KENT STATE UNIVERSITY
CERTIFICATION OF CURRICULUM PROPOSAL

Preparation Date   Curriculum Bulletin _____

Effective Date   **select one**   Approved by EPC _____

Department

College   **RE - Regional College**

Degree   **BS - Bachelor of Science**

Program Name   **Modeling, Animation and Game Creation**   Program Banner Code

Concentration(s)   Concentration(s) Banner Code(s)

Proposal   **Establish program**

Description of proposal:

Kent State proposes establishing a new major, Modeling, Animation and Game Creation, within the Bachelor of Science degree. The program will be offered fully at the university's Kent, Stark and Tuscarawas campuses.

Does proposed revision change program's total credit hours?   ☐ Yes   ☐ No

Current total credit hours: Proposed total credit hours **120**

Describe impact on other programs, policies or procedures (e.g., duplication issues; enrollment and staffing considerations; need; audience; prerequisites; teacher education licensure):
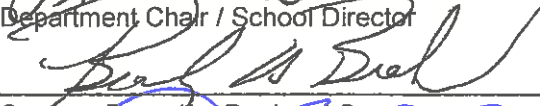
The proposed program is existing at Kent State, having been offered since 2001 as a concentration called Computer Design, Animation and Game Design, first within the Technology major (2001-2012) and then within the Engineering Technology major (2012-present). There are no duplication concerns. Currently, three full-time and five part-time (adjunct) faculty members teach in the existing Computer Design, Animation and Game Design concentration.
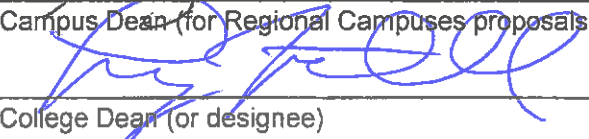
Units consulted (other departments, programs or campuses affected by this proposal):

Tuscarawas Faculty Council, Regional College Curriculum Committee, College of Aero and Engineering, Arts and Sciences, CCI, EPC

REQUIRED ENDORSEMENTS

_____   10/20/17
Department Chair / School Director

_____   10/20/17
Campus Dean (for Regional Campuses proposals)

_____   10/27/17
College Dean (or designee)

_____   ___/___/___
Dean of Graduate Studies (for graduate proposals)

_____   ___/___/___
Senior Vice President for Academic Affairs and Provost (or designee)

Ohio | **Department of Higher Education**

John R. Kasich, Governor
John Carey, Chancellor

INITIAL INQUIRY
REQUEST TO OFFER A NEW PROGRAM

Date of submission: *Date to come (sent after EPC)*

Name of institution: Kent State University

Primary institutional contact for this request:
Name:	Therese E. Tillett
Title:	Executive Director of Curriculum Services, Office of the Provost
Phone:	330-672-8558
E-mail:	ttillet1@kent.edu

Name of program: Bachelor of Science degree, Modeling, Animation and Game Creation major

Classification of Instructional Program (CIP):   **50.0102 Digital Arts.** A general, undifferentiated program that focuses on the use of computerized digital images as the primary medium of expression in the visual and performing arts, and that may prepare individuals for a wide variety of careers using new media, including graphic design, digital animation, motion graphics, 3D visualization, game and interactive media design, music and sound design, video production, web design, photography and other fields.

Proposed start date: Fall 2019, pending approval from the Ohio Department of Higher Education and the Higher Learning Commission

For institutions that are already approved/authorized by the chancellor
☐ New degree designation
☒ New program within an existing degree (e.g., major, minor, concentration)

Delivery options (check all that apply):
☒ Campus based
☐ Online/hybrid delivery
☐ Flexible or accelerated delivery
☐ Offering the program at a new offsite location
☐ Offering the program at an existing offsite location
☐ Program contains off-campus experiences (e.g., internship, clinical, practicum, student teaching)

The institution will be seeking specialized accreditation for the program:
☒ No   ☐ Yes

Provide a brief description of the request.

Kent State proposes establishing a new major, Modeling, Animation and Game Creation, within the Bachelor of Science degree. The program will be offered at the university's Kent, Stark and Tuscarawas campuses, and administered by the Regional College.

