Creative industries (CI) is a potent mix of computer programming, art, animation, storytelling, information architecture, and logic. Our dual majors in interactive media or game design provide the breadth and resources to offer all aspects of this deeply collaborative field. CI affords artists, composers, and designers new opportunities to experiment and collaborate with a wide variety of partners, such as medical researchers, mathematicians, and historians. Our modern creative economy has made specialized artistic and technical literacy necessary for the modern professional across a wide variety of professions.

The creative industries dual majors offer students in the areas of Art + Design, music, and computer science an opportunity to understand and experience the disparate disciplines that contribute to content creation. These dual majors expose students to the historical significance of changing technology and media, while encouraging students to integrate their creative work with the skills they need in the rapidly growing field of creative and technical production.

Interactive media and game design require intensive team interaction and a broad knowledge base. Our collaborative approach best allows all team members to understand the context in which their contributions are used. Creative industries students have many opportunities to collaborate with their peers and work with students in all interactive media and game design dual majors.

Transferring to the Dual Majors
Interactive media and game design dual majors require a serious dedication concentrating in one of seven separate programs of study. To be eligible to apply to the creative industries program, students must:
1. Be majors in good standing in one of the home disciplines.
2. Complete at least one semester of course work in the Department of Art + Design, Department of Music, or College of Computer Science with an overall GPA of 3.000 (or permission of the Creative Industries Committee).

Students in the program begin their work in their home department or college and then continue to develop their core discipline while exploring their interdisciplinary course work.

The curriculum comprises three components:
- Basic principles of art and design, music technology, and computer programming
- Extradisciplinary courses to provide a historical, societal, and cultural framework
- Cross-disciplinary courses specific to the program, such as the following:
  - GAME 1110 Games and Society 4 SH

The student’s senior year in the program is devoted to integrating these components in a capstone project. Students work as interdisciplinary teams, drawing on their accumulated knowledge to develop and deliver a single original project.

Academic Progression Standards
Art + Design and music technology students are required to maintain a 3.000 GPA in their home department and creative industries courses. Computer science students must maintain a minimum 2.670 GPA in all CS courses.

BS in Interactive Media and Music with Concentration in Music Technology

NU CORE REQUIREMENTS
See page 26 for requirement list.

MUSIC REQUIREMENTS

Music Courses
Complete the following eight courses:
- MUSC 1000 Music at Northeastern 1 SH
- MUSC 1250 Instrumentation and Notation 4 SH
- MUST 1220 Music and Technology 1 4 SH
- MUST 1221 Music and Technology 2 4 SH
- MUST 2315 History of Electronic Music 4 SH
- MUST 2320 Sound Design 4 SH
- MUST 3421 Digital Audio Processing 4 SH
- MUST 4520 Interactive Real-Time Performance 4 SH

Music Theory and Historical Traditions
Complete the following seven courses. Music Theory and Musicianship should be taken concurrently, as indicated:
- MUSC 1201 Music Theory 1 4 SH
- with MUSC 1241 Musicianship 1 1 SH
- MUSC 1202 Music Theory 2 4 SH
- with MUSC 1242 Musicianship 2 1 SH
- MUSC 2303 Music Theory 3 4 SH
- with MUSC 2343 Musicianship 3 1 SH
- MUSC 2304 Music Theory 4 4 SH
- with MUSC 2344 Musicianship 4 1 SH
- MUSC 2308 Principles of Music Literature 4 SH
- MUSC 2312 Historical Traditions 2: Classical 4 SH
- MUSC 2313 Historical Traditions 3: World 4 SH

Music Composition Lessons
Complete the following (repeatable) course six times:
- MUSC 1903 Composition Lessons 1 SH
### Music Ensemble
Complete two music ensembles:

- MUSC 1904 Chorus 1 SH
- MUSC 1905 Band 1 SH
- MUSC 1906 Orchestra 1 SH
- MUSC 1907 Wind Ensemble 1 SH
- MUSC 1911 Jazz Ensemble 1 SH
- MUSC 1912 Rock Ensemble 1 SH
- MUSC 1913 Blues/Rock Ensemble 1 SH
- MUSC 1914 Create Your Own Music 1 SH
- MUSC 1915 Chamber Ensembles 1 SH
- MUSC 1916 Electronic Music Ensemble 1 SH
- MUSC 1917 Jazz/Blues Choir 1 SH

