



Program Outcomes for Bachelor's Degree – Information Systems Emphasis

As required of all students graduating with a bachelor's degree in Computer Science at Utah State University, students graduating with an **information systems emphasis** must demonstrate the following:

1. Proficiency in programming in at least two programming languages that have significance in industry
2. Mastery of the following core curriculum
 - a. Data structures and algorithms
 - b. Computer architecture and organization
 - c. Programming languages
 - d. Theory of computing
 - e. Software engineering
3. Understanding of the practices and dynamics required to develop software whether it be a single program or a major software product developed in a team environment
4. Proficiency in the use of mathematical tools including calculus, and elementary statistics and probability
5. Sufficient mastery of fundamental knowledge of computer science to be a life-long learner
6. Understanding of the social and ethical issues that face computer scientists , thus, being able to contribute to society in a positive and productive manner
7. Ability to communicate information effectively both in writing and orally

In addition to the core objectives listed above, students who graduate with an **information systems** emphasis must also demonstrate the following:

1. Proficiency in the use of mathematical tools, specifically discrete mathematics
2. Understanding of the basics of science, specifically the scientific method
3. Understanding of information and database systems and their implementation
4. Understanding of basic business, accounting, and economic principles
5. Understanding of basic team and organizational leadership principles