

## Academic Learning Compact

***Degree Program: Civil Engineering (BS) (CIP Code 14.0801)***

Intended Program Student Learning Outcomes	Direct and Indirect Measures	
	Direct Method of Assessment	Indirect Method of Assessment
<p><b>Outcome 1: [Communication Skills]</b>                      In odd-numbered years, ABET data will indicate that students have an ability to write a technical document that is clear, concise, and well organized and has minimal errors in spelling, punctuation, grammar, and usage (ABET Outcome 3a &amp; 3b). In even-numbered years, ABET data will indicate that students have an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.</p>	<p><b><u>Direct Measure(s)</u></b>                      Course-embedded assessment</p>	<p><b><u>Indirect Measure(s)</u></b>                      Departmental survey</p>
<p><b>Outcome 2: [Communication Skills]</b>                      In odd-numbered years, ABET data will indicate that students have an ability to plan, prepare, and deliver an oral presentation that is well organized, clear, and appropriate for the target audience, including visual aids and graphics that are easy to read, appropriate, and clear (ABET Outcome 3c &amp; 3d). In even numbered-years, ABET data will indicate that students have an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.</p>	<p><b><u>Direct Measure(s)</u></b>                      Course-embedded assessment</p>	<p><b><u>Indirect Measure(s)</u></b>                      Departmental survey</p>
<p><b>Outcome 3: [Critical Thinking Skills]</b>                      In odd numbered years, ABET data will indicate that students have an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics (ABET Outcome 1). In even-</p>	<p><b><u>Direct Measure(s)</u></b>                      Course-embedded assessment</p>	<p><b><u>Indirect Measure(s)</u></b>                      Departmental survey</p>

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numbered years, ABET data will indicate that students have 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.		
<p><b>Outcome 4: [Critical Thinking Skills]</b>            In odd-numbered years, ABET data will indicate that students have 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 (ABET Outcome 2). In even-numbered years, ABET data will indicate that students have 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.</p>	<p><b><u>Direct Measure(s)</u></b>            Course-embedded assessment</p>	<p><b><u>Indirect Measure(s)</u></b>            Departmental survey</p>
<p><b>Outcome 5: [Content/Discipline Knowledge and Skills]</b>            Data will indicate that students have an ability to take and pass the Fundamentals of Engineering (FE) licensure exam in preparation for becoming licensed professional engineers.</p>	<p><b><u>Direct Measure(s)</u></b>            Certification exams, licensure exams</p>	<p><b><u>Indirect Measure(s)</u></b>            Exit Survey</p>