INTEGRATED DESIGN AND MEDIA (MS)

Technology, Culture, and Society Department (https:// engineering.nyu.edu/academics/departments/technology-culture-andsociety/)

NYSED: 30609 HEGIS: 0605.00 CIP: 11.0103

Program Description

The Integrated Design & Media (IDM) program fosters creative practice, design research, and multidisciplinary experimentation with emerging media technologies. As a research-active program within NYU Tandon School of Engineering, faculty collaborate in research that integrates digital media and society. The IDM MS curriculum combines project-based learning with the study of historical, cultural, ethical, and philosophical aspects of emerging media and technology. We emphasize the development of skills applicable to a broad spectrum of media through individual and collaborative work. Guest lectures and conferences supplement our curriculum and maximize students' personal contact with leaders in various sectors of the following fields: business, advocacy, service, entertainment, and education. The program culminates in a self-directed project that combines theory and practice showcasing students' creative and technical abilities.

Our faculty include leading artists, designers, developers, and performers who passionately engage in professional work and research at the intersection of engineering and creative practice.

Research and Outreach

Graduate students in IDM participate fully in research initiatives through our partnerships with other programs and schools at NYU Tandon, the Center for Urban Science and Progress (CUSP) (https:// engineering.nyu.edu/research-innovation/centers/cusp/), NYU, and other NYC institutions.

- The ABILITY Project (https://wp.nyu.edu/ability/) supports research in client-centered, assistive technology and adaptive design for people with disabilities.
- The Mobile Augmented Reality Lab (http:// mobilearlab.bxmc.poly.edu/) supports research into design modalities where digital experiences meet the physical world.
- The Laboratory for Living Interfaces (http://idm.engineering.nyu.edu/ henafflab/) aims to understand how the design decisions of architects, city planners, and material scientists affect the ubiquitous living component of the spaces we inhabit: the environmental microbiome.
- The Low PWR Lab (https://wp.nyu.edu/lowpwrlab/) focuses on climate-resilient, rugged and low-power computing for community-owned solutions, infrastructure & services.

Some of our top research areas include:

- Assistive Technology
- Augmented Reality
- Human-Computer Interaction
- Motion Capture
- Real-Time Performance

- Social Activism
- User Experience

Internships and Careers

From industry giants to fast-paced startups, the most competitive companies in the world seek NYU Tandon School Of Engineering graduate students. Below is a small sample of some of the places our IDM students have interned or worked at:

Companies

- ABC Network
- American Express
- Apple Corporate
- Bank of America
- EMI Music
- Facebook Inc.
- Google
- HTC China
- LG Electronics
- Major League Gaming
- New York Stock Exchange
- Simon & Schuster Incorporated
- Wunderman/Y&R Advertising

Careers

- Multimedia Artist
- Video Editor
- Graphic Designer
- Sound Designer
- Web Designer/Developer
- Game Developer
- Mobile Application Developer
- User Experience (UX) Designer
- Creative Director

Admissions

To apply for admission to any Tandon graduate program, please contact the Office of Graduate Admissions (https://engineering.nyu.edu/ admissions/graduate/).

Program Requirements

Students must complete 30 credits in a minimum of four semesters, but no more than ten to obtain a Master of Science in Integrated Design and Media. Students must enroll in DM-GY 9963 MS Pre-Thesis in Digital Media: Research Methods and DM-GY 9973 MS Thesis in Digital Media in their final two consecutive semesters (not simultaneously).

Course	Title	Credits
IDM Grad Core		
DM-GY 6043	Theories and Cultural Impact of Media & Technology ¹	3
or DM-GY 9113	Special Topics Seminar in Design & Media	
DM-GY 6053	Ideation & Prototyping	3
DM-GY 6063	Creative Coding	3
DM-GY 7033	Media Law	3
Thesis Sequence		

Total Credits		30
Select four elective courses		12
Elective Courses		
DM-GY 9973	MS Thesis in Digital Media	3
DM-GY 9963	MS Pre-Thesis in Digital Media: Research Methods	3

¹ If students take both DM-GY 6043 and DM-GY 9113, the latter taken will count as an elective. Students may take several sections of DM-GY 9113. The first will count toward the core (if DM-GY 6043 has not been taken) and latter sections taken will count as electives.

Elective Courses

Electives, which may include Special Topics Courses or an internship, in virtual reality (VR), augmented reality (AR), motion capture, userexperience design (UX), live performance, sound, cinema, interaction design, game design, and web to raise your expertise level in a particular area.

Special Topics courses, taught by regular and adjunct faculty, are selected each year from a group of possible courses based on the interests of the first-year class. For example, if the entering DM class is specifically interested in UX/UI or Mobile Application Development (based on its project work in the first-semester seminar), the faculty will "commission" an elective on that topic.

Students can take graduate courses offered by other departments at the NYU Tandon School of Engineering, including Computer Science & Engineering (https://engineering.nyu.edu/academics/departments/ computer-science-and-engineering/) and Technology Management & Innovation (https://engineering.nyu.edu/academics/departments/ technology-management-and-innovation/) and others. After the first semester of study, students can also take up to 3 elective graduate courses offered through other NYU programs in accordance with Tandon policies, and the host school's registration policies. Pass/fail coursework and coursework from the School of Professional Studies (SPS) is not permitted. Consult with your academic adviser regarding any questions pertaining to Tandon policies and registration.

Sample Plan of Study

Course	Title	Credits
1st Semester/Term		
DM-GY 6053	Ideation & Prototyping	3
DM-GY 6063	Creative Coding	3
Elective		3
	Credits	9
2nd Semester/Term		
DM-GY 6043	Theories and Cultural Impact of Media & Technology	3
Elective		3
Elective		3
	Credits	9
3rd Semester/Term		
DM-GY 7033	Media Law	3
DM-GY 9963	MS Pre-Thesis in Digital Media: Research Methods	3
Elective		3
	Credits	9
4th Semester/Term		
DM-GY 9973	MS Thesis in Digital Media	3
	Credits	3
	Total Credits	30

Learning Outcomes

Upon successful completion of the program, graduates will:

- 1. Develop conceptual thinking skills to generate ideas and content in order to solve problems or create opportunities. Students will develop a research and studio practice through inquiry and iteration.
- 2. Develop technical skills to realize their ideas. Students will understand and utilize tools and technology, while adapting to constantly changing technological paradigms by learning how to learn. Students will be able to integrate/interface different technologies within a technological ecosystem.
- Develop critical thinking skills that will allow them to analyze and position their work within cultural, historic, aesthetic, economic, and technological contexts.
- Gain knowledge of professional practices and organizations by developing their verbal, visual, and written communication for documentation and presentation, exhibition and promotion, networking, and career preparation.
- 5. Develop collaboration skills to actively and effectively work in a team or group.

Policies

NYU Policies

University-wide policies can be found on the New York University Policy pages (https://bulletins.nyu.edu/nyu/policies/).

Tandon Policies

Additional academic policies can be found on the Tandon academic policy page (https://bulletins.nyu.edu/graduate/engineering/academic-policies/).