### INTERACTIVE MEDIA REQUIREMENTS

#### Interactive Media Courses
Complete the following six courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM 1110</td>
<td>Interactive Media and Society</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 2100</td>
<td>Digital Narrative 1</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 2250</td>
<td>Programming for Digital Media</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 2400</td>
<td>Web Design and Development</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 2401</td>
<td>Web Development Tools</td>
<td>1 SH</td>
</tr>
<tr>
<td>IM 4700</td>
<td>Interactive Media Capstone 1</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 4701</td>
<td>Interactive Media Capstone 2</td>
<td>4 SH</td>
</tr>
</tbody>
</table>

#### Art + Design
Complete the following two courses with corresponding tools:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 1122</td>
<td>2D Foundation</td>
<td>4 SH</td>
</tr>
<tr>
<td>with ARTF 1123</td>
<td>2D Tools: Imaging Basics</td>
<td>1 SH</td>
</tr>
<tr>
<td>ARTF 2223</td>
<td>Interactive Foundation</td>
<td>4 SH</td>
</tr>
<tr>
<td>with ARTF 2224</td>
<td>Interactive Tools</td>
<td>1 SH</td>
</tr>
</tbody>
</table>

### SOCIAL SCIENCE LEVEL 1
Complete the following course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1101</td>
<td>Foundations of Psychology</td>
<td>4 SH</td>
</tr>
</tbody>
</table>

### Mathematics
Complete the following course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1260</td>
<td>Math Fundamentals for Games</td>
<td>4 SH</td>
</tr>
</tbody>
</table>

### Ethics and Culture
Complete one of the following courses. This course should be taken only after the student has completed 56 semester hours:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 1220</td>
<td>Media, Culture, and Society</td>
<td>4 SH</td>
</tr>
<tr>
<td>PHIL 1145</td>
<td>Technology and Human Values</td>
<td>4 SH</td>
</tr>
<tr>
<td>SOCL 4528</td>
<td>Computers and Society</td>
<td>4 SH</td>
</tr>
</tbody>
</table>

### CREATIVE INDUSTRIES ELECTIVES
Complete three courses from the following lists. If the course has prerequisites, the student must take those first unless permission is obtained in advance from the program office. If the course requires a corresponding lab or tools course, that course must be taken as well:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 1111</td>
<td>Art + Design History since 1400</td>
<td>4 SH</td>
</tr>
<tr>
<td>ARTH 2210</td>
<td>Art + Design History, 1900 to 1945</td>
<td>4 SH</td>
</tr>
<tr>
<td>ARTH 2212</td>
<td>Survey of the Still and Moving Image</td>
<td>4 SH</td>
</tr>
<tr>
<td>ARTD 2370</td>
<td>Animation Basics</td>
<td>4 SH</td>
</tr>
<tr>
<td>with ARTD 2371</td>
<td>Animation Tools</td>
<td>1 SH</td>
</tr>
<tr>
<td>ARTD 3470</td>
<td>Animation Studio 1</td>
<td>4 SH</td>
</tr>
<tr>
<td>ARTD 2380</td>
<td>Video Basics</td>
<td>4 SH</td>
</tr>
<tr>
<td>with ARTD 2381</td>
<td>Video Tools</td>
<td>1 SH</td>
</tr>
<tr>
<td>ARTD 3480</td>
<td>Video 1</td>
<td>4 SH</td>
</tr>
<tr>
<td>ARTD 2200</td>
<td>Digital Narrative 2</td>
<td>4 SH</td>
</tr>
<tr>
<td>with ARTD 2251</td>
<td>Type Tools</td>
<td>1 SH</td>
</tr>
<tr>
<td>ARTD 2252</td>
<td>Graphic Design 1</td>
<td>4 SH</td>
</tr>
<tr>
<td>ARTD 3350</td>
<td>Typography 2</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 2200</td>
<td>Digital Narrative 2</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 2300</td>
<td>Managing Media Development</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 3250</td>
<td>Physical Computing</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 3500</td>
<td>Cross-Media Marketing</td>
<td>4 SH</td>
</tr>
<tr>
<td>with IM 3600</td>
<td>Market Analysis for the Creative Industries</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 3700</td>
<td>Interface and Virtual Environments</td>
<td>4 SH</td>
</tr>
<tr>
<td>IM 3899</td>
<td>Topics in Interactive Media</td>
<td>4 SH</td>
</tr>
<tr>
<td>CS 2500</td>
<td>Fundamentals of Computer Science 1</td>
<td>4 SH</td>
</tr>
<tr>
<td>with CS 2501</td>
<td>Lab for CS 2500</td>
<td>1 SH</td>
</tr>
<tr>
<td>CS 2510</td>
<td>Fundamentals of Computer Science 2</td>
<td>4 SH</td>
</tr>
<tr>
<td>with CS 2511</td>
<td>Lab for CS 2510</td>
<td>1 SH</td>
</tr>
<tr>
<td>CS 2800</td>
<td>Logic and Computation</td>
<td>4 SH</td>
</tr>
<tr>
<td>with CS 2801</td>
<td>Lab for CS 2800</td>
<td>1 SH</td>
</tr>
<tr>
<td>CS 3200</td>
<td>Database Design</td>
<td>4 SH</td>
</tr>
<tr>
<td>CS 3500</td>
<td>Object-Oriented Design</td>
<td>4 SH</td>
</tr>
<tr>
<td>PSYC 3452</td>
<td>Sensation and Perception</td>
<td>4 SH</td>
</tr>
<tr>
<td>PSYC 3464</td>
<td>Psychology of Language</td>
<td>4 SH</td>
</tr>
<tr>
<td>PSYC 3466</td>
<td>Cognition</td>
<td>4 SH</td>
</tr>
</tbody>
</table>

