UNION COLLEGE International Study Programs

Dr. Thomas K. Jewell, P.E.
Director of International Programs for Engineering
At UNION you will learn how to look into the future and shape it.

Nanotechnology
Bioengineering
Mechatronics
Pervasive Comp
and how to look at the world and help change it
Need for Global Perspective

- Globalization of marketplace
- Shrinking world
- Developing countries
- Off shore outsourcing
UNION General Education Requirements

• Linguistic and Cultural Competency
  – International Experiences
  – Modern Languages
  – Cultural Comparisons
  – Cultural Traditions
Union
International Experiences

- Terms Abroad
- Independent Study Abroad
  - Winter/Spring Terms
- International Internships
- International Design Projects
- Mini-Terms Abroad (3 weeks)
- Summer Programs
Language Preparation

Class of 2015

- 35.2% Four or more years
  - 19.0% Spanish
  - 9.5% French
  - 6.7% Other (Chinese, German, Japanese, Latin)
- 24.8% Three years
- 10.5% Two years
- 29.5% None*

*Eighteen students (17.1%) said they didn’t take language in high school, but plan to at Union
## Engineering Students’ International Experiences

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</thead>
<tbody>
<tr>
<td>Term Abroad</td>
<td>61%</td>
<td>63%</td>
<td>42%</td>
<td>46%</td>
<td>59%</td>
<td>46%</td>
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<tr>
<td>Mini-term</td>
<td>19%</td>
<td>19%</td>
<td>27%</td>
<td>20%</td>
<td>13%</td>
<td>24%</td>
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<tr>
<td>International Design Project</td>
<td></td>
<td></td>
<td>9%</td>
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<tr>
<td>International Internship</td>
<td></td>
<td></td>
<td></td>
<td>2%</td>
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<tr>
<td>Other (Not involving international travel)</td>
<td>20%</td>
<td>19%</td>
<td>23%</td>
<td>32%</td>
<td>28%</td>
<td>30%</td>
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Terms Abroad

Benefits

- Length of stay
- Language proficiency (selected programs)
- Cultural immersion

Exchanges vs. Regular Terms Abroad

- Exchanges have engineering component
- No resident faculty on exchanges
- Support group

Non-Union Programs

- Winter/Spring
- William Stone Fellowship (full year)
Fall

- Australia (PGE)
- Sao Paulo, Brazil (PGE, odd years)
- Prague, Czech Republic (Engineering)
- Shanghai, China
- York, England
- Fiji/Palau (even years)
- Rennes, France (FRN201)
- Athens, Greece
- Ireland (PGE)
- Osaka, Japan (JPN100 preferred)
- Vietnam (PGE)
Winter

- Independent Study Abroad and Non-Union Programs (W/S)
- Cuernavaca, Mexico (SPN203) (odd years)
- Seville, Spain (SPN203) (even years)
- Tasmania (even years)
- Aachen, Germany (Engineering) (W/S)
- LaSalle, Mexico (Engineering) (W/S)
- Turkey (Engineering) (W/S)
Spring

- Independent Study Abroad & Non-Union Programs (W/S)
- Freiburg & Berlin, Germany (GER101 or GER201)
- Florence, Italy (Art History)
- Sicily (ITL100) (Odd Years)
- Aachen, Germany (Engineering) (W/S)
- LaSalle, Mexico (Engineering) (W/S)
- Turkey (Engineering) (W/S)
Spring/Summer

- National Health Systems
  - Canada
  - Denmark
  - London
- Late March to Early July
New Programs

• METU, Ankara, Turkey
• American University in Dubai (In process)

Stay Tuned!
When to Apply

• Full Year Programs
  – 3rd week of winter term

• Summer/Fall Programs
  – Friday, 3rd week of winter term

• Winter Break/Winter Programs
  – Friday, 3rd week of spring term

• Spring Programs
  – Friday, 3rd week of fall term
International Internships

Benefits
- Length of stay
- Strong engineering component
- Language proficiency
- Cultural immersion
- Interaction with international engineers
- Scheduling and length somewhat flexible

Disbenefits
- No academic credit

New Internship: IBM research labs in China (Beijing) and Switzerland (Zurich)
IAESTE

• International Association for the Exchange of Students for Technical Experience
• Internships in Industry
• Reciprocal Program
  – Union Students to International Companies
  – International Students to U.S. Companies
• Paid Positions
German American Chamber of Commerce

- GACC host-companies operate in the following areas:
  - automotive industry
  - information technology
  - microelectronics
  - sensor and control systems
  - measuring systems
- Some positions do not require German proficiency
International Design Projects (IVDS)

Benefits
- Length of interaction
- Interaction with international engineers
- Design oriented

Disbenefits
- Technical difficulties
- Length of immersion
Where & What

• Where
  – ESIGELEC, Rouen, France
  – Atilim University, Ankara, Turkey

• Topics
  – Robotics
  – Mechatronics
  – Industrial Processes and Control
Mini-Terms

- Short term programs
- Don’t interfere with regular classes
- $3,500 + airfare
Topics

- NZ Electricity Market
- Acid Mine Drainage
- Oil Shale Development
- Roman Water Systems in Spain
- Wind Power
- Geothermal Power Generation
Cultural Aspects
Where?

- Egypt
- New Zealand
- Uruguay
- Non-engineering
Not all work!
Other International Experience Options
German Academic Exchange Program (DAAD)

- Language Programs
- Scholarships
- Undergraduate Study
- Graduate Study
- Research

http://daad.org/
Summer Programs

- URI German Summer School of the Atlantic
- Engineering World Health Summer Institute
- Engineers for a Sustainable World
- Engineers Without Borders
How to Prepare

• Discuss with Advisor
• Research
  – Terms Abroad Office
  – Web Sites
• Plan Ahead
• Take Courses
  – Language
  – Background
• Apply
How to be Competitive

- Cumulative Academic Average
- Excellent Essay
- Language Preparation
- Course Preparation
Good Luck
and
Enjoy