Media Arts

Digital Animation has become one of the fastest growing careers within the computer graphics industry. Victor Valley College's Media Arts (MERT) courses are designed for individuals seeking training in advanced techniques and procedures currently used in today's 3D production workplace. Designed for both beginning and advanced students, the department's 3D animation program curriculum is geared toward individuals interested in creating video games, television commercials, product or architectural visualizations, animated logos, 3D website motion graphics or film-based special effects. Learning essential principles and techniques for creating professional quality work, students are introduced to problem-solving situations similar to those encountered in a real world production environment. Students successfully completing the program's courses possess entry-level skills that apply to a wide variety of career opportunities (see below). Several program certificates are currently offered. The primary software package used in all 3D Animation courses in the Media Arts Department is Autodesk Maya.

3D Animation classes are also offered through the college's Computer Integrated and Design (CIDG) Department. Please see the CIDG section of the catalog for the courses the department currently offers.

Career Opportunities

3D Animation Careers: Modeler, Texture Artist/Painter, Lighting Specialist, Character Designer, Character Animator, Special F/X Animator, Environment Designer, Game Level Designer, Architectural Animator, Mechanical Design Animator, Medical Visualization Artist, Courtroom Visualization Artist, Web Graphics Animator, Storyboard Artist, Layout Artist, Graphic Designer, Compositor

CAD Careers: Architect, Architectural Drafter, CAD Management, CAD Operator, Cabinet Shop Detailer, Civil Drafter, Computer Animator, Community College Instructor, Construction Technician, Desk-Top Publisher, Electrical Drafter, Electronics Drafter, GIS Technician, Graphics Designer, Interior Designer, Landscape Architect, Landscape Designer, Mapping Specialist, Mechanical Drafter, Public Works Technician, Rendering Specialist, Steel Fabricator Drafter, Structural Drafter, Technical Illustrator

Degrees and Certificates Awarded

Digital Animation Technician I – Maya	Digital Animation Artist – Maya
Expanded Animation Technician – Maya	Digital Filmmaker
Digital Animation Technician I – 3ds Max	see Computer Integrated and Design Dept (CIDG)
Digital Animation Artist – 3ds Max	see Computer Integrated and Design Dept (CIDG)
Expanded Animation Technician – 3ds Max	see Computer Integrated and Design Dept (CIDG)

Note: Associate of Science Degree programs require completion of at least 60 units of credit, which normally will take 4 semesters. Certificate programs, many of which lead to an Associate of Science degree, vary in the number of units required. Most can be completed in 2 - 4 semesters. Each course required for a certificate must be completed with a "C" grade or better. All can be counted toward its related degree.

Transfer

To pursue a bachelor's degree in this field, here are some schools that have programs that might interest you. For the most up-to-date information on these programs and others, visit www.assist.org, or, for private schools, www.aiccu.edu. Please stop by the Transfer Center in Building 55 or make an appointment with a counselor if you have questions.

UC campuses offering Animation include Berkeley and UCLA
CSU campuses that offer Animation include Long Beach, Chico, Fullerton, Los Angeles, and San Jose
Private schools include University of Southern California (USC), Biola University, Loyola Marymount University, Chapman Univeristy and Academy of Arts San Francisco

Program Learning Outcomes

For Cad & Drafting
• To create compelling two and three dimensional project that meet current industry standards
• To discuss the key components of design, process, layout, and function as it relates to the real work

For Animation
• To discuss the key components of design, process, layout, and function as it relates to the real world
• To develop scene aesthetics that emphasizes creativity and storytelling

For more animation classes see Computer Integrated Design & Graphics (CIDG)

Media Arts

DIGITAL ANIMATION TECHNICIAN I MAYA CERTIFICATE OF CAREER PREPARATION

The Maya certificate is designed to offer students a detailed look at one of the Animation industry's premiere 3D packages. Students will study a variety of topics, including how to model 3D objects, creation of a realistic material, the art of camera and lighting techniques, and an introduction to advanced keyframing. In addition to completing several animation projects, students learn about both the history of Animation and the traditional principles involved in making an individual's work look both realistic and believable.

Units Required: 9.0		
All of the following must be completed with a grade of "C" or better:		
MERT 50	Principles of Animation in Maya	3.0
MERT 51	Advanced Materials, Lighting and Rendering with Maya	3.0
MERT 52	Digital Character Animation with Maya	3.0

DIGITAL ANIMATION ARTIST MAYA CERTIFICATE OF CAREER PREPARATION

The Digital Animation Artist - Maya certificate is designed to expand an individual's expertise in 3D Animation by requiring additional training in traditional art principles and techniques. Employers many times view an animator who possesses the ability to both draw and more thoroughly understand concepts and practices specific to traditional art painting as more well-rounded and work-ready. By earning the Digital Animation Artist certificate, students will better position themselves for employment opportunities in this fast-paced and competitive field. An Adobe Photoshop course specific to 3D Animation applications is also required to earn a certificate.

