**Plus3: Virtually Exploring Global Supply Chains**  
Swanson School of Engineering  
3 credits

Summer 2021  
Locations: Virtual (Brazil, Germany, and South Africa)

*Please note this is the DRAFT syllabus for the program. The faculty will finalize the syllabus prior to the start of the course.*

**Course Overview:**

This three-credit research-focused global opportunity is offered as a follow-up to the *Engineering Analysis* (ENGR 0011 and ENGR 0012) at the University of Pittsburgh. The course is conducted through lectures, discussion sessions and virtual tours of local and multi-national companies, lectures, and cultural sites.

The Plus3 program dates to 2002 and over the 12 years of its existence has taken more than 1,000 students abroad. The Plus3 program was the recipient (in 2005) of the Andrew Heiskell award for innovation in study abroad. Administered by the Institute for International Education, the Heiskell award is the highest honor bestowed on American study abroad programs.

**Course Registration:**

See below for the course registration according to program location and student school.

<table>
<thead>
<tr>
<th>Country</th>
<th>Engineering Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual Global</td>
<td>ENGR1151</td>
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</tbody>
</table>

**Instructor(s):**

Faculty from the University of Pittsburgh will facilitate academic activities.

<table>
<thead>
<tr>
<th>Country</th>
<th>Faculty</th>
<th>Faculty</th>
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<tbody>
<tr>
<td>Virtual Global</td>
<td>Dr. Karen Bursic</td>
<td>Frank Bursic</td>
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**Course Structure:**

The course will be offered in Summer Session 6WK1: May 17 through June 26, 2021 on Tuesday and Thursday mornings from 8:30am-11:45am. The course will consist of virtual company visits, cultural experiences, classes, and lectures. Each student is required to attend and participate in all of these components. The students will research and present on their assigned company and cultural topics.
**Academic Focus:**

Globalization is the process of international integration arising from the interchange of world views, products, ideas, and other aspects of culture. This course examines the economic, social, and environmental impacts of globalization on several industry-specific supply chains. Each geographic destination for Plus3 will focus on an industry critical to that location and will provide the basis for a case study:

- Global – *Plus3: Virtually Exploring Global Supply Chains*

Focusing on a supply chain such as these provides rich context to several important globalization factors including economic productivity, sustainability, efficiency, labor, society and the environment. This course aims to go beyond the consumer and business side of technological breakthroughs to examine critical factors influencing global supply chain management and decision making in an increasingly connected global economy. In doing so, this course enables students to study, compare and contrast various aspects of operations management, global business, logistics and engineering including manufacturing (component and finished goods), sales and operations planning, distribution, port operations, transportation, marketing, finance, and innovations in social/environmental compliance.

**Course Objectives:**

The objectives of the course are:

1) To provide students completing their freshman year with a first study abroad experience.
2) To provide a first opportunity for engineering and business students to work together on common company-based research projects.
3) To equip students with skills for analyzing the economic and political, as well as social and environmental, sources of supply chain controversy and to identify both business and social decision-making solutions to address them.
4) To develop research, writing, and presentation skills.
5) To reflect on the global experience.
6) To learn how to network and discuss company and market complexities with executives and their employees who are pioneering new approaches in global supply chain management and who are drivers for the worldwide industries:
   a) Specifically, to explore areas of consumer and market demand, government regulations and their impact on supply chain management, international business and the global supply chain, environmental sustainability innovations, labor management and relations, and engineering including manufacturing, distribution, port operations, transportation, R&D, etc.
7) To learn how to integrate knowledge from a diversity of sources and use it to identify critical decision-making factors that can lead to sustainable development.
Grading:

The course grade earned is based on the following:
- In-Class Participation and Attendance
- Individual Reports & Presentations
- Team Reports & Presentations
- Individual Participation
- Final Team Presentation

Grading Scale:

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<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A+</td>
<td>98-100</td>
<td>C+</td>
<td>78-80</td>
</tr>
<tr>
<td>A</td>
<td>94-97</td>
<td>C</td>
<td>74-77</td>
</tr>
<tr>
<td>A-</td>
<td>90-93</td>
<td>C-</td>
<td>70-73</td>
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<tr>
<td>B+</td>
<td>87-89</td>
<td>D</td>
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<tr>
<td>B</td>
<td>84-86</td>
<td>F</td>
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<tr>
<td>B-</td>
<td>81-83</td>
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Course Policies:

Academic Integrity:
Students in this course will be expected to comply with the University of Pittsburgh’s Policy on Academic Integrity. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating University Policy. Furthermore, no student may bring any unauthorized materials to an exam, including dictionaries and programmable calculators.

To learn more about Academic Integrity, visit the Academic Integrity Guide for an overview of the topic. For hands-on practice, complete the Understanding and Avoiding Plagiarism tutorial.

Disability Services:
If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services (DRS), 140 William Pitt Union, (412) 648-7890, drsrecep@pitt.edu, (412) 228-5347 for P3 ASL users, as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.