Engineering Program Educational Objectives (PEOs)

The Engineering Programs are designed to provide its graduates a solid educational foundation on which they can build successful and sustainable careers in engineering or a related field, using their God-given talents and skills to further His kingdom as their careers develop. In particular, recent graduates of the Engineering Program will be prepared to do the following:

- 1. To be employed or pursuing an advanced degree in the field of engineering or other related disciplines.
- 2. To be productive members of interdisciplinary teams.
- 3. To assume leadership positions in their industry, their continuing education, or in their communities, as their careers develop.
- 4. To continue their professional development and engage in the life-long learning necessary for a sustainable career.

Student Outcomes (SOs)

The student outcomes for the Engineering Programs at Bethel University are:

- 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, both orally and in writing, 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