Digital media—and the importance of web design—is growing as consumers change the way they access information. In fact, Jupiter Research is projecting that connected home service revenue, for homes accessing digital media, will grow from $20 billion in 2012 to a staggering $60 billion in 2017.

In pursuing the Graduate Certificate in Digital Media and Web Design, students will acquire the skills and knowledge to create, design and analyze digital media. The focus will be on the media itself, the social/digital network that connects these media, the interfaces that connect these media with users, and the application of these skills in business and other creative contexts. Thus this certificate program will address the pressing demand and opportunities for graduates with advanced knowledge and skills in areas such as networked communication and marketing, web-based media creation and design, and methods for designing and building effective human-media interfaces.

**Admission requirements**

Prospective students may apply at any time by completing the Graduate Application for Admission found online at apply.mst.edu. The graduate certificate program is open to all individuals holding a bachelor’s, master’s or Ph.D. degree in areas such as business, social sciences, technology, engineering, or related disciplines. Students must also have the required prerequisites for the courses in the program.

In order to receive a Graduate Certificate, the student must have an average graduate cumulative grade point of 3.0 or better on a 4.0 scale in the certificate courses taken. Students admitted only to the certificate program will have non-degree graduate status but will earn graduate credit for the courses they complete. Students will be given three years to complete the certificate as long as a B or better average is maintained in the courses taken.

If a student completes the four graduate certificate courses with a grade of B or better in each of the courses taken, the student will, upon application, be admitted to the Master of Business Administration or to the Master of Science in Information Science and Technology. The certificate courses taken by students admitted to the program will count toward the student’s MBA or M.S. degree.
COURSE DESCRIPTIONS

REQUIRED CORE COURSE

IS&T 6654 Advanced Web Design and Digital Media Studies
The course covers web design and digital media, including topics such as social media, cyberculture, service design thinking, citizen journalism, crowd intelligence, brain-computer interfaces, privacy, and copyright. This course is an advanced version of Web Design and Digital Media Studies.

ELECTIVE COURSES (CHOOSE TWO)

IS&T 5680 Digital Media Development and Interactive Design
This course covers techniques and tools for design and development of digital and interactive media, including text, graphics, animation, audio, and video.

Prerequisite: A grade of "C" or better in IS&T 1551, IS&T 1561 or Comp Sci 1570.

IS&T 5885 Human-Computer Interaction and User Experience
Introduction to the field of Human-Computer Interaction (HCI). Students examine issues and challenges related to the interaction between people and technology. The class explores the social and cognitive characteristics of people who use information systems. Students learn techniques for understanding user needs, interface prototyping, and interface evaluation.

MKT 5310 Digital Marketing and Promotions
A managerial examination of integrated marketing communication (IMC) and creativity, with a focus on digital media and new marketing concepts. Specifically, we will look at innovative marketing techniques such as viral marketing, brand communities, experiential marketing and guerilla tactics.

Prerequisite: At least junior standing.

ELECTIVE COURSES (CHOOSE ONE)

IS&T 5652 Advanced Web Development
Advanced web development techniques to provide dynamic interaction; methods for extracting and delivering dynamic information to/from web servers - a hands-on approach. Emphasis on interaction with servers; mobile software development; processing of graphics and web video. Project work is required.

Prerequisites: IS&T 4654; one of IS&T 1551, IS&T 1561.

IS&T 5886 Prototyping Human-Computer Interactions
This course explores novel HCI and UX technologies as well as methods and tools for creating system prototypes, including best practices and guidelines for optimal user experiences. Example concepts include mobile applications, behavioral monitoring, gamification, natural user interfaces, haptics, and computers as social actors.

Prerequisite: Preceded or accompanied by IS&T 5885.

* Curriculum is subject to change. Please contact the department for up-to-date information on courses. Other courses approved by the department may be substituted for any of the above listed courses on a case-by-case basis. The administrative coordinators must approve the substitution prior to enrolling in the course.