The proposed program is existing at Kent State, having been offered since 2001 as a concentration—called Computer Design, Animation and Game Design—first within the Technology major (2001-2012) and then within the Engineering Technology major (2012-present). The program is approved by the Ohio Department of Higher Education to be offered at the Kent and Tuscarawas campuses.

In addition, Kent State has offered an associate degree in the field since 1995 at the Tuscarawas Campus. That program has graduated more than 300 students since 2000.

Explain the academic unit's rationale for making the request.

Kent State's computer design, animation and game design program has long experienced solid enrollment and is one of the Tuscarawas Campus' signature programs, see table 1. Graduates have obtained jobs in a wide variety of sectors in local, state, national and international markets, see appendix A.

Table 1: Student Enrollment in BS Degree, Engineering Technology Major, Computer Design, Animation and Game Design Concentration[1]

Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
157	146	156	148	167	191

In order to prepare students to compete in the job market today, faculty have been continually updating the program's curricular offerings to stay current with the developments in the field. As a concentration in the Engineering Technology major, faculty are limited in both marketing the program and in refining the curriculum while keeping a major core among all the concentrations.[2]

In addition to elevating the Computer Design, Animation and Game Design concentration to a separate major, the name will change—to Modeling, Animation and Game Creation—to reflect better updates to the curriculum and program objectives.

> **Modeling.** Modeling is a domain-specific term, with other domain-specific meanings used in mathematics and the sciences. Two- and three-dimension models are created in design, graphic and game industries. Students in the program learn how to create a 2D and 3D character model design in a game environment, reproduction of an object using a solid-modeling program, an architectural 3D house model or a modeled scene to be used in a virtual/augmented reality environment.

[1] Data provided by Kent State University Office of Institutional Research (15th day census).

[2] In addition to housing the Computer Design, Animation and Game Design concentration, the Engineering Technology major comprises the following concentrations: Mechanical/Systems, Green and Alternative Energy, Electrical/Electronics Engineering Technology and 2+2 Integrated Engineering Technology.

Animation. Animation involves bringing motion to still objects or, more traditionally, 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.

Game Creation. Game creation is a phrase that describes level (environment) and content creation in 2D and 3D 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 2D and 3D model creation for specific games used for simulation, training, entertainment and measuring educational outcomes.

Indicate whether additional resources (e.g., faculty, staff, facilities, technology) will be needed to support the proposed request.

Currently, three full-time and five part-time (adjunct) faculty members teach in the existing Computer Design, Animation and Game Design concentration. Plans have been formalized to hire at least one more full-time faculty member. Several more adjunct faculty are in the process of being hired.

Appendix A:

Jobs/Internships of Graduates of the Computer Design, Animation and Game Design Concentration

Company	Location	Graduate Job Title
Sanctuary Software Studio	Fairlawn, OH	multimedia developer
MMG Studios	Cincinnati, OH	2D and 3D animator
Pixar Canada	Vancouver, Canada	animator and lighting specialist
Pixomondo	Vancouver, Canada	animator
Reel FX	Dallas, TX	special effects designer
Animal Logic	Sydney, Australia	lighting and composer
Double Negative	Vancouver, Canada	lighting
Science Applications International Corporation	Huntsville, AL	modeler and simulator
Barking Lizards Technologies	Richardson, TX	game designer
Vcom3D	Orlando, FL	game designer
SDMyers	Tallmadge, OH	2D/3D modeler
Zero Point 3D	Coconut Creek, FL	3D artist
Twin Sisters Publishing Company	Akron, OH	animator
Forms+Surfaces	Carpenteria, CA	sketchup artist
TMW Systems	Mayfield Heights, OH	technical writer and video specialist
LJ Smith Stair Systems	Gnadenhutten, OH	3D modeler
Synergy Sign & Graphics	Strasburg, OH	graphic designer
Lauren Manufacturing	New Philadelphia, OH	autoCAD and solid modeler
Canton Elevator	Canton, OH	CAD operator
H3D Tool Corporation	Newcomerstown, OH	2D/3D modeler
JLG Industries, Inc.	Orrville, OH	technical illustrator
Hines Specialty Vehicle Group	New Philadelphia, OH	autoCAD designer
Aqua Blue Inc.	New Philadelphia, OH	web design
S.A. Comunale	Barberton, OH	autoCAD designer
Tubar Eureka Industrial Group	Dover, OH	autoCAD designer
Tusco Display	Gnadenhutten, OH	solid modeler

KENT STATE UNIVERSITY | STARK

July 19, 2017

Kent State University
Curriculum Services
208 Schwartz Center
Kent Ohio 44242

Dear Review Committee:

I am writing to offer my steadfast support for a stand-alone degree in the Computer Design Animation and Gaming program. The current program has been designed as a Bachelor's of Science degree in Engineering Technology at the Tuscarawas Campus. The program is synchronously delivered to the Stark Campus. The program has thus far served the needs of the students and community, and with the ever-growing demand in this field, the faculty and the program coordinators have proposed a change in the name of the degree to *Bachelor of Science in Modeling, Animation and Game Creation*. The new name is able to better reflect the learning objectives of the program and is in line with other curriculum changes.

The proposed name change will allow us to effectively market the program at both campuses (Tuscarawas and Stark). The environmental scan we performed to gauge community demand shows that there is a high demand for modeling and animation design in industry and a considerable lack of skilled workers.

In fall 2017, Kent State University at Stark will have a new dedicated classroom for the CDAG program. It will be equipped with computers and state of the art projection along with all necessary software. Additional to this room we have a smaller dedicated room for virtual reality (VR) activities. We will continue to support the new degree and build the capacity to attract more students to the program.

In summary, I am very excited about this new vibrant marketing opportunity for our campuses. If you have any questions, please do not hesitate to contact me.

Sincerely,

Denise A. Seachrist, Ph.D.
Dean & Chief Administrative Officer

July 27, 2017

Kent State University
Curriculum Services
208 Schwartz Center
Kent, OH 44242

To Whom It May Concern,

The purpose of this letter is offer support for a stand-alone degree in the Computer Design, Animation and Game Design program. The current program was originally designed as a Bachelor of Science degree in Engineering Technology. Unfortunately, the requirements of the degree as an Engineering Technology degree now conflicts with the growth of the program as a modeling and animation degree. Animators and modelers do not need to be held to the same requirements as engineering technologists. Although there will always be some overlap between the design aspects of the two degrees, in particular with regard to software used, the applications have grown apart.

To better reflect the direction and the learning objectives of the program, the faculty have proposed a change in name to the degree to Bachelor of Science in Modeling, Animation and Game Creation. This new name sheds the archaic "computer" designation, which is a "given" in today's technological society. In its place, the concepts of modeling, animation and game creation are placed in the forefront as better descriptors of the degree.

As the Director of Engineering Technology at Kent State University at Tuscarawas, I support this move.

Sincerely,

Paul Dykshoorn
Director, Engineering Technology

KENT STATE UNIVERSITY | TUSCARAWAS

June 29, 2017

Kent State University
Curriculum Services
208 Schwartz Center
Kent Ohio 44242

Dear Review Committee:

It is my pleasure to fully support a stand-alone degree for our current Computer Design Animation and Gaming program. Our program has been under the umbrella of our Bachelor's of Science in Engineering Technology for many years. While the needs of our students were served well during this period, the faculty now are ready to take the program to the next level, clearly differentiating it from the current Bachelor's program, creating a more transparent degree name (Bachelor of Science in Modeling, Animation and Game Creation) which is a better reflection of the curriculum and program objectives. There are many advantages to the proposal, including:

- Higher visibility and marketability for the campuses (Tuscarawas and Stark). This program will help enrollment at both campuses

- Meeting a community demand. Many of our industries have indicated need for computer modeling and animation in particular. I often hear about a deficit in the skills of the workforce. This program will help to bridge that gap

- Relatively low start-up costs. Most of the faculty and equipment is either in place, or planned to be in place very soon. As the program grows, additional resources will be added commensurate with need

- Faculty expertise. Our faculty are highly qualified and credentialed to teach in this program

The Tuscarawas campus has a history of dedicating the resources necessary to ensure program success. We have done this with our Veterinary Technology Program, our new Agribusiness program and have purchased updated and newer equipment/software for CDAG at our campus and Stark. We will continue to support the new degree program and not negatively impact any other degree here at the Tuscarawas campus.

In summary, I am very excited about this new, marketable and dynamic opportunity for our campus and the regional college. If you have any questions, please do not hesitate to contact me.

Regards,

Bradley, A. Bielski, Ph.D.
Dean & Chief Administrative Officer