# Instructional Technology Courses (INSTTECH)

## Courses


This is a foundational course that prepares pre-service educators to facilitate student learning in technology-rich high school environments. The course provides hands-on experiences integrating technology, pedagogy, and content knowledge to support clearly-defined student learning outcomes. Pre-service teachers select and design technology-enhanced learning tools to promote collaboration, creativity, communication, and higher-order thinking skills in the classroom. Students explore contemporary topics related to educational media and technology trends in education. The following majors are waived from INSTTECH 1020 (240:020): Department of Technology, Music Education, Art Education, Secondary Science teaching (Science Education, Biology, Chemistry, Earth Science, Mathematics Education and Physics), Secondary Business Education teaching, and Modern Language education. (Fall and Spring)


Students engage in student-driven, project-based, hands-on learning opportunities. This involves connecting with local schools and technology specialists in the area, experimenting with the new interactive classroom tools, and engaging in problem-based learning. Techniques will be used to expand creativity of learners, collaboration and other higher-order thinking skills, while building the digital backpack of educators. Prerequisite(s): INSTTECH 1020 (240:020) or INSTTECH 1031 (240:031). (Spring)


This is a foundational course that prepares pre-service educators to facilitate student learning in technology-rich Pre-K-12 environments. The course provides hands-on experiences that integrate technology, pedagogy, and content knowledge to support clearly-defined student learning outcomes. Pre-service teachers select and design technology-enhanced learning tools to promote collaboration, creativity, communication, and higher-order thinking skills in the classroom. Students explore contemporary topics related to educational media and technology trends in education. (Fall and Spring)

### INSTTECH 4110/5110. Developing and Directing Online Learning — 3 hrs.

Students explore online learning and the special needs/concerns of teaching at a distance. Students will be actively involved in creating effective distance education: engaging online learners, addressing learner needs, and fostering interactive learning environments. Prerequisite(s): INSTTECH 1020 (240:020) or INSTTECH 1031 (240:031); junior standing. (Spring)


Students are prepared to critically examine contemporary issues, explore current research, and investigate emerging trends in educational technology. It involves students in strategies for making informed decisions concerning equity, ethics, and enhancing the curriculum. Prerequisite(s): INSTTECH 1020 (240:020) or INSTTECH 1031 (240:031); junior standing. (Fall)


The use of computer-generated imagery in media often is misinterpreted, blurring the line between reality and fiction. This course will empower students to critically interpret visual messages, understand their impact on world cultures, and appreciate how visuals influence learning and perception. This will open the eyes of students, expand their knowledge base, and empower them to become more effective educators, designers, and leaders. Prerequisite(s): junior standing. (Fall)

### INSTTECH 4139/5139 (240:139g). Planning and Producing Instructional Media — 3 hrs.

Teaches planning and production steps essential for creating instructional multimedia projects. Students produce a real-world instructional multimedia product using the framework of the ISTE instructional technology standards. Lab as arranged. Prerequisite(s): INSTTECH 1020 (240:020) or INSTTECH 1031 (240:031) or consent of instructor; junior standing. (Fall and Spring)

### INSTTECH 4153/5153 (240:153g). Using Digital and Social Media in Education — 3 hrs.

Involves students in integrating leading-edge research about using digital and social media in education with hands-on experience. Students engage in social media to experience how it can be part of the learning process. Students create an interactive instructional environment and document their pedagogical choices as a final project. Prerequisite(s): INSTTECH 1030 (240:030) or INSTTECH 4139/5139 (240:139g); junior standing. (Fall)

### INSTTECH 4160 (240:160). Instructional Technology Projects — 1-3 hrs.

Independent instructional technology projects. Credit to be determined at time of registration; project, credit and evaluation criteria require advance consent of instructor. May be repeated for maximum of 3 hours. (Fall and Spring)

### INSTTECH 4170/5170 (240:170g). Supporting Learning with Dynamic Web Design — 3 hrs.

Focuses on the evaluation and design of electronically-produced materials. Provides students with opportunities to apply basic visual design principles to the development of web-based instructional media. Includes hands-on experience with web site design. Prerequisite(s): junior standing. (Variable)

### INSTTECH 4186/5186. Studies in Instructional Technology — 1-3 hrs.

Individualized study of a specific problem or application in an area as determined by instructor and student. Prerequisite(s): junior standing. (Fall and Spring)

### INSTTECH 4189 (240:189). Readings in Instructional Technology — 1-3 hrs.

Independent instructional technology projects. Credit to be determined at time of registration; project, credit and evaluation criteria require advance consent of instructor. (Fall, Spring, Summer)
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Action research involves teachers systematically investigating how to develop practical solutions to improve their teaching practice. This course engages students in creating an action research proposal and preparing an IRB application for actual research. This proposal may be used as a starting point for the final masters paper. Prerequisite(s): INSTTECH 6240 (240:240). (Fall)

**INSTTECH 6232 (240:232). Selecting and Integrating Instructional Technology** — 3 hrs.
Examines new technologies that generate need for new literacies for 21st century students. Includes procedures for selection and integration of instructional technologies to support learning. (Fall)

Explores leading change towards 21st century learning. Change theory is introduced and then applied to everyday educational systems. Leadership skills are developed through both theory and practical applications. (Fall)

**INSTTECH 6240 (240:240). Understanding Instructional Design** — 3 hrs.
Students will apply a systematic instructional design model from the initial analysis through design, development and evaluation. Students will master the fundamental practices upon which the instructional design process is based. (Spring)

**INSTTECH 6250. Writing a Graduate Paper/ePortfolio** — 3 hrs.
Refines skills in writing a Masters Literature Review: researching, reading, writing and formatting a paper. Masters ePortfolio is organized, formatted and development begins. (Fall)

**INSTTECH 6260 (240:260). Advanced Instructional Technology Projects** — 1-3 hrs.
Independent instructional technology projects. Credit to be determined at time of registration; project, credit and evaluation criteria require advance consent of instructor. May be repeated for maximum of 3 hours. (Fall, Spring, Summer)

**INSTTECH 6285 (240:285). Readings in Instructional Technology** — 1-3 hrs.
Reviews individualized selected readings in an area of emphasis as determined by instructor and student. May be repeated for maximum of 3 hours. (Fall, Spring, Summer)

Individualized study of a specific problem or application in an area as determined by instructor and student. (Fall, Spring, Summer)

**INSTTECH 6289 (240:289). Seminar in Instructional Technology** — 3 hrs.
Provides the opportunity for candidates to explore a variety of topics in preparation for their profession. (Variable)

Students will be provided the opportunity to spend significant time on-site in a supervised position. This practicum experience assists students in discovering, developing and refining necessary competencies and skills for their proposed career goals. (Variable)

**INSTTECH 6299 (240:299). Research** — 3 hrs.
Students will complete their masters literature review/project report/original research/journal article during this course. It should be taken in the final semester of your program. Prerequisite(s): consent of department. (Fall, Spring, Summer)

This doctoral level course engages students in creating innovative instructional projects by applying current research, several instructional design models and learning theories in the systematic instructional design process. (Variable)