School of Arts, Technology, Emerging Communications

Graduate Programs in Arts and Technology

The program leading to the MA in Arts and Technology is designed both for individuals engaged in professional practice wishing to enhance their knowledge and skills and for students intending to pursue a doctorate in a related field. It offers advanced studies in interactive media and computer-based arts that emphasize the fusion of creative with critical thinking and theory with practice. Students must complete thirty-six semester credit hours of coursework and an advanced project.

Master of Arts in Arts and Technology

36 semester credit hours minimum

Major Core Courses: 9 semester credit hours

- **ATEC 6300** Interdisciplinary Approaches to Arts and Technology
- **ATEC 6331** Aesthetics of Interactive Arts
- **ATEC 6391** Computer Processing for Arts and Technology

Students are expected to complete these courses as early as possible in their degree plan.

Prescribed Electives: 24 semester credit hours

Twenty-four semester credit hours chosen from the following courses:

- **ATEC 6332** Design Principles
- **ATEC 6335** Research in Sound Design
- **ATEC 6341** Game Design
- **ATEC 6344** History and Culture of Interactive Media
- **ATEC 6345** Game Production Lab
- **ATEC 6346** Game Pipeline Methodologies
- **ATEC 6347** Serious Games
- **ATEC 6348** Educational Games
- **ATEC 6351** Digital Arts
- **ATEC 6352** Motion Capture
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEC 6353</td>
<td>Visualization Research</td>
</tr>
<tr>
<td>ATEC 6354</td>
<td>Virtual Environments</td>
</tr>
<tr>
<td>ATEC 6355</td>
<td>Animation Production Lab</td>
</tr>
<tr>
<td>ATEC 6356</td>
<td>Interactive Narrative</td>
</tr>
<tr>
<td>ATEC 6357</td>
<td>Animation Studio</td>
</tr>
<tr>
<td>ATEC 6358</td>
<td>Concept Development</td>
</tr>
<tr>
<td>ATEC 6359</td>
<td>Digital Cinematography</td>
</tr>
<tr>
<td>ATEC 6361</td>
<td>Creating Interactive Media</td>
</tr>
<tr>
<td>ATEC 6362</td>
<td>Modeling and Simulation</td>
</tr>
<tr>
<td>ATEC 6363</td>
<td>Creative Automata</td>
</tr>
<tr>
<td>ATEC 6375</td>
<td>Topics in Emerging and Cognitive Design</td>
</tr>
<tr>
<td>ATEC 6380</td>
<td>Studies in Art, Science, and Humanities</td>
</tr>
<tr>
<td>ATEC 6384</td>
<td>Special Topics in Game Studies</td>
</tr>
<tr>
<td>ATEC 6385</td>
<td>Special Topics in Animation</td>
</tr>
<tr>
<td>ATEC 6389</td>
<td>Topics in Arts and Technology</td>
</tr>
<tr>
<td>EMAC 6372</td>
<td>Approaches to Emerging Media and Communication</td>
</tr>
<tr>
<td>EMAC 6373</td>
<td>Emerging Media Studio I</td>
</tr>
<tr>
<td>EMAC 6374</td>
<td>Digital Textuality</td>
</tr>
<tr>
<td>HUAS 6310</td>
<td>Introduction to Film Studies</td>
</tr>
<tr>
<td>HUAS 6312</td>
<td>Art and Society</td>
</tr>
<tr>
<td>HUAS 6313</td>
<td>The Business of the Arts</td>
</tr>
<tr>
<td>HUAS 6330</td>
<td>Studies in the Visual Arts</td>
</tr>
<tr>
<td>HUAS 6339</td>
<td>Painting/Digital Imaging/Video</td>
</tr>
<tr>
<td>HUAS 6354</td>
<td>Creating Short Fictions</td>
</tr>
<tr>
<td>HUAS 6375</td>
<td>Imagery and Iconography</td>
</tr>
<tr>
<td>HUAS 6381</td>
<td>Creating Fiction: Intermediate</td>
</tr>
<tr>
<td>HUAS 6391</td>
<td>Creativity: Visual Arts Workshop</td>
</tr>
<tr>
<td>HUAS 6392</td>
<td>Creativity: Image/Text Workshop</td>
</tr>
<tr>
<td>HUAS 6393</td>
<td>Creativity: Time-Based Arts Workshop</td>
</tr>
<tr>
<td>HUSL 6370</td>
<td>Studies in Literature and Ideas</td>
</tr>
</tbody>
</table>
Final Project: 3 semester credit hours

ATEC 6V95 Advanced Project Workshop

Having completed at least 30 semester credit hours of coursework, students will complete and present an advanced project in digital arts for evaluation by a master's committee.

Master of Fine Arts in Arts and Technology

54 semester credit hours minimum

Overview

The program leading to the MFA in Arts and Technology is designed both for students wishing to teach arts- and-technology-related courses in colleges and universities and for those intending to engage in professional studio or design practice. While maintaining a commitment to interdisciplinary education fusing critical with creative thinking, this program places greater emphasis on the creation and application of computer-based arts and narrative. Students must complete fifty-four semester credit hours of coursework and a substantial advanced project.

Major Core Courses: 6 semester credit hours

ATEC 6300 Interdisciplinary Approaches to Arts and Technology
ATEC 6331 Aesthetics of Interactive Arts

Students are expected to complete these courses as early as possible in their degree plan.

