

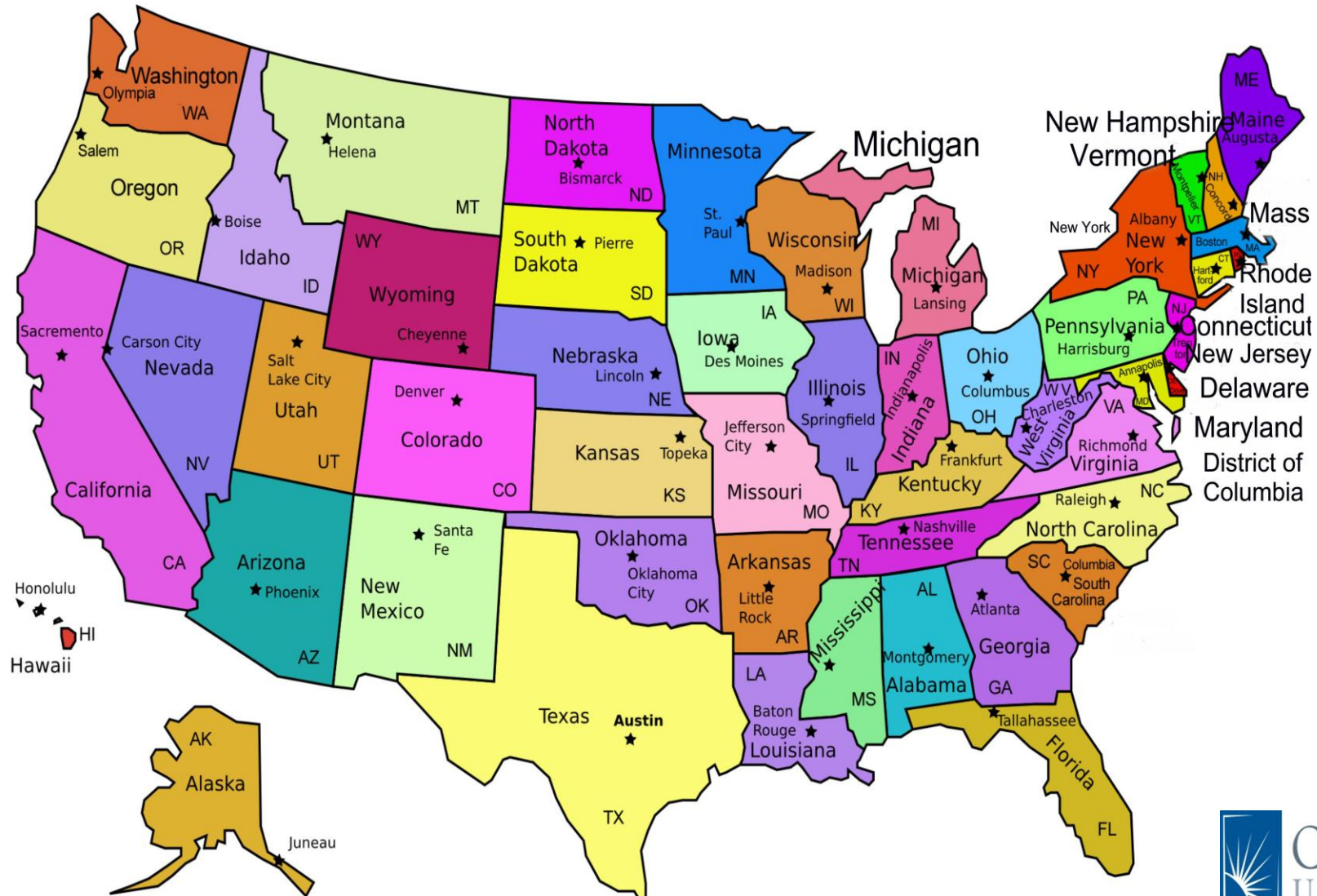
# Global E3 Annual Meeting 2014

## The Role of the Dean's Office in Facilitating with Departments to Integrate Study Abroad into the Curriculum

Debbie Fatica

Assistant Dean, Case School of Engineering  
Case Western Reserve University

# Where in the World is Case Western Reserve University?



# Where in the World is Case Western Reserve University?







Case Western Reserve University



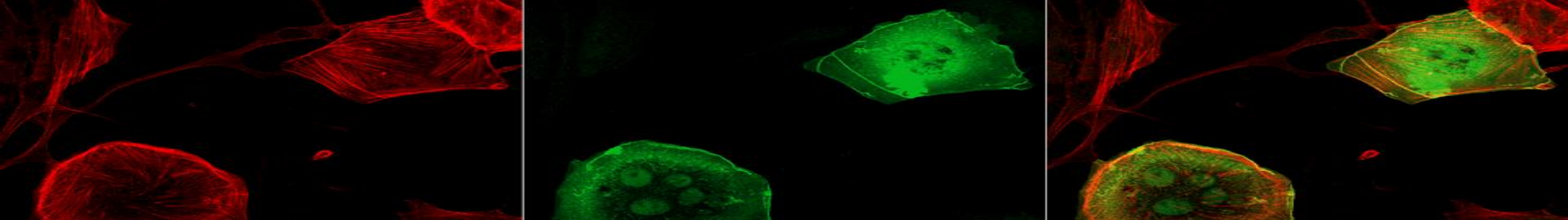


Founded in 1826

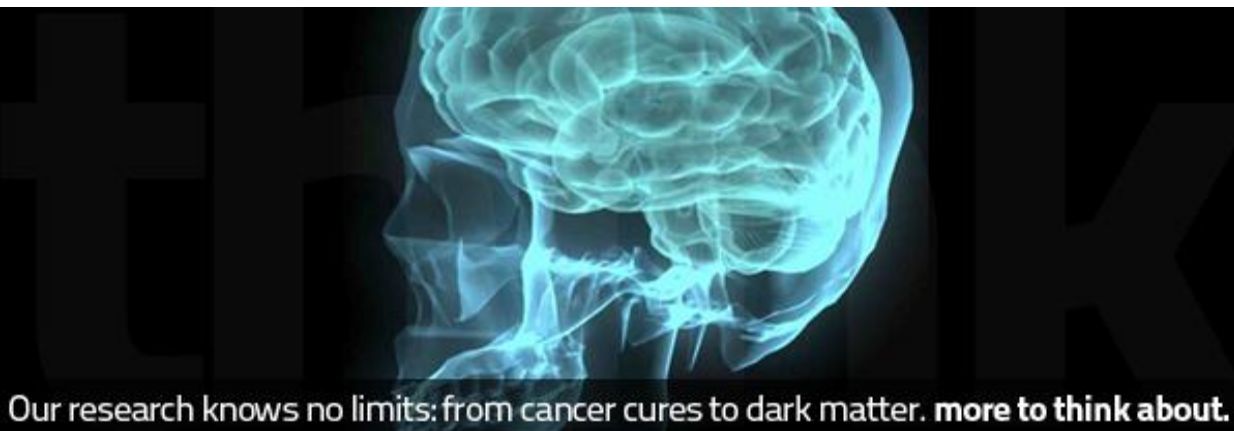


CASE WESTERN RESERVE  
UNIVERSITY EST. 1826

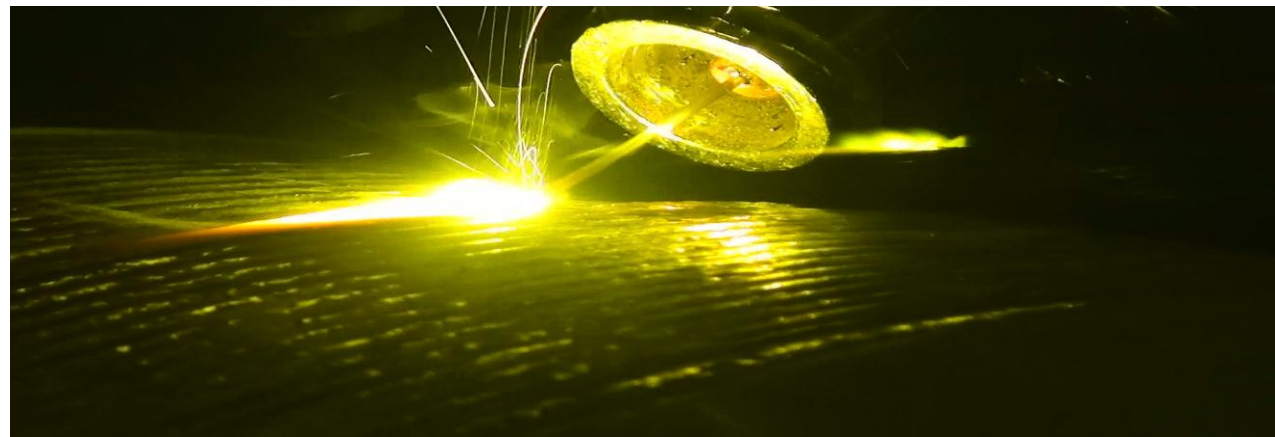




- ❖ Endowment of \$1.8 billion
- ❖ 100 designated academic and research centers receiving nearly \$400 million in external research awards each year.



