Texas A&M University

Marketable Skills

Program:	Interdisciplinary Engineering
Degree:	BS
Department:	CLEN
Contact Name:	Rachal Thomassie
Contact Phone:	979-845-2643

Outcome	Master the depth of knowledge required for a degree
Marketable	(1) an ability to identify, formulate, and solve complex engineering
Skills	problems by applying principles of engineering, science, and mathematics
	(6) an ability to develop and conduct appropriate experimentation,
	analyze and interpret data, and use engineering judgment to draw conclusions
	(4) an ability to recognize ethical and professional responsibilities in
	engineering situations and make informed judgments, which must
	consider the impact of engineering solutions in global, economic,
	environmental, and societal contexts

Outcome	Demonstrate critical thinking
Marketable	(1) an ability to identify, formulate, and solve complex engineering
Skills	problems by applying principles of engineering, science, and mathematics
	 Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
	 Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Outcome	Communicate effectively
Marketable	(3) an ability to communicate effectively with a range of audiences
Skills	Providing information to supervisors, co-workers, and subordinates by telephone,
	in written form, e-mail, or in person.

Outcome	Practice personal and social responsibility
Marketable	(4) an ability to recognize ethical and professional responsibilities in
Skills	engineering situations and make informed judgments, which must
	consider the impact of engineering solutions in global, economic,
	environmental, and societal contexts

Outcome	Demonstrate social, cultural, and global competence
Marketable	(2) an ability to apply engineering design to produce solutions that meet
Skills	specified needs with consideration of public health, safety, and
	welfare, as well as global, cultural, social, environmental, and
	economic factors

Outcome	Prepare to engage in lifelong learning
Marketable	(4) an ability to recognize ethical and professional responsibilities in
Skills	engineering situations and make informed judgments, which must
	consider the impact of engineering solutions in global, economic,
	environmental, and societal contexts
	• Establishing and maintaining personally challenging achievement goals and exerting
	effort toward mastering tasks.

Outcome	Work collaboratively
Marketable	(5) an ability to function effectively on a team whose members together
Skills	provide leadership, create a collaborative and inclusive environment,
	establish goals, plan tasks, and meet objectives
	• Giving full attention to what other people are saying, taking time to understand the
	points being made, asking questions as appropriate, and not interrupting at
	inappropriate times.

Notes:

- Marketable skills listed with a numbers (1)-(7) for this example program were drawn from ABET Criterion 3.
- Alternate sources for degree-specific marketable skills include learning outcomes and associated metrics used for programmatic assessment
- Learning outcomes or skills required for programmatic accreditation