BRAZIL
STUDY ABROAD
SUMMER STUDY TRIP

Bioinstrumentation for Sub-tropical Climates

May 14 – June 10, 2012

Program offered by ACES Study Abroad

DESCRIPTION
This 4-week study visit is a partnership between UIUC and Purdue University, and two Universities in Brazil. The visit coordinators are professor Angela Green (UIUC) and professor Bernie Engel (Purdue). Travel will take place from mid-May 2012. Students will work in small teams with Brazilian students on projects related to bioinstrumentation for engineering research. Field trips, nature excursions, and cultural programs will be included.

Check out www.usp.br/ccps and www.ufv.br to learn more about the University of São Paulo at Pirassununga and the Federal University of Viçosa. Also check out the semester-long study opportunities of our companion project “Bioenergy and Biological Systems Engineering: An Educational Consortium for a Sustainable Agriculture”.

PROGRAM OBJECTIVES
1. Raise student awareness and understanding of Brazilian cultures and the role of engineering problem solving in a global context.
2. Expose students to the process of identifying and solving a research-based engineering problem in collaboration with students and faculty from the Brazilian partner institutions.
**PROCEDURE**

1. Register for ACES 298 and ABE 397 or TSM 396, Spring 2012 (required, CRN provided).
2. Attend weekly meetings and two weekend retreats, March 3-4 and April 7-8. These meetings will provide students an opportunity to organize travel, prepare for project, form teams and develop team dynamics, and develop the project timeline.
3. On arrival in Brazil execute the planned schedule. Students will prepare both oral presentations and written reports of their team projects. Students are expected to present the results of their projects to students and faculty both in Brazil and the US.

**TENTATIVE SCHEDULE**

- May 14-15 - travel days, to Brazil
- May 16-23 - visit to USP-FZEA, nearby industries, work on student projects
- May 24-27 - cultural tours en route to Vicosa
- May 28 – June 5 - visit to UFV, nearby industries, completion of student projects
- June 6–9 - tourist time in Rio de Janeiro or other
- June 9-10 - travel days, return to US

Industry and tourist visits from last trip include: Embrapa (instrumentation), Alfa Agro-energia, Abengoa or GAIA (Sugar cane farming/harvesting/milling/ethanol production), Pif Paf (poultry, pork), Braúna coffee, vegetable processing, brewery, museums, markets, hiking, sugar loaf, Cristo, botanical gardens, beach
CREDITS

The study tour to Brazil in May, the preceding preparatory sessions during the spring semester, and completion of all assignments carries 3 credits, to be awarded as an International Experience and Independent Study.

ACES 298, 1 credit. International Experience.
ABE 397 or TSM 396, 2 credits. Independent Study.

Grading for the course will be based on: Retreats/preparation sessions, Bioinstrumentation Project Presentations (Brazil and US), Written Project Report, and Written Reflections. This course is project-based, and projects will be outlined at the first retreat in March. Requirements for the project will be appropriate for the freshman/sophomore level student. For specific grading and assignment details, please contact Dr. Green for a course syllabus.

ESTIMATED EXPENSES

<table>
<thead>
<tr>
<th>Estimated Costs (Subject to change)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Program fee, <strong>non-refundable once the participant has committed to the program</strong> (charged to UIUC acct)</td>
<td>$300</td>
</tr>
<tr>
<td>Housing and Meals, Student Activity Fees and Excursions (charged to UIUC acct)</td>
<td>approx. $2200</td>
</tr>
<tr>
<td>Visa and immigration processing (paid directly by student)</td>
<td>$150</td>
</tr>
<tr>
<td>Round-trip airfare (Group travel will be arranged, paid directly by student)</td>
<td>approx. $1000</td>
</tr>
<tr>
<td>SAO administrative fee (charged to UIUC acct)</td>
<td>$25</td>
</tr>
<tr>
<td>Emergency medical insurance (charged to UIUC acct)</td>
<td>$30</td>
</tr>
<tr>
<td>Personal expenses (variable), Immunizations, etc (paid directly by student)</td>
<td>$350</td>
</tr>
</tbody>
</table>

Total Cost of Participation: approx. $4055

The program fee of $300 is due by Feb 1, 2012 (UIUC participants: this will be charged to students’ accounts). Airfare will be purchased by the participant directly through the travel agent with whom group flights have been booked. The costs for Housing and Meals, Student Activity Fees and Excursions (app. $2200) will be charged to the UIUC student in March 2012 directly to their account.

SCHOLARSHIPS

ACES undergraduate students are eligible for a $500 ACES scholarship, to be credited to the student’s account in March 2012. Agricultural & Biological Engineering students may be eligible for IPENG scholarships. For details, please refer to [http://students.aces.illinois.edu/study_abroad/scholarships](http://students.aces.illinois.edu/study_abroad/scholarships).

In addition, campus scholarships may be available, particularly the I4I scholarship. For details, refer to [https://www.studyabroad.uiuc.edu/](https://www.studyabroad.uiuc.edu/).
**ELIGIBILITY**

The program is open to students with good academic standing from all UIUC colleges. Students who wish to participate in this program must show a strong commitment to academic achievement and be in good academic standing. Applicants must have completed at least one year of course work at UIUC by the time the program begins. Space is limited and participants are chosen on a first come, first serve basis.

**LANGUAGE REQUIREMENTS**

The program is conducted primarily in English but Portuguese is the language of Brazil and familiarity with it is beneficial. Basic culture and intro language sessions will be covered in the weekly meetings.

**PRE-DEPARTURE ORIENTATION**

Students accepted into this program will be required to attend weekly meetings and weekend retreats.

**APPLICATION PROCESS**

Apply online at [www.studyabroad.uiuc.edu](http://www.studyabroad.uiuc.edu) (click programs tab, search for “Instrumentation”). Please contact Meredith Blumthal or Dr. Green if you have problems with the application.

*by February 1, 2012*

**PASSPORT AND VISA**

You will need to have a valid passport to participate in this program. Instructions on how to obtain or renew a passport are at: [http://students.aces.illinois.edu/study_abroad/planning_tools](http://students.aces.illinois.edu/study_abroad/planning_tools).

If you already have a passport: Check to make sure it is valid until at least January 2013. If not, get it renewed now. The group members must have a valid Brazilian visa to enter the country. Visa applications will be done during group preparation sessions.

**VACCINATIONS AND HEALTH**

Once you have been accepted into the program you need to schedule a health consultation at McKinley Health travel and immunization unit (333-2702) to discuss what immunizations you need, get a travel kit, etc. Visiting the dentist at least one month prior to departure is also recommended. See also [www.cdc.gov/travel](http://www.cdc.gov/travel).

**CONTACT**

*Angela Green*, Assistant Professor, Team Leader; Agricultural and Biological Engineering
332G Agricultural Engineering Sciences Building, Phone: 217-244-4228, Email: angelag@illinois.edu

OR

*Meredith Blumthal*, Assistant Dean, ACES Academic Programs
123 Mumford Hall, Phone: (217) 333-3380, Email: mblumtha@illinois.edu