School of Arts, Technology, and Emerging Communication

Arts and Technology (BA)

Students who complete the major in Arts and Technology receive a thorough grounding in the mutually productive interaction of technology with the arts, with specific emphasis on the interplay of visual art, music, and narrative with the new modes of expression and communication that have emerged from the convergence of computing and media technologies. The program stresses not only the creation but also the potential applications and cultural implications of interactive media. A student majoring in Arts and Technology will be required to channel selected coursework according to individual needs and specialties. Particular attention should be given to the Prescribed Electives for the major, and close consultation with academic advisors is recommended. By selecting courses from a variety of the remaining elective headings, students are able to combine courses in technology and fine arts with coursework in literary criticism and interpretation, creative writing and translation, and linguistics and languages.

Unless otherwise noted, courses in Arts and Technology are open to all students in the University. However, students majoring in Arts and Technology may be given preference in certain course enrollments.

Bachelor of Arts in Arts and Technology

Degree Requirements (120 semester credit hours)¹

Faculty

Professors: Anne Balsamo, Frank Dufour, Monica Evans, Paul Fishwick, Roger Malina, Mihai Nadin

Clinical Professors: Elizabeth (Lisa) Bell, Michael Breault, Tim Christopher, Carie King, Paul Lester

Professor of Practice: Marjorie Zielke

Associate Professors: Christine (xtine) Burrough, Eric Farrar, Todd Fechter, Scot Gresham-Lancaster, Rosanna Guadagno, Midori Kitagawa, Kim Knight, Maximilian Schich, Andrew Scott, Dean Terry

Clinical Associate Professors: Cassini Nazir, Derek Royal, Harold (Chip) Wood

Assistant Professors: Olivia Banner, Kristin Drogos, Phillip Hall, Casey Johnson, Angela M. Lee, Sean McComber, Ryan McMahan, Josef Nguyen

Clinical Assistant Professors: Janet Johnson, Jillian Round, Michael Stephens

Senior Lecturers: Elizabeth Boyd, Christopher Camacho, Filip Celander, Melissa Hernandez-Katz,
I. Core Curriculum Requirements: 42 semester credit hours

Communication: 6 semester credit hours
- **COMM 1311** Survey of Oral and Technology-based Communication
- **RHET 1302** Rhetoric

Mathematics: 3 semester credit hours
Choose one course from the following:
- **MATH 1306** College Algebra for the Non-Scientist
- **MATH 1314** College Algebra

Or select any 3 semester credit hours from Mathematics core courses

Life and Physical Sciences: 6 semester credit hours
Select any 6 semester credit hours from Life and Physical Sciences core courses

Language, Philosophy and Culture: 3 semester credit hours
Choose one course from the following:
- **HUMA 1301** Exploration of the Humanities
- **LIT 2331** Masterpieces of World Literature
- **PHIL 1301** Introduction to Philosophy
- **PHIL 2316** History of Philosophy I
- **PHIL 2317** History of Philosophy II

Or select any 3 semester credit hours from Language, Philosophy and Culture core courses

Creative Arts: 3 semester credit hours
Choose one course from the following:
- **ARTS 1301** Exploration of the Arts
- **AHST 1303** Survey of Western Art History: Ancient to Medieval
- **AHST 1304** Survey of Western Art History: Renaissance to Modern
- **AHST 2331** Understanding Art
- **DANC 1310** Understanding Dance
**American History: 6 semester credit hours**

Choose two courses from the following:

- **HIST 1301** U.S. History Survey to Civil War
- **HIST 1302** U.S. History Survey from Civil War
- **HIST 2301** History of Texas
- **HIST 2330** Themes and Ideas in American History
- **HIST 2332** Civil War and Reconstruction

**Government / Political Science: 6 semester credit hours**

- **GOVT 2305** American National Government
- **GOVT 2306** State and Local Government

**Social and Behavioral Sciences: 3 semester credit hours**

Select any 3 semester credit hours from Social and Behavioral Sciences core courses

**Component Area Option: 6 semester credit hours**

Choose two courses from the following or other Component Area Option courses:

- **ARHM 2340** Creativity
- **ARHM 2341** Global Media
- **ARHM 2342** Connections in the Arts and Humanities
- **ARHM 2343** Science and the Humanities
- **ARHM 2344** World Cultures

**II. Major Requirements, Lower-Division: 21 semester credit hours**

- **ARTS 1316** Drawing Foundations
- **ATEC 2320** Exploration of Arts and Technology
  - or **ATEC 2325** Game Design Fundamentals
  - or **ATEC 2326** Computer Animation Processes
or **ATEC 2385** Sound Design

**ATEC 2340** Project Management for Arts and Technology I

**ATEC 2382** Computer Imaging

**ATEC 2384** Design I

**CS 1335** Computer Science I for Non-majors³

**CS 2335** Computer Science II for Non-majors⁴

### III. Major Requirements, Upper-Division: 24 semester credit hours

#### Major Core Courses

Any 3000- or 4000-level Art History (AHST) course

or **DRAM 3323** Performance in Historical Context

or **FILM 3321** Film in Historical Context

or **MUSI 3322** Music in Historical Context

**ATEC 3310** Audio Technologies

or **ATEC 3317** Modeling and Texturing I

or **ATEC 3327** Lighting and Composition I

or **ATEC 3328** Rigging I

or **ATEC 3336** Computer Animation I

or **ATEC 3346** Storytelling for New Media I

or **ATEC 3351** Game Design I

**ATEC 3320** Digital Content Design and Usability

or **ATEC 3325** Introduction to Computer Mediated Communication

**ATEC 3329** Tools Development for Arts and Technology

or **CS 3360** Computer Graphics for Artists and Designers

or **CS 4352** Human Computer Interaction I

**ATEC 3330** Digital Video Production I

or **ARTS 3371** Photography: Black/White

or **ARTS 3372** Photography: Color

or **ARTS 3377** Photography: Altered Image

or **ARTS 3379** Photography: New Media
or **ARTS 4368** Advanced Visual Arts

**ATEC 3384** Design II

**ATEC 4380** Capstone Project

or **ATEC 4381** Senior Seminar

**HIST 3328** History and Philosophy of Science and Medicine

or **HIST 3337** Technology and Western Civilization

or **HIST 3374** American Technological Development

or **LIT 3316** The Literature of Science Fiction

or **LIT 3334** Literature of Science

IV. Elective Requirements: 33 semester credit hours

**Prescribed Electives:** 15 semester credit hours

Choose any five courses from the following, from any option area:

