ANIMATION GAME DESIGN - B.S.

College of Applied and Technical Studies
cats@kent.edu
www.kent.edu/cats

Description
The Bachelor of Science degree in Animation Game Design provides the key concepts, creative tools and principles of diverse skills in fundamental and advanced technical knowledge of modeling, animation and game design.

The degree program prepares students for careers by developing technical competency, creative/independent problem solving and conceptual understanding necessary for the challenges of a career in the creative industries. Upon graduation, students have created a professional-quality portfolio to enter the field of content creators and are prepared for jobs in technical illustration, two- and three-dimension modeling, game design, animation, artistic production, and exhibition. Students are guided in selecting courses that support a given concentration. They can take courses in various aspects of art, design, and film/video.

The Animation Game Design major comprises the following concentrations:

- The **Animation** concentration involves bringing motion to still objects or displaying a sequence of still images to create the illusion of motion or life. Animation involves more than just character motion; it includes motion graphics, video editing, special effects, cameras and video output. Students learn how to animate characters, elements of environments and graphics. Two- and three-dimension models are animated as necessary, via a combination of manual animation, procedural tools and physical simulation.

- The **Game Design** concentration provides the environment and content creation in two- and three-dimension models. The focus is on the design part of game environments to be used on platforms such as personal computers, smart phones and game consoles. Students learn the importance of two- and three-dimension model creation for specific games used for simulation, training, entertainment and measuring educational outcomes.

Fully Offered At:
- Kent Campus
- Stark Campus
- Tuscarawas Campus

Accreditation
National Association of Schools of Art and Design (NASAD)

Admission Requirements
The university affirmatively strives to provide educational opportunities and access to students with varied backgrounds, those with special talents and adult students who graduated from high school three or more years ago.

Freshman Students on the Kent Campus: The freshman admission policy on the Kent Campus is selective. Admission decisions are based upon the following: cumulative grade point average, ACT and/or SAT scores, strength of high school college preparatory curriculum and grade trends. The Admissions Office at the Kent Campus may defer the admission of students who do not meet admissions criteria but who demonstrate areas of promise for successful college study. Deferred applicants may begin their college coursework at one of seven regional campuses of Kent State University. For more information on admissions, including additional requirements for some academic programs, visit the admissions website for new freshmen.

Freshman Students on the Regional Campuses: Kent State campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, as well as the Twinsburg Academic Center, have open enrollment admission for students who hold a high school diploma, GED or equivalent.

English Language Proficiency Requirements for International Students: All international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning a minimum 525 TOEFL score (71 on the Internet-based version), minimum 75 MELAB score, minimum 6.0 IELTS score, minimum 48 PTE score or minimum 100 DET score; or by completing the ESL level 112 Intensive Program. For more information on international admission, visit the Office of Global Education’s admission website.

Transfer, Transitioning and Former Students: For more information about admission criteria for transfer, transitioning and former students, please visit the admissions website.

Program Learning Outcomes
Graduates of this program will be able to:
1. Demonstrate current skills in two- and three-dimension modeling, animation and game design.
2. Apply design thinking to technological problems, including demonstrating familiarity with design thinking applicable to their professional work.
3. Demonstrate an understanding of the ethics (and legal issues) closely associated with fields of modeling, animation and game design.
4. Demonstrate effective communication skills—both verbally and in written form—with technical, business and design professionals, including effective communication as individuals and as part of a project team.
5. Participate in, and lead, multidisciplinary project teams, demonstrating theoretical and practical understanding of team dynamics.
6. Demonstrate appreciation for diverse cultures and individual differences, and reflect that appreciation in their work.
7. Engage in continuous learning, as well as research and assess new ideas and information to provide the capabilities for lifelong learning.

University Requirements
All students in a bachelor’s degree program at Kent State University must complete the following university requirements for graduation.
NOTE: University requirements may be fulfilled in this program by specific course requirements. Please see Program Requirements for details.

Destination Kent State: First Year Experience 1

Course is not required for students with 25 transfer credits, excluding College Credit Plus, or age 21+ at time of admission.

Diversity Domestic/Global (DIVD/DIVG) 2 courses

Students must successfully complete one domestic and one global course of which one must be from the Kent Core.

Experiential Learning Requirement (ELR) varies

Students must successfully complete one course or approved experience.

Kent Core (see table below) 36-37

Writing-Intensive Course (WIC) 1 course

Students must earn a minimum C grade in the course.

Upper-Division Requirement 39 (or 42)

Students must successfully complete 39 upper-division (numbered 30000 to 49999) credit hours to graduate. Students in a B.A. and/or B.S. degree in the College of Arts and Sciences must complete 42 upper-division credit hours.

Total Credit Hour Requirement 120

Some bachelor’s degrees require students to complete more than 120 credit hours.

Kent Core Requirements

Kent Core Composition (KCMP) 6

Kent Core Mathematics and Critical Reasoning (KMCR) 3

Kent Core Humanities and Fine Arts (KHUM/KFA) (min one course each) 9

Kent Core Social Sciences (KSS) (must be from two disciplines) 6

Kent Core Basic Sciences (KBS/KLAB) (must include one laboratory) 6-7

Kent Core Additional (KADL) 6

Total Credit Hours: 36-37

Program Requirements

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGD 12000</td>
<td>TWO DIMENSION GRAPHICS</td>
<td>3</td>
</tr>
<tr>
<td>AGD 12001</td>
<td>MODELING AND TEXTURING I</td>
<td>3</td>
</tr>
<tr>
<td>AGD 21000</td>
<td>FUNDAMENTALS OF MIXED REALITY</td>
<td>3</td>
</tr>
<tr>
<td>AGD 22004</td>
<td>MODELING AND TEXTURING II</td>
<td>3</td>
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<tr>
<td>AGD 22010</td>
<td>DIGITAL SCULPTING</td>
<td>3</td>
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<tr>
<td>AGD 23020</td>
<td>GAMING AND CULTURE</td>
<td>3</td>
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<tr>
<td>AGD 34003</td>
<td>ANIMATION THEORY</td>
<td>3</td>
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<tr>
<td>AGD 43092</td>
<td>INTERNSHIP IN ANIMATION AND GAME DESIGN (ELR)</td>
<td>3</td>
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<tr>
<td>or AGD 43096</td>
<td>INDIVIDUAL INVESTIGATION IN ANIMATION AND GAME DESIGN</td>
<td></td>
</tr>
<tr>
<td>AGD 49999</td>
<td>SENIOR CAPSTONE PROJECT (ELR)</td>
<td>3</td>
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</table>

Major Electives, choose from the following: 1 24

- Animation Game Design (AGD) Electives
- Art History (ARTH) Electives
- Art Studio Art (ARTS) Electives
- Visual Communication Design (VCD) Electives

Additional Requirements (courses do not count in major GPA)

<table>
<thead>
<tr>
<th>Code</th>
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<th>Credit Hours</th>
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<tbody>
<tr>
<td>ARTH 22006</td>
<td>ART HISTORY: ANCIENT AND MEDIEVAL ART (KFA)</td>
<td>3</td>
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<tr>
<td>or ARTH 22007</td>
<td>ART HISTORY: RENAISSANCE TO MODERN ART (KFA)</td>
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<tr>
<td>or VCD 13000</td>
<td>DESIGN: PRINCIPLES, PROCESSES AND PRACTICE</td>
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</tr>
<tr>
<td>or VCD 14001</td>
<td>VISUAL DESIGN LITERACY</td>
<td></td>
</tr>
<tr>
<td>ARTS 14000</td>
<td>DRAWING I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 14001</td>
<td>DRAWING II</td>
<td>3</td>
</tr>
<tr>
<td>COMM 15000</td>
<td>INTRODUCTION TO HUMAN COMMUNICATION (KADL)</td>
<td>3</td>
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<tr>
<td>MATH 11010</td>
<td>ALGEBRA FOR CALCULUS (KMCR)</td>
<td>3</td>
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<tr>
<td>MATH 11022</td>
<td>TRIGONOMETRY (KMCR)</td>
<td>3</td>
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<tr>
<td>UC 10097</td>
<td>DESTINATION KENT STATE: FIRST YEAR EXPERIENCE</td>
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Kent Core Composition 6

Kent Core Humanities and Fine Arts (minimum one course from each) 9

Kent Core Social Sciences (must be from two disciplines) 6

Kent Core Basic Sciences (must include one laboratory) 6-7

General Electives (total credit hours depends on earning 120 credit hours, including 39 upper-division credit hours) 5

Concentrations

Choose from the following: 18

- Animation...
Game Design

Minimum Total Credit Hours: 120

1 Students should meet with an advisor when selecting electives.

### Animation Concentration Requirements

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>AGD 11003</td>
<td>SOLID MODELING</td>
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<tr>
<td>AGD 34000</td>
<td>CHARACTER ANIMATION</td>
<td>3</td>
</tr>
<tr>
<td>AGD 34001</td>
<td>ANIMATION PROJECT</td>
<td>3</td>
</tr>
<tr>
<td>AGD 43001</td>
<td>ANIMATION PRODUCTION AND VISUAL EFFECTS</td>
<td>3</td>
</tr>
<tr>
<td>AGD 43025</td>
<td>REAL-TIME RENDERING FOR ANIMATION</td>
<td>3</td>
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<tr>
<td>Animation Game Design (AGD) Elective</td>
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Minimum Total Credit Hours: 18

### Game Design Concentration Requirements

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<tbody>
<tr>
<td>AGD 22001</td>
<td>MODELING FOR ARCHITECTURE</td>
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<td>AGD 22005</td>
<td>MULTIMEDIA AND GAME DESIGN</td>
<td>3</td>
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<td>AGD 33010</td>
<td>COMPETITIVE GAMING</td>
<td>3</td>
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<td>AGD 33030</td>
<td>GAMES FOR EDUCATION</td>
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<td>AGD 34005</td>
<td>ENVIRONMENTAL GAME DESIGN</td>
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<tr>
<td>AGD 43000</td>
<td>INTERACTIVE GAME DESIGN</td>
<td>3</td>
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</table>

Minimum Total Credit Hours: 18

### Graduation Requirements

Minimum Major GPA: 2.000
Minimum Overall GPA: 2.000

### Roadmap

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

#### Semester One

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<tr>
<td>Kent Core Requirement</td>
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<tr>
<td>Kent Core Requirement</td>
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Credit Hours: 16

#### Semester Two

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</table>

Major Electives: 6
Concentration Requirement: 3
Kent Core Requirement: 3
General Electives: 2

Credit Hours: 14

Minimum Total Credit Hours: 120