Our research knows no limits: from cancer cures to dark matter. **more to think about.**



# Schools and Colleges

- ❖ Case School of Engineering
- ❖ College of Arts & Sciences
- ❖ Frances Payne Bolton School of Nursing
- ❖ Jack, Joseph, & Morton Mandel School of Applied Social Sciences
- ❖ School of Dental Medicine
- ❖ School of Graduate Studies
- ❖ School of Law
- ❖ School of Medicine
- ❖ Weatherhead School of Management

# CWRU Facts

- ❖ U.S. News and World Report, 2014 ranking for CWRU, 37 out of 280 national universities
- ❖ Ranked best university in the State of Ohio
- ❖ 15 Nobel Laureates
- ❖ 10,000 students total at University; 40% undergraduates
- ❖ Represent 50 States and over 100 countries



# Case School of Engineering

- ❖ U.S News & World Report Ranking 35<sup>th</sup>
- ❖ Undergraduate Students 1298 (6% International)
- ❖ Graduate Students 633 (52% International)
- ❖ National Academy of Engineers 37
- ❖ Research Revenues \$33.3 million
- ❖ Engineering Endowment \$224 million



# Departments and Majors:

Biomedical Engineering  
Chemical Engineering  
Civil Engineering  
Electrical Engineering & Computer Science  
    Computer Engineering  
    Computer Science  
    Electrical Engineering  
    Systems & Control Engineering  
Macromolecular Science & Engineering  
Materials Science & Engineering  
Mechanical & Aerospace Engineering  
    Aerospace Engineering  
    Mechanical Engineering

❖ Engineering Physics



# International Offerings

## Study Abroad:

Traditional study abroad, including GE3, offered out of Office of International Affairs

