Teaching Innovation

FIRST EXPERIENTIAL LEARNING COURSE ON INDUSTRIAL AUTOMATION (IELM2100E)



Experiential learning is an active form of learning process. Rather than absorbing the knowledge passively in lectures, students are supported to apply the theoretical knowledge to real-life situations. Through actively posing questions, investigating for solutions and reflecting on their experience with peers and mentors, they are then able to develop new ideas for further testing. Eventually, students will work out a number of feasible solutions for real-life problems.

IELM 2100E Computing in Industrial Applications

is the first experiential learning course offered by IELM Department, with the sponsorship from *CEI Teaching Development Grant*. Instead of attending lectures or lab sessions, students learn course materials through working on an actual project - designing and developing a prototype system to automatically put a RFID tag on transited baggage, in collaboration with the Hong Kong International Airport Authority.

Eagerness to learn and self-motivation are the keys of success for students participating in this course. Working in a team of 5, students had to work out the project proposal and schedule their own regular meetings. They also had to initiate the meeting with **Professor Richard So**, the course instructor of this course, during which suggestions to their proposed plan were given.

"What makes this course unique is that we focus on the learning process, instead of the final deliverables," comments by Professor So, who plays a vital role as a facilitator throughout the course. Rather than providing a clear direction to students, they are encouraged to do the information search online and explore the possible solutions to work out the prototype. "One may not be able to produce a well functional prototype, but as long as they have gained knowledge and experience through working on this hands-on project, they have achieved the learning outcomes of this course," Professor So adds. Students were required to submit their learning portfolio at the end of the course. Failed designs were also included in the portfolio, as this is part of the learning process.

The final presentation was held on May 13 2016, in attendance of **Mr. Andy Ho**, *Project Manager* from *Advanced Integration Systems Limited (AIS)*, **Mr. James Liu**, *Control Engineer* from *Hong Kong International Airport*, both helped out in mentoring the students as industry advisors throughout the course; and **Professor Roger Cheng**, *Associate Provost (Teaching & Learning)*. Students commented on the enjoyment aspect of this challenging yet rewarding course, and they all agreed that this had been an exceptional learning experience for them.