

## **Science and Engineering Communication Project (SECP): 1 credit**

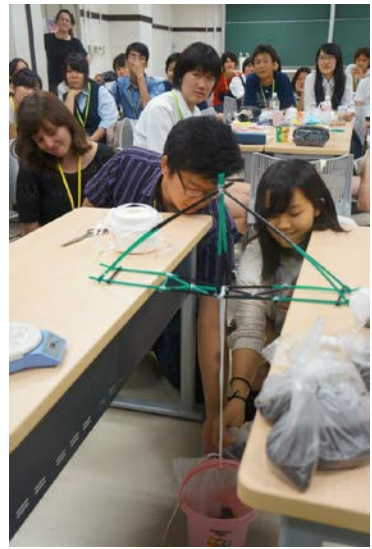
SECP is grounded in the learner-centered style of teaching where the instructor facilitates and students take an active role in their knowledge acquisition. When a student or scholar goes abroad to study or conduct research, he or she steps into a different culture and has to communicate and work with people with different ideas and different cultural assumptions to achieve common goals. Communication skills, negotiation skills and leadership skills are important in such circumstances and these are very difficult to teach in a typical teacher-centered or top-down learning environment.

SECP is designed to meet these needs in our increasingly interconnected and collaborative world. As this year's theme, "Making a Straw Bridge" is selected again for the group project around which the students would develop their ideas and strategies for both construction of the bridge and communication. Not only would the groups of international students have to communicate with each other to design a bridge, but they would have to communicate how to build it to visiting Japanese high school students who would then construct it. Three "Bridge Policies" are set and the groups of international and Tokyo Tech students welcomed high school students into their groups and teach them in English how to construct the bridge they designed. All of the students will enjoy themselves immensely as they compete for points in the areas of Cost Effective Bridge, Most Aesthetically Pleasing Bridge and Most Durable Bridge.

The course has weekly meetings starting on July 2 and finishing on July 23 with the competition and outreach in English to local high school students. The high school students will have a campus tour of Tokyo Tech in the morning and then join one of the groups as described above for an afternoon of fun and hands-on activities.

SECP is interesting to design as it provides an opportunity to discuss many things with colleagues. We believe the SECP class has the following strengths.

- Provide a hands-on project with a goal to encourage teamwork among team members.
- Introduce students to what international research collaboration might be like.
- Facilitate communication and interaction opportunities with Japanese students, both Tokyo Tech students and Japanese high school students, while introducing Japanese culture.



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