

## Academic Learning Compact

**Degree Program: Chemical Engineering (BS) (CIP Code 14.0701)**

Intended Program Student Learning Outcomes	Direct and Indirect Measures	
	Direct Method of Assessment	Indirect Method of Assessment
<b>Outcome 1: [Communication Skills]</b> Students graduating from the program will have the ability to communicate effectively with a range of audiences.	<b><u>Direct Measure(s)</u></b> Grading with criteria or rubric	<b><u>Indirect Measure(s)</u></b> Exit Survey Departmental survey
<b>Outcome 2 [Critical Thinking Skills]</b> Students graduating from the program will 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.	<b><u>Direct Measure(s)</u></b> Grading with criteria or rubric	<b><u>Indirect Measure(s)</u></b> Exit Survey Departmental survey
<b>Outcome 3: [Content/Discipline Knowledge and Skills]</b> Students graduating from the program will have the ability to apply knowledge of mathematics, physics, chemistry, and chemical engineering to analyze chemical engineering processes.	<b><u>Direct Measure(s)</u></b> Course-embedded assessment	<b><u>Indirect Measure(s)</u></b> Exit Survey Departmental survey
<b>Outcome 4: [Content/Discipline Knowledge and Skills]</b> Students graduating from this program will 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.	<b><u>Direct Measure(s)</u></b> Grading with criteria or rubric	<b><u>Indirect Measure(s)</u></b> Exit Survey Departmental survey
<b>Outcome 5: [Content/Discipline Knowledge and Skills]</b> Students will 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.	<b><u>Direct Measure(s)</u></b> Course-embedded assessment	<b><u>Indirect Measure(s)</u></b> Exit Survey Departmental survey
<b>Outcome 6: [Content/Discipline Knowledge and Skills]</b> Students graduating from the program will demonstrate an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	<b><u>Direct Measure(s)</u></b> Course-embedded assessment	<b><u>Indirect Measure(s)</u></b> Exit Survey Departmental survey

Intended Program Student Learning Outcomes	Direct and Indirect Measures	
	Direct Method of Assessment	Indirect Method of Assessment
<p><b>Outcome 7: [Content/Discipline Knowledge and Skills]</b>            Students graduating from the program will demonstrate the ability to acquire and apply new knowledge as needed, using appropriate learning strategies. to communicate effectively.</p>	<p><u><b>Direct Measure(s)</b></u>            Grading with criteria or rubric</p>	<p><u><b>Indirect Measure(s)</b></u>            Exit Survey            Departmental survey</p>