EDUCATIONAL TECHNOLOGY ENDORSEMENT REQUIREMENTS

EDUC 5800	Cognition, Education and Technology	3 Credits

This course examines the increasingly pervasive role of electronic media in educating and socializing young students. It explores the range of content available to these students and their families; documents the developing child's patterns of use and understanding of media; examines theories and methods for assessing media effects; reviews research on the role of media in shaping individual identity and responses to social issues; and analyzes public policies that affect teachers and students.

EDUC 5810	Instruction, Curriculum & Educational Leadership in the Digital Age	3 credits

The focus in this course is on examining issues surrounding teachers and the use of technology in curricular and instructional design, especially in designing coursework for an online learning environment. Students will learn to incorporate virtual reality formats to create an online learning environment. Students will be introduced to the integrated nature of Technological Pedagogical Content Knowledge (TPACK), the Common Core, and the National Educational Technology Standards (NETS) as frameworks for identifying and applying the knowledge needed to teach and assess student learning with technology. The course will also address issues of leadership, as students may become mentors in the area of educational technology.

EDUC 5820	Designing and Producing Media for Instruction	3 Credits

This course helps students produce educational media materials. Each student has the opportunity to collaborate with others to design, produce, test, and revise a unique project for television, multimedia, the web, mobile applications, video games, radio, photography, or other formats. Students learn to use a variety of tools and formats, including digital storytelling, video, online research tools, WebQuests, advanced Excel, Google tools, Web 2.0, and GPS. Students conceptualize, design, fashion, and evaluate media projects. The course explores several analytic frameworks drawn from both instructional design and education research.

EDUC 5830	Digital Models of Instruction	3 credits

In this course, the intellectual focus is on using instructional design and Web page design principles. The course will also examine the best instructional use of online options, including flipped and hybrid course design, and gaming. Students complete an instructional design plan for an instructional unit of the participants' choice for a learner group of their choice.

EDUC5840	Universal Design for Learning	3 credits

This course focuses on universal design for learning (UDL) that creates curricula and learning environments that are designed to achieve success for a wide range of student abilities and disabilities. The UDL approach takes advantage of advances in the fields of cognitive neuroscience of learning, educational technologies, and multimedia. Students will learn to apply the UDL approach in designing differentiated learning experiences using educational technology.

EDUC 5850	Digital Course Design Capstone	3 credits

Students in this course work to design and create media for content-specific units of instruction, will learn to use technology specific to a given discipline, and will learn to incorporate instructional design and digital media to create an online unit of study.