Program Outcome Assessment Matrix (Approved revision August 2005)

- Required Courses:

Course/Tool	a	b	c	d	e	f	g	h	i	j	k	l	m	Title	Assessed by:
ChE 100	P	P					S			S	S		S	Intro. ChBE	Faculty/Students/DAC
ChE 120	P										P			Intro. ChBE Comp.	Faculty/Students/DAC
ChE 213	P				S					S				Materials Science	Faculty/Students/DAC
ChE 215	P				P								S	Elem. Princ. I	Faculty/Students/DAC
ChE 216	P				P			S		P			S	Elem. Princ. II	Faculty/Students/DAC
ChE 307	P				P						S		S	Thermodynamics I	Faculty/Students/DAC
ChE 310			P							S	P			Intro to Proc. Design	Faculty/Students/DAC
ChE 321	P		S		P									Fluid Mechanics Ops	Faculty/Students/DAC
ChE 322	P		S		P						P			Heat Transfer Ops	Faculty/Students/DAC
ChE 323	P		S		P								S	Mass Transfer Ops	Faculty/Students/DAC
ChE 328	P	S			P	S	S			S				Reaction Engineering	Faculty/Students/DAC
ChE 400						P	P	P	P	S				Prof. in ChBE	Faculty/Students/DAC
ChE 407	P				P						S			Thermodynamics II	Faculty/Students/DAC
ChE 411R	P		P	P			P		P	S			P	Design I	Faculty/Students/DAC
ChE 412R	P		P	P			P		P	S			P	Design II	Faculty/Students/DAC
ChE 424	P		S		P						P			Transport Analysis	Faculty/Students/DAC
ChE 438	P		S		P					S		P		Bioprocess Engineering	Faculty/Students/DAC
ChE 442	P	P			S		P						S	ChBE Laboratory I	Faculty/Students/DAC
ChE 443	P	P			S		P						S	ChBE Laboratory II	Faculty/Students/DAC
ChE 451	P		P		S						S			Proc. Dynamics & Cont.	Faculty/Students/DAC

- Standardized exams and survey instruments

FE Exam	P					P			P						Faculty/DAC
Senior Exit Survey	P	P	P	P	P	P	P	P	P	P	P	P	P		Student/Faculty/DAC
Alumni Survey	P	P	P	P	P	P	P	P	P		P	P	P		Alumni/Faculty/DAC
Employer Survey	P	P	P	P	P	P	P	P	P		P		P		Supervisor/Faculty/DAC

- Focus area electives and CORE 2.0 courses

ChE 444						P		P	S	P		P		Haz. Waste Manage.	Faculty/Students/DAC
ChE 445	P		P		P	S	S	S		S		P		Haz. Waste Treatment	Faculty/Students/DAC
ChE 452										S		P		Adv. Eng. Materials	Faculty/Students/DAC
ChE 463		P			P		S					P		Composite Materials	Faculty/Students/DAC
ChE 467							S			S		P		Intro. Polymer Eng.	Faculty/Students/DAC
University Seminar							P							or equivalent	
Engl 121							P							College Writing	
CORE (15 credits)								P						Diversity, IH, IS, IA	

P = primary course/assessment tool, S = secondary course/assessment tool

Program Outcomes: Students will attain:

a. an ability to apply knowledge of mathematics, science, and engineering.
b. an ability to design and conduct experiments, as well as to analyze and interpret data.
c. an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
d. an ability to function on multi-disciplinary teams.
e. an ability to identify, formulate, and solve engineering problems.
f. an understanding of professional and ethical responsibility.
g. an ability to communicate effectively.
h. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
i. the recognition of the need for, and an ability to engage in life-long learning.
j. a knowledge of contemporary issues.
k. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
l. an awareness of a particular career option through study in their focus area.
m. an ability to be team contributors.