

INTERACTIVE MEDIA ARTS (BS)

CIP: 11.1004

Program Description

Interactive Media Arts (IMA) encourages students to explore the expressive possibilities of emerging media. Our students are challenged to combine practice and theory, connecting technical skills with historical knowledge, cultural understanding, and conceptual thinking. Areas of expertise include the development of software, the manipulation of digital media, the fabrication of material objects, the production of electronic devices, the construction of virtual and physical spaces, media theory, interactive installation, and the philosophy of technology. Our curriculum, community, and active learning environment facilitate student acquisition of both conceptual insights and practical skills, encouraging our students to explore their personal interests whilst engaging both critically and creatively with new technologies.

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 concepts and tools in order 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>		
CSSF-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		8-16
<i>Mathematics</i>		
Mathematics Course		4
<i>Algorithmic Thinking</i>		
Algorithmic Thinking Course		4
<i>Science</i>		
Experimental Discovery in the Natural World		4
Science, Technology, and Society		4
Courses for the Interactive Media Arts Major		
<i>Foundations</i>		
INTM-SHU 205	What is New Media?	4
Select two of the following:		8
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		20
<i>Interactive Media Arts Advanced Electives</i>		
Select eight credits of advance electives from list below		8
<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: Social Space and Public Art	4
ART-SHU 250	Visual Culture and Social Art Practice: Collaborations and Community Interactions	4
ART-SHU 251	Typography in the Urban Environment	4
ART-SHU 255	Printmaking in an Expanded Field	4
ART-SHU 274	Woodblock Printmaking: Practice and Theory	4
ART-SHU 306	Moving Images I	4
ART-SHU 307	Moving Images II	4
ART-SHU 375	The Graphic Novel	4
BUSF-SHU 211A	Design Thinking - Part I	2
BUSF-SHU 211B	Design Thinking - Part II	2
BUSF-SHU 232	Entrepreneurship Explored	4
CCST-SHU 141	Innovation in/of Daily Spaces	2
CRWR-SHU 175	Storytelling Strategies	4
CRWR-SHU 245	Intermediate Fiction Workshop: Speculative Fictions	4
CSCI-SHU 50	The Design Sprint: Modern Aging and the Future of Health in China	4
GCHN-SHU 230	Culture and Media in Urban China	4
GCHN-SHU 236	Immersive Narrative of Chinese Monuments	4

HUMN-SHU 231	Contemporary Art and Theory in North America and Europe	4	INTM-SHU 207T	Topic: AI and Culture: Paths of Definition, Paths of Development	2
IMBX-SHU 102	Global Experience Design	4	INTM-SHU 208D	Realtime Audiovisual Performance Systems	4
IMBX-SHU 103	Understanding Financial Technology	4	INTM-SHU 209	This is the Remix	4
IMBX-SHU 105	Introduction to the Technology Innovation Process	4	INTM-SHU 210	Animation: Traditional Techniques & Contemporary Practices	4
IMBX-SHU 106	Introduction to Media Industries and Institutions	4	INTM-SHU 211	Animation and Dynamic Surfaces	4
IMBX-SHU 110	Innovation Lab	4	INTM-SHU 212	Sound & Vision	4
IMBX-SHU 201	The Minimum Viable Product: The Lean Launchpad	4	INTM-SHU 213	Unmanned Aerial Storytelling	2
IMBX-SHU 211	Design Thinking	4	INTM-SHU 214	User Experience Design	4
IMBX-SHU 241	Creative Learning Design	4	INTM-SHU 215	Machine Learning for New Interfaces	4
IMBX-SHU 254	Introduction to Mindful Product Management	4	INTM-SHU 216	Unsustainable Fashion	4
IMBX-SHU 262	Global Beauty Industry	4	INTM-SHU 217	Make Believe	4
IMBX-SHU 501	Realtime	2	INTM-SHU 218	Design and Fabrication of Everyday Things	4
IMBX-SHU 9501	Going Live: Real-Time Streaming and Interactive Media	2	INTM-SHU 221	Creating Immersive Worlds	2
INTM-SHU 10J	Neighborhood, Map, Phone	4	INTM-SHU 222	Introduction to Robotics	4
INTM-SHU 124	Emerging Technologies & Computational Arts	4	INTM-SHU 223	Programming Design Systems	4
INTM-SHU 125	Digital Arts and New Media	4	INTM-SHU 224	Unconventional Design+Interactions	4
INTM-SHU 126	Introduction to 3D	2	INTM-SHU 225	Media and Participation	4
INTM-SHU 127	Paper Art: History and Practice	4	INTM-SHU 226	Artificial Intelligence Arts	4
INTM-SHU 129	Industrial Design in Action	4	INTM-SHU 227	ABC Browser Circus	4
INTM-SHU 129T	Digital Design and Fabrication	4	INTM-SHU 228	Digital + Sculpture	4
INTM-SHU 130	Working with Electrons	4	INTM-SHU 229	Topics in Computation & Data:	2
INTM-SHU 132	Kinetic Light	4	INTM-SHU 230	Topics in Computation & Data:	4
INTM-SHU 134	Movement Practices and Computing	4	INTM-SHU 231	Developing Web	4
INTM-SHU 138	Responsive Environments: Designing Interactive, Sentient, and Intelligent Spaces	4	INTM-SHU 233	Collaborative Design	4
INTM-SHU 138T	Extended Perception	4	INTM-SHU 234	Rapid Prototyping	4
INTM-SHU 140T-A	Open Project Salon	2	INTM-SHU 235	Topics in Art & Design - 2pt	2
INTM-SHU 140T-B	Open Project Salon	2	INTM-SHU 236	Topics in Art & Design	4
INTM-SHU 150	Storytelling in Mixed Reality	4	INTM-SHU 238	Toy Design and Prototyping	4
INTM-SHU 150J	Mobile Media	4	INTM-SHU 239	Digital Fabrication	2
INTM-SHU 151	Learning with Turtles	4	INTM-SHU 240	Solar Solutions: Considering The Sun in our Digital Future	4
INTM-SHU 152T	Woodworking for Art and Design	4	INTM-SHU 242	Exhibition: Next	4
INTM-SHU 165	Talking Fabrics	4	INTM-SHU 243	Introduction to Animation	4
INTM-SHU 180	Design Expo	4	INTM-SHU 244	Bio-Inspired Robot Systems	4
INTM-SHU 184	Communities & Net Literature	4	INTM-SHU 245	Topics in Experimental Interfaces & Physical Computing - 2pt	2
INTM-SHU 185	Interactive Fashion	4	INTM-SHU 245A	Topics in Physical Computing & Experimental Interfaces:	2
INTM-SHU 187T	E-textiles	2	INTM-SHU 246	Topics in Experimental Interfaces & Physical Computing - 4pt	4
INTM-SHU 190	Collective Methods	4	INTM-SHU 246A	Topics in Experimental Interfaces & Physical Computing - 4pt	4
INTM-SHU 193	Chinese Cyberculture	4	INTM-SHU 247	Creative Game Design and Development	4
INTM-SHU 194	Global Media Cultures	4	INTM-SHU 248	Introduction to Assistive Technology	2
INTM-SHU 195	After Us: Post-human Media	4	INTM-SHU 249	Street Life & Street Food in the 21st Century City	4
INTM-SHU 200	Topics in IMA:	4	INTM-SHU 250	Special Topics in Digital Humanities: Street Food & Urban Farming	4
INTM-SHU 201	Expanded Web	4	INTM-SHU 251	Making Maker Education	2
INTM-SHU 202	Media Architecture	4	INTM-SHU 251H	Making Maker Education 4pt	4
INTM-SHU 203T	Intro to Movement Practices	2	INTM-SHU 252	The Minimum Viable Product	2
INTM-SHU 204	Critical Data and Visualization	4	INTM-SHU 253	Creating Assistive Technology	4
INTM-SHU 205	What is New Media?	4			
INTM-SHU 205T	The Artificial: Programming and Planarity	4			
INTM-SHU 206T	Topic: Media Past and Future	4			