Prescribed Electives: 24 semester credit hours

Twenty-four semester credit hours chosen from the following courses:

ATEC 6332 Design Principles
ATEC 6335 Research in Sound Design
ATEC 6341 Game Design
ATEC 6344 History and Culture of Interactive Media
ATEC 6345 Game Production Lab
ATEC 6346 Game Pipeline Methodologies
ATEC 6347 Serious Games
ATEC 6348 Educational Games
ATEC 6351 Digital Arts
ATEC 6352 Motion Capture
ATEC 6353 Visualization Research
ATEC 6354 Virtual Environments
ATEC 6355 Animation Production Lab
ATEC 6356 Interactive Narrative
ATEC 6357 Animation Studio
ATEC 6358 Concept Development
ATEC 6359 Digital Cinematography
ATEC 6361 Creating Interactive Media
ATEC 6362 Modeling and Simulation
ATEC 6363 Creative Automata
ATEC 6375 Topics in Emerging and Cognitive Design
ATEC 6380 Studies in Art, Science, and Humanities
ATEC 6385 Special Topics in Animation
ATEC 6389 Topics in Arts and Technology
EMAC 6372 Approaches to Emerging Media and Communication
EMAC 6373 Emerging Media Studio I
EMAC 6374 Digital Textuality
EMAC 6375 Research Methodologies in Emerging Media and Communication
HUAS 6310 Introduction to Film Studies
HUAS 6312 Art and Society
HUAS 6313 The Business of the Arts
HUAS 6330 Studies in the Visual Arts
HUAS 6339 Painting/Digital Imaging/Video
HUAS 6352 Creating Television and Movie Scripts
HUAS 6354 Creating Short Fictions
HUAS 6373 Studies in Film, Television, and Digital Media
HUAS 6375 Imagery and Iconography
Doctor of Philosophy in Arts and Technology

60 semester credit hours minimum beyond the master’s degree

Overview

The program leading to the PhD in Arts and Technology is designed both for students wishing to teach arts- and-technology-related courses in colleges and universities and those who wish to develop new artistic, cultural or commercial applications of digital technology/emerging media. This program emphasizes the fusion of creative with critical thinking and theory with practice. Students seeking a PhD in Arts and Technology will normally complete a minimum of 60 semester credit hours (42 semester credit hours in coursework and 18 semester credit hours in dissertation) beyond a master’s degree or its equivalent, pass doctoral field examinations, and complete and defend a dissertation.

Students who have not previously completed six semester credit hours of graduate coursework in computer programming are required to complete ATEC 6391.

Within the first 18 semester credit hours of coursework applicable to the degree plan, students must successfully complete ATEC 6300, ATEC 6331, and ATEC 7331. During the semester within which students complete 18 semester credit hours of coursework applicable to the degree plan, students must successfully pass a qualifying examination in order to proceed in the program.
Major Core Courses: 9 semester credit hours

ATEC 6300 Interdisciplinary Approaches to Arts and Technology
ATEC 6331 Aesthetics of Interactive Arts
ATEC 7331 Research Methodology in Arts and Technology

Recommended Electives: 18 semester credit hours

Eighteen semester credit hours chosen from the suggested courses below:

ATEC 6341 Game Design
ATEC 6351 Digital Arts
ATEC 6353 Visualization Research
ATEC 6361 Creating Interactive Media
ATEC 6389 Special Topics in Arts and Technology
ATEC 7V81 Advanced Doctoral Project Workshop
ATEC 7V82 Advanced Projects in Interactive Media
ATEC 7620 Advanced Projects in Simulation and Game Design
ATEC 8303 Independent Readings in Arts and Technology
ATEC 8305 Independent Research in Arts and Technology
EMAC 6342 Digital Culture
EMAC 6372 Approaches to Emerging Media and Communication
EMAC 6374 Digital Textuality
EMAC 6375 Research Methodologies in Emerging Media and Communication
HUAS 6375 Imagery and Iconography
HUHI 7387 Science and Technology in Western Culture
HUSL 6384 Digital and Visual Rhetorics

Free Electives: 15 semester credit hours

Fifteen semester credit hours of electives in any organized graduate-level courses offered by the School of Arts and Humanities, Erik Jonsson School Engineering and Computer Science, School of
Behavioral and Brain Sciences, Naveen Jindal School of Management, School of Economic, Political and Policy Sciences, School of Natural Sciences and Mathematics, or School of Interdisciplinary Studies. All free electives are subject to approval by the Graduate Advisor.

**Doctoral Field Examinations**

After completing 36 semester credit hours of coursework applicable to the degree plan, students may proceed to the doctoral field examinations, a sequence consisting of three written sections and one oral section. The examining committee, composed of three regular members of the faculty, oversees definition and preparation of the three examination fields within guidelines established by the program. At least three business days before the exams themselves, the faculty members submit examination questions to the Arts and Technology office, which schedules and administers the examination. The maximum time allowed for a student's completion of the examination sequence is 20 business days.

**Dissertation (18 semester credit hours minimum)**

Students are formally advanced to PhD candidacy when they have successfully completed the doctoral field examinations and received final approval for dissertation from the four-person supervising committee formed, normally from the examining committee plus another regular faculty member proposed by the student, to oversee dissertation work.

Each candidate then writes a doctoral dissertation, which is supervised and defended according to general University regulations. Every student must register for a minimum of nine dissertation semester credit hours in two successive semesters and must maintain continuous enrollment thereafter for at least three semester credit hours during consecutive long semesters until the degree is completed. Any exception to this requirement is granted only by petition to the school's Associate Dean for Graduate Studies.