



### Academic Learning Compact

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

Intended Program Student Learning Outcomes	Academic Learning Compact(s)	Direct and Indirect Measures	
		Direct Method of Assessment	Indirect Method of Assessment
Students graduating from the program will have the ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.	Critical Thinking, Discipline Specific Knowledge	Direct - Other	Indirect - Exit Survey Indirect - Focus Group
Students graduating from the program will have an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health,	Critical Thinking, Discipline Specific Knowledge	Direct - Other	Indirect - Exit Survey Indirect - Focus Group

safety, and welfare, as well as global, cultural, social, environmental, and economic factors.			
Students graduating from the program will have the ability to communicate effectively with a range of audiences.	Communication	Direct - Other	Indirect - Exit Survey Indirect - Focus Group
Students graduating from the program will have the 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.	Critical Thinking, Discipline Specific Knowledge	Direct - Other	Indirect - Exit Survey Indirect - Focus Group
Students graduating from the program will have the 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.	Communication, Critical Thinking, Discipline Specific Knowledge	Direct - Other	Indirect - Exit Survey Indirect - Focus Group
Students graduating from the program will have the ability to develop and conduct	Critical Thinking, Discipline Specific Knowledge	Direct - Other	Indirect - Exit Survey

appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.			Indirect - Focus Group
Students graduating from the program will have the ability to acquire and apply new knowledge as needed, using appropriate learning strategies.	Critical Thinking, Discipline Specific Knowledge	Direct - Other	Indirect - Exit Survey Indirect - Focus Group
At least 80% of the BS-ChE program graduates will, within six months of graduation, be employed in industry, government, or public service, or enrolled in post-graduate or professional schools.	Discipline Specific Knowledge	Direct - Academic Progression	Indirect - Alumni Survey Indirect - Exit Survey