Career-Smart STEM Curricula
Access to Global Learning and Professional Development in the STEM Disciplines

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UC Undergraduate Demographics

Engineering and Applied Sciences

Gender
- 85% male
- 15% female

Residency
- 88% from within Ohio
- 12% from outside Ohio and international

Ethnicity
- 85% Caucasian
- 3% African American
- 2.5% Asian
- 2% Hispanic
- 7.5% other or mixed
UC Structure of ICP

Intro to Co-op

Orientation to International Co-op

Intensive Language

International Co-op

ICP Schedule

F  SP  US  F  SP  US  F  SP  US  F  SP  US  F  S
Freshmen  Sophomore  Pre-Junior  Junior  Senior
Engineering Graduates: 525

ICP:
- German: 15 – 24 students
- Japanese: 6 – 8 students
- Spanish: < 1 students
- French: 1 students

4 – 6 percent of Engineering students
<table>
<thead>
<tr>
<th>YEAR</th>
<th>FALL</th>
<th>WINTER</th>
<th>SPRING/SUMMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAR 1</td>
<td>1A</td>
<td>1B</td>
<td>WT1</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>2A</td>
<td>WT2</td>
<td>2B</td>
</tr>
<tr>
<td>YEAR 3</td>
<td>WT3</td>
<td>3A</td>
<td>WT4</td>
</tr>
<tr>
<td>YEAR 4</td>
<td>3B</td>
<td>WT5</td>
<td>4A</td>
</tr>
<tr>
<td>YEAR 5</td>
<td>WT6</td>
<td>4B</td>
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- 6500-7000 students per term on work term
- 80% in Canada, 10% in USA, 10% in rest of world
UW Professional Development Program - WatPD

**Required Courses:**
PD1: Co-op Fundamentals
PD2: Critical Reflection and Report Writing
PD20: **Engineering** Workplace Skills I: Developing Reasoned Conclusions
PD21: **Engineering** Workplace Skills II: Developing Effective Plans

**Elective Courses:**
PD3: Communication
PD4: Teamwork
PD5: Project Management
PD6: Problem Solving
PD7: Conflict Resolution
**PD8: Intercultural Skills**
PD9: Ethical Decision Making
PD22: Professionalism and Ethics in Engineering Practice
**DAAD CASE STUDY: MOBILITY OF STEM STUDENTS IN GERMANY**

Favorite subject areas for international STEM students:

<table>
<thead>
<tr>
<th>2002/3</th>
<th>2012/13</th>
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</thead>
<tbody>
<tr>
<td>1. Computer science</td>
<td>1. Mechanical engineering, process engineering</td>
</tr>
<tr>
<td>2. Electrical engineering</td>
<td>2. Computer science</td>
</tr>
<tr>
<td>3. Mechanical engineering, process engineering</td>
<td>3. Electrical engineering</td>
</tr>
<tr>
<td>4. Industrial engineering</td>
<td>4. Biology</td>
</tr>
<tr>
<td>5. Biology</td>
<td>5. Civil engineering</td>
</tr>
</tbody>
</table>
DAAD Funding Recipients (2012) – by Subject

- Law, economics, social sciences: 19,314
- Language and cultural studies: 16,269
- Engineering: 15,320
- Mathematics and natural sciences: 13,327
- Human medicine: 4,040
- Veterinary medicine, agronomy, forestry & nutritional sciences, ecology: 3,689
- Art, music and sports science: 2,679
- Interdisciplinary: 694

* not including EU programs
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