Publication of Student Outcomes and Program Educational Objectives

The student outcomes can be found in the University Catalog and also at the Department's

web site: https://www.uwyo.edu/eecs/index.html

Electrical Engineering

The Program Educational Objectives for the Electrical Engineering Program are:

(EE-OB1) Be able to successfully practice the profession of Electrical Engineering.

(EE-OB2) Be prepared and motivated to accept challenging assignments and responsibilities and be productive members of society.

(EE-OB3) Demonstrate successful career growth (e.g., professional registration, graduate school, promotion and advancement, patents, publications).

Electrical Engineering Program Student Outcomes:

- 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.

Computer Engineering

The Program Educational Objectives for the Computer Engineering Program are:

(CPEN-OB1) Be able to successfully practice the profession of Computer Engineering.

(CPEN-OB2) Be prepared and motivated to accept challenging assignments and responsibilities and be productive members of society.

(CPEN-OB3) Demonstrate successful career growth (e.g., professional registration, graduate school, promotion and advancement, patents, publications).

Computer Engineering Program Student Outcomes 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 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.

Computer Science

The following are the objectives that the Computer Science program is preparing its graduates to achieve:

- Success: Graduates will be employed in a computer science-related field or making progress toward an advanced graduate degree.
- Growing: Graduates show continued learning and leading in computing-related professions.
- Ethics: Graduates exhibit ethical and responsible behavior in all professional and community endeavors.

The Program Educational Objectives are contained within the General Bulletin for all engineering and computer science programs.

Computer Science Program Student Outcomes are as follows:

- 1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- 2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- 3. Communicate effectively in a variety of professional contexts.
- 4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- 5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- 6. Apply computer science theory and software development fundamentals to produce computing-based solutions.