

# Computer Information System (CIS), Computer Science (CS), Computer Engineering Technology (CET), Information Technology (IT) Programs “Conceptual Fit – Similar yet different?”

## Descriptions per Association for Computing Machinery (ACM) – Curricula 2005

**CIS** majors specialize in integrating information technology solutions and business processes to meet the information needs of the organization.

**CS** majors have an understanding of the inner-workings of the technology used to develop computer-based solutions.

**CET** majors design and construct computers and computer-based systems. They study hardware, software, communications and the interaction among them.

**IT** majors emphasize the technology itself more than the information it conveys. They specialize in hands-on expertise to care for the technical infrastructure of an organization and to ensure systems are secure, upgraded, maintained and replaced.

## Course Content per Association for Computing Machinery (ACM) – Curricula 2005

**CIS** focuses on determining the requirements, analysis, design and implementation for an organization's information systems. Examples include providing a web-based sales order entry system, defining ways to store information in a database and developing decision support systems for executive decision-making.

**CS** focuses on the theoretical and algorithmic function of computers such as designing software, devising new ways to use computers and developing ways to solve computer problems. Examples include using computers to decipher DNA and to develop new techniques and algorithms to optimize databases.

**CET** focuses on the theories, electrical engineering and mathematics in order to apply solutions to design computers and computer-based devices. One example includes designing a digital hardware computer configuration.

**IT** focuses on selecting and maintaining the hardware and software products for an organization. Examples include the installation of local area networks and managing the desktop upgrade for the Microsoft Vista operating system.

