

# UNIVERSITY OF CENTRAL FLORIDA

## ACADEMIC LEARNING COMPACTS

# COLLEGE OF ENGINEERING AND COMPUTER SCIENCE COMPUTER ENGINEERING - B.S.CP.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 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 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.
- 2. 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.
- 3. 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.
- 4. Graduates will have an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

#### Assessment of Computer Engineering - B.S.Cp.E. Outcomes

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

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