

MECHANICAL ENGINEERING PROGRAM STANDARDS

PROGRAM EDUCATIONAL OBJECTIVES

Alumni of the Thales College Mechanical Engineering program will attain the following objectives within three years of graduating:

- Be engaged in:
 - The professional practice of engineering within traditional careers in design, manufacturing, technical sales, and other focuses associated with mechanical engineering.
 - Graduate school for continued learning and development.
 - A career oriented toward service, education, or some other form of community betterment.
- Refine engineering and professional skills developed through the co-op and bootcamp application at Thales College through ongoing professional experience.
- Provide solutions in the workplace through the application of engineering knowledge and skills.
- Utilize communication, project management, and leadership skills to function effectively in the workplace and advance team goals.
- Continuously improve and expand their professional skills through technical experience and a dedication to continuous learning.
- Demonstrate a commitment to the betterment of society through service, community involvement, and professional work.

STUDENT LEARNING OUTCOMES

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- 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.
- An ability to communicate effectively with a range of audiences.
- 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.
- 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.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