INTM-SHU 254	Nature of Code	4
INTM-SHU 255	Topics in Business of Emerging Media	2
INTM-SHU 256	Topics in Business of Emerging Media	4
INTM-SHU 257	Immersive Arts	4
INTM-SHU 257T	VFX in the Age of Virtual Production	4
INTM-SHU 258	Machine Learning for Artists and Designers	4
INTM-SHU 259	Immersive Design for Video Games	2
INTM-SHU 260	Topics in Electronics & Physical Computing:	4
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 270	Generating and Expressing Data	4
INTM-SHU 271	Remade in China	4
INTM-SHU 280	Topics in New Media & Entertainment	4
INTM-SHU 280A	Topics in New Media & Entertainment	4
INTM-SHU 280B	Topics in New Media & Entertainment	4
INTM-SHU 280C	VR / AR Fundamentals	4
INTM-SHU 280D	Realtime Audiovisual Performance Systems	4
INTM-SHU 280E	Topics in New Media & Entertainment	4
INTM-SHU 281	Topics in New Media & Entertainment	2
INTM-SHU 282	Fairy Tales for the 21st Century	2
INTM-SHU 283	Locative Media	4
INTM-SHU 284	Digital Sculpting for Facial Animation	4
INTM-SHU 285	Seminar Topics	4
INTM-SHU 286	Theories and Practices of Transmedia Storytelling	4
INTM-SHU 287	NIME: New Interfaces for Musical Expression	4
INTM-SHU 288	Kinetic Interfaces	4
INTM-SHU 289	Exploring & Creating Sonic Environments	4
INTM-SHU 291	Solar Contraptions	2
INTM-SHU 294	History of Human Computer Interaction	4
INTM-SHU 295	Seminar Topics:	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 303T	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 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 102	Experience Studio	2
PCIX-SHU 103	Life Design	4
PCIX-SHU 201	Design Thinking	4
PCIX-SHU 202	Communicating for Influence	4
PCIX-SHU 301	Entrepreneurship Experienced	4
PHIL-SHU 130	Philosophy of Technology: Thinking Machines	4
PSYC-SHU 344	Psychology of Human-Machine Communication and Relationships	4

SOCS-SHU 225	Media and Participation	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 303T	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 350	Advanced Seminar: Media's Material and Environmental Relations	4
INTM-SHU 351	Advanced Seminar: Machine Decision is Not Final	2

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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
7th Semester/Term		
INTM-SHU 400	Capstone Studio I	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

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

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/>).