DIVISION OF ENGINEERING LEADERSHIP AND PROFESSIONAL PRACTICE

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The Division of Engineering Leadership and Professional Practice (http://engineering.case.edu/delpp/) (DELPP) designs, develops and administers programs and opportunities which complement and enhance the curricular offerings in the Case School of Engineering.

The DELPP staff is committed to serving all engineering undergraduate and graduate students. We work closely with students, faculty, staff, and off-campus organizational representatives to deliver experiences designed to promote excellence in engineering education.

Mission

The mission of the Division of Engineering Leadership and Professional Practice is to support, through teaching and educational research, the Case School of Engineering’s educational programs, student programs, and outreach activities at all academic levels: PreK-12, undergraduate, graduate, and continuing education.

The activities supported by DELPP include optional academic programs that enhance the engineering curriculum, such as Cooperative Education and the Dual Degree undergraduate programs, as well as global programs, leadership exposure and opportunities, and professional practice.

Cooperative Education for Undergraduate and Graduate Engineering Students

Undergraduate Cooperative Education (https://engineering.case.edu/coop/) is an academic program that enables students to alternate classroom studies with career-based experiences in industry. It is a learning experience designed to integrate classroom theory with practical experience and professional development. Co-op is a paid full-time work experience designed to maximize the student’s education. Co-op assignments are typically for a seven-month period consisting of a summer and a contiguous spring or fall semester. Co-op is available to students who have completed 4-5 semesters of coursework, are in good academic standing, registered as a full-time student, and pursuing a degree in engineering, engineering physics, or computer science. Registration in this course will serve to maintain full-time student status for the period of time that the student is on a co-op assignment.

Graduate Cooperative Education (https://engineering.case.edu/coop/) is an academic program designed for graduate students to enhance their classroom, laboratory, and research learning through participation and experience in various organizational/industrial environments where theory is applied to practice. Co-op is a paid full-time work experience for one seven-month period. Students must obtain approval from their academic advisor prior to accepting a co-op position. Graduate cooperative education experiences may be integrated with the student’s thesis or research project areas, or be solely for the purpose of gaining professional experience related to the student’s major field of study. Registration in this course will serve to maintain full-time student status for the period of time the student is on a co-op assignment. A large variety of companies hire and train the co-op students providing quality and challenging experiences.

For additional information, please contact Genine Apidone (genine.apidone@case.edu) 216.368.5024.

Dual Degree (3+2) Engineering Program

The Dual Degree (3+2) Engineering Program (https://engineering.case.edu/academics/dual-degree-program/) enables superior undergraduate students, enrolled at approximately forty participating liberal arts colleges in the continental United States and Puerto Rico, to combine a strong liberal arts foundation with the study of engineering. While enrolled at a cooperating liberal arts college, students complete courses in mathematics, chemistry, physics, and computer science in addition to studies in the humanities and social sciences. Students complete these courses during their first three years and must obtain the approval of the designated faculty liaison at the liberal arts college prior to admission to the Case School of Engineering.

Qualified candidates continue at the Case School of Engineering for an additional two years of concentrated coursework in an engineering field. At the conclusion of five years, two baccalaureate degrees are awarded: one from the liberal arts college and the other in the Bachelor of Science in Engineering degree program from Case Western Reserve University.

For additional information, please contact Deborah Fatica (deborah.fatica@case.edu) or 216.368.4449.

Engineering Academic Community Engagement

The DELPP develops strategic and intentional programming designed to engage students and promote a strong and supportive campus community.

Joint activities with faculty, alumni, staff and corporate sponsors include, but are not limited to: leadership opportunities in Engineering student organizations including National Engineers Week and the Dean’s Student Advisory Committee, hands-on industry-sponsored design competitions, and networking and mentoring with alumni and faculty.

