

DIGITAL MEDIA STUDIES

The UHCL master's program in Digital Media Studies is the first of its kind in Texas. In response to a cultural shift toward media convergence, the curriculum offers interdisciplinary training in digital theory and skills through courses in communication, business, art, computer science and instructional technology. Program graduates will be well positioned to move into professional and managerial positions, creating, processing and delivering information across a variety of digital platforms.

CURRICULUM*

Courses in the Digital Media Studies program are organized into three foundational areas: Concept, Design and Production. Exposure to each of these areas is essential to understand how digital media are produced, delivered and used. Students will be required to take 9 hours of core courses and 6 hours in each of the foundational areas. Students will then take 3 additional hours in the area that interests them most. Their coursework will be followed by a 6-hour capstone experience in the form of a graduate internship or final project. The degree requires 36 hours of study.

Core Curriculum (9 hours)

DMST 5230: Critical Approaches to Digital Media
DMST 5031: Graphic Design**
DMST 5232: Technical Foundations of Digital Media

Concept (6 or 9 hours)

DMST 5034: Film in a Digital Society
DMST 5233: Digital Media Law and Ethics Seminar
DMST 5234: Public Relations Writing
MKTG 5031: Marketing Essentials for the 21st Century: Creating Customer Value
MKTG 5931: E Marketing Management
MGMT 5638: Managing Technical and Professional People
DMST 5931: Selected Topics in Digital Media Studies

Design (6 or 9 hours)

DMST 5033: Advertising Design or COMM 5035 Illustration
DMST 5037: Computer Imaging
DMST 5038: Digital Photography
DMST 5039: Web Design I (or INST 5635)
DMST 5139: Web Design II (or INST 5635)
DMST 5231: Advanced Digital Media Design
PSYC 5931: User-Centered Design

Production (6 or 9 hours)

DMST 5036: Digital Video
DMST 5132: 3D Modeling***
DMST 5235: Animation***
DMST 5236: Digital Storytelling
DMST 5332: Compositing
DMST 5538: Desktop Publishing
ISAM 5030: Fundamentals of Business Programming
ISAM 5638: Advanced Applications Programming with JAVA (Prereq: ISAM 5030)
DMST 5931: Theory and Principles of Computer Game Programming (Prereq: DMST 5132)

Independent Study

DMST 5939: Independent Study

Capstone Experience (6 hours)

DMST 6739: Digital Media Studies Internship

DMST 6839: Digital Media Studies Project

Program Summary

Core Curriculum	9 hours
DMS Concept	6 hours
DMS Design	6 hours
DMS Production	6 hours
Additional course in area of concentration	3 hours
DMS internship or final project	6 hours
Total	36 hours

Notes:

* Students who have earned an undergraduate degree from UHCL will not be able to take courses in the curriculum for master's level credit that they took for undergraduate credit.

** Students who have taken Graphic Design in another program should take Advertising Design or Illustration as an alternative.

*** These courses may be taken a second time as an independent study that would apply to the production area of the curriculum.

COURSE DESCRIPTIONS

CORE CURRICULUM COURSES:

DMST 5031 / COMM 5031: Graphic Design

An introductory course in 2-D principles of design, including form, aesthetics, typography and visual theory. (Students without previous graphics experience would be required to take DMST 5037: Computer Imaging first.)

DMST 5230: Critical Approaches to Digital Media

A graduate seminar addressing the personal, cultural, social, economic, political and ethical impact of information technology, using critical/cultural studies approaches.

DMST 5232: Technical Foundations of Digital Media

An introductory course in the delivery of content through digital media. Class would explore concepts of digital systems, computer components, networking and delivery techniques.

CONCEPT COURSES:

DMST 5034: Film in a Digital Society

A films studies class in which global issues in a digital society are addressed using critical/cultural studies approaches. Focuses on world-wide cultural differences to foster knowledge and understanding of diversity issues.

DMST 5233: Digital Media Law and Ethics Seminar

An overview of legal and ethical issues pertinent to the professional communicator, regarding issues such as information access, intellectual property, privacy and defamation, with an emphasis on regulation of new technology.

DMST 5234/ HUMN 5133: Public Relations Writing

Writing for corporate, nonprofit and government organizations. Press releases, public service announcements, speeches, newsletters, grants, etc. Interviewing, public relations research techniques, layout and production.

MKTG 5031: Marketing Essentials for the 21st Century: Creating Customer Value

An exploration of how product distribution, promotion and pricing strategies are determined in a dynamic environment to create customer value. (Class is also available online.)

MGTG 5931: E Marketing Management

This course adopts a marketing management perspective, helping students to understand the strategic use of the Internet. The course examines the various business models that firms use on the Internet for improving corporate profitability and creating value for its stakeholders.

MGMT 5638: Managing Technical and Professional People

(Prerequisite: MGMT 5032 or permission of the instructor)

This course discusses issues in managing and leading scientists, engineers, and other technical professions. It provides ideas on the most effective methods for increasing individual invention and organization innovation. Topics include motivation, leadership, technical communication, career development, group dynamics, and organizational design. (Class will also be available online.)

DMST 5931: Selected Topics in Digital Media Studies

Identified by a specific title each time course is offered

DMST 5939: Independent Study

Independent learning under the supervision of faculty. If used to replace one of the courses in a foundational area, the study must correspond to a topic suitable for the same foundational area.

