



**College of Engineering and Computer Science  
Academic Learning Compacts**

**Electrical Engineering - B.S.E.E.**

**Discipline Specific Knowledge, Skills, Behavior and Values**

- 1. Graduates will have an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics**
- 2. Graduates 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.**
- 3. Graduates will have an ability to communicate effectively with a range of audiences**
- 4. Graduates 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**
- 5. Graduates 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**
- 6. Graduates will have an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions**
- 7. Graduates will have an ability to acquire and apply new knowledge as needed, using appropriate learning strategies**

**Critical Thinking**

- 1. Graduates will have an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics**
- 2. Graduates 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.**
- 3. Graduates 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**

- 4. Graduates 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**
- 5. Graduates will have an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions**
- 6. Graduates will have an ability to acquire and apply new knowledge as needed, using appropriate learning strategies**

### **Communication**

- 1. Graduates will have an ability to communicate effectively with a range of audiences**

### **Assessment of Electrical Engineering - B.S.E.E. Outcomes**

**These outcomes will be assessed using a variety of assessment methods, including:**

- Data for the assessment are collected through surveys (alumni, graduating students, Industrial Advisory Board), undergraduate student forums, the Electrical Engineering Curriculum Oversight and Review committee, senior design course evaluation, and course assessment reports.**