



Leadership in Engineers A GuideLinE to Success

Issue 2, Feb 2015



HeadLinE -
To bring up leadership
topics and news related to
engineering



WhatsMentor -
As a platform to showcase
Peer Mentoring Program
activities



LeaderSource -
To update students about
resources available for
leadership development



AList -
To list upcoming on/off
campus service activities



What are Employers Looking for?

"We look for engineers who not only have excelled in studies but exhibit excellent interpersonal skills", said Lauren Jones from Huntsman Corporation Australia.

"We look for people who can lead a team, get the team motivated and a person who can quickly learn which people are best at doing what", said Kalani Jones, Engineering Vice President at Tachyon Inc. (San Diego).

Since many graduates complete similar coursework, companies largely differentiate candidates for employment based on their soft skills and experiences outside the classroom. Therefore, to gain competitive advantages, today's engineering graduates should possess not only technical knowledge, but also personal skills that help them to work well with others in the workplace. These skills cannot be easily handled instantly and need to be fine-tuned over a period of time. Students are advised to develop the skills in the university, including:

- Communication skills – skillful communicators get along with colleagues, listen and understand instructions, and put their points across without being aggressive. They can change their style of communication to suit different situations, from handling conflicts to persuading colleagues for support.
- Interpersonal skills – engineers need to effectively work as part of a team and identify clients' needs to provide solutions.
- Leadership skills – employers look for people who lead by example, have positive thinking, constantly look to improve, motivate themselves, and know when to follow instructions and when to show initiative.

Peer Mentoring Program (PMP)



Peer Mentoring Training

E²I organized a 2-day camp at Lei Yue Mun Park and Holiday Village for peer mentor training. Besides soft-skill learning and self-exploration, peer mentors had opportunities to spend time with their clan members in the camp, strengthening their rapport and mutual understanding among themselves. This could help them organize clan activities and provide support to their mentees. They had a great time in the camp!

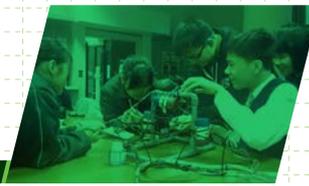
Intercultural Peer Learning Program

To expand peer mentors' horizons, E²I collaborated with Sungkyunkwan University (SKKU) to organize an intercultural peer learning program. The program provided opportunities for outstanding peer mentors to work with students with a different culture, solving problems with a global vision and multiple perspectives. Besides learning skills and experiencing Korean culture, peer mentors developed invaluable friendship with SKKU students.



Training X Christmas Gathering

To celebrate the Peer Mentors' service during the fall term, E²I hosted a training workshop and Christmas gathering on Dec. 23, 2014. Two professional trainers were hired to coach the Peer Mentors on further developing their communication skills. The workshop focused on strategies for creating sustainable relationships between mentors and mentees. In keeping with the event's communication theme, the Peer Mentors participated in a series of team building games during the gathering. The highlights of the gathering were the Christmas turkey and hilarious lucky draw at the end of the night.



In the coming semester, there will be 3 new service-learning courses allowing students to apply what they learn to satisfy the needs of different communities. Besides acquiring technical knowledge, students will also have the opportunities to practice their soft skills (e.g., communication, teamwork and leadership) in their group projects. These courses are:

ENGG 2900B – Community Service Project: Innovative Trolley Design for the Elderly

This course is intended to engage students in teams to design and develop an innovative trolley for the elderly.

- Gain experience from developing a plan, marketing through implementation of projects with a group of professional civil engineers
- Intended Learning Outcomes (ILOs) of this course are:
 1. Introduction to Corporate Social Responsibility (CSR) and community services issues from a social point of view
 2. Introduction to mechanical, eletro-mechanical, production and costing aspects of trolley design, with the aim of helping elderly people collecting cardboard from the streets
 3. Integrate students' knowledge and technical skills into a comprehensive design project
 4. Involve students actively in the planning and design of a realistic engineering project
 5. Foster teamwork and multi-disciplinary coordination towards solving open-ended design problems
 6. Provide students with exposure to real-life engineering experiences via site visits and meetings with engineers from a prominent engineering company



ENGG 2900C – Community Service Project: The Mobile App Development for Hearing Impaired Children

In this course, students from different schools (SBM, SENG, SHSS and SSCI) will learn how to design a mobile App and server system of Articulation Screening and Training Tool for hearing impaired children.

- Work in sub-team in different areas such as mobile app design, data server construction, system integration and user interface (UI) design
- Organize service learning activities in collecting speech samples



ENGG 2900D – Community Service Project: Underwater Robot Community Engagement Project

Besides the technical skills of building robots, students will learn to apply their knowledge to satisfy the needs of others in learning.

- Work in teams from different schools, to serve identified community groups (i.e. primary and secondary school students/South Asian youths etc.) and understand their limitations
- Learn how to apply theoretical knowledge on the building of under-water robots
- Act as teachers by transferring their skills of under-water robot building to primary and secondary school students and/or South Asian youths
- Learn the skills of event management throughout the project



EnG Chitchat



An open and interactive forum, **EnG Chitchat**, is now scheduled every Wednesday during the fall and spring semesters at the Professional Leader's Focus area, Engineering Commons. In each session, participants are encouraged to speak out and share their ideas on a specified topic after the speaker's presentation. Through this two-way interaction, students can understand more about the role of leadership in engineering disciplines and how to apply what they have learnt to make contributions to different communities. Here is the schedule of EnG Chitchat in spring 2015:



Wednesday
4 Feb TOUCH of Braille: Sharing on Braille Maths by Visually-impaired Student of Ebenezer School

Wednesday
11 Feb What Makes an Engineering Leader?

Wednesday
25 Feb Competition Experience. Talking to the Champions.

Wednesday
4 Mar FYP Ideas and Experiences 1

Wednesday
11 Mar FYP Ideas and Experiences 2

Wednesday
18 Mar Keys to Leadership Success (tentative)

Wednesday
25 Mar Hackathon (tentative)

Wednesday
1 Apr Challenges for Leaders (tentative)

Wednesday
15 Apr Things learnt from organizing the 2-day Inclusion Underwater Robot Competition (tentative)

Wednesday
22 Apr Leadership assessment: Can you be a leader? (tentative)

Wednesday
29 Apr Sharing by Student Chapter (tentative)

Upcoming Events



E²I is now recruiting a new batch of Peer Mentors. If you are interested to help SENG first-year students to adjust their university life, please join the **Peer Mentoring Program 2015-2016**. Application deadline: 13 Apr 2015.

EnG Chitchat would like to invite final-year students to share their community-care FYPs in March. If the objective of your project is to help the people in need (e.g., to develop a system to assist patients to have physiotherapy at home or to design a mobile water purification system for potable water shortage areas), please contact Leo (egleo@ust.hk) or Winnie (egwinnie@ust.hk) before February 17 to arrange a sharing session.

For more information:

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