

**Proposal for  
International Internship for Global Leadership Program  
Group Program Summer 2015**

Name of Program: Research Internship at University of Teknologi Petronas	Length of Work-week (hours): 40
Country/Location: Malaysia / Bandar Seri Iskandar, 31750, Tronoh, Perak 05-3688000	Faculty/Staff Leaders: TBD
Dates/Duration: TBD / 8 weeks	Estimate of Number of Participants: 6

Internship Experience: Undergraduate research. In the proposed program, each student will work either independently or as part of teams of undergraduate and / or graduate students, and one or more professors from UTP, on a research topics matched to his / her particular interests. Students will develop important research skills, including abstract writing, specific detailed research methods, data analysis and interpretation, and oral presentation techniques. The research will build upon each student's prior coursework experience, and will stretch his / her understanding about their specific engineering or science discipline.

Through personal work relationships, field trips, and other cultural enrichment experiences (both arranged by the program, and on their own free time), each student will gain a meaningful introduction to Malaysia.

Program Objectives: (1) Provide an opportunity to engage in undergraduate research activity at a world-class institution in an international setting; (2) Provide an introduction to Malaysia through work relationships with students and faculty, and through visits to Malaysian historical / cultural sites.

Program Activities: The students will work full-time during the week on their research projects for the 8-week program duration. At the conclusion of the program, students will make oral presentations on their work. Weekends will be spent with enrichment activities including trips to locations to be determined by UTP and based on the experiences of the past three summer programs. The students will also have free time to explore on their own.

Program Itinerary: Attached is an example program from a previous summer. A similar program will be developed for summer 2015.

Program Location: University of Teknologi Petronas, Malaysia / Bandar Seri Iskandar, 31750, Tronoh, Perak.

Program Dates: Exact program are still to be confirmed with UTP.

Program Director: Stephen Pessiki

Faculty Staff Participants: 1

Number of Student Participants: 6

Target Population: Undergraduate students in the P. C. Rossin College of Engineering and Applied Science. Open to all engineering majors. Preference given to juniors, and consideration also given to sophomores.

Recruitment process: On-campus information sessions in Fall 2014 semester, and announcements at RCEAS and CAS faculty meetings in Fall 2014 semester.

Number of students to be funded: 6

Other funding sources: Students' own personal resources.

Faculty/Staff accompanying students on the program: The program leader is still to be identified. Professor Pessiki will identify a faculty member from either Civil and Environmental Engineering or Chemical Engineering to lead the program. Faculty from both departments are engaged in the development of a collaborative research program with UTP, and someone from that effort will be identified to lead the program.

Faculty/Staff experience with similar programming: Professor Pessiki led the inaugural summer 2012 program to UTP. Professor Kothare from Chemical Engineering led the summer 2013 program, and Professor Gilchrist led the 2014 program.

How will the program be evaluated upon return? (1) Survey evaluation administered by the Study Abroad office for returning students.

Pre-requisite Course Work, if applicable: None. To the degree possible, each participating student will be paired with their research UTP supervisor prior to departing the U.S. In the past, this has been sometimes difficult to accomplish. The goal is that each student's program will include relevant background reading before departing from the U.S. in order to be better prepared for the project work upon arrival in Malaysia.

Health and safety concerns: None that Professor Pessiki is aware of.

Other issues to be considered: The participating faculty member will not remain with the students for the entire duration of the program. The faculty member will arrive in Kuala Lumpur at least one day in advance of the students. He or she will greet the students upon their arrival at KL airport, and then accompany the students via UTP-arranged ground transportation to UTP's campus. The faculty member will remain with the students for 1-2 days of the program to ensure that any issues that may arise are settled. He or she will then participate in research program development discussions with UTP faculty and researchers, and then return to the U.S.

On-Site Support / Partnership:

Universiti Teknologi Petronas

Professor Ibrisam Akbar

Email address: ibrisam\_akbar@petronas.com.my

Mailing address: Department of Civil Engineering

Telephone: 605 - 368 7293

Professor Akbar will serve as the point of contact at Universiti Teknologi Petronas. He will also assist Professor Pessiki and / or the participating Lehigh faculty member with efforts to pair Lehigh students with appropriate research projects prior to their departure for Malaysia.

Description of Involvement/Support:

- UTP will provide all expenses associated with the execution of the undergraduate research projects.
- The students will stay in university-operated student housing. This is a program cost to Lehigh.
- The students will be afforded the opportunity to dine in university-operated dining facilities. This is a program cost to Lehigh. The students may also choose to make other dining arrangements on their own once they become familiar with their living accommodations.

Budget:

See attached.