

## Institution Outcomes Assessment

### Direct and Indirect Measures for MMA Institutional Student Learning Outcomes (ISLOs) for Undergraduate Education (as of 7/8/2016):

Learning Outcomes	Direct Measures	Indirect Measures
Basic knowledge and understanding of the history, theories, scholarship, tools, technologies, methods, and/or specialized terms of a field of study.	<ul style="list-style-type: none"> <li>• USCG License Exams (Marine Transportation and Marine Engineering majors)</li> <li>• Facilities Engineering Qualification Exam (FEQE)</li> <li>• Fundamentals of Engineering (FE) Exam (required of Energy Systems Engineering majors)</li> <li>• IMB Competency Exam</li> <li>• IMB Capstone Project</li> <li>• EM Capstone Project</li> <li>• MSEP Environmental Monitoring Project</li> <li>• Co-Op Employer Evaluations (shoreside majors)</li> <li>• Commercial Shipping Evaluations (seagoing majors)</li> <li>• Experiential Learning Projects (shoreside majors)</li> </ul> <p><i>State licensure rates and certification outcomes are also tracked (required for some majors; optional for others)</i></p>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> <li>• Career Fair Employer Survey</li> <li>• Survey of Recent Alumni</li> <li>• IMB Exit Survey</li> <li>• ESE Student Curriculum Survey</li> </ul>
Basic knowledge and understanding of humanities, social sciences, sciences, and mathematics.	<ul style="list-style-type: none"> <li>• ETS Proficiency Profile</li> <li>• Pre- and post-tests (Chemistry I; Western Civilization)</li> <li>• Social Science assessments (essay exams, term papers)</li> <li>• Force Concept inventory (College Physics I and Engineering Physics I)</li> <li>• MathXL quizzes (Algebra and Trigonometry)</li> </ul>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> <li>• Career Fair Employer Survey</li> <li>• Survey of Recent Alumni</li> </ul>
Ability to explore concepts and questions that bridge different areas of learning.	<ul style="list-style-type: none"> <li>• Social Science assessments (essay exams, term papers)</li> </ul> <p><i>Additional measure(s) TBD</i></p>	<i>Measure(s) TBD</i>
Ability to write, read, speak, and listen effectively.	<ul style="list-style-type: none"> <li>• Writing Assessment Program (exam and portfolio)</li> <li>• ETS Proficiency Profile</li> <li>• Co-Op Employer Evaluations</li> <li>• Commercial Shipping Evaluations</li> </ul>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> <li>• Career Fair Employer Survey</li> <li>• Survey of Recent Alumni</li> </ul>
Ability to critically and creatively comprehend and evaluate new information and ideas.	<ul style="list-style-type: none"> <li>• Writing Assessment Program (exam and portfolio)</li> <li>• ETS Proficiency Profile</li> <li>• Co-Op Employer Evaluations</li> <li>• Commercial Shipping Evaluations</li> </ul>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> <li>• Career Fair Employer Survey</li> <li>• Survey of Recent Alumni</li> </ul>

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Learning Outcomes	Direct Measures	Indirect Measures
Ability to use quantitative reasoning skills, applying basic concepts of mathematics and science.	<ul style="list-style-type: none"> <li>• Pre- and post-tests (Chemistry I)</li> <li>• Force Concept inventory (College Physics I and Engineering Physics I)</li> <li>• MathXL quizzes (Algebra and Trigonometry)</li> </ul>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> </ul> <p><i>Additional measure(s) TBD</i></p>
Capacity for lifelong learning, including ability to utilize technology and information literacy skills.	<ul style="list-style-type: none"> <li>• Co-Op Employer Evaluations</li> <li>• Commercial Shipping Evaluations</li> </ul> <p><i>Additional measure(s) TBD</i></p>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> <li>• Career Fair Employer Survey</li> <li>• Survey of Recent Alumni</li> <li>• Library Research Assessment Project survey (Western Civilization)</li> </ul>
Ability to work and achieve goals as a member of a team.	<ul style="list-style-type: none"> <li>• Co-Op Employer Evaluations</li> <li>• Commercial Shipping Evaluations</li> </ul>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> <li>• Career Fair Employer Survey</li> <li>• Survey of Recent Alumni</li> </ul>
Capacity for leadership, including the ability to make rational decisions while complying with a set of standards.	<i>Measure(s) TBD</i>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> <li>• Career Fair Employer Survey</li> <li>• Survey of Recent Alumni</li> </ul>
Ability to perform and behave in a professional manner acceptable for career goals.	<ul style="list-style-type: none"> <li>• Co-Op Employer Evaluations</li> <li>• Commercial Shipping Evaluations</li> </ul>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> <li>• Career Fair Employer Survey</li> <li>• Survey of Recent Alumni</li> </ul>
Ability to make appropriate future decisions based on past and present conditions and circumstances.	<ul style="list-style-type: none"> <li>• Co-Op Employer Evaluations</li> <li>• Commercial Shipping Evaluations</li> </ul>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> <li>• Career Fair Employer Survey</li> <li>• Survey of Recent Alumni</li> </ul>
Basic knowledge, understanding, and appreciation of diverse social and political values.	<ul style="list-style-type: none"> <li>• Social Science assessments (essay exams, term papers)</li> </ul> <p><i>Additional measure(s) TBD</i></p>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> <li>• Career Fair Employer Survey</li> <li>• Survey of Recent Alumni</li> </ul>
Capacity for ethical reasoning, including the ability to make decisions and act in a socially responsible manner.	<i>Measure(s) TBD</i>	<ul style="list-style-type: none"> <li>• Senior Exit Survey</li> </ul> <p><i>Additional measure(s) TBD</i></p>
Ability to integrate knowledge and skills in civic and global contexts.	<ul style="list-style-type: none"> <li>• Social Science assessments (essay exams, term papers)</li> </ul> <p><i>Additional measure(s) TBD</i></p>	<i>Measure(s) TBD</i>
Capacity for empathy, including an appreciation for diversity and inclusion.	<i>Not Applicable (learning outcome not directly observable / difficult to directly observe)</i>	<ul style="list-style-type: none"> <li>• Campus Climate Survey</li> <li>• Survey of Recent Alumni</li> </ul>
Capacity for civic action, including the ability to engage in service that benefits the public good.	<ul style="list-style-type: none"> <li>• Experiential Learning Projects (shoreside majors)</li> </ul>	<i>Measure(s) TBD</i>