

Program Outcome Assessment Matrix (Updated June 2006)

Assessment Tool Mapping - Student examples, standardized exams, and surveys

Assessment Tool	a	b	c	d	e	f	g	h	i	j	k	l	m	Title	Assessed/Reviewed by:
Student Examples	P	P	P		P	P	P	P	P	P	P		P	See next page	Faculty & DAC/Faculty
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	S	S	S	S	S	S	S	S	S	S	S	S	S		Alumni/Faculty & DAC
Employer Survey	S	S	S	S	S	S	S	S	S		S		S		Employer/Faculty & DAC

Course Mapping - Required Courses

Course	a	b	c	d	e	f	g	h	i	j	k	l	m	Title	Assessed/Reviewed by:
CHBE 100	P	P					S			S	S		S	Intro. CHBE	Students/Faculty
CHBE 120	P										P			Intro. CHBE Comp.	Students/Faculty
CHBE 213	P									S				Materials Science	Students/Faculty
CHBE 215	P				P								S	Elem. Principles I	Students/Faculty
CHBE 216	P				P			S		P			S	Elem. Principles II	Students/Faculty
CHBE 307	P										S		S	Thermodynamics I	Students/Faculty
CHBE 321	P		S		P									Fluid Mechanics Ops	Students/Faculty
CHBE 322	P		S		P						P			Heat Transfer Ops	Students/Faculty
CHBE 323	P		S		P								S	Mass Transfer Ops	Students/Faculty
CHBE 328	P	S	P		P		S			S				Reaction Engineering	Students/Faculty
CHBE 407	P				P						S			Thermodynamics II	Students/Faculty
CHBE 410	P		P			P		P		S				Intro to Proc. Design	Students/Faculty
CHBE 411R	P		P				P	P	P	S	P		P	Design I	Students/Faculty
CHBE 412R	P		P				P		P	S			P	Design II	Students/Faculty
CHBE 424	P		S		P						P			Transport Analysis	Students/Faculty
CHBE 438	P		S		P					S		P		Bioprocess Engineering	Students/Faculty
CHBE 442	P	P			S		P						S	CHBE Laboratory I	Students/Faculty
CHBE 443	P	P			S		P						S	CHBE Laboratory II	Students/Faculty
CHBE 451	P		P		S						S			Proc. Dynamics & Cont.	Students/Faculty

Course Mapping - Focus area electives and CORE 2.0 courses

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

P = primary course or assessment tool, S = secondary course or 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.