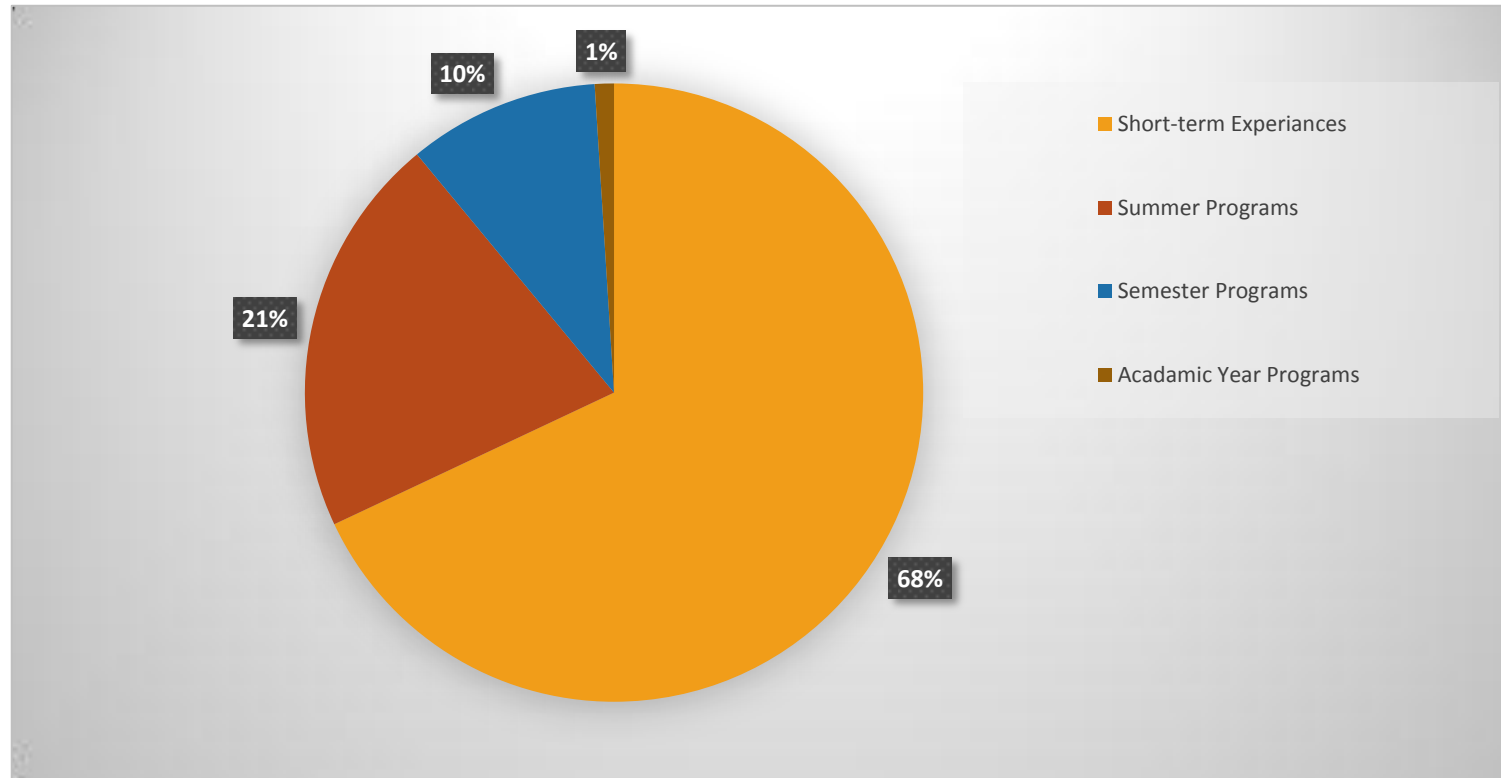
Executive Director, Molly Watkins



ENGR 225B at the University of Botswana, Africa



# Study Abroad 2012 – 2013 Academic Year



Of the students that study abroad, 30% are Engineers



# Engineering Courses

## **ENGR 225 – Thermodynamics**

University of Botswana

3-week intensive course intertwines engineering content with regional issues specific to sub-Saharan Africa

## **ENGR 484 – International Engineering Entrepreneurship**

U.S. Department of State recognized this course as the first U.S. college course in Myanmar Student participants are involved in the Masters of Engineering and Management Program

## **EECS 342 – Introduction to Global Issues**

Interact with students from 15 strategically selected universities to provide global coverage to UNESCO's Global-problematique Education Network Initiative (GENIE) in joint participatory scenario via the internet

## **ECHE 362 – Chemical Engineering Laboratory**

Summer laboratory in Chemical Engineering at the Technical University of Denmark



## **2+2 Programs**

Undergraduate programs in China and Taiwan

## **3+2 Programs**

Graduate programs with several countries



## **Summer Research Abroad**

Switzerland, Brazil, Sweden, China, etc.

