

UNIVERSITY OF ALASKA FAIRBANKS
Student Learning Outcomes Assessment Plan
Engineering Ph.D. Program
College of Engineering and Mines
May 2021

Expanded Statement of Institutional Purpose	Intended Objectives/Outcomes	Assessment Criteria and Procedures	Implementation (what, when, who)
MISSION STATEMENT: The College of Engineering and Mines (CEM) advances and disseminates technical and scientific knowledge through innovative teaching, research and public service with an emphasis on Alaska and other high-latitude regions. The College promotes students' self motivation to excel and guides them towards professional careers and entrepreneurship in an environment of life-long learning. GOAL STATEMENT: The CEM Engineering Ph.D. program trains doctoral students to perform independent research in one or more of the following concentration areas: Arctic, Civil, Computer, Electrical, Engineering Management, Environmental, Geological, Mechanical, Mining, and Petroleum.	a. Engineering PhD students demonstrate the technical ability and knowledge to function as professionals in their engineering concentration area(s).	Students must pass written and oral comprehensive exams that are developed and administered by their graduate advisory committee.	CEM Engineering PhD Assessment Committee sends the SLOA PhD Assessment Form to student's Graduate Advisory Committee to collect these pass dates.
	b. Engineering PhD students demonstrate the ability to perform independent research in areas associated with their engineering concentration area(s).	Students must pass a thesis defense of their dissertation which demonstrates ability to perform independent research.	CEM Engineering PhD Assessment Committee sends out The SLOA PhD Assessment Form (to be filled out after the student's defense) which surveys the student's graduate advisory committee and asks the committee members to rank the student's abilities in four areas: application of science, communication skill, use of tools and techniques, and ability to perform independent research.
	c. The majority of graduates should enter professional careers in areas associated with their engineering concentration area(s).	Longitudinal tracking information is collected from each graduate of the Engineering PhD program to determine his or her initial placement following graduation.	The SLOA PhD Assessment Form collects the student's initial placement. If student is not employed upon graduation, The CEM Engineering PhD Assessment committee will poll the student and/or primary advisor within 1 year after graduation to determine initial placement.