

What is the difference?

COMPUTER SCIENCE

“the Builders”

Computer Engineering

Computer Engineering is a discipline that encompasses the science and technology of design, construction, implementation, testing, and maintenance of software and hardware components of modern computing systems and computer-controlled equipment.

Computer engineers are the minds behind so many novel systems that we use every day such as cell phones, video games, and laptops.

Computer Science

Computer Scientists master the theory and practice of computing, and explore new and exciting ways to use computers. Systems like Google and Amazon are created by computer scientists. By the time you are a senior you are prepared to design and program a compiler, or program a number of artificial intelligence programs. Or, you could work with a computer engineer to help do robotics, or with a graphic artist to design and program games.

Software Engineering

Software Engineers design and develop large software systems. They may lead teams of software developers or quality assurance engineers. They also work with users and customers to understand their needs. Software systems, such as Microsoft Office, are implemented by software engineers.

Information Systems & Technology

“the Maintainers”

Information Systems

Information Systems involves people and computers. It involves collecting, filtering, creating, processing & interpreting information. IS graduates have a strong business curriculum complimented by courses that focus on utilizing and creating information systems to solve business problems.

We offer four emphases that focus in analytics, application development, healthcare information systems, and information security management.

Information Technology

Every organization uses some form of information technology to perform its operations. Information Technology includes installing, managing, and maintaining the computing infrastructure on which organizational systems run. IT prepares students to work as data communication consultants, information security analysts, and network administrators. The core of the BS IT program prepares students to have a strong foundation in computer architecture, data communication, information security, networks, and system administration.

Digital Media

“the Users”

Web Design & Development

Digital experiences that put User-Centered design in the middle of how they interact with digital screens or devices. The degree has two concentrations that include **Interaction Design** (UX or IxDA) and the **Web & App Development**. This field has a projected job growth of more than 13 percent during the coming decade, with many opportunities to advance in a lucrative technology career.

Our goal is to prepare students to become the best prepared **“Junior Level Web Developers”** or **“Digital Product Designers”** in the UVU service area with skills in visual design, digital asset creation, HTML5/CSS3, responsive design, Frameworks, PHP, API's, Content Management Systems, Problem Solving, Teamwork, and written as well as verbal communication skills. We also emphasize lifelong learning and personal responsibility.

Interaction Design Emphasis

Prepares students for jobs in Web Design, Interaction Design, Digital Product Design, VR/AR Content Development (Virtual Reality/Augmented Reality), and production and maintenance of websites within teams. The curriculum will include basic training in web development and scripting alongside the Web & App Development students. Interaction Design students will be fluent in understanding and collaborating with developers and other team members to create digital experiences. They will use industry standard design and development tools to integrate with the development process.

Web & App Development Emphasis

Prepares the students for jobs in Web Development, Front-end Web Development, Web & App Development, and production and maintenance of websites and other digital experiences. The curriculum will include design training and project management with Interaction Design students, to understand how to work in cross-functional teams. The student will be using tools such as PHP, frameworks, WordPress, CSS, HTML 5, and JavaScript.