

INTEGRATED DESIGN AND MEDIA (MS)

NYSED: 30609 **HEGIS:** 0605.00 **CIP:** 11.0103

Program Description

The Integrated Design & Media (IDM) program (formerly known as Integrated Digital Media) fosters creative practice, design research and multidisciplinary experimentation with emerging media technologies. As a research-active program within NYU Tandon School of Engineering, IDM faculty collaborate in research that integrates digital media and society. Our projects range from using motion capture technology to reimagine theatrical performance, to developing novel uses of virtual/augmented reality for health and wellness, to the integration of STEAM learning into special needs education, to the development of citizen science tools to empower NYC residents to monitor and report on noise pollution in their communities, to helping NASA JPL develop next-generation user interfaces for space exploration, to assisting with the search and visualization of the historical record of New York City.

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, NYC Media Lab (<http://nycmedialab.org/>), the Center for Urban Science and Progress (CUSP) (<https://cusp.nyu.edu/>), 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.

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

Admission to graduate programs in the Tandon School of Engineering requires the following minimum components:

- Résumé/CV
- Statement of Purpose
- Letters of Recommendation
- Transcripts
- Proficiency in English

The NYU Tandon Graduate Admissions website (<https://engineering.nyu.edu/admissions/graduate/apply/requirements/>) has additional information on school-wide admission.

Some programs may require additional components for admissions.

See the program's How to Apply (<https://engineering.nyu.edu/admissions/graduate/how-apply/>) for department-specific admission requirements and instructions.

Requirements

Priority Deadline: December 1st

Regular Admission: February 15th

The following items are required for admission:

- Online Application + \$90 application fee
- Transcripts from all previously attended institutions
- Letters of Recommendation (minimum of 2)
- Personal Statement
- Resumé/CV
- Portfolio of Creative Work (as PDF or website)
- TOEFL or IELTS Scores (for international applicants only) (school code: 2668)

- Interview (on skype or in person) with faculty and administration, if requested

**No GRE is required for the Graduate IDM application*

Video and Portfolio Submission

Submit a portfolio of your creative work as a PDF. If you have materials online that you wish to use, please provide a PDF with a URL to your website.

The one-minute video required for application to IDM is an opportunity for you to give us a stronger sense of who you are as a person. We'd like to hear specifically what you might expect to do with your time at NYU. This may include faculty you want to work with and why, which of our courses are exciting to you, a project you're currently passionate about that you'd like to explore, or what labs or research activities spark your interest. This video should be as unique as you. Think of it as an extension of your portfolio and use your own voice. We get many videos of people reading our website back to us, this is an opportunity for your personality to come through.

Post to Youtube or Vimeo and share the link for viewing. We strongly encourage you to post this privately and share the password with us. There are many IDM application videos on the web, and yours should not look like any of the others out there.

If you require accommodations for either the portfolio or video requirements, please contact Eric Maiello at em1680@nyu.edu to discuss.

Program Requirements

Students must complete 30 credits in a minimum of three semesters, but no more than ten to obtain a Master of Science in Integrated Design and Media (formerly known as Integrated Digital Media). Students typically take a four course load (3 credits per course) in the fall and spring of their first year. Students must enroll in M.S. Pre-Thesis and M.S. Thesis in their final two consecutive semesters (not simultaneously). Below is the distribution of credit requirements.

- IDM Grad Core (4 courses)
- 4 Elective Courses
- Thesis sequence (2 courses)

Course	Title	Credits
IDM Grad Core		
DM-GY 6043	Theories and Cultural Impact of Media & Technology	3
DM-GY 6053	Ideation & Prototyping	3
DM-GY 6063	Creative Coding	3
DM-GY 7033	Media Law	3
Thesis Sequence		
DM-GY 9963	MS Pre-Thesis in Digital Media: Research Methods	3
DM-GY 9973	MS THESIS IN DESIGN MEDIA	3
Elective Courses		
Select four elective courses		12
Total Credits		30

Elective Courses

Electives, which may include Special Topics Courses, an Independent Study, or a 3-credit Internship, in virtual reality (VR), augmented reality

(AR), motion capture, user-experience 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.

Independent Study enrollment is permitted for DM students interested in specific research areas outside of the electives offered.

Internships are available for students seeking to gain job experience outside of the School of Engineering in the commercial or nonprofit sector. Students should contact the IDM Internship instructor one semester in advance to prepare for the course.

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 such as NYU Steinhardt's Music Technology (<http://steinhardt.nyu.edu/music/technology/>), Digital Media Design for Learning (<http://steinhardt.nyu.edu/alt/ect/ma/>), and Art & Arts Professions (<http://steinhardt.nyu.edu/art/>), and the graduate programs at NYU Tisch, such as coursework through the Game Center.

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 DESIGN 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.

3. Develop critical thinking skills that will allow them to analyze and position their work within cultural, historic, aesthetic, economic, and technological contexts.
4. 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/>).