Center for Engineering Action

The mission of the Center For Engineering Action is to provide students with opportunities to participate in multi-disciplinary team-based design projects, research and coursework which focuses on advancing the public good through partnerships between local, regional, and global communities and Case Western Reserve University. We do this through:

• Supporting student organizations that focus on working with the vulnerable and underserved.
• Integrating service- and humanitarian-oriented experiential learning into the Case Western Reserve engineering curriculum.
• Cultivating and maintaining relationships with partner communities, organizations, and academic institutions.
• Communicating to the Case Western Reserve University community, and the public in general, the value and purpose of the Center's work.
• Promoting available service opportunities so all interested students can take advantage of them.
• Advancing the scholarship of service-learning from both technical and pedagogical points of view.
• Building capacity in partner communities and institutions by collaboration and training.

For additional information, please contact Lynn Rollins (Lynn.Rollins@case.edu).

Global Programs

Global Programs (http://engineering.case.edu/outside-classroom/global-opportunities/) offer international opportunities for engineering students ranging from study abroad to short-term programs, internships and cooperative education experiences, and research opportunities. Participation in global activities optimizes the student’s educational experience as well as contributes to their societal awareness. Exposure to global activities is a valuable asset for leadership positions within multinational corporations.

The Division of Engineering Leadership and Professional Practice designs and implements programs tailored to students’ interests. Currently, short-term cultural and language immersion programs are offered in the summer at various international universities, with more being established. Additional Engineering core courses are being taught abroad during the summer.

The Case School of Engineering hosts many students from various countries which enables students to learn about and interact with various cultures. New programs and opportunities continue to develop for students.

On the graduate level, the Case School of Engineering is establishing partnerships with top-ranked international universities to host 3+1+1 students. This program enables students to receive a bachelor’s degree from their home university along with receiving a master’s degree from the Case School of Engineering.

Approximately 80% of the Case School of Engineering faculty collaborate with over one hundred universities and organizations in over thirty countries spanning six continents.

For additional information, please contact Deborah Fatica (deborah.fatica@case.edu) or 216.368.4449.

Engineering Peer Advising Program

A staff of upper-class Engineering students, representing all Engineering majors, are available to advise undergraduate students on a drop-in basis in the Peer Advising Program (https://engineering.case.edu/content/peer-advising-program/).

Peer Advisors assist their fellow students at all stages in their college careers-helping them review major and minor selections, declare majors, review academic requirements, navigate dropping and adding courses, as well as offering recommendations and identification of other campus resources.

The Peer Advisors are selectively chosen to represent the various Engineering majors. They work in partnership with the Engineering Departmental Chairs and faculty. The Peer Advisors are extensively trained and are well prepared to answer questions and provide sound advice to their fellow students in terms of both general engineering and program-specific concerns.

All students are encouraged to stop by the Peer Advising Office in Nord, Room 316.

Envoys High School Program

The purpose of the Envoys Program is to increase access and persistence in STEM at CWRU for underrepresented minority students from the Cleveland and East Cleveland public schools.

Envoys is an immersive high school STEM education, training and college preparatory program. It includes:

• Three years and three summers of progressive and intensive research, mentorship and STEM coursework offered free of charge to students starting in grade 10 through grade 12.
• Coursework in chemistry, physics, math, engineering design and polymer science.
• Real-world laboratory research under the guidance of a graduate student mentor.
• Wrap-around supports, including industry mentors, leadership classes, tutoring and college-ready workshops.
• An annual stipend to help prevent Envoys students from having to work part-time.
• 1,400+ hours of individualized instruction above the normal high school curriculum.

Envoys, an innovative program for high school students, was developed at Case Western Reserve University as a vehicle for broadening participation in STEM fields through the NSF Science and Technology Center (STC) in Layered Polymeric Systems (CLiPS). The program continues in operation at CWRU with support from the university and investment from individual benefactors and philanthropic foundations. Special thanks to Mark Gelfand and the Gelfand Foundation for their support.

To learn more about the Envoys program, contact Tryreno Sowell (tns21@case.edu), Director for Education and Diversity.