Program:	Multidisciplinary Engineering Technology - Mechatronics
Degree:	BS
Department:	Engineering Technology and Industrial Distribution
Contact Name:	Dr. Joseph A. Morgan
Contact Phone:	979-575-0128

Outcome	Master the depth of knowledge required for a degree
Marketable Skills	 (1) apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline
	• (4) conduct standard tests, measurements, and experiments and to analyze and interpret the results

Outcome	Demonstrate critical thinking
Marketable Skills	 (2) design solutions for well-defined technical problems and assist with engineering design of systems, components, or processes appropriate to the discipline *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. *Considering the relative costs and benefits of potential actions to choose the most appropriate one

Outcome	Communicate effectively
Marketable Skills	 (3) apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature *The ability to listen to and understand information and ideas presented through spoken words and sentences *The ability to communicate information and ideas in writing so others will
	 understand *The ability to communicate information and ideas in speaking so others will understand *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	• (5) function effectively as a member of a technical team
Skills	 *being sensitive to others' needs and feelings and being understanding and helpful on the job
	• (i) ability to understand professional, ethical and social responsibilities

Outcome	Demonstrate social, cultural, and global competence

Marketable	• (j) A respect for diversity and knowledge of contemporary professional, societal
Skills	and global issues.

Outcome	Prepare to engage in lifelong learning
Marketable	• (h) understanding of the need for and an ability to engage in self-directed
Skills	continuing professional development.

Outcome	Work collaboratively
Marketable	• (5) function effectively as a member of a technical team
Skills	 *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
	 *Adjusting actions in relation to others' actions

Notes:

- Marketable skills listed with an asterisk (*) for this example program were drawn from the Knowledge, Skills, and Abilities identified by the US Department of Labor and Statistics for "electrical engineers" as published on O*Net Online (onetonline.org)
- Marketable skills listed with a letters (a)-(k) or (1) (5) for Mechatronics were drawn from ABET Criterion 3.