

Montana State University College of Engineering
Learning Outcomes Assessment Plan (2012 draft)

Program: **College of Engineering**

Degree: **Chemical Engineering Program MS (Plan A - Thesis)**

Program Learning Outcomes Students will be able to:	Performance Indicators (What would you see if the student has learned?)	Measures (What is the measure and where, how, and when is data collected?)	Use of the Information (Who collects and compiles, who reviews)
Demonstrate technical expertise in emphasis area	Students successfully complete courses specified in program of study. Students successfully defend their thesis and research work.	Annual % of Plan A grad students with GPA equal or above 3.0 in all courses in Program of Study. Annual % of Plan A graduate students that successfully defend their thesis.	Department administrative assistant to collect data and maintain statistics. Department head to review bi-annually (even years).
Effectively communicate research to a scientific audience	Students successfully communicate their research in writing through their thesis document. Students successfully communicate their research work orally at the public MS thesis defense.	Annual % of Plan A graduate students submitting final signed thesis (by end of fifth semester). Annual pass rate (% of students passing) of oral defense of MS thesis.	Department administrative assistant to collect data and maintain statistics. Department head to review bi-annually (even years).
Perform quality original research	Students successfully defend the originality and quality of their research at the (oral) public final defense .	Annual pass rate (% of students passing) of oral defense of MS thesis.	Department administrative assistant to collect data and maintain statistics. Department head to review bi-annually (even years).

Program: **College of Engineering**

Degree: **Chemical Engineering Program MS (Plan B – non-Thesis)**

Program Learning Outcomes Students will be able to:	Performance Indicators (What would you see if the student has learned?)	Measures (What is the measure and where, how, and when is data collected?)	Use of the Information (Who collects and compiles, who reviews)
Demonstrate technical expertise in emphasis area	Students successfully complete courses specified in program of study.	Annual % of Plan B graduate students with GPA equal or above 3.0 in all courses in Program of Study.	Department administrative assistant to collect data and maintain statistics. Department head to review bi-annually (even years).
Effectively communicate research to a scientific audience	Students successfully communicate their research in writing and orally through their professional paper.	Annual % of Plan B graduate students successfully passing the professional paper requirement.	Department administrative assistant to collect data and maintain statistics. Department head to review bi-annually (even years).