Graphic and Information Design and Mathematics, BS

The Department of Mathematics and the Department of Art + Design offer a combined major in mathematics and graphic and information design. Students interested in the combined major integrate the study of mathematical reasoning including methods for analyzing and solving problems encountered in the physical world with the design of message and meaning, integrating text and image to visualize concepts and data to enhance human understanding of complex and vital knowledge.

Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

Universitywide Requirements

All undergraduate students are required to complete the Universitywide Requirements (http://catalog.northeastern.edu/undergraduate/university-academics/university-wide-requirements/).

NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (http://catalog.northeastern.edu/undergraduate/university-academics/nupath/).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through electives.

Graphic and Information Design Requirements

Code	Title	Hours
Art and Design at Northeastern		
ARTF 1000	Art and Design at Northeastern	1
or MATH 1000	Mathematics at Northeastern	
Art and Design Fundamentals		
Complete one course in the following range. ARTF 1143 is recommended.		4
ARTF 1141 to ARTF 1149		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
Art and Design History		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4
Design		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
Degree Project		
ARTG 4550	Design Degree Project	4
Art and Design Elective		
Complete one of the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
ARTG 2400	Interaction Design 1: Responsive (with optinal ARTG 2401)	
ARTG 3351		

ARTG 3450	Graphic Design 2
ARTG 3460	Identity and Brand Design
ARTG 4552	Information Design 2
ARTG 4553	
ARTG 4554	Typography 3

Mathematics Requirements

Code	Title	Hours
Math Reasoning		
MATH 1365	Introduction to Mathematical Reasoning	4
Calculus		
A grade of C or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
Intermediate Math		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
Advanced Elective		
Complete one of the following:		4
MATH 3150	Real Analysis	
MATH 3175	Group Theory	
MATH 3560	Geometry	
Mathematics Elective		
MATH 4025 can count as an upper-level math elective as well as a capstone.		
Complete one course in the following range:		4
MATH 3101 to MATH 4899		

Integrative Requirement

Code	Title	Hours
ARTG 3451	Information Design 1	4

Combined-Major Credit Requirement

Complete 80 semester hours in the major.

Program Requirement

128 total semester hours required

Plan of Study
Sample 5-Year Plan of Study , 2 Co-op

Year 1

Fall	Hours	Spring	Hours
ARTF 1000	1	MATH 1342	4
ARTF 1143	4	ARTF 1122 (with optional ARTF 1123)	4
MATH 1365	4	ARTG 1250	4
MATH 1341	4	ARTH 2210	4
ENGW 1111	4		
	17		16

Year 2

Fall	Hours	Spring	Hours
MATH 2321	4	MATH 2341	4
ARTG 2250	4	ARTG 2252	4
ARTH 2215	4	Math elective	4

Elective		4	Elective		4		
		16			16		

Year 3

Fall	Hours		Spring	Hours		Summer 1	Hours
MATH 2331		4	Co-op			Co-op	
ARTG 3350		4					
Elective		4					
Elective		4					
EEAM 2000		1					
		17			0		0

Year 4

Fall	Hours		Spring	Hours		Summer 1	Hours
MATH 3081		4	Co-op			Co-op	
ARTG 3451		4					
Elective		4					
Elective		4					
		16			0		0

Year 5

Fall	Hours		Spring	Hours	
ARTG 4550		4	Capstone		4
Art and Design Elective		4	Elective		4
Elective		4	Elective		4
Elective		4	Elective		4
		16			16

Total Hours: 130