# TECHNICAL MODELING DESIGN - A.A.S.

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

## About This Program

Design your future with the Technical Modeling and Design Associate of Applied Science program. Develop the technical and creative skills needed to thrive in today's design industry. With a focus on hands-on experience and real-world projects, this program prepares you for success in a variety of design fields. Enroll now and take the first step toward a rewarding career in design. Read more...

## Contact Information

- Program Coordinator: **Lori Bears** | lbears@kent.edu | 330-308-7438
- Speak with an Advisor
- Chat with an Admissions Counselor

## Program Delivery

- **Delivery:**
  - Fully online
  - In person
- **Location:**
  - Tuscarawas Campus

## Examples of Possible Careers and Salaries*

### Architectural and civil drafters

- -2.5% decline
- 102,900 number of jobs
- $57,500 potential earnings

### Calibration technologists and technicians and engineering technologists and technicians, except drafters, all other

- 2.1% slower than the average
- 91,600 number of jobs
- $64,190 potential earnings

### Drafters, all other

- 0.6% little or no change
- 15,200 number of jobs
- $54,500 potential earnings

### Electrical and electronics drafters

- 0.5% little or no change
- 25,300 number of jobs
- $62,100 potential earnings

### Mechanical drafters

- -8.3% decline
- 57,500 number of jobs
- $58,270 potential earnings

* Source of occupation titles and labor data comes from the U.S. Bureau of Labor Statistics' Occupational Outlook Handbook. Data comprises projected percent change in employment over 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.

## 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.

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

Some programs may require that students meet certain requirements before progressing through the program. For programs with progression requirements, the information is shown on the Coursework tab.

For more information on admissions, contact the Regional Campuses admissions offices.

## Program Requirements

### Major Requirements

| Code | Title | Credit Hours |
|---|---|---|
| **Major Requirements (courses count in major GPA)** | | |
| AGD 11003 | SOLID MODELING | 3 |
| AGD 12000 | TWO DIMENSION GRAPHICS | 3 |
| AGD 12001 | MODELING AND TEXTURING I | 3 |
| AGD 22000 | TWO-DIMENSION COMMUNICATION | 3 |
| AGD 22001 | MODELING FOR ARCHITECTURE | 3 |
| Major Electives, choose from the following: | | 15 |
| AGD 21000 | FUNDAMENTALS OF MIXED REALITY | |
| AGD 22004 | MODELING AND TEXTURING II | |
| AGD 22010 | DIGITAL SCULPTING | |
| AGD 22095 | SPECIAL TOPICS IN ANIMATION AND GAME DESIGN | |
| AGD 23020 | GAMING AND CULTURE | |
| ARTS 14000 | DRAWING I | |
| EMAT 10310 | MY STORY ON THE WEB | |
| MERT 12000 | ENGINEERING DRAWING | |
| MERT 12001 | COMPUTER-AIDED DESIGN | |
| **Additional Requirements (courses do not count in major GPA)** | | |
| BMRT 11000 | INTRODUCTION TO BUSINESS | 3 |
| or BUS 10123 | EXPLORING BUSINESS | |
| or ENTR 27056 | INTRODUCTION TO ENTREPRENEURSHIP | |
| COMM 15000 | INTRODUCTION TO HUMAN COMMUNICATION (KADL) | 3 |
| EERT 32003 | TECHNICAL COMPUTING | 3 |
| ENG 20002 | INTRODUCTION TO TECHNICAL WRITING | 3 |

| | | |
|---|---|---|
| MATH 11010 | ALGEBRA FOR CALCULUS (KMCR) | 3 |
| UC 10001 | FLASHES 101 | 1 |
| Kent Core Composition | | 3 |
| Kent Core Humanities and Fine Arts | | 3 |
| Kent Core Social Sciences | | 3 |
| Kent Core Basic Sciences | | 3 |
| General Electives (total credit hours depends on earning 60 credits hour) | | 2 |
| **Minimum Total Credit Hours:** | | **60** |

# Graduation Requirements

| Minimum Major GPA | Minimum Overall GPA |
|---|---|
| 2.000 | 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 | | Credits |
|---|---|---|
| AGD 22000 | TWO-DIMENSION COMMUNICATION | 3 |
| BMRT 11000<br>or BUS 10123<br>or ENTR 27056 | INTRODUCTION TO BUSINESS<br>or EXPLORING BUSINESS<br>or INTRODUCTION TO ENTREPRENEURSHIP | 3 |
| UC 10001 | FLASHES 101 | 1 |
| Major Elective | | 6 |
| Kent Core Requirement | | 3 |
| | **Credit Hours** | **16** |
| **Semester Two** | | |
| AGD 11003 | SOLID MODELING | 3 |
| AGD 12000 | TWO DIMENSION GRAPHICS | 3 |
| MATH 11010 | ALGEBRA FOR CALCULUS (KMCR) | 3 |
| Major Elective | | 3 |
| Kent Core Requirement | | 3 |
| | **Credit Hours** | **15** |
| **Semester Three** | | |
| AGD 12001 | MODELING AND TEXTURING I | 3 |
| AGD 22001 | MODELING FOR ARCHITECTURE | 3 |
| COMM 15000 | INTRODUCTION TO HUMAN COMMUNICATION (KADL) | 3 |
| ENG 20002 | INTRODUCTION TO TECHNICAL WRITING | 3 |
| Major Elective | | 3 |
| | **Credit Hours** | **15** |
| **Semester Four** | | |
| EERT 32003 | TECHNICAL COMPUTING | 3 |
| Major Elective | | 3 |
| Kent Core Requirement | | 3 |
| Kent Core Requirement | | 3 |
| General Elective | | 2 |
| | **Credit Hours** | **14** |
| | **Minimum Total Credit Hours:** | **60** |

## University Requirements

All students in an applied or technical associate 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.

| Code | Title | Credit Hours |
|---|---|---|
| Flashes 101 (UC 10001) | | 1 |
| | Course is not required for students with 30+ transfer credits (excluding College Credit Plus) or age 21+ at time of admission. | |
| Kent Core (see table below) | | 15 |
| Total Credit Hour Requirement | | 60 |
| | Some associate degrees require students to complete more than 60 credit hours. | |

## Kent Core Requirements

| | |
|---|---|
| Kent Core Composition (KCMP) | 3 |
| Kent Core Mathematics and Critical Reasoning (KMCR) | 3 |
| Kent Core Humanities and Fine Arts (KHUM/KFA) | 3 |
| Kent Core Social Sciences (KSS) | 3 |
| Kent Core Basic Sciences (KBS/KLAB) | 3 |
| **Total Credit Hours:** | **15** |

# Program Learning Outcomes

Graduates of this program will be able to:

1. Apply knowledge, techniques and skills to create complex two- and three-dimensional drawings, modeling and animations.
2. Integrate effective communication skills, both verbally and in written form, with technical, business and design professionals as individuals and part of a project team.
3. Understand and commit to address professional and ethical responsibilities, including respect for diversity.
4. Recognize the need for and an ability to engage in lifelong learning.
5. Collaborate with people of diverse backgrounds and abilities.

# Full Description

The Associate of Applied Science degree in Technical Modeling Design prepares students for entry-level positions as technical illustrators, drafter/designer technicians in business and computer animation and game design industries, as well as in the field of multimedia development. Computer-aided design (CAD) is used throughout the program for computer modeling and multimedia development.

The degree program articulates with the CAD for Manufacturing undergraduate certificate, the Bachelor of Science degree in Animation Game Design and other select bachelor's degrees at Kent State.