INTERNATIONAL INITIATIVES

Faculty, staff and students operate in a competitive global marketplace. Through strategic investments and targeted collaborations, The Ohio State University College of Engineering is positioned to be a leader in international engineering education and research.

INTERNATIONAL PARTNERSHIPS

The College of Engineering has formalized agreements with universities, research centers and industry partners in 17 countries on five continents.

- **Argentina**: National Scientific and Technical Research Council
- **Australia**: University of Queensland
- **Brazil**: Univers. Federal de Campina Grande
- **China**: Dalian University of Technology, Nanjing University, Shanghai Jiao Tong University, Shanghai Nuclear Engineering Research and Design Institute, Tianjin University, University of Science and Technology of China, Xi’an Jiao Tong University
- **Colombia**: Universidad de Nariño
- **Egypt**: Cairo University
- **France**: École Nationale Supérieure de Mécanique et d’Aérotechnique
- **Germany**: Forschungsinstitut für Kartfahrwesen und Fahrzeugmotoren Stuttgart, University of Stuttgart
- **India**: Aligarh Muslim University, Indian Institute of Technology Bombay, Indian Institute of Technology Delhi, Indian Institute of Technology Kanpur, International Center for Automotive Technology
- **Italy**: Politecnico di Milano, Politecnico di Torino, University of Pisa, University of Salerno
- **Japan**: National Institute of Technology at Suzuka College
- **Korea**: Korea Aerospace University
- **Pakistan**: M A Jinnah University Controls and Signal Processing Research Group
- **Poland**: Warsaw Technical University and Institute of Aviation
- **South Africa**: Nelson Mandela Metropolitan University
- **Tanzania**: University of Dodoma
- **Thailand**: Chulalongkorn University

INTERNATIONAL DUAL DEGREE PROGRAMS

The College of Engineering is a leader in establishing dual degree programs with partner universities worldwide.

The programs give students the opportunity to collaborate with faculty at both participating universities through coursework and research. Upon completion, students earn two degrees, one from each university.

**Combined Degree (BS/MS) Program**

Students from the partner university spend all or part of their senior year at Ohio State taking courses that will count toward the BS from their home institution as well as toward the MS degree from Ohio State.

Currently, the Department of Electrical and Computer Engineering offers this dual degree option to students from Shanghai Jiao Tong University (SJTU) and Xi’an Jiao Tong University (XJTU) in China.

**Dual MS Program**

Admitted students spend time at both their home institution and the partner institution taking coursework and/or conducting research. This culminates in the student being awarded two MS degrees, one from each institution.

Currently, this dual degree option is offered to students in the aerospace engineering programs at Ohio State and École Nationale Supérieure de Mécanique et d’Aérotechnique.

**Dual PhD Program**

Admitted students spend time at both their home institution and the partner institution taking coursework and conducting research under the supervision of a joint committee of faculty from both institutions and a dissertation advisor at each institution. This culminates in the student being awarded two doctorates, one from each institution.

Currently, this dual degree option is offered to materials science and engineering students at Ohio State and Shanghai Jiao Tong University and to aerospace engineering students at Ohio State and the Institute of Aviation in Warsaw.
UNDERGRADUATE GLOBAL EDUCATION PROGRAMS

Students of the 21st century need to be prepared to practice engineering in a global environment and recognize the vital importance of active global citizenship.

Undergraduate students are afforded many unique opportunities to globalize their engineering education here at Ohio State. Whether examining the global impact of engineering decisions, researching biomedical optics in China, coming up with solutions for sustainable food production in Honduras, or setting speed records on the Isle of Man, Buckeye engineers are venturing beyond the classrooms and the labs of Columbus and finding success in every corner of the globe.

GLOBAL OPTION IN ENGINEERING

The Global Option in Engineering (GO ENGR) program infuses global competencies into the undergraduate engineering curriculum and involves course selections with global perspectives as part of the various engineering degree programs.

GO ENGR educates students on the impact of global cultural diversity on engineering decisions. Students plan an undergraduate engineering curriculum with elements related to international themes and global dimensions without adding time to graduation by selectively using credit hours already required for their chosen engineering major. Upon successful completion, students receive an Engineering Global Option designation on their transcript.

HUMANITARIAN ENGINEERING AND INTERNATIONAL SERVICE LEARNING

Humanitarian engineering is the creation of technologies that help people. The college’s Center for Humanitarian Engineering, its Humanitarian Engineering Minor and its array of international engineering service learning programs provide students with academic and in-country experiences designed to introduce and teach the concepts of humanitarian engineering through practical, hands-on experiences.

These programs consist of a semester-long course in which students assess needs, and then research, design, develop and document various projects that are implemented during a separate one- or two-week in-country experience.

ENGINEERING GLOBAL COMPETENCIES

1. Understand impact of global cultural diversity on engineering decisions.
2. Deal with ethical issues arising from cultural or national differences.
3. Communicate across cultural and linguistic boundaries.
4. Work in ethnically and culturally diverse teams.
5. Understand the connectedness of the world and the workings of the global economy.
6. Understand international aspects of engineering topics
7. Possess familiarity with the history, governments and economic system of targeted countries.

ENGINEERING ABROAD PROGRAMS

Each academic year, more than 300 College of Engineering students venture abroad to nearly 40 countries on six continents, enhancing their understanding of the world and the international dimensions of engineering.

To support this student interest, and create immersive and impactful experiences, the College of Engineering sponsors a growing number of both short-term and semester-length engineering abroad programs. Short-term programs last anywhere from 10 days to one month and are credit-bearing, faculty-led and discipline-specific education abroad courses. This format combines classroom instruction with hands-on application of engineering principles in a global setting.

The college also offers an increasing number of semester-length programs with partner universities around the globe. Currently, Ohio State engineering students have the opportunity to enroll full-time in upper-level, major-specific engineering courses (taught in English) at select partner universities in Europe, Asia and Oceania. These transfer credits are pre-approved for application to the major, allowing participating students to maintain their pace toward graduation.

Through a combination of faculty-led short-term programs, student exchange programs or direct-enroll opportunities, Ohio State engineering students are networking with peers across the globe, developing global competencies necessary for success and making a difference worldwide.

CONTACT

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