Assessment Findings

In response to its 2014 Academic Program Review, the Department of Systems and Industrial Engineering (SIE) collected data during the academic year 2014-2015, and the results were analyzed in August 2015. The SIE graduate studies committee shared the results with the entire faculty members in an SIE faculty retreat on August 22, 2015. The findings are discussed below.

<PhD Program>

The four outcomes of the PhD program are assessed via two ways: i) the SIE PhD program assessment forms for each PhD student, filled by the PhD committee during the oral comprehensive exam as well as the final dissertation defense; ii) the online exit survey for each PhD student who has graduated.

More specifically, the findings are listed as follows:

- Outcome 1 is assessed by students’ exit survey (the 1st question). All students found that their experiences in acquiring fundamental knowledge in SIE domain were either excellent or good.

- Outcome 2 is assessed by 1) assessment forms collected during the oral comprehensive exam (the 1st question) and final defense (the 1st question), and 2) exit survey (the 2nd question). Comparing the results obtained from the oral comprehensive exam and the final defense, the SIE faculty members found that PhD students’ skills in critical review/analysis of literature improved significantly from “neutral” level to “excellent/good” levels. All students believed that their experiences in developing skills in critical review/analysis of literature were either excellent or good.

- Outcome 3 is assessed by assessment forms collected during the oral comprehensive exam (the 2nd question) and final defense (the 2nd question), and exit survey (the 3rd question). All students believed that their experiences in performing in-depth research were either excellent or good.

- Outcome 4 is assessed by assessment forms collected during oral comprehensive exam (the 3rd and 4th questions) and final defense (the 3rd and 4th questions), and exit survey (the 4th question). For both written and oral communication skills, improvements are observed from the “oral comprehensive exam” stage to the “final defense” stage. All students believed that their experiences in communicating ideas and results were either excellent or good.
<MS Programs>

The three outcomes of MS programs were assessed via two ways: i) the SIE MS program assessment forms for each MS student, filled by the MS committee during the final defense; ii) the online exit survey for each MS student who has graduated.

More specifically, the findings are listed as follows:

- **Outcome 1** is assessed by students’ exit survey (the 1\textsuperscript{st} question). All students believed that their experiences in acquiring in-depth knowledge within a particular area of study and complementary knowledge from a related area in SIE were either excellent or good.

- **Outcome 2** is assessed by assessment forms collected during thesis/project defense (the 1\textsuperscript{st} question), and exit survey (the 2\textsuperscript{nd} question). The faculty committee members thought 90\% of MS students were excellent or good in conducting original research works, while 90.9\% of MS students believed that their performance in original research works were excellent or good.

- **Outcome 3** is assessed by assessment forms collected during thesis/project defense (the 2\textsuperscript{nd} and 3\textsuperscript{rd} questions), and exit survey (the 3\textsuperscript{rd} question). The faculty members thought 65\% of MS students could effectively communicate ideas and results in both write-ups and oral presentations, while 95.5\% of MS students believed that their communication skills were excellently or good.