

# COMPUTER SCIENCE TECHNOLOGY (CSTE)

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**CSTE 5319. Critical Analysis-Instruc Sftwr. 3 Hours.**

Students examine the instructional and educational value of commercially available software for the pre-k through 12th grade and enterprises. Students build upon a foundation of instructional theory to identify appropriate characteristics of instructional software and explore the effectiveness of instructional software in the classroom. This course may not be counted toward the M.S. in Computer and Information Science, Information Assurance and Security or Digital Forensics.

**CSTE 5336. Educational Multimedia. 3 Hours.**

Students explore the uses of multimedia in the classroom and extend the teachers' skill base in the development of appropriate multimedia examples to support and enhance the middle school and high school curricula. Throughout the course, students gain experience in still and motion digital editing, and audio and animation production. This course may not be counted toward the M.S. in Computer and Information Science, Information Assurance and Security or Digital Forensics.

**Prerequisite:** CSTE 5319 and Graduate standing.

**CSTE 5337. Design Instrctnl Mat For Web. 3 Hours.**

Students examine the development of websites for instructional purposes. Students explore the systematic design of instruction, a process that examines the development of appropriate course goals, the identification of measurable objectives that meet those goals, and intelligent approaches to assessing student performance. This design approach is then applied to the development of web-based materials, providing opportunities for skills acquisition in a variety of multimedia applications and their incorporation into a website. The course culminates in the development of a geometry web site for use in schools and businesses. This course may not be counted toward the M.S. in Computer and Information Science, Information Assurance and Security or Digital Forensics.

**Prerequisite:** CSTE 5336.

**CSTE 5338. Dev of Tech Infrastructre-Schl. 3 Hours.**

This course examines the funding, design and implementation processes required to establish and realize a coherent technology acquisition and management strategy.

**Prerequisite:** CSTE 5337.

**CSTE 7315. Educational Network Design. 3 Hours.**

Students examine the technical, environmental, and policy issues involved in the development of educational technology infrastructures, focusing on network design and evaluation.

**CSTE 7325. Technology Sustainability. 3 Hours.**

Students examine the potential and the challenges associated with initiating and maintaining green and cost-efficient technology infrastructures based on environmental awareness initiatives.

**CSTE 7335. Mgmt Application Analysis. 3 Hours.**

Students are provided a systematic and rational approach to the analysis, evaluation, and implementation of course management systems from the standpoints of pedagogical success, user friendliness, and cost effectiveness.

**CSTE 7336. Instructional Design Assmt. 3 Hours.**

Student apply instructional design theories to the development, analysis, evaluation, and assessment of various digital instructional designs.

**CSTE 7380. Inst Tech Research Methods. 3 Hours.**

Students focus on the research questions, approaches, and measures typically employed by instructional technology researchers.