

INTEGRATED DESIGN AND MEDIA (BS)

Department Website (<https://engineering.nyu.edu/academics/departments/technology-culture-and-society/>)

NYSED: 31312 **HEGIS:** 0605.00 **CIP:** 11.0103

Program Description

This program was formally titled: Integrated Digital Media.

Our Bachelor of Science program centers around the IDM core, a suite of courses that focus on the areas of Image, Sound, Narrative, and Interactivity. These courses lead to upper-level project-based electives in interactive installations, augmented reality, 3D, game and user experience design, and more. The curriculum is rounded out with courses from the Tandon Engineering core, media studies (taken in the department of Media, Culture, and Communication (<https://steinhardt.nyu.edu/departments/media-culture-and-communication/>)), and additional courses in math, science, humanities, and social sciences.

Students will be exposed to a project-based education focused on their development as socially engaged, creative individuals fluent in the use and development of cutting-edge technology. IDM students are encouraged to engage in research and to develop their own work through their classes, capstone projects, the Tandon VIP Program (<https://engineering.nyu.edu/research-innovation/student-research/vertically-integrated-projects/>), the NYU (<https://entrepreneur.nyu.edu/resource/nyu-entrepreneurial-institute/>) Entrepreneurial Institute (<https://entrepreneur.nyu.edu/resource/nyu-entrepreneurial-institute/>), and internships within New York City's media industry.

As a research-active program within NYU Tandon School of Engineering, IDM faculty collaborate on projects that integrate media, design, and society in a creative capacity. Our research covers wide range of topics and mediums. These areas include using motion capture technology to reimagine theatrical performance, working with fine arts conservationist on reconditioning historic electronic artwork, development of digital archives to explore the history of natural science, virtual production development of next generation storytelling experiences, electronic sound synthesis with hardware and software, integrating wearable electronics in dance performances, and rethinking STEM education with electronics among many others.

Admissions

New York University's Office of Undergraduate Admissions supports the application process for all undergraduate programs at NYU. For additional information about undergraduate admissions, including application requirements, see How to Apply (<https://www.nyu.edu/admissions/undergraduate-admissions/how-to-apply.html>).

Program Requirements

Course	Title	Credits
Digital Media Core		
DM-UY 1113	Audio Foundation Studio	3
DM-UY 1123	Visual Foundation Studio	3
DM-UY 1133	Creative Coding	3
DM-UY 1143	Ideation & Prototyping	3

DM-UY 2193	Intro to Web Development	3
DM-UY 2263	Still and Moving Images	3
DM-UY 4003	Senior Project in Digital Media	3
DM-UY 4173	Professional Practices for Creatives	3

Major Electives

Select one of the following options: 18

Option 1

Select 18 credits of DM-UY 2/3/4XXX DM Studio Electives

Option 2

Select 15 credits of DM-UY 2/3/4XXX DM Studio Electives

CP-UY 2013/2023	Undergraduate Internship I	
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Math, Science, Humanities, and Social Sciences

CS-UY 1114	Intro To Programming & Problem Solving	4
EG-UY 1001	Engineering and Technology Forum	1
EXPOS-UA 1	Writing as Inquiry	4
EXPOS-UA 22	Advanced Writing for Engineers	4
MA-UY 1414	Basic Practice of Statistics for Social Science ^{1,2}	4
	or MA-UY 1024 Calculus I for Engineers	
MCC-UE 1	Introduction to Media Studies	4
	or MCC-UE 3 History of Media & Comm	
MD-UY 2314	Interactive Narrative	4
PH-UY 1213	Motion and Sound	3
PH-UY 1223	Electricity and Light	3

Select one MCC-UE course from one of the following areas of study:^{3,4} 4

Technology and Society	
Interaction and Experience	
Select 25 credits of Humanities/Math/Natural Science Electives	25

Free Electives

Select 18 credits of Free Electives 18

Total Credits 120

¹ For students who place into MA-UY 1024 Calculus I for Engineers.

Students who place into MA-UY 914 Precalculus for Engineers would follow a different outline, discussed with their Advisor.

² MA-UY 914 Precalculus for Engineers does not count towards degree requirements.

³ <https://steinhardt.nyu.edu/degree/bs-media-culture-and-communication/curriculum/areas-study> (<https://steinhardt.nyu.edu/degree/bs-media-culture-and-communication/curriculum/areas-study/>)

⁴ With the **exception** of MCC-UE 1029 New Media Research Studio; MCC-UE 1031 Digital Media: Context and Practice; MCC-UE 1585 Creative Coding; MCC-UE 1033 Critical Making

Sample Plan of Study

Course	Title	Credits
1st Semester/Term		
DM-UY 1123	Visual Foundation Studio	3
DM-UY 1133	Creative Coding	3
DM-UY 1143	Ideation & Prototyping	3
EXPOS-UA 1	Writing as Inquiry	4
EG-UY 1001	Engineering and Technology Forum	1
Credits		14

2nd Semester/Term

DM-UY 1113	Audio Foundation Studio	3
DM-UY 2193	Intro to Web Development	3
DM-UY 2263	Still and Moving Images	3
EXPOS-UA 22	Advanced Writing for Engineers	4

Select one of the following:

MA-UY 1414 or MA-UY 1024	Basic Practice of Statistics for Social Science ^{1,2} or Calculus I for Engineers	4
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Credits	17
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3rd Semester/Term

PH-UY 1213	Motion and Sound	3
Math, Science, Humanities Elective		4
Math, Science, Humanities Elective		4
DM 2/3/4XXX DM Studio Elective		3
MCC-UE 1 or MCC-UE 3	Introduction to Media Studies or History of Media & Comm	4

Credits	18
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4th Semester/Term

DM 2/3/4XXX DM Studio Elective		3
DM 2/3/4XXX DM Studio Elective		3
Math, Science, Humanities Elective		4
PH-UY 1223	Electricity and Light	3
CS-UY 1114	Intro To Programming & Problem Solving	4

Credits	17
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5th Semester/Term

DM 2/3/4XXX DM Studio Electives		3
Math, Science, Humanities Elective		3
Free Elective		4
Select one MCC-UE course from one of the following areas of study: ^{3,4}		4
Interaction and Experience		
Technology and Society		

Credits	14
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6th Semester/Term

Select one of the following:

DM 2/3/4XXX DM Studio Electives		3
CP-UY 2013/2023	Undergraduate Internship I	
Math, Science, Humanities Elective		4
Math, Science, Humanities Elective		4
Free Elective		4

Credits	15
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7th Semester/Term

DM-UY 4173	Professional Practices for Creatives	3
DM 2/3/4XXX DM Studio Electives		3
MD-UY 2314	Interactive Narrative	4
Free Elective		4

Credits	14
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8th Semester/Term

DM-UY 4003	Senior Project in Digital Media	3
Math, Science, Humanities Elective		4
Free Elective		4

Credits	11
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Total Credits	120
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⁴ With the **exception** of MCC-UE 1029 New Media Research Studio; MCC-UE 1031 Digital Media: Context and Practice; MCC-UE 1585 Creative Coding; MCC-UE 1033 Critical Making

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/undergraduate/engineering/academic-policies/>).

¹ For students who place into MA-UY 1024 Calculus I for Engineers. Students who place into MA-UY 914 Precalculus for Engineers would follow a different outline, discussed with their Advisor.

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