### REQUIRED GENERAL ELECTIVES
Complete two general electives. If the NU Core comparative studies of cultures requirement is to be satisfied by taking a course, then it must be one of the general electives.

### GENERAL ELECTIVES
Additional courses taken beyond college and major course requirements to satisfy graduation credit requirements.
COOPERATIVE EDUCATION
If elected

UNIVERSITY-WIDE REQUIREMENTS
144 total semester hours required
Minimum 2.000 GPA required

BS in Computer Science and Game Design
See page 287.

BS in Computer Science and Interactive Media
See page 288.

BFA in Digital Art and Game Design
See page 66.

BFA in Digital Art and Interactive Media
See page 67.

BFA in Graphic Design and Game Design
See page 69.

BFA in Graphic Design and Interactive Media
See page 70.

Minor in Creative Industries
Note: “TBD” stands for “to be determined.”

CREATIVE INDUSTRIES REQUIREMENT
Complete one of the following courses:
GAME 1110 Games and Society 4 SH
IM 1110 Interactive Media and Society 4 SH

INTERACTIVE MEDIA AND GAME DESIGN
Complete at least three courses in interactive media or game design from the following lists:

Interactive Media
IM 1110 Interactive Media and Society 4 SH
IM 2300 Managing Media Development 4 SH
IM 3200 Interactive Sound Development and Communication 4 SH
IM 3500 Cross-Media Marketing 4 SH
IM 3600 Market Analysis for the Creative Industries 4 SH

Game Design
GAME 1110 Games and Society 4 SH
GAME 2150 Programming for Games 4 SH
GAME 3150 Game Design Algorithms 4 SH
GAME 3250 Artificial Intelligence for Games 4 SH

CREATIVE INDUSTRIES ELECTIVES
Complete two additional courses, either from the above interactive media or game design lists or from the following creative industries electives. If the course has prerequisites, the student must complete those first unless permission is obtained in advance from the program office. If the course requires a corresponding lab or tools course, that course must be taken as well:

Computer Science
CS 2500 Fundamentals of Computer Science 1 4 SH
with CS 2501 Lab for CS 2500 1 SH
CS 2510 Fundamentals of Computer Science 2 4 SH
with CS 2511 Lab for CS 2510 1 SH
CS 2800 Logic and Computation 4 SH
with CS 2801 Lab for CS 2800 1 SH
CS 3200 Database Design 4 SH
CS 3500 Object-Oriented Design 4 SH

Journalism
JRNL 1150 Interpreting the Day’s News 4 SH
JRNL 3525 Online Journalism 4 SH
JRNL 5340 Reinventing the News: The Journalism of the Web 4 SH

Music
Course list TBD.

Communication Studies
Course list TBD.

Business
Course list TBD.

Psychology
PSYC 1101 Foundations of Psychology 4 SH
PSYC 3452 Sensation and Perception 4 SH
PSYC 3464 Psychology of Language 4 SH
PSYC 3466 Cognition 4 SH

Ethics and Culture
COMM 1220 Media, Culture, and Society 4 SH
PHIL 1145 Technology and Human Values 4 SH
SOCL 4528 Computers and Society 4 SH

GPA REQUIREMENT
2.000 GPA required in the minor