

INTERACTIVE MEDIA ARTS (BS)

CIP: 11.1004

Program Description

Interactive Media Arts (IMA) is an academic community of artists, thinkers, and makers dedicated to cultivating cutting-edge theory and practice within the field of media arts. We foster interdisciplinary research and encourage critical and artistic exploration. IMA is committed to supporting a diverse and inclusive environment that nurtures creativity, experimentation, and collaboration. Through rigorous intellectual inquiry, dynamic creative expression, and community engagement, we train future generations of artists and scholars who will reshape the ever-evolving landscape of emerging media.

All IMA majors take a required foundation course, *What is New Media?*, a course designed to give students a strong theoretical and historical background in new media arts. They may then choose between 3 other foundation courses: Interaction Lab, Communications Lab, and Creative Coding Lab. Interaction Lab introduces students to the fields of interaction design, physical computing, and digital fabrication and provides students with foundational skills in electronics prototyping and an introduction to basic computer programming. Communications Lab introduces students to the concepts and tools used to produce multimedia content for print, photography, audio, and video. Creative Coding Lab introduces students to the fundamentals of computation, software design, and web technologies.

Students then choose from a range of electives across the disciplines of art & design, humanities, science, and computation, with great freedom to make selections based on their personal interest and future career goals. Starting from their sophomore year, students are introduced to advanced labs and seminars where they can sharpen their technical skills, learn about professional environments, and develop richer and more complex conceptual frameworks. Every student will receive guidance in their choices and - in their junior and senior years - be encouraged to specialize in a particular area of concentration. All majors finish with a two semester Capstone Studio course based on a topic of their own choosing. The IMA capstone synthesizes theoretical research and practice to produce an emerging media project that is critically informed by a related research essay.

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
Core Courses		
<i>Social and Cultural Foundations</i>		
CCSF-SHU 101L	Global Perspectives on Society	4
Interdisciplinary Perspectives on China (Two Courses)		8
<i>Writing</i>		
WRIT-SHU 102	Writing as Inquiry	4

WRIT-SHU 201	Perspectives on the Humanities	4
<i>Language</i>		
Language Courses ¹		
Mathematics		
Mathematics Course		
<i>Algorithmic Thinking</i>		
Algorithmic Thinking Course		
<i>Science</i>		
Experimental Discovery in the Natural World		
Science, Technology, and Society		
Courses for the Interactive Media Arts Major		
<i>Foundations</i>		
INTM-SHU 205	What is New Media?	4
Select two of the following:		
INTM-SHU 101	Interaction Lab	
INTM-SHU 103	Creative Coding Lab	
INTM-SHU 120	Communications Lab	
<i>Interactive Media Arts Electives</i>		
Select 20 credits of electives from list below		
<i>Interactive Media Arts Advanced Electives</i>		
Select eight credits of advance electives from list below		
<i>Capstone Courses</i>		
INTM-SHU 400	Capstone Studio I	4
INTM-SHU 401	Capstone Studio II	4
Other Elective Credits		
		28-36
Total Credits		128

Interactive Media Arts Electives

Code	Title	Credits
ART-SHU 222	Site and Situation: Public Art	4
ART-SHU 250	Visual Culture and Social Art Practice: Collaborations and Community Interactions	4
ART-SHU 255	Printmaking in an Expanded Field	4
ART-SHU 274	Chinese Woodblock Printmaking: A Socially Engaged Graphic Art Form	4
ART-SHU 306	Moving Images I	4
ART-SHU 307	Moving Images II	4
ART-SHU 320	Experiences in Time: The Art of Time-based Media	4
ART-SHU 375	The Graphic Novel	4
BUSF-SHU 232	Entrepreneurship Explored	4
CRWR-SHU 175	Storytelling Strategies	4
GCHN-SHU 236	Immersive Narrative of Chinese Monuments	4
HIST-SHU 158	Is That Art? The Rise of the Avant-Garde	4
HUMN-SHU 231	Making Sense of Contemporary Art	4
IMBX-SHU 110	Innovation Lab	4
IMBX-SHU 220	Playing to Win: Game Design, Development, and Business	4
IMBX-SHU 501	Realtime	2
IMBX-SHU 9501	Going Live: Real-Time Streaming and Interactive Media	2
INTM-SHU 124	Emerging Technologies & Computational Arts	4
INTM-SHU 125	Digital Arts and New Media	4
INTM-SHU 126	Introduction to 3D	2

