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| Program: | Aerospace Engineering |
| Degree: | BS |
| Department: | Aerospace Engineering |
| Contact Name: | Dr. Krysti Shryock |
| Contact Phone: | 979.845.0735 |

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| Outcome | Master the depth of knowledge required for a degree |
| Marketable Skills | <ul style="list-style-type: none"> • (1) an ability to identify, formulate, and solve complex engineering 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 |

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| Outcome | Demonstrate critical thinking |
| Marketable Skills | <ul style="list-style-type: none"> • (1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics • *Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions • *Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems |

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| Outcome | Communicate effectively |
| Marketable Skills | <ul style="list-style-type: none"> • (3) an ability to communicate effectively with a range of audiences • *The ability to communicate information and ideas in writing so others will understand • *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 |

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| Outcome | Practice personal and social responsibility |
| Marketable Skills | <ul style="list-style-type: none"> • (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 |

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| Outcome | Demonstrate social, cultural, and global competence |
| Marketable Skills | <ul style="list-style-type: none"> • (2) an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors |

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| | <ul style="list-style-type: none"> • (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 • *Being aware of others' reactions and understanding why they react as they do |
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| Outcome | Prepare to engage in lifelong learning |
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| Marketable Skills | <ul style="list-style-type: none"> • (7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies • *Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things • *Identifying the educational needs of others, developing formal educational or training programs or classes, and teaching or instructing others • *Understanding the implications of new information for both current and future problem-solving and decision-making |

| Outcome | Work collaboratively |
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| Marketable Skills | <ul style="list-style-type: none"> • (5) an ability to function effectively on a team whose members together 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 an asterisk (*) for this example program were drawn from the Knowledge, Skills, and Abilities identified by the US Department of Labor and Statistics for “aerospace engineers” as published on O*Net Online (onetonline.org)
- Marketable skills listed with 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