

UNIVERSITY OF ALASKA FAIRBANKS
Student Learning Outcomes Assessment Plan
Master of Science in Electrical Engineering
College of Engineering and Mines

| Expanded Statement of Institutional Purpose | Intended Objectives/Outcomes | Assessment Criteria and Procedures | Implementation (what, when, who) |
|---|--|---|--|
| <p>MISSION STATEMENT: The Mission of the UAF Electrical and Computer Engineering Department is to offer the highest quality, contemporary education at the undergraduate and graduate levels and to perform research appropriate to the technical needs of the state of Alaska, the nation, and the world.</p> <p>GOAL STATEMENT: Prepare students to be effective researchers or faculty members or to have leading roles in electrical engineering.</p> | An ability to apply knowledge of mathematics, science and engineering | Thesis and body of graduate work evaluated according to standard rubric | Graduate committee evaluation at time of graduation |
| | An ability to identify, formulate and solve engineering problems and develop critical thinking skills | Thesis and body of graduate work evaluated according to standard rubric | Graduate committee evaluation at time of graduation |
| | An ability to communicate effectively in oral and written form | Thesis, oral defense and body of graduate work evaluated according to standard rubric | Graduate committee evaluation at time of graduation |
| | An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice | Thesis and body of graduate work evaluated according to standard rubric | Graduate committee evaluation at time of graduation |
| | An ability to perform guided research | Thesis and body of graduate work evaluated according to standard rubric | Graduate committee evaluation at time of graduation |
| | Broad expert knowledge in field of electrical engineering and depth expert knowledge in a discipline of electrical engineering | Written comprehensive exam evaluated according to rubric | Department comprehensive exam given every semester by department faculty |
| | Students attain degree in a reasonable timeframe | Time to complete MSEE degree | Department tracks time for student to graduate |

Revised 5/18/12 by Charlie Mayer