Code	Title	Credits
INTM-SHU 129	Industrial Design in Action	4
INTM-SHU 129T	Digital Design and Fabrication	4
INTM-SHU 130	Working with Electrons	4
INTM-SHU 132	Kinetic Light	4
INTM-SHU 134	Movement Practices and Computing	4
INTM-SHU 138	Responsive Environments: Designing Interactive, Sentient, and Intelligent Spaces	4
INTM-SHU 138T	Extended Perception	4
INTM-SHU 140T- A	Open Project Salon	2
INTM-SHU 140T- B	Open Project Salon	2
INTM-SHU 141	Art and the Anthropocene: Material-Based Activism	4
INTM-SHU 142	Writing with AI: Philosophy and Practice	2
INTM-SHU 150	Storytelling in Mixed Reality	4
INTM-SHU 151	Learning with Turtles	4
INTM-SHU 152T	Woodworking for Art and Design	4
INTM-SHU 166	The Media World of Animation: History and Theory	4
INTM-SHU 185	Interactive Fashion	4
INTM-SHU 187T	E-textiles	2
INTM-SHU 194	Global Media Cultures	4
INTM-SHU 195	After Us: Post-human Media	4
INTM-SHU 200	Topics in IMA:	4
INTM-SHU 201	Expanded Web	4
INTM-SHU 202	Media Architecture	4
INTM-SHU 203T	Intro to Movement Practices	2
INTM-SHU 204	Critical Data and Visualization	4
INTM-SHU 205T	The Artificial: Programming and Planetary	4
INTM-SHU 206T	Topic: Media Past and Future	4
INTM-SHU 207T	Topic: AI and Culture: Paths of Definition, Paths of Development	2
INTM-SHU 208D	Realtime Audiovisual Performance Systems	4
INTM-SHU 214	User Experience Design	4
INTM-SHU 215	Machine Learning for New Interfaces	4
INTM-SHU 217	Make Believe	4
INTM-SHU 218	Design and Fabrication of Everyday Things	4
INTM-SHU 222	Introduction to Robotics	4
INTM-SHU 223	Programming Design Systems	4
INTM-SHU 224	Unconventional Design+Interactions	4
INTM-SHU 226	Artificial Intelligence Arts	4
INTM-SHU 227	ABC Browser Circus	4
INTM-SHU 228	Digital + Sculpture	4
INTM-SHU 234	Rapid Prototyping	4
INTM-SHU 235	Topics in Art & Design - 2pt	2
INTM-SHU 238	Toy Design and Prototyping	4
INTM-SHU 239	Digital Fabrication	2
INTM-SHU 241	VFX in the Age of Virtual Production	4
INTM-SHU 242	Exhibition: Next	4
INTM-SHU 243	Introduction to Animation	4
INTM-SHU 244	Bio-Inspired Robot Systems	4
INTM-SHU 247	Creative Game Design and Development	4
INTM-SHU 253	Creating Assistive Technology	4
INTM-SHU 254	Nature of Code	4
INTM-SHU 255	Topics in Business of Emerging Media	2
INTM-SHU 257	Immersive Arts	4
INTM-SHU 258	Machine Learning for Artists and Designers	4
INTM-SHU 259	Immersive Design for Video Games	2
INTM-SHU 261	Data: Code it, Make it	4
INTM-SHU 262	Urban Farming: Technology and Community	4
INTM-SHU 265	Topics in Digital Humanities:	4
INTM-SHU 266	Digital Heritage	4
INTM-SHU 267	The Cultivated City	4
INTM-SHU 268	Acoustic Ethnography of the Yangtze Delta	4
INTM-SHU 271	Remade in China	4
INTM-SHU 280C	VR / AR Fundamentals	4
INTM-SHU 280D	Realtime Audiovisual Performance Systems	4
INTM-SHU 283	Locative Media	4
INTM-SHU 284	Digital Sculpting for Facial Animation	4
INTM-SHU 286	Theories and Practices of Transmedia Storytelling	4
INTM-SHU 287	NIME: New Interfaces for Musical Expression	4
INTM-SHU 289	Exploring & Creating Sonic Environments	4
INTM-SHU 294	History of Human Computer Interaction	4
INTM-SHU 296	The Planetary: Computation in the Anthropocene	4
INTM-SHU 297T	Synthetic Senses and Sensation	2
INTM-SHU 301	Advanced Lab: Open Project	2
INTM-SHU 303	Advanced Lab: Shaders	2
INTM-SHU 304	Advanced Lab: Web Page to Web Space	4
INTM-SHU 305	Advanced Seminar: Hello Metaverse	2
INTM-SHU 306	Advanced Lab: Synthetic Media	4
INTM-SHU 350	Advanced Seminar: Media's Material and Environmental Relations	4
INTM-SHU 351	Advanced Seminar: Machine Decision is Not Final	2
PCIX-SHU 101	Creativity Considered	4
PCIX-SHU 201	Design Thinking	4
PCIX-SHU 202	Communicating for Influence	4
PCIX-SHU 241	Creative Learning Design	4
PHIL-SHU 130	Philosophy of Technology: Thinking Machines	4
PSYC-SHU 344	Psychology of Human-Machine Communication and Relationships	4
SOCS-SHU 353	Urban Design Studio: Pocket Space in Shanghai	4
WRIT-SHU 240	Storytelling with Data Visualization	4
WRIT-SHU 245	Digital Storytelling: Lessons of the Out of Eden Project	4