Units Required: 15.0	*Complete the requirements listed in both Group I and Group II*	
All of the following must be completed with a grade of "C" or better:		
MERT 50	Principles of Animation in Maya	3.0
MERT 51	Advanced Materials, Lighting and Rendering with Maya	3.0
MERT 52	Digital Character Animation with Maya	3.0
MERT 56	Photoshop for Animators	3.0
GROUP II – One of the following must be completed with a grade of "C" or better:		
ART 101	Survey of Art History	3.0
ART 104	Film as an Art Form	3.0
ART 112	Design I	3.0
ART 113	Design II	3.0
ART 122	Life Drawing I	3.0
ART 124	Anatomy of Life Drawing	3.0
ART 125	Drawing I	3.0
ART 141	Sculpture I	3.0

EXPANDED ANIMATION TECHNICIAN MAYA CERTIFICATE OF CAREER PREPARATION

This certificate crosses over all the software taught under the MERT program, any student who achieves this certificate has gone through the program and successfully completed the demo reel project, they have learned to work in a large complex environment and complete assigned tasks on an individual and group level. The student has learned the functions required to work on a large structured project in which their skill sets in a CG environment are tested and judged by peers in the class and the Instructor when the project is finalized.

Units Required: 12.0		
All of the following must be completed with a grade of "C" or better:		
MERT 50	Principles of Animation in Maya	3.0
MERT 51	Advanced Materials, Lighting and Rendering with Maya	3.0
MERT 52	Digital Character Animation With Maya	3.0
MERT 53	Advanced Animation/Demo Reels	3.0

DIGITAL FILMMAKER CERTIFICATE OF CAREER PREPARATION

The Digital Filmmaker certificate is designed to teach students to look at films as an art form, rather than as entertainment. The courses taken to complete the certificate provide students invites to explore the expressive and communicative nature of film while also examining the process by which films are made. The courses cover topics such as camera operation, lighting, composition, script-writing, storyboarding, audio, editing, compositing, and practical film making techniques. Individual projects will give students the opportunity to hone their personal skill set, while large group and class projects will teach students to work collaboratively, a necessary skill in this demanding industry.

Units Required: 6.0		
All of the following must be completed with a grade of "C" or better:		
ART 104	Film as an Art Form	3.0
MERT 74	Digital Video Production	3.0

DIGITAL ANIMATION TECHNICIAN I 3DS MAX CERTIFICATE OF CAREER PREPARATION

The 3ds Max certificate is designed to offer students a detailed look at one of the Animation industry's premiere 3D packages. The courses taken to complete the certificate provide students an opportunity to learn a variety of topics, including how to model 3D objects, how to create realistic textures and materials, the art of camera and lighting techniques, and a variety of keyframing solutions to bring their ideas to life. In addition to completing both individual and group projects, students also delve into the traditional principles of animation that serve to heighten the level of realism and believability of an individual's work.

Units Required: 9.0		
All of the following must be completed with a grade of "C" or better:		
CIDG 160	3ds Max Fundamentals	3.0
CIDG 260	3ds Max Adv Modeling and Materials	3.0
CIDG 261	3ds Max Character Animation and Advanced Keyframing Techniques	3.0

DIGITAL ANIMATION ARTIST 3DS MAX CERTIFICATE OF CAREER PREPARATION

The Digital Animation Artist certificate is designed to expand an individual's expertise in 3D Animation by requiring additional training in traditional art principles and techniques. Employers many times view an animator who possesses the ability to both draw and more thoroughly understand concepts and practices specific to traditional art painting as more well-rounded and work-ready. By earning the Digital Animation Artist certificate, students will better position themselves for employment opportunities in this fast-paced and competitive field. An Adobe Photoshop course specific to 3D Animation applications is also required to earn a certificate.

