

Information Technology

FRANCIS TUTTLE
TECHNOLOGY CENTER



**Cluster:
Information
Technology**

**Program:
3D Animation and
Visual Effects**

Rockwell Campus

2011-2012
Rev. 07/10/2011

3D Animation and Visual Effects

Overview Star Wars or any Pixar film could never have been made without the skills and software you learn in this program. You are challenged to combine your academic abilities with creativity and innovation, as you redefine reality through 3D design and animation, visual effects, and advanced techniques for motion graphics in an environment that encourages teamwork, problem solving, and the ability to meet deadlines. College bound? Complete curriculum designed to provide an overview of the opportunities available related to animation and visual effects so you can "try it out" before selecting a major. Develop exceptionally creative digital portfolios and demo reels, limited only by the imagination. Advance your motion graphics and 3D animation skills to the next level as you learn to bring your creations to life.

Autodesk's Oscar-winning software, Maya is the primary application our program utilizes; Maya is a broad, practical program with many applications. It supports several industries, including the entertainment industry--movies, television, and video games; training and education; web animation; communications and marketing; government and healthcare professions through simulated animations; advertising, particularly with the growth of the "in-game" advertising; and in the corporate world, where digital media is increasingly used as a visual marketing tool as businesses struggle to be noticed in our digital society.

In addition to Maya, you may use a variety of CGI tools including Flash, Photoshop, Illustrator, and After Effects; Apple Final Cut Pro, ZBrush, MotionBuilder, and compositing applications. You will have the ability to earn over 30 hours of college credit.

Redefine Reality . . . Animate Your Future!

Who can Attend?	High school juniors, seniors, and adults		
Times	Daytime classes - 2 sessions: 8:00 am - 10:55 am and 12:30 pm - 3:25 pm Full-time students enroll in both sessions		
Location	Rockwell Campus Information Technology		
Length	<u>Career Major</u>	<u>Full Time</u>	<u>Clock Hours</u>
	Special Effects Technician	6 Months	600
	2D Animator	8 Months	840
	3D Modeler	9 Months	960
	3D Animator	9 Months	960
	Motion Graphics Artist	11 Months	1200

3D Animation and Visual Effects

Entrance Requirements/Recommendations

- Commitment to lifelong learning
- Ability to manage projects and tasks and meet deadlines
- Flexibility, creativity, and an artistic aptitude
- Digital literacy

Career Success Indicators

High School:
ACT PLAN composite score of 17 -or- COMPASS scores of: Reading - 80; Math - 36; Writing - 80; -or- Reading, math, and science skills at or above grade level

Adult:
12 hours of college credit