Interactive Media Arts Advanced Electives

Code	Title	Credits
INTM-SHU 301	Advanced Lab: Open Project	2
INTM-SHU 303	Advanced Lab: Shaders	2
INTM-SHU 304	Advanced Lab: Web Page to Web Space	4
INTM-SHU 305	Advanced Seminar: Hello Metaverse	2
INTM-SHU 306	Advanced Lab: Synthetic Media	4
INTM-SHU 307	Advanced Lab: ABC Browser Circus on Tour (Mobile)	4
INTM-SHU 308	Advanced Lab: Mixed Reality and Cultural Heritage	4

INTM-SHU 350	Advanced Seminar: Media's Material and Environmental Relations	4	7th Semester/Term			
INTM-SHU 351	Advanced Seminar: Machine Decision is Not Final	2	INTM-SHU 400	Capstone Studio I	4	
INTM-SHU 352	Advanced Media Theory	4	Advanced IMA Elective		4	
			General Elective		4	
			General Elective		4	
				Credits	16	
				8th Semester/Term		
			INTM-SHU 401	Capstone Studio II	4	
			General Elective		4	
			General Elective		4	
			General Elective		4	
				Credits	16	
				Total Credits	128	

¹ Students who did not attend a Chinese-medium high school fulfill the Core language requirement by demonstrating proficiency of the Chinese language through the Intermediate level. Chinese speakers who did not attend an English-medium high school fulfill the Core language requirement through completion of EAP-SHU 100 English for Academic Purposes I and EAP-SHU 101 English for Academic Purposes II. Additional information can be found on the NYU Shanghai Core Curriculum page (<https://bulletins.nyu.edu/undergraduate/shanghai/core-curriculum/#text>).

Sample Plan of Study

Course	Title	Credits
1st Semester/Term		
CCSF-SHU 101L	Global Perspectives on Society	4
INTM-SHU 101 or INTM-SHU 120 or INTM-SHU 103	Interaction Lab or Communications Lab or Creative Coding Lab	4
Core Class		4
Chinese or EAP		4
	Credits	16
2nd Semester/Term		
WRIT-SHU 102	Writing as Inquiry	4
INTM-SHU 205 or INTM-SHU 101 or INTM-SHU 120 or INTM-SHU 103	What is New Media? or Interaction Lab or Communications Lab or Creative Coding Lab	4
Core Class		4
Chinese or EAP		4
	Credits	16
3rd Semester/Term		
WRIT-SHU 201	Perspectives on the Humanities	4
INTM-SHU 205 or INTM-SHU 101 or INTM-SHU 120 or INTM-SHU 103	What is New Media? or Interaction Lab or Communications Lab or Creative Coding Lab	4
IMA Elective		4
Chinese or Core		4
	Credits	16
4th Semester/Term		
IMA Elective		4
IMA Elective		4
Core Class		4
Chinese or Core		4
	Credits	16
5th Semester/Term		
IMA Elective		4
IMA Elective		4
Core Class		4
General Elective		4
	Credits	16
6th Semester/Term		
Advanced IMA Elective		4
General Elective		4
General Elective		4
General Elective		4
	Credits	16

Learning Outcomes

Upon successful completion of the program, students will be able to display:

1. Proficiency in the development of interactive media projects from concept to working prototype. They apply skills in interaction design, computational thinking, media production, and / or fabrication.
2. Conceptual thinking in the ideation of their work and the pursuit of related research.
3. Critical thinking skills that facilitate analysis and placement of their work within various research contexts (ie. cultural, historical, aesthetic, business, and / or technological.) They use these skills for thesis development, and for drawing research conclusions.
4. Visual, verbal, and written communication skills relevant to the development, documentation, and presentation of their work.
5. Organization, collaboration, management, and group conflict resolution skills that help them execute interactive media projects within individual and group environments.

Policies

Prerequisite Courses for Declaring a Major

Final grade of C/ current semester midterm grade of B or higher in Interaction Lab OR Communications Lab OR Creative Coding Lab.

NYU Policies

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

NYU Shanghai Policies

Additional academic policies can be found on the NYU Shanghai Academic Policies page (<https://bulletins.nyu.edu/undergraduate/shanghai/academic-policies/>).