



AIEA 2014 Annual Conference
February 16-19, 2014
Washington, DC

UNIVERSALIZING GLOBAL LEARNING IN THE 21ST-CENTURY ACADEMY

Career-Smart STEM Curricula

Access to Global Learning and Professional
Development in the STEM Disciplines

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Nina Lemmens, German Academic Exchange Service (DAAD)

Moderated by: Katja Kurz, Cultural Vistas

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UC Undergraduate Demographics Engineering and Applied Sciences

Gender

- 85% male
- 15% female

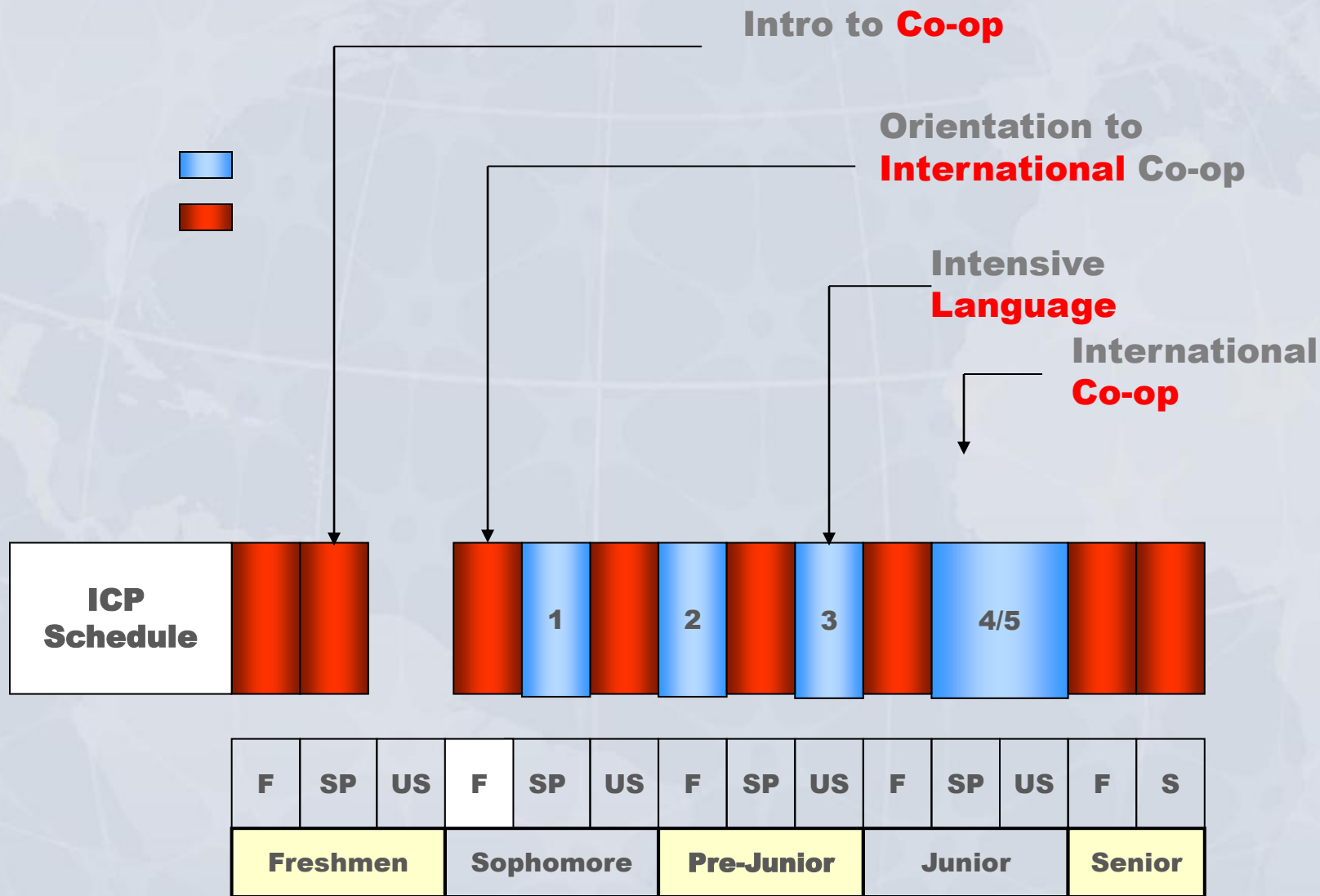
Residency

- 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



UC Annual Participation Rates

Engineering Graduates: 525

ICP:

