

## **Program Educational Objectives for Mechanical Engineering at Grace College**

Grace engineering seeks to produce engineers that will (within 3 years of graduation):

1. Apply their mechanical engineering education to solve technical problems and make the world a better place through service.
2. Maintain the curiosity that drives lifelong learning and allows for the flexibility to adapt to the fast-moving 21<sup>st</sup> century engineering world.
3. Fulfill their calling in life through engineering practice, continuing education, and community involvement.
4. Serve as an ambassador for the engineering profession and Grace College in word and deed.

## **Grace College Mechanical Engineering Degree Student Outcomes**

Grace engineering will produce engineers that have the following abilities at graduation:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
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.
3. An ability to communicate effectively with a range of audiences.
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
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.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
8. An ability to perform hands-on industry relevant engineering tasks like machining, testing, and designing using CAD software.
9. An ability to identify and perform service activities using their engineering skills.

## Enrollment in the Bachelors of Mechanical Engineering Degree at Grace College

	Academic Year		Enrollment Year					Total Undergrad	Degrees Awarded – Anticipated May 2021
			1st	2nd	3rd	4th	5th		Bachelors
	Previous Academic Year	2020–2021	FT	14	4	4	3	0	25
PT			0	0	0	0	0	0	0
Current Academic Year	2021–2022	FT	12	7	3	4	0	26	4
		PT	0	0	0	0	0	0	0