

Multimedia Development Minor

Program Planning Sheet

Overview: Employment opportunities for graduates with multimedia development skills are growing as companies have an increasing need for well-designed multimedia materials. This **15-credit** undergraduate minor is designed to equip students of all majors with design and development expertise at the intersection of technology, learning, and instruction.

Courses (15 credits minimum required)		Credits	Fall	Spring	Summer
ITLS 4130*	Data Visualization	3	Online		
ITLS 5205	Computer Applications: Tools or Learning	3	Online		Online
ITLS 5210	Virtual Environment Development	3			Online (odd years)
ITLS 5215	Video and Audio Design and Production I	3	Online		Online
ITLS 5220*	Video and Audio Design and Production II	3		Online	
ITLS 5225	User Experience User Interface UX/UI	3	Online		
ITLS 5230	Instructional Graphics Production I	3	Online	Online	Online
ITLS 5240*	Instructional Graphic Production II	3	Online		
ITLS 5245	eLearning Authoring Tools	3		Online	Online
ITLS 5260	Mobile Design and Development for Learning	3	Online		
ITLS 5265	Internet Development	3	F2F/Online	F2F/Online	Online
ITLS 5270	Digital Making and Learning	3		F2F	
ITLS 6275	Multimedia Special Topic Studio I	3	**	**	**
ITLS 6285*	Multimedia Special Topic Studio II	3	**	**	**
ITLS 5320	Writing For Design (CI)	3	Online	Online	Online
IS 5700*	Advanced Client-Side Web Application Development	3	**	**	
Additional courses possible with approval by MMDV coordinator.					

*Course may have required prerequisites, please check before registration.

**Check the class schedule or with the program advisor for availability and course options.

If you have questions or want more information, please contact Janet Blad (janet.blad@usu.edu) or Dr. Ramy Shaaban (ramy.shaaban@usu.edu).

Data Visualization (ITLS 4130) - This course provides an overview of the nature of data visualization, and how people can apply its concepts to better understand data by exploring the impacts of existing data-informed decisions across multiple domains.

Computer Applications for Instruction and Training (ITLS 5205) - Introduction to the design, development, and implementation of materials for instruction and training. Students explore standard and/or new technologies in a variety of areas including surveys, content management, presentation software, and media production.

Virtual Environment Development (ITLS 5210) - Students study game and virtual-environment development using modern game engines. Topics include fundamental programming concepts like variables and their types, code re-use, commenting code, and basic control structures. Students spend some time on game design, but focus on game development.

Video and Audio Design and Production I (ITLS 5215) - Introduction to design and development for camera and computer-based video production. Students will explore recording, editing/digitizing audio and video segments for education and training applications. Current topics to be covered could include video design, Final Cut Pro, Adobe Premiere and professional interviewing.

Video and Audio Design and Production II (ITLS 5220) - Advanced practices in design and development for camera and computer-based video production. Students will explore recording, editing/digitizing audio and video segments for education and training applications. Current topics to be covered could include video design, Final Cut Pro, Adobe Premiere and professional interviewing.

User Experience User Interface UX/UI (ITLS 5225) - The course aims to give students the knowledge and skills to design user experience and interaction for multiple platforms, including mobile apps, websites, and other virtual experiences. The course also allows students to acquire skills in market-standard UX/UI tools such as Adobe XD and Figma. Other emerging technologies, such as using Generative AI tools in the field of UX/UI, are also included in the course.

Instructional Graphic Production I (ITLS 5230) - Introductory practices of using a computer to design instructional graphics. Current topics may include image creation/manipulation, Adobe Photoshop, and principles of design.

Instructional Graphic Production II (ITLS 5240) - An advanced course using computer practices to design a variety of instructional graphics. A deeper understanding of the graphic design process will be covered as students focus on principles and elements of design, create well-designed marketing materials, and chart a course that will best fit the needs of their desired profession. This course covers the most widely used graphic design software such as Adobe Photoshop.

eLearning Authoring Tools (ITLS 5245) - Students will explore fundamental interaction design concepts in the context of instruction and learning using technologies, such as Adobe Captivate or similar. Students finishing this course will have at least one completed fully functional project for their portfolios.

Mobile Design and Development for Learning (ITLS 5260) Students evaluate, design and build multiple mobile apps for educational purposes and learn fundamental programming concepts, such as variables, control structures, procedures, and cloud-based database implementation. To support mobile app design and development, students review design and learning concepts. Additional coursework is required for those enrolled in the graduate-level course.

Internet Development (ITLS 5265) - Introductory web development course that explores current web technologies, such as HTML5 (Hypertext Markup Language, version 5) and CSS3 (Cascading Style Sheets, version 3). The course covers a variety of relevant design topics including accessibility, usability, and visual design.

Digital Making and Learning (ITLS 5270) - Students will utilize cutting edge technologies alongside more traditional crafts to explore the basics of interactive computing. This course covers human-centered design processes and the opportunity to experiment with new learning technologies.

Writing for Design (ITLS 5320) (CI) Students examine purposes of writing in today's world, from product documentation and training to professional proposals and grants. Students learn to scope and articulate writing assignments, build a repeatable workflow, and develop methods for productive editing, collaboration, version control, and delivery.

Advanced Client-Side Web Application Development (IS 5700) - Students learn to design, develop, and deploy data-driven web applications using client-side JavaScript frameworks (React.js). The course focuses on component-based application architecture, database connectivity, and consumption of external API data. Additional coursework is required for those enrolled in the graduate-level course.