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

4 – 6 percent of Engineering students

UW Co-operative Education Model

	FALL	WINTER	SPRING/SUMMER
YEAR 1	1A	1B	WT1
YEAR 2	2A	WT2	2B
YEAR 3	WT3	3A	WT4
YEAR 4	3B	WT5	4A
YEAR 5	WT6	4B	

- 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

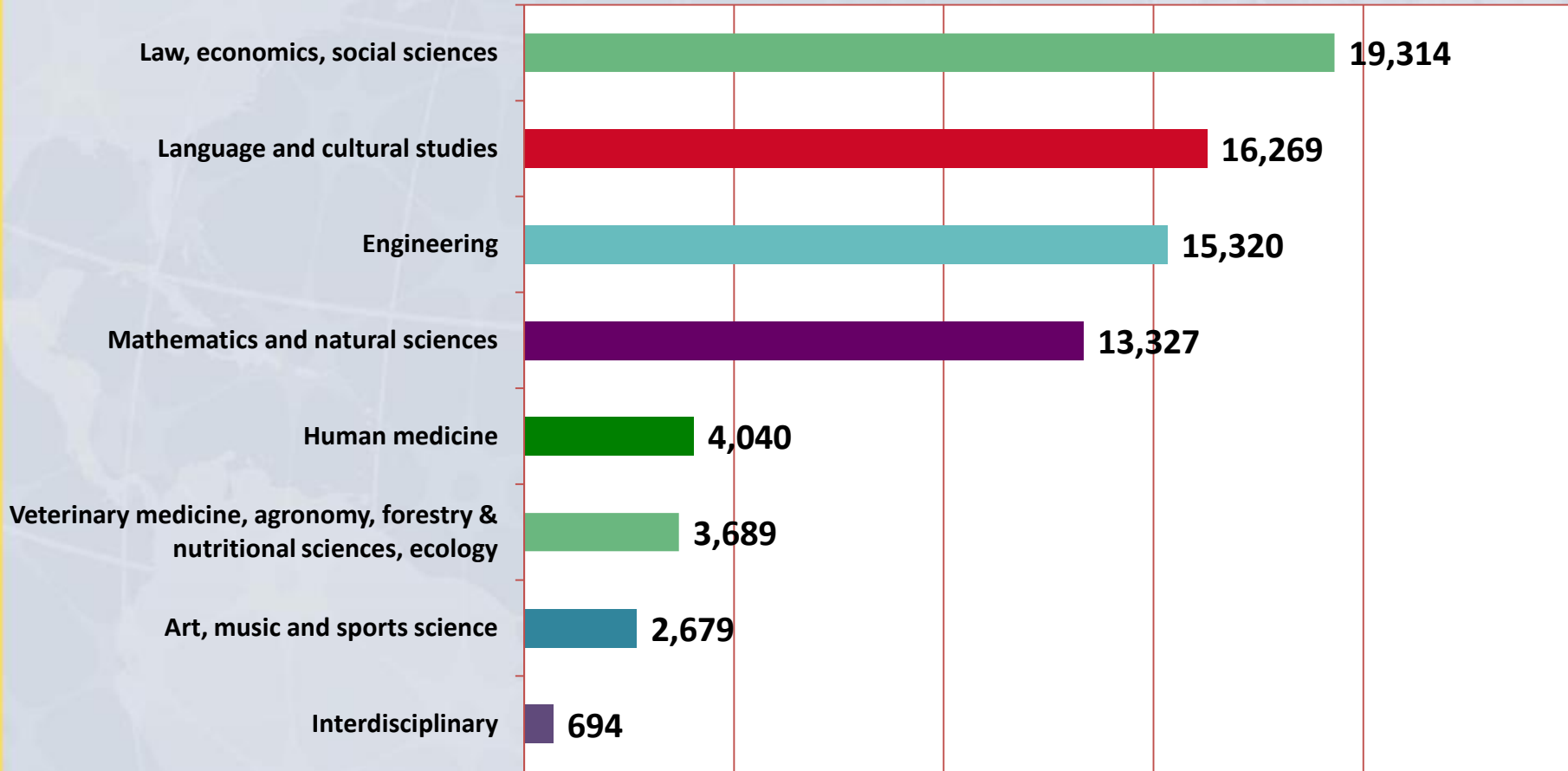
PD22: Professionalism and Ethics in Engineering Practice

DAAD CASE STUDY: MOBILITY OF STEM STUDENTS IN GERMANY

Favorite subject areas for international STEM students:

2002/3	2012/13
1. Computer science	1. Mechanical engineering, process engineering
2. Electrical engineering	2. Computer science
3. Mechanical engineering, process engineering	3. Electrical engineering
4. Industrial engineering	4. Biology
5. Biology	5. Civil engineering

DAAD Funding Recipients (2012) – by Subject *



* not including EU programs

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