

Experiences with International Internships and Co-op Programs

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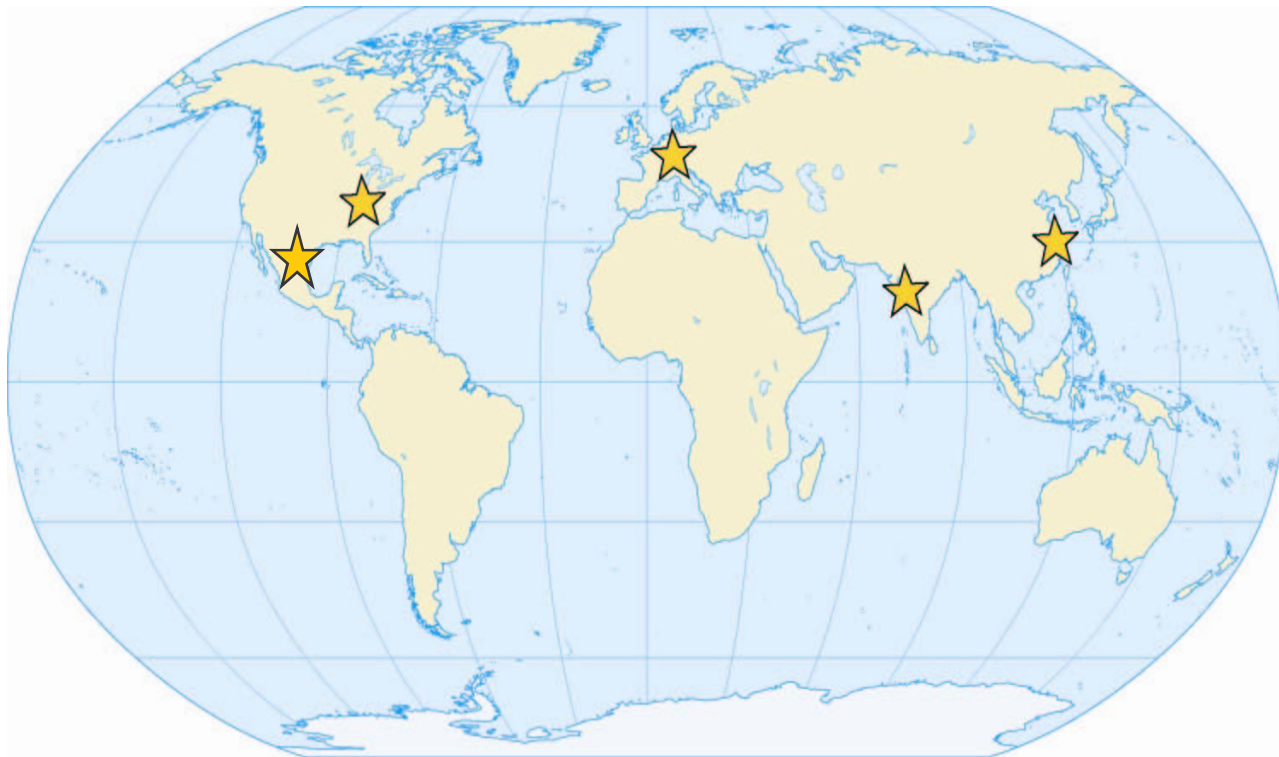


GEARE

Global Engineering Alliance
for Research and Education

Internship Placements

- USA
- Germany
- China
- India
- Mexico
- France



Industry Partners

● Partners

- » **Chrysler (China and Germany – Daimler before the split)**
- » **Cummins (China, Mexico, and India)**
- » **John Deere (Germany)**
- » **DOW (China and India)**
- » **Ford (Germany)**
- » **GM (China and Germany – Opel)**
- » **Shell (China)**
- » **Siemens (Germany and India)**
- » **United Technologies – Otis, Pratt & Whitney, Carrier (China, Germany, India)**

● Supporters

- » **GE (India & Germany)**
- » **Kimberly-Clark (Latin America)**
- » **Bosch (Germany)**
- » **Rolls-Royce (Germany)**

Role of Industry Partners

- Committed to help us globalize student experiences
- Offer suitable projects plus mentoring for the global design team courses
- Recommend students for the program from pool of interns
- Provide domestic and international internships to 1+ Purdue student per year
- Provide domestic and international internships to 1+ Int'l Univ. partner student per year
- Provide financial support (for student assistantships, short courses, faculty exchange, administration, etc.)
- Participate in Industrial Advisory Board
 - » Find people who are committed
 - » Find decision makers

Issues

- Recruiting Companies

- » Start with your friends:
 - Typically, companies that fund research at your university
- » Travel to location
- » Value proposition:
 - Mainly, recruitment of students
 - Secondary, advertisement/marketing own products
 - Secondary, educate global engineers

- Recruiting Students

- » Student selection is critical
- » Need good students
- » One bad student can destroy the relationship

Issues, cont'd

- Work Visa

- » Work with partner universities to enroll students
 - Typically, allows for 90 days of work permission per year
- » Work with company in the US
 - Have student “send” on international assignment
- » Work with agencies
 - IAESTE
 - Carl Duisberg Society

- Housing

- » Dormitory, if internship is close to partner university
- » Otherwise, rely on company
 - Works quite well, unless it is small company

Issues, cont'd

- Preparing Students

- » Regular meetings with returning students from previous year
- » Build a community of students
- » Don't send freshman students
 - At least junior standing, unless it is a very mature students
- » Don't send students, whose first internship is international
 - Have them do a domestic internship first

Lessons learned

- Germany

- » Works extremely well, even with very limited language skills
- » Maybe best country to start
- » Payment medium: 600 to 900 Euro per month

- France

- » Language skills a must
- » Payment similar to Germany
- » French university have requirement that ALL students must spend at least 2 months abroad → chance to reciprocate

- India

- » No language problem
- » Culture shock substantial
- » Payment low: couple hundred \$ per month
- » Need to compensate salary

Lessons learned, cont'd

- China

- » Language and culture shock substantial
- » Chinese university system does not require internships
- » Chinese industry does not know what to do with interns
- » Only way it works:
 - Team US student with Chinese students in teams of two during internships
 - Place team in industry division of expatriate
- » Payment low: couple hundred \$ per month
 - Need to compensate salary

Lessons learned, cont'd

- Mexico

- » In my mind, most difficult country
- » Mexican government does not allow foreigner to be employed by Mexican company for compensation
- » Only way it works:
 - Student is employed by US company and send “on assignment”
 - Company makes donation to the partner university and student receives “scholarship” from the partner university
- » Need for language skills varies
- » Payment depends on model
 - If employed by US company → no problem
 - If scholarship through partner university → very low need to compensate

International Co-Op Programs

- 5-Session Program:
 - » Starts after first year
 - » Co-op students conducts first 3 work sessions with global Purdue co-op company domestically
 - » Co-op students conducts 4th and/or 5th work sessions with the same company internationally
- 3-Session Program:
 - » Starts academically later
 - » All three work session abroad
 - » Alternating schedule or all at once

International Co-Op Programs

- General Issues:
 - » Work to be conducted in English
 - » Orientation in foreign culture before going abroad
 - » Conduct international work session with co-op student from local partner university
 - » Program details currently being finalized by Office of Professional Practice

Final Comments

- Use Partner University as buffer
 - » Recruit students first, than companies
 - Bad for industry relationship if you “promise” students and cannot deliver
 - » If you have more students than companies, place students in “research internships” at the partner university
- Need to identify person at partner university, who is as committed as you are
 - » Only personal relationship makes this work
- Travel by administrators is necessary!