with 6 or more credits of engineering-related coursework at a strategic global university partner. The list of strategic global university partners is maintained and continuously updated by the Global Engineering Program Team (GEPT).
- **Departmental Study Abroad** - Short-term study abroad experience offered in the College of Engineering, typically occurring during winter break, spring break, or summer. Must involve enrollment in 3 or more credits.
- **International Engineering Internship** - One international internship at a strategic global industry partner or under the auspices of a global organization, of duration two or more months. The list of the strategic industry partners and global organizations is maintained and continuously updated by the Global Engineering Program Team (GEPT).
- **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 global 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.

- **Traditional Study Abroad** - One term of any traditional study abroad program is acceptable for this option.
- **Language Proficiency** - Demonstrate proficiency in a second language up to the 202 course level in at least one non-native language. The 12 credit requirement include credits established by examination. The 12 credits of language courses will normally be completed before the student participates in study or professional practice experiences abroad.
- **Cultural Knowledge** - Demonstrate proficiency in an understanding of cultures by completing 12 credits of coursework in culture-oriented courses. The 12 credits can include credits established by examination, but at least 6 of the 12 credits must be taken at Purdue-West Lafayette. A list of approved Cultural Knowledge courses appears as Appendix A below, and will be reviewed and updated annually to reflect ongoing changes in course availability.

Appendix A: Cultural Knowledge Courses

This is a representative rather than complete list of Cultural Knowledge courses. If you have questions about whether other courses qualify, contact Prof. Jim Jones (jonesjd@purdue.edu).

African

- HIST 21000 - The Making Of Modern Africa
- HIST 34100 - History Of Africa South Of The Sahara
- HIST 34200 - Africa And The West
- HIST 35700 - History Of Southern Africa Since 1400
- HIST 36101 - Violence, War, And Militarism In Modern Africa
- HIST 43000 - Women In African History
- HIST 44100 - Africa In The Twentieth Century

Arabic

- ARAB 23900 - Arab Women Writers
- ARAB 28000 - Arabic Culture
- ARAB 33400 - North African Literature And Culture
- HIST 24300 - South Asian History And Civilizations
- HIST 24500 - Introduction To The Middle East History And Culture
- HIST 24600 - Modern Middle East And North Africa
- HIST 36000 - Gender In Middle East History
- HIST 45500 - Modern Iraq

Chinese

- CHNS 28000 - Topics in Chinese Civilization and Culture
- HIST 33900 - Traditional China
- HIST 34000 - Modern China
- HIST 43900 - Communist China
- HIST 24100 - East Asia In The Modern World
- HIST 35900 - Gender In East Asian History

Classics

- CLCS 33900 - Literature And The Law
- CLCS 38100 - Julius Caesar: Statesman, Soldier, Citizen

- CLCS 48000 - Potters And Society In Antiquity
- GREK 10200 - Ancient Greek Level II
- GREK 20200 - Ancient Greek Level IV
- GREK 44600 - Greek Historians
- LATN 44300 - Roman Satire

European

- HIST 10300 - Introduction To The Medieval World
- HIST 10400 - Introduction To The Modern World
- HIST 31200 - The Crusades
- HIST 31700 - A History Of The Christian Church And The Expansion Of Christianity I
- HIST 31800 - A History Of The Christian Church And The Expansion Of Christianity II
- HIST 32000 - The World Of Charlemagne
- HIST 32200 - Monarchy: Its Rise And Fall
- HIST 32700 - The Habsburg Legacy: Central Europe, 1500-2000
- HIST 32800 - History Of Women In Renaissance Europe
- HIST 32900 - History Of Women In Modern Europe
- HIST 33000 - History Of The British Empire And Commonwealth, 1783 To 1960
- HIST 33700 - Europe In The Age Of The Cold War
- HIST 40300 - Europe In The Reformation
- HIST 40400 - Kings And Philosophers: Europe 1618-1789
- HIST 40600 - Rebels And Romantics: Europe 1815-1870
- HIST 40800 - Dictatorship And Democracy: Europe 1919-1945
- HIST 41100 - The Four Horsemen Ride: Crisis And Change In Europe 1300-1648
- HIST 41200 - The Cultural History Of The Middle Ages
- HIST 41300 - Modern European Imperialism: Repression and Resistance
- HIST 41800 - European Society And Culture 1450-1800

French

- FR 33000 - French Cinema
- HIST 32400 - Modern France
- HIST 40500 - The French Revolution And Napoleon

German

- GER 28000 - German Special Topics
- HIST 32300 - German History
- HIST 42300 - Advanced Topics In Modern Germany

Hebrew

- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 39001 - Jews In The Modern World: A Survey Of Modern Jewish Society, Culture, And Politics

Italian

- ITAL 23100 - Dante's Divine Comedy
- ITAL 28100 - The Italian Renaissance And Its Scientific And Cultural 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)

Portuguese

- PTGS 33000 - Brazilian, Portuguese, And African Cinema

Russian

- RUSS 33000 - Russian And East European Cinema
- HIST 39100 - History Of Russian Popular Entertainment

Spanish

- SPAN 23100 - Cervantes' Don Quixote
- SPAN 23500 - Spanish American Literature In Translation
- SPAN 33000 - Spanish And Latin American Cinema
- HIST 42700 - History Of Spain And Portugal
- HIST 47200 - History Of Mexico

Notes

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

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