Units Required: 15.0	Complete the requirements listed in both Group I and Group II	
GROUP I - All of the following must be completed with a grade of "C" or better:		
CIDG 160	3ds Max Fundamentals	3.0
CIDG 260	3ds Max Adv Modeling and Materials	3.0
CIDG 261	3ds Max Character Animation and Advanced Keyframing Techniques	3.0
MERT 56	Photoshop for Animators	3.0
GROUP II – One of the following must be completed with a grade of "C" or better:		
ART 101	Survey of Art History	3.0
ART 104	Film as an Art Form	3.0
ART 112	Design I	3.0
ART 113	Design II	3.0
ART 122	Life Drawing I	3.0
ART 124	Anatomy of Life Drawing	3.0
ART 125	Drawing I	3.0
ART 141	Sculpture I	3.0

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EXPANDED ANIMATION TECHNICIAN 3DS MAX CERTIFICATE OF CAREER PREPARATION		
This certificate crosses over all the software taught under the CIDG and MERT programs, any student who achieves this certificate has gone through the program and successfully completed the demo reel project, they have learned to work in a large complex environment and complete assigned tasks on an individual and group level. The student has learned the functions required to work on a large structured project in which their skill sets in a CG environment are tested and judged by peers in the class and the Instructor when the project is finalized.		
Units Required: 12.0		
All of the following must be completed with a grade of "C" or better:		
CIDG 160	3ds Max Fundamentals	3.0
CIDG 260	3ds Max Advanced Modeling and Materials	3.0
CIDG 261	3ds Max Character Animation and Advanced Keyframing Techniques	3.0
MERT 53	Advanced Animation/Demo Reels	3.0

Media Arts Courses

MERT 50 PRINCIPLES OF ANIMATION IN MAYA

Units: 3.0	**32-36 hours lecture and 48-54 hours laboratory**

(No prerequisite. Grade Option)

Students will learn the basics of 3D modeling in Maya, how to create and apply realistic textures, lighting principles and techniques, camera types and their appropriate usage, and fundamental keyframing procedures. Other topics to be covered include storyboards, the traditional principles of animation, current industry trends and issues pertaining to rendering output for different mediums (film, video, Internet, etc.)

MERT 51 ADVANCED MATERIALS, LIGHTING AND RENDERING WITH MAYA

Units: 3.0	**32-36 hours lecture and 48-54 hours laboratory**

(Recommended Preparation: MERT 50. Grade Option)

This course covers advanced material techniques using Hypershade, rendering with Mental Ray and advanced lighting techniques. Students will complete a combination of exercises, individual and group projects.

MERT 52 DIGITAL CHARACTER ANIMATION WITH MAYA

Units: 3.0	**32-36 hours lecture and 48-54 hours laboratory**

(Recommended Preparation: MERT 50, MERT 51, or familiarity with a current 3D application, preferably Maya. Grade Option)

This course is an advanced study in digital character animation and feature-length digital media production. This course explores the relationships between anatomy, motion, weight, and timing through a balanced combination of exercises, individual and group projects.

MERT 53 ADVANCED ANIMATION/ DEMO REELS

Units: 3.0	**32-36 hours lecture and 48-54 hours laboratory**

(Prerequisite: MERT 50 or CIDG 160. Grade Option)

This course is an in depth look at creating an animation production with a final reel being the goal of the class. The course covers camera techniques, staging, modeling, texturing, character development, story development, plot development, storyboarding, titling, and final production using industry standards as guidelines from start to finish.

MERT 56 PHOTOSHOP FOR ANIMATORS

Units: 3.0 | **32-36 hours lecture and 48-54 hours laboratory**

(Recommended Preparation: CIDG 160 or MERT 50. Grade Option)

Students will learn the concepts and procedures required for creating high quality texture maps and imagery for use in 3D computer animation. Topics will include basic and advanced editing techniques, managing tone and color, layer management, optimization strategies and the use of filters. Compositing techniques will be addressed in detail. Relevant issues dealing with the pre-production process, and industry trends and analysis will also be discussed.

MERT 74 DIGITAL VIDEO PRODUCTION

Units: 3.0 | **32-36 hours lecture and 48-54 hours laboratory**

(Recommended preparation: ART 133, CIS 101. Grade Option)

This course introduces digital video production techniques. Course topics include the operation of digital camcorders, lighting, sound equipment and post production digital editing suites, and the principles and aesthetics of film and video editing.

MERT 80 ZBRUSH FUNDAMENTALS

Units: 3.0 | **32-36 hours lecture and 48-54 hours laboratory**

(Recommended preparation: Mert 50, CIDG 160. Grade Option)

Students will learn the concepts and procedures required for creating high quality texture maps and Zbrush models for use in 3D computer animation. Topics will include basic and advanced editing techniques with Hard Surface modeling, ZSpheres, detailing models with various brushes and masks, layer management and optimization strategies for high resolution models. Relevant issues dealing with ZBrush models and other 3D packages and industry trends and analysis will also be discussed. Grade Option.

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