

ANIMATION AND GAMING, ASSOCIATE OF SCIENCE (AS)

Overview

The Animation & Gaming curriculum develops students' aesthetic and technical competence by providing training with professional software in production processes. The program builds a foundation in 2D and 3D Animation, production pipeline and game development for entertainment, serious games and simulations. Our courses give students a core background in visual arts and screen design, also providing technical skills in media development, production and distribution.

The program prepares students for employment at entry-level positions in game development firms or for transfer to media, animation and gaming programs at 4-year institutions. The program provides a technical overview of the processes in the field that will prepare students for entry jobs as a tester, production assistant, content developer, character animator, 3D modeler, graphic artist or interactive web programmer in the gaming industry.

Requirements

Associate Degree Graduation Requirements

Complete all of the following:

1. All Major Requirements listed below with a "C" or better or "P" in each course (at least 20% of the major requirements must be completed through SBCC).
2. One of the following General Education options:
 - a. OPTION 1: SBCC General Education (<https://catalog.sbcc.edu/degrees-certificates-awards/#associateddegreestext>) pattern OR
 - b. OPTION 2: Cal-GETC (<https://catalog.sbcc.edu/transfer-curricula/#igetctext>) pattern
3. A minimum of 60 semester units of degree-applicable college credit (SBCC courses numbered 100 and higher and C1000 and higher).
4. Maintain a cumulative GPA of 2.0 or higher in degree-applicable coursework.
5. A minimum of 12 units through SBCC.

Code	Title	Units
Major Requirements		
Required Core		
MAT 103	Introduction to Multimedia	3
MAT 111A	Photoshop for Media Production	1
MAT 112	Digital Drawing	3
or MAT 134A	Classical Animation I	
MAT 116	Interactive Design I	3
MAT 131	Digital Imaging I	3
MAT 136	Introduction to 3D Animation	3
MAT 137	Visual Effects for Film, Television and Gaming	3
or MAT 118	2-D Animation techniques	
MAT 138	3-D Character Animation	3
MAT 141	3-D Modeling	3
MAT 145	Video Game Design	3

MAT 167	3-D Environments Design	3
MAT 205	Portfolio Development	3
Total Units		34.00

Recommended Courses

Code	Title	Units
ART 140	Studio Art Foundations (2-D)	3
ART 141	Studio Art Foundations 3D	3
FP 181	Production Sound for Film and Television	3
MAT 121	Computer Interface Design	3
MAT 134B	Classical Animation II	3

Learning Outcomes

- Develop digital drawing skills using bitmap and vector drawing tools to create story-boards, character sheets, animation poses and turnaround studies.
- Use Timing, Staging and other principles of Animation to create short stories and work with 2D animation techniques and output the animation to video.
- Create complex 3D models, apply complex color and textures to them according to design and story.
- Create a digital lighting system and render Photo-realistic images in 2D using Mental Ray.
- Set up a skeleton for a 3D model and animate a character according to a storyboard.
- Animate the character according to the dialog in the story.
- Analyze story, design and game play of released games in the market or their own projects, and identify problems and successes in those areas.
- Create game-assets optimized for game engine use.
- Work with a Game Engine to create basic game-play for a game prototype.

Recommended Sequence

Make an appointment with your SBCC academic counselor through Starfish to create a Student Education Plan that reflects a recommended course sequence for this program that is tailored to your individual needs.

How to schedule an Academic Counseling appointment (<https://www.sbcc.edu/counselingcenter/counselingappointments.php>).