## **Engineering Faculty Survey**

Partnerships in 33 countries and on 6 continents



## **Engineers Without Borders**

Students travel to Dominican Republic, Cameroon, Thailand



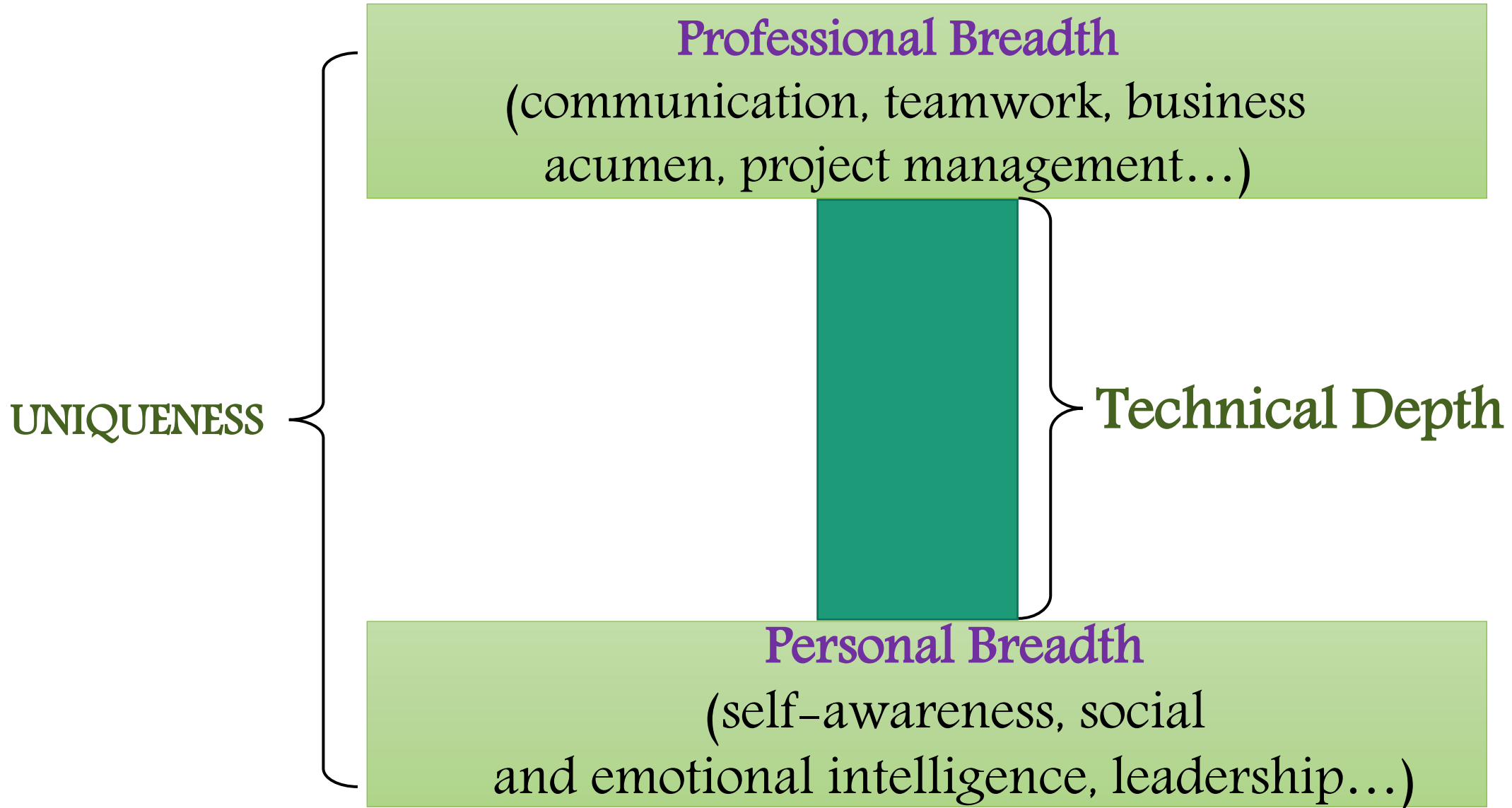
## ABET – Program Outcomes and Assessment

H) ... the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context



# The 21<sup>st</sup> Century Engineer

## I-Shaped Engineer





# The Future

- ❖ Global Faculty Liaisons in each Engineering Department
- ❖ Academic mapping of courses to optimal semesters and locations
- ❖ International summer internships and Cooperative Education experiences
- ❖ Increase Global Programs and Opportunities
- ❖ Survey Faculty for International Activities and Partnerships