DESIGN COURSES:

DMST 5033 / COMM 5033: Advertising Design

Professional approaches to advertising design, typography, advertising theory and practice. Advertising design projects requiring traditional design and computer skills. Previously established art, design, computer and writing skills are desirable. (Prerequisite: DMST 5031 and DMST 5037 or permission of instructor.)

COMM 5035: Illustration

This course may be taken as an alternative to Advertising Design, but not in addition to it. This course may also be taken if Graphic Design was taken at the undergraduate level. Supervised projects in illustration techniques: emphasis on computer methods. (Prerequisite: DMST 5031 and DMST 5037 or permission of instructor.)

DMST 5037 / COMM 5037: Computer Imaging

Supervised projects in the technical processing of photographic imagery

DMST 5038: Digital Photography

An exploration of photography and photographic processes in the digital realm. Concepts of documentation, communication and fine art addressed. (Prerequisite is DMST 5037: Computer Imaging.)

DMST 5039: Web Design

Creating and publishing Web pages using HTML. Study of formal design elements, theories, audience analysis, and usability as students apply to the Web to serve as a communication tool. (INST 5635: Web Design and Development may be substituted if student's emphasis is information presentation for educational purposes. This course is taught online.)

DMST 5139: Advanced Web Design

Study of advanced techniques in Web page construction, including Web animation, dynamic HTML and site management. Also covers audience and usability testing. (INST 5735: Advanced Web Development may be substituted if student's emphasis is information presentation for educational purposes. This course is taught online.)

DMST 5231: Advanced Digital Media Design

A concept-based design course taken the semester before the final project in which students use digital tools from their major areas of study.

PSYC 5931: User-Centered Design

This course specifically covers how users should be included in the design process, including needs analysis, requirements writing, iterative testing of low/medium/high fidelity prototypes, implementation of requirements and evaluation.

INST 5635: Web Design and Development

Students will learn to design and develop an instructional website by applying principles of educational psychology, communication theory and fundamental principles of message design; to create tables, frames and interactive multimedia elements, and forms in web pages. (This class is taught online.)

PRODUCTION COURSES:**DMST 5036: Digital Video**

An examination of basic methods and processes of video production, using non-linear editing equipment. Emphasis on technique, concept and artistic expression. (INST 5835: Digital Video may be substituted.)

DMST 5132/ COMM 5931: 3D Modeling**

This course covers 3D modeling techniques for animation, images and 3D computer sculptures. Students will learn how to build 3D models and be exposed to a variety of modeling techniques used in 3D software applications. The student will be exposed to texture mapping and lighting in a 3D environment.

DMST 5235: Animation**

An introduction to the fundamental principles of animation, both computer and traditional. Emphasis is on 3D computer animation techniques including key framing, path animation, non-linear animation and hierarchical animation. Storyboarding and animation project planning are also covered (prerequisite: DMST 5132 3D Modeling).

DMST 5236: Digital Storytelling

Developing skills in the preparation, narrative development techniques, and writing for digital short film scripts, and introduction to basic knowledge and skills in interactive media writing.

DMST 5538: Desktop Publishing

Coverage of theory and technology related to creation of graphic products for offset printing. Includes examination of Photoshop, Illustrator, In Design and other software applications (prerequisite DMST 5037)

DMST 5332: Compositing

This course covers the trends and techniques in digital compositing for film and video with an emphasis on combining 2D and video imagery with 3D animation. Matte creation and use, keying, transitions, timing, titling and special effects will be covered in addition to procedures for rendering 3D elements in layers for compositing.

ISAM 5030: Fundamentals of Business Programming

Common program logic and structures inherent in business application programs; programming using a business-oriented, high-level language; overview of program design and development methodologies; management and control of program design and development activities. Includes numerous hands-on class projects.

ISAM 5638: Advanced Applications Programming with JAVA

(prerequisite ISAM 5030 or at least 6 hours of programming courses)

This is an advanced programming course using the JAVA programming language. Students learn how to design and construct interactive JAVA programs for business applications. Course covers program design, coding for Applets and Applications, etc.

DMST 5931: Theory and Principles of Computer Game Programming

(prerequisite: DMST 5132 3D Modeling)

This course is an introduction to computer game programming, including 2D and 3D graphics, animation and sound. Realistic predefined 3D computer models will be used for animation and in games. Course will also survey the computer game industry and identify key companies, new products and other new applications, such as biofeedback and physical therapy using computer games.

CAPSTONE EXPERIENCE:**DMST 6739: Digital Media Studies Internship**

The development of digital media under the supervision of a selected professor and an on-site organizational supervisor. Five hundred hours on-site required.

DMST 6839: Digital Media Studies Project

The completion of a project sufficient to represent a capstone activity that integrates knowledge and skills developed in the program.

ADMISSIONS INFORMATION:

Students must have a 3.0 cumulative average in their last 60 hours of undergraduate coursework to be admitted without taking the Graduate Record Exam. Alternatively, students must take the GRE and score within the acceptable range for admission, based on the following formula: $(\text{GPA} \times 500) + \text{GRE Verbal} + \text{GRE Quantitative} = 2050$ or higher.

Students may transfer in from another graduate program with as many as 12 hours, if they are acceptable for the degree. Students must take their last 24 hours through UHCL.

Students without adequate undergraduate experience in computer software or graphics, as determined by the DMST faculty, may be required to take preparatory courses at the undergraduate level before entering the program.