

# Objectives and Outcomes for the BS in Computer Science

## Objectives

- I. To provide a solid education in computer science in a liberal arts setting that prepares the student for graduate study or entrance into a profession in the computing sciences.
- II. To help students develop the ability and mental precision necessary to analyze, think critically, consider alternatives, and finally to be creative in computer science.
- III. To provide courses and personnel that view computer science as part of the human endeavor, that is, to see computer science in relation to more general intellectual development and to the needs of society.
- IV. To foster an aptitude and desire for life-long learning.

In other words we want to turn out students who will not only contribute to the field of computer science but also succeed in life. These objectives are reflected in our program outcomes which are designed to produce graduates who, as practicing engineers, are able to:

- Contribute to their field of study
- Apply sound design methodology and tools to solve problems
- Respect their role in society
- Expand their knowledge after graduation

We call these our CARE objectives.

In order to satisfy these objectives we have several outcomes which are expected of our students at the time of graduation. These outcomes are regularly monitored.

## Outcomes

- 1) An ability to apply mathematics and the scientific method to solving computing problems.
- 2) An ability to critically analyze a problem and to design, implement, and evaluate a computing solution that meets requirements.
- 3) An ability to work effectively in small groups on medium scale computing projects.
- 4) An ability to use oral and written communication effectively.
- 5) A recognition of the need to engage in life long learning.
- 6) An ability to understand the social and ethical implications of working as a professional in the field of computer science.
- 7) An ability to use current tools and methodologies in computing practice.

The relationship between these outcomes and the program objectives are mapped below:

<b>Objective</b>	<b>Outcome(s)</b>
Contribute	3, 4, 6
Apply	1, 2, 7
Respect	6
Expand	5