CS, IS, IT

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It is typical for new students in computing to have a hazy concept of the different degree paths and job opportunities. Most students have heard of Computer Science, but fewer are familiar with Information Systems and Information Technology.

All computing majors at BYUH share the same core content: working with computers and making them productive for people. But there are sub-disciplines that focus on special areas.

1 CIS

CIS stands for Computer and Information Sciences. It is the umbrella term that covers all computing disciplines.

BYUH offers a major in CIS. This differs from CS, IS, and IT in that it is more general and broad. It does not require the depth of study in one particular area as would be expected in the other degrees.

Systems engineering captures the overall analysis and design of computing systems in particular and business systems in general.

Ethics explores the issues of responsibility for creating a mouse trap that may still be operational after the creator is gone. When we develop systems or write programs, what degree of care should be involved? When old notions of privacy or property rights break down, how do we reinvent them for the future?

2 CS: Programming

CS stands for Computer Science. CS pays more attention to algorithms and programming.

The dress code for computer scientists is often more casual than for people in IS and IT because IS and IT have to deal with management and other employees more often. CS tends to sit in the background and solve problems.

3 IS: People

IS stands for Information Systems. IS pays more attention to human needs and how those can be met through appropriate use of computing technologies.

Database particularly tries to capture the way information is organized within businesses and organizations. Relationships are explored and firmed up so the data can be used by programs to inform management decisions and facilitate worker activities such as shipping.

4 IT: Configuration

IT stands for Information Technology. IT is a recent specialization within IS but has rapidly developed its own identity. The primary focus is on installing and adjusting computers and software so they meet the needs of their users.