

Student Learning Outcomes Assessment Summary

Engineering, PhD

College of Engineering and Mines

AY2010-11 and AY2011-12

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1. Assessment information collected

The Engineering Ph.D. is a diverse program with 10 approved concentration areas within the 6 CEM departments. The end of the current reporting period represents the 10th year since this program was established in 2002. During that time, 51 students have entered the program, including:

24 students that graduated (47%),
15 students that are currently active (30%), and
12 students that left the program (23%).

The average time to complete the degree over this 10-year period is 4 years.

During the current 2-year reporting period:

5 new students entered the program (2 CE, 2 EE, and 1 ME), and
3 students graduated (1 CE, 1 EE, and 1 Env. Eng.)

Assessment data collected includes the pass rate of the comprehensive exam, and the initial employment placement of graduates.

We are not aware of any Engineering PhD students that have failed the written comprehensive exam during the current reporting period.

Of the three graduating students during the current reporting period, one remained in the U.S. Air Force as an officer and F-16 pilot, and the other two returned to their native countries for employment in the engineering industry.

Given the extremely small number of students in this program, and the diversity of their programs, we have not yet implemented the survey of the 3-year and 6-year graduates that was originally planned.

Also, we have not implemented a review of research publications of the graduates after graduation, since many of the graduates are working for industry or government agencies that do not encourage (or even discourage) publication. We plan to revise this component of our assessment plan in the next cycle.

2. Conclusions drawn from the information summarized above

The Engineering PhD program provides an important capability for providing students with research opportunities and training within CEM, and is helping to grow the infrastructure at UAF that may warrant dedicated doctoral programs within select CEM departments in the future.

3. Curricular changes resulting from conclusions drawn above

Due to the diversified nature of this program and the small number of students, there is no curriculum that is common to a majority of students in this program. No curricular changes were made based on the conclusions drawn above.

4. Identify the faculty members involved in reaching the conclusions drawn above and agreeing upon the curricular changes resulting

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