

ABET General Student Outcomes:

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.

BS in Computing Student Outcomes:

- **Problem Solving and Critical Solving** (Solve problems by creating client/server applications that are efficient, user-friendly, and portable)
 - a. Formulate project requirements and alternative solutions appropriate to the computing problems
 - b. Integrate design and implementation principles to develop effective applications
 - c. Perform critical analyses of the impacts of decisions based on mathematics
 - d. Implement computing solutions that consist of system and application software written in various programming languages
 - e. Create efficient, user-friendly applications appropriate to the computing problems
- **Communication and Interpersonal Skills** (Use written, oral and electronic methods for effective communication)
 - a. Document all aspects of a system precisely and clearly
 - b. Use written, oral, and electronic communication to convey technical information effectively
 - c. Devise effective user interfaces based on the application
 - d. Work cooperatively in teams and with others
- **Ethical and Professional Responsibilities** (Discern and articulate the impact of technologies on society)
 - a. Determine the economic and organizational effects of information technology on global society
 - b. Recognize important legal issues and demonstrate appropriate social responsibilities in information technology
 - c. Demonstrate an awareness of the codes of professional ethics in the information technology industry
 - d. Plan for and ensure the security, privacy, and integrity of data
 - e. Recognize the need for continuing professional development

Mapping between ABET General Student Outcomes and BS in Computing Student Outcomes:

ABET General Student Outcomes	BS in Computing	Course outcomes
1) Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.	Problem Solving and Critical Solving a) Formulate project requirements and alternative solutions appropriate to the computing problems	CPSC 146-obj#1, CPSC 311-obj#1, CPSC 327- obj#1, CPSC 327- obj#3
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.	Problem Solving and Critical Solving d) Integrate design and implementation principles to develop effective applications b) Implement computing solutions that consist of system and application software written in various programming languages	CPSC 217-obj#1, CPSC 246-obj#-1, CPSC 323-obj#1, CPSC 423-obj#1 CPSC 130-obj#1, CPSC 146-obj#2, CPSC 207-obj#1
5) Function effectively as a member or leader of a team engaged in activities appropriate to the program’s discipline.	Communication and Interpersonal Skills d) Work cooperatively in teams and with others	CPSC 300-obj#3, CPSC 427-obj#2, CPSC 488-obj#5
4) Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.	Ethical and Professional Responsibilities b) Recognize important legal issues and demonstrate appropriate social responsibilities in information technology c) Demonstrate an awareness of the codes of professional ethics in the information technology industry	CPSC 207-obj#2, CPSC 323-obj#3, CPSC 423-obj#3 CPSC 130-obj#3, CPSC 146-obj#5, CPSC 207-obj#3
3) Communicate effectively in a variety of professional contexts.	Communication and Interpersonal Skills a) Document all aspects of a system precisely and clearly b) Use written, oral, and electronic communication to convey technical information effectively	CPSC 130-obj#2, CPSC 146-obj#4, CPSC 217-obj#2, CPSC 246-obj#3 CPSC 300-obj#1, CPSC 300-obj#2, CPSC 427-obj#3, CPSC 427-obj#4, CPSC 488-obj#2, CPSC 488-obj#3

	c) Devise effective user interfaces based on the application	CPSC 146-obj#3, CPSC 427-obj#2, CPSC 488-obj#4
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