Assessment Plan for Chemical Engineering Graduate Program

Master’s in Alternative Energy Program Learning Objectives (and Curricular Elements):

1. Prepare students as professional engineers with special training in technologies related to alternative energy. (Require students to take certain core courses and allow students to take elective courses covering advanced chemical engineering subjects as well as a range of related disciplines such as advanced materials, alternative energy, biotechnology, and fuel cells.)
2. Program will prepare students to as successful professionals in their field. (Participation in the department Research Seminar is a program requirement and students are able to interact with scientists in Chemical Engineering and related fields. Most of the students also participate in weekly group meetings, giving presentations about their current research progress.)
3. Program will prepare students as effective researchers in their field. (Provide opportunities for students to do thesis research in addition to coursework.)
4. Program will prepare students as effective teachers. (Student may complete a teaching assignment.)

Assessment Methods

**PhD**

Direct methods:
Grades B and above in core and elective courses- PLO 2
Qualifying exam PLO 1,2,5
Proposal review- PLO 1,2,3,5
Thesis defense, written and oral exam- PLO 1,2,3,4,5
Presentations in graduate seminar and research seminar- 1,2,3,4
Teaching review- PLO 6
Career data- PLO 1-7

Indirect methods:
Graduate student survey of learning and career path (PLO 1-7)

**MS**

Direct methods:
Grades B and above in core and elective courses- PLO 1
Thesis review by adviser- PLO 1-3
Presentations in graduate seminar and/or research seminar- 1-4
Career data- PLO 1-4

Indirect methods:
Graduate student survey of learning and career path (PLO 1-7)