BSCSE STUDENT OUTCOMES

The UGA BSCSE Program has adopted and is using the ABET Student Outcomes (a) through (k) as listed below. These Student Outcomes are documented in the syllabus for each BSCSE course:

a) An ability to apply knowledge of mathematics, science, and engineering;
b) An ability to design and conduct experiments, as well as to analyze and interpret data;
c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
d) An ability to function on multi-disciplinary teams;
e) An ability to identify, formulate, and solve engineering problems;
f) An understanding of professional and ethical responsibility;
g) An ability to communicate effectively;
h) The broad education necessary to understand the impact of engineering solutions in a global economic, environmental and societal context;
i) A recognition of the need for, and an ability to engage in, life-long learning;
j) A knowledge of contemporary issues;
k) An ability to use techniques, skills, and modern engineering tools necessary for engineering practice.
## Relationship between the BSCSE Program Educational Objectives and Student Outcomes

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<th>Program Educational Objectives</th>
<th>Student Outcomes</th>
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| (1) Established themselves in positions of leadership in their profession and their community in fields that require integration of hardware and software | d) an ability to function on multi-disciplinary teams  
e) an ability to identify, formulate, and solve engineering problems  
f) an understanding of professional and ethical responsibility  
g) an ability to communicate effectively  
h) The broad education necessary to understand the impact of engineering solutions in a global economic, environmental and societal context;  
j) a knowledge of contemporary issues |
| (2) Have developed expertise in creating design solutions in software, hardware, and their integration | a) an ability to apply knowledge of mathematics, science, and engineering  
b) an ability to design and conduct experiments, as well as to analyze and interpret data  
c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability  
e) an ability to identify, formulate, and solve engineering problems  
k) an ability to use techniques, skills, and modern engineering tools necessary for engineering practice |
| (3) Developed an awareness to integrate safety and security | f) an understanding of professional and ethical responsibility  
h) The broad education necessary to understand the impact of engineering solutions in a global economic, environmental and societal context;  
j) a knowledge of contemporary issues |
| (4) Engaged in lifelong learning through professional training, certification, or pursuit of graduate degrees | f) an understanding of professional and ethical responsibility  
i) recognition of the need for an ability to engage in life-long learning |
| (5) Developed awareness and an appreciation for business ethics and responsibility towards the common good and the environment | f) an understanding of professional and ethical responsibility  
h) The broad education necessary to understand the impact of engineering solutions in a global economic, environmental and societal context;  
j) a knowledge of contemporary issues |