

Media Arts and Sciences

AN INTERDEPARTMENTAL MAJOR

Co-Directors: *Metaxas (Computer Science), Black (Studio Art)*

The Departments of Art and Computer Science offer an interdepartmental major in media arts and sciences that explores the artistic, cultural, and scientific applications of new media technologies. The program focuses on media production that balances artistic sensibility with analytical reasoning within the rich tradition of the liberal arts environment. Areas of study include digital imaging and design; web-connected database architectures; three-dimensional visualization and modeling; digital composition in audio/video; analog and digital print and photographic processes; computer graphics and animation; human-computer interaction; and programming for networked environments.

A major in media arts and sciences requires twelve units of course work, at least eight of which must be above the 100-level and two of which must be at the 300-level. No more than one can be 350 or 360. Flexibility has been built into the major to allow students to adapt their course of study to their interests, choosing an emphasis either in media sciences or in media arts. The major starts with three introductory courses, at least five courses in the area of concentration and at least two courses outside the area of concentration. In addition to other courses at Wellesley, students can take courses at MIT's Media Lab and Comparative Media Studies program or at Olin.

Requirements for the major are listed below. A Frequently Asked Questions (FAQ) section can be found at the program's Web site: www.wellesley.edu/MAS/ along with a spreadsheet to help students plan their major.

1. Three required introductory courses, one each from studio art, art history and computer science: ARTH 101 (Introduction to the History of Art Part II: Renaissance to the Present), CS 110 (Computer Science and the Internet), ARTS 109 (Basic Two-Dimensional Design) or ARTS 108 (Photography I) or ARTS 105 (Drawing) or ARTS 165 (Introduction to Video Production).
2. At least two required art courses (at least five required for emphasis in media arts) from the following suggested courses: ARTS 221 (Digital Imaging), ARTS 255 (Dynamic Interface Design), ARTS 260 (Moving Image Studio), ARTS 208 (Photography II) or ARTS 265 (Intermediate Video Production), ARTS 308 (Photography III) or ARTS 365 (Advanced Video Production), ARTS 313 (Virtual Form), ARTS 219 or 220 (Printmaking), ARTS 317 (Seminar. Topics in the Visual Arts), ARTS 322 (Advanced Print Concepts), MUS 275 (Computer Music: Synthesis Techniques and Compositional Practice).
3. At least two required computer science courses (at least five required for concentration in media sciences) from the following suggested courses: CS 111 (Computer Programming and Problem Solving), CS 215 (Multimedia Design and Programming), CS 230 (Data Structures), CS 231 (Fundamental Algorithms), CS 242 (Computer Networks), CS 249 (Human-Computer Interaction), CS 304 (Databases with Web Interfaces), CS 307 (Computer Graphics).

4. At least one media culture course is recommended from the following suggested courses: ARTH 225 (Modern Art Since 1945), ARTH 226 (History of Photography: From Invention to Advertising Age), ARTH 391 (Persuasive Images), CAMS 175 (Introduction to Cinema and Media Studies), ARTH 364 (Women Filmmakers: Theory of Subversion). Other media studies courses that could apply may be offered in the future.

Majors are also encouraged to take an advanced media production course (e.g. an MAS individual study).

Students may receive a maximum of one unit of college credit for a score of 5 on the Computer Science A or AB Advanced Placement Exam. This unit can count towards the media arts and sciences major.

Honors

The MAS thesis offers a year-long opportunity to develop independent research and production with honors. Students interested in proposing a thesis must have a minimum 3.5 GPA in the major, and the support of a faculty advisor in the Art or CS departments. Normally, the honors process needs to obey the guidelines of the corresponding department (Studio Art or CS). An interdepartmental review will occur at the end of the fall semester, to determine whether the student should continue her project as a 370 in the Spring and convey its decision to the student by December 20th. In a case where it is recommended that the Senior Thesis not be continued into the second semester, a student would receive credit for 360 work on the completion of a schedule of work previously agreed to between the thesis advisor and the student.

The thesis proposal should be discussed with the primary faculty advisor during the spring prior to senior year. Proposals for thesis projects must be submitted in writing, detailing the scope for the project, research methodology, project timeline, and must be accompanied by an electronic portfolio of at least 4 MAS/Studio Art projects. Proposals are due on August 25 before the beginning of the student's senior year.

MAS 250 Research or Individual Study

Prerequisite: Open to all students by permission.

Distribution: None

Semester: Fall, Spring Unit: 1.0

MAS 250H Research or Individual Study

Prerequisite: Open to all students by permission.

Distribution: None

Semester: Fall, Spring Unit: 0.5

MAS 350 Research or Individual Study

Prerequisites: Open to juniors and seniors by permission

Distribution: None

Semester: Fall, Spring Unit: 1.0

MAS 350H Research or Individual Study

Prerequisites: Open to juniors and seniors by permission

Distribution: None

Semester: Fall, Spring Unit: 0.5

MAS 360 Senior Thesis Research

Prerequisites: By permission of department. See Academic Distinctions

Distribution: None

Semester: Fall, Spring Unit: 1.0

MAS 370 Senior Thesis

Prerequisites: 360

Distribution: None

Semester: Fall, Spring Unit: 1.0

Related Courses

For Credit Toward the Major

The courses listed below are representative of Wellesley and MIT courses that emphasize topics related to the media arts and sciences major. Students may include courses not listed below in their major with permission of the program directors.

CAMS 231 Film as Art

CS 115/PHYS 115 Robotic Design Studio

CS 342 Computer Security

CS 349 Web Search and Mining

ENG 204 The Art of Screenwriting

EXTD 240 From Papyrus to Paper to Pixel

PHIL 203 Philosophy of Art

PHYS 115/CS 115 Robotic Design Studio

NEUR 320 Vision and Art: Physics, Physiology, Perception and Practice

SOC 231 The Sociology of Art, Media, and Culture - Comparative Perspectives

MIT Courses

The MIT Media Lab and the MIT Comparative Media Studies Program offer a large variety of courses that may be appropriate for a media arts and sciences major. These offerings vary per semester; please consult the MIT catalog at student.mit.edu/catalog/mMASa.html and student.mit.edu/catalog/mCMSa.html. Sample Media Lab courses offered regularly are:

MAS.110 Fundamentals of Computational Media Design

MAS.111 Introduction to Doing Research in Media Arts and Sciences

MAS.160 Signals, Systems and Information for Media Technology

MAS.642J Writing for Computer Performance

CMS.790 Media Theories and Methods I

CMS.801 Media in Transition

CMS.880 Erasmus to E-mail: Technologies of the Word

Olin Courses

The Olin College of Engineering offers the following courses that may be appropriate for a media arts and sciences major.

ENGR 2250 User Oriented Collaborative Design

ENGR 3220 Human Factors and Interaction Design