

Communications Technology (CTEC)

COURSES

CTEC 2350. WEB COMMUNICATION DESIGN AND DEVELOPMENT 1. 3 Hours.

Overview of theoretical principles of communication, organization, human-computer interaction, and user experience research for effective communication over the Internet. This course provides an introduction to essential elements of Web design and development, including using markup and style sheet languages, developing information architecture, and assessing usability.

CTEC 3320. MULTIMODAL COMMUNICATION AND DESIGN. 3 Hours.

Recognizing the important role content plays in shaping user experience (UX), this course focuses on how different communication modalities influence content strategies. Students will learn principles, techniques, and workflows for creating content aligned with these strategies. Through hands-on multimedia projects, students will develop skills in scripting, storyboarding, audio and visual recording, multimedia editing, motion design and animation, and post-production techniques. Prerequisite: COMM 3303.

CTEC 3323. USER EXPERIENCE DESIGN PROCESS. 3 Hours.

Explores user experience (UX) design emphasizing inclusivity, ethics, and social impacts. Students will apply industry best practices in workflow management, project collaboration, and AI tools to craft digital experiences based on interaction design principles and emerging UX trends. Deliverables, including component-based design systems, wireframes, and interactive prototypes, prepare students for professional practice with a focus on designing for positive change. Prerequisite: A grade of C or better (2.0/4.0) in CTEC 2350.

CTEC 3350. WEB COMMUNICATION DESIGN AND DEVELOPMENT 2. 3 Hours.

A continuation of CTEC 2350. This course focuses on creating intuitive, accessible web experiences that enable users to effectively consume and interact with content via HTML, CSS, and JavaScript. Key topics include translating design briefs and visual mockups into functional code, adapting content for different devices, and incorporating interactivity and multimedia elements to enhance user engagement. Prerequisite: CTEC 2350 with a grade of C (2.0/4.0 scale) or better, and 3 hours of Math.

CTEC 4309. INTERNET MARKETING COMMUNICATION. 3 Hours.

Course examines best practices in marketing communication; considers electronic commerce conducted via current communication and information technology. Discussion of theories, research strategies, usage trends, and current development. Prerequisite: COMM 3300, COMM 3315, a grade of C (2.0/4.0) or better in COMM 2311 and one of the following: ADVT 3305, CTEC 3350, PREL 3340, or BCMN 3340.

CTEC 4321. DIGITAL COMMUNICATION MANAGEMENT. 3 Hours.

Study of corporate and organizational communication theories through a user-centered approach. Students will design, analyze, and evaluate the organization and structure of digital communication via the development of Web-based, database-supported interactive applications. Prerequisite: COMM 3315, a grade of C or better (2.0/4.0) in the following: COMM 2311, CTEC 2350, and CTEC 3350.

CTEC 4323. USER EXPERIENCE RESEARCH AND INTERACTION DESIGN PRINCIPLES. 3 Hours.

Study of user experience (UX) research based on the Humanity-Centered Design approach. Students will conduct original research, including interviews, surveys, probes, contextual observations, usability testing, and data analysis. Hands-on projects integrate design principles with research insights, equipping students to conduct comprehensive UX research that guides the creation of user-centric interfaces, preparing them for roles in UX design and research. Prerequisites: COMM 3315 and a grade of C or better (2.0/4.0) in the following: COMM 2311, CTEC 2350, CTEC 3323, CTEC 3350, or, for non-CTEC majors, permission of the department.

CTEC 4350. WEB COMMUNICATION DESIGN AND DEVELOPMENT 3. 3 Hours.

This capstone course of the CTEC sequence reviews and applies theoretical principles of communication, human-computer interaction, user experience research, and information architecture for effective communication over the Internet. The course includes web design, implementation, development and project management. Prerequisites: A grade of C (2.0/4.0) or better in the following courses: CTEC 2350, CTEC 3320, CTEC 3350, CTEC 4309, and either CTEC 4321 or CTEC 4323.

CTEC 4391. CONFERENCE COURSE. 3 Hours.

Topic assigned on an individual basis, covering individual research or study in the designated areas. May be repeated when topic changes. Prerequisite: 60 or more hours earned and permission of the department.

CTEC 4393. SPECIAL TOPICS. 3 Hours.

Special studies in communication technology. Topic varies from semester to semester. May be repeated when topic changes, for a maximum of six credit hours. Prerequisite: 60 or more hours earned and permission.

CTEC 4395. PROFESSIONAL INTERNSHIP. 3 Hours.

Individual research while working with business and industry. Individual conference to be arranged. Prerequisite: 60 or more hours earned and permission.