

## **Plan for Assessment of Outcomes for SOE MS and PhD Programs**

### **Outcomes for SOE Graduate Degree Programs:**

#### **PhD programs**

Students receiving the PhD in Engineering will:

- 1) Exhibit knowledge of engineering and science fundamentals appropriate for the discipline and specialization.
- 2) Demonstrate a depth of knowledge in the specialization.
- 3) Have the ability to conduct original and independent research.
- 4) Have demonstrated the ability to perform a critical review of the literature in the area of specialization.
- 5) Be able to communicate effectively.

#### **MS and MEng programs**

Students receiving Masters degrees from the School of Engineering will:

- 1) Exhibit knowledge of engineering and science fundamentals appropriate for the discipline and specialization.
- 2) Be able to communicate effectively in oral and/or written form.
- 3) Demonstrate the ability to critically assess information in the discipline and/or specialization.

#### **Assessment Plans:**

**PhD programs** For students receiving a PhD from the School of Engineering, the student's exam committee will assess whether the student has achieved the SOE outcomes based on the student's dissertation and defense. This will be documented on a rubric that has been developed for this purpose, to be filled out by a consensus of the committee (rather than by each individual member of the committee). Results of the assessment will be reported to the department graduate committee, and to the School of Engineering Academic Council for analysis, discussion, feedback, and any necessary action. The department graduate committee will forward a report on the assessment results to the department faculty at least annually for discussion and possible action.

**MS and MEng programs** For MS or MEng students, assessment will be done using the exit exam. The assessment will be documented using the rubric that has been developed for this purpose, to be filled out by a consensus of the faculty participating in the student's exit exam.

Results of the outcomes assessment for each student will be evaluated by the department's graduate committee and/or faculty; findings and recommendations will be forwarded at least annually to the full department faculty for review and possible action. The evaluations prepared by the departmental graduate committee will be reported to the SoE Academic Council for analysis, discussion, feedback, and any necessary action.