

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

**CET** majors apply modern hardware and software technologies in the design and implementation of devices and systems used in both the industrial and consumer sectors.

**CET** focuses on integrating principles from computer science, electrical engineering and mathematics in the creation of "smart" devices. Examples include computer-based embedded systems (as used in real-time process controllers) and wireless data communication networks.

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

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

**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.

**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.

**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.