**Options in Animation:**

**ATEC 3315** Motion Graphics

**ATEC 3316** Procedural Animation

**ATEC 3317** Modeling and Texturing I

**ATEC 3318** Pre-Production Design I

**ATEC 3327** Lighting and Composition I

**ATEC 3328** Rigging I

**ATEC 3329** Tools Development for Arts and Technology

**ATEC 3336** Computer Animation I

**ATEC 4318** Pre-Production Design II

**ATEC 4328** Rigging II

**ATEC 4336** Computer Animation II

**ATEC 4339** Special Effects

**ATEC 4345** Motion Capture Animation

**ATEC 4348** Modeling and Texturing II

**ATEC 4349** Lighting and Composition II
ATEC 4351 Animation Studio I
ATEC 4352 Animation Studio II
ATEC 4356 Computer Animation III

Options in Design:
ATEC 3315 Motion Graphics
ATEC 3320 Digital Content Design and Usability
ATEC 3325 Introduction to Computer Medicated Communication
ATEC 3361 Internet Studio I
ATEC 3363 Interaction Design I
ATEC 4340 Project Management for Arts and Technology II
ATEC 4341 Digital Marketing Design
ATEC 4347 Design Innovation Workshop
ATEC 4357 Strategic Design
ATEC 4361 Internet Studio II
ATEC 4363 Interaction Design II

Options in Emerging Media:
EMAC 3300 Reading Media Critically
EMAC 3326 Emerging Media Production
EMAC 3328 The Digital Society
EMAC 3343 Social Networks
EMAC 3350 Reading in a Networked Era
EMAC 4326 Advanced Emerging Media Production
EMAC 4335 Emerging Media and the Digital Economy
EMAC 4350 Networked Identities
EMAC 4365 Ethics in Emerging Media

Options in Fabrication:
ATEC 3324 Computer Modeling for Digital Fabrication
ATEC 3332 Additive Processes in Digital Fabrication
ATEC 3334 Laser Cutting in Digital Fabrication
ATEC 3335  Scanned Data in Digital Fabrication
ATEC 3338  Digital Applications in Sculpture
ATEC 3339  Projection Mapping Studio
ATEC 4322  Digital Sculpting
ATEC 4324  Digital Fabrication Studio I
ATEC 4325  Digital Fabrication Studio II
ATEC 4329  Advanced Projects in Digital Fabrication Studio

Options in Gaming:

ATEC 3329  Tools Development for Arts and Technology
ATEC 3351  Game Design I
ATEC 3352  User Experience Design for Games I
ATEC 3353  Game Studies I
ATEC 3354  Sound Design for Games and Interactive Media
ATEC 3355  Scripting for Games I
ATEC 3356  Games and Narrative I
ATEC 3364  Level Design I
ATEC 3365  Virtual Environments
ATEC 4350  Game Production Lab I
ATEC 4353  Game Production Lab II
ATEC 4365  Level Design II
ATEC 4367  Game Design II
ATEC 4368  User Experience Design for Games II

Options in Sound:

ATEC 3310  Audio Technologies
ATEC 3312  Audio Productions Lab I
ATEC 3331  Sound Design for Linear and Non-linear Media
ATEC 3354  Sound Design for Games and Interactive Media
ATEC 4310  Digital Audio Processing
ATEC 4312  Audio Productions Lab II
Options in Storytelling:

ATEC 3318 Pre-Production Design
ATEC 3346 Storytelling for New Media I
ATEC 3356 Games and Narrative I
ATEC 4346 Storytelling for New Media II

Options in Video:

ATEC 3330 Digital Video Production I
ATEC 4330 Digital Video Production II

Topics Course Options:

ATEC 3370 Topics in Arts and Technology
ATEC 4370 Special Topics in Arts and Technology
ATEC 4371 Topics in Animation
ATEC 4373 Topics in Game Development
ATEC 4374 Topics in Digital Design
ATEC 4375 Topics in Sound Design

Free Electives: 18 semester credit hours

Both upper- and lower-division courses may be used as electives, but students must complete at least 51 semester credit hours of upper-division courses to qualify for graduation.

1. Incoming freshmen must enroll and complete requirements of UNIV 1010 and the corresponding school-related freshman seminar course. Students, including transfer students, who complete their core curriculum at UT Dallas must take UNIV 2020.

2. Curriculum Requirements can be fulfilled by other approved courses from institutions of higher education. The courses listed are recommended as the most efficient way to satisfy both Core Curriculum and Major Requirements at UT Dallas.

3. Students who are ATEC/CS double degree or who plan to minor in CS must enroll in CS 1336 Programming Fundamentals and CS 1136 Computer Science Laboratory and/or CS 1337 Computer Science I (if placed out of CS 1336 and CS 1136).

4. Students who are ATEC/CS double degree or who plan to minor in CS must enroll in CS 2336 Computer Science II.