ANIMATION GAME DESIGN - B.S.

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

Examples of Possible Careers*
Artists and related workers, all other
- 0.2% little or no change
- 13,100 number of jobs
- $65,800 potential earnings

Special effects artists and animators
- 4.1% about as fast as the average
- 67,500 number of jobs
- $77,700 potential earnings

Contact Information
- Program Coordinator: Chris Totten | ctotten@kent.edu | 330-308-7438
- Speak with an Advisor
  - Kent Campus
  - Stark Campus
  - Tuscarawas Campus
- Chat with an Admissions Counselor

Fully Offered
- Kent Campus
- Stark Campus
- Tuscarawas Campus

*Note
Source of occupation titles and labor data is from the U.S. Bureau of Labor Statistics'
Occupational Outlook Handbook. Data comprises projected percent change in employment
erover the next 10 years; nation-wide employment numbers; and the yearly median wage at
which half of the workers in the occupation earned more than that amount and half earned
less.

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.

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 first-year students.

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

Experiential Learning Requirement (ELR)
- Students must successfully complete one course or approved experience.

Kent Core (see table below)
- Students must earn a minimum C grade in the course.

Writing-Intensive Course (WIC)
- Students must earn a minimum C grade in the course.

Upper-Division Requirement
- 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
- Total credit hours required is 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

Kent Core Additional (KADL)
- Course requirements. Please see Program Requirements for details.
- NOTE: complete the following university requirements for graduation.

Upper-Division Requirement
- Writing-Intensive Course (WIC)

Diversity Domestic/Global (DIVD/DIVG)

Experiential Learning Requirement (ELR)

Kent Core (see table below)

Writing-Intensive Course (WIC)

Total Credit Hours Requirement

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

Major Requirements

AGD 12000 TWO DIMENSION GRAPHICS 3
AGD 12001 MODELING AND TEXTURING I 3
AGD 21000 FUNDAMENTS OF MIXED REALITY 3
AGD 22004 MODELING AND TEXTURING II 3
AGD 22010 DIGITAL SCULPTING 3
AGD 23020 GAMING AND CULTURE 3
AGD 34003 ANIMATION THEORY 3
AGD 43092 INTERNSHIP IN ANIMATION AND GAME DESIGN (ELR) (WIC) 3
AGD 49999 SENIOR CAPSTONE PROJECT (ELR) (WIC) 3

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
ARCH 10011 GLOBAL ARCHITECTURAL HISTORY I (KFA) 3
ARCH 10012 GLOBAL ARCHITECTURAL HISTORY II (KFA) 3
ART 10022 2D COMPOSITION 3
ART 10023 3D COMPOSITION 3
CCI 12001 PHOTOGRAPHY 3
CS 13001 COMPUTER SCIENCE I: PROGRAMMING AND PROBLEM SOLVING 3
CS 13011 COMPUTER SCIENCE IA: PROCEDURAL PROGRAMMING 3
CS 13012 COMPUTER SCIENCE IB: OBJECT ORIENTED PROGRAMMING 3
ENG 20021 INTRODUCTION TO CREATIVE WRITING 3
ENTR 27056 INTRODUCTION TO ENTREPRENEURSHIP 3
ENTR 37040 ENTREPRENEURIAL TOOLS 3
FDM 10023 FASHION VISUALS 3
FDM 10024 FASHION VISUALS LABORATORY 3
FDM 10140 FOUNDATIONS OF FASHION DRAWING 3
FDM 20013 HISTORY OF COSTUME 3
MDJ 10009 ELEMENTS OF FILM, TV AND ANIMATION 3
MDJ 20001 MEDIA, POWER AND CULTURE (DIVD) (KSS) 3
MDJ 20011 PRODUCTION FUNDAMENTALS 3
MDJ 23004 STORY FOR PICTURE 3
MDJ 23130 DIRECTING FOR PICTURE 3
MDJ 23140 PRODUCTION I 3
MDJ 30036 DIGITAL VIDEO EDITING 3
MDJ 33033 SOUND FOR PICTURE 3
MDJ 33024 BROADCAST PERFORMANCE 3
MDJ 33036 MULTIMEDIA ENGINEERING 3
MDJ 33043 DIGITAL CINEMATOGRAPHY 3
MUS 21113 MUSIC PRODUCTION I 3
MUS 21114 MUSIC PRODUCTION II 3
MUS 21221 AUDIO RECORDING I 3
THEA 11303 THE ART OF ACTING 3

Additional Requirements (courses do not count in major GPA)
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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGD 12000</td>
<td>TWO DIMENSION GRAPHICS</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 14000</td>
<td>DRAWING I</td>
<td>3</td>
</tr>
<tr>
<td>COMM 15000</td>
<td>INTRODUCTION TO HUMAN COMMUNICATION (KADL)</td>
<td>3</td>
</tr>
<tr>
<td>UC 10097</td>
<td>DESTINATION KENT STATE: FIRST YEAR EXPERIENCE</td>
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**Semester Two**

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<tr>
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<tr>
<td>ARTH 22006 or ARTH 22007 or VCD 13000</td>
<td>ART HISTORY: ANCIENT AND MEDIEVAL ART (KFA) or ART HISTORY: RENAISSANCE TO MODERN ART (KFA) or DESIGN: PRINCIPLES, PROCESSES AND PRACTICE</td>
<td>3</td>
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<tr>
<td>ARTS 14001</td>
<td>DRAWING II</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>
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**Semester Three**

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<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>
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<tr>
<td>AGD 43025</td>
<td>REAL-TIME RENDERING FOR ANIMATION</td>
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<tr>
<td>AGD 12001</td>
<td>MODELING AND TEXTURING I</td>
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<tr>
<td>AGD 21000</td>
<td>FUNDAMENTALS OF MIXED REALITY</td>
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**Semester Four**

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<td>AGD 22004</td>
<td>MODELING AND TEXTURING II</td>
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<td>AGD 22010</td>
<td>DIGITAL SCULPTING</td>
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<td>AGD 23020</td>
<td>GAMING AND CULTURE</td>
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**Semester Five**

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<tr>
<td>AGD 34003</td>
<td>ANIMATION THEORY</td>
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<td>AGD 22001</td>
<td>MODELING FOR ARCHITECTURE</td>
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<td>AGD 22005</td>
<td>MULTIMEDIA AND GAME DESIGN</td>
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<td>AGD 33010</td>
<td>COMPETITIVE GAMING</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>
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**Semester Six**

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<td>MATH 11022</td>
<td>TRIGONOMETRY (KMCR)</td>
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**Semester Seven**

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<td>UC 10097</td>
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<td>1</td>
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</table>

**Course Requirements**

- Students should meet with an advisor when selecting electives.
<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Kent Core Requirement</td>
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<td><strong>Total Credit Hours</strong></td>
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**Semester Eight**

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<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>AGD 43092 INTERNSHIP IN ANIMATION AND GAME DESIGN (ELR) (WIC)</td>
<td>3</td>
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<tr>
<td>AGD 43096 or INDIVIDUAL INVESTIGATION IN ANIMATION AND GAME DESIGN</td>
<td>3</td>
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<tr>
<td>AGD 49999 SENIOR CAPSTONE PROJECT (ELR) (WIC)</td>
<td>3</td>
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<tr>
<td>Major Elective</td>
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<tr>
<td>Kent Core Requirement</td>
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<tr>
<td>General Elective</td>
<td>2</td>
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<tr>
<td><strong>Total Credit Hours</strong></td>
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**Minimum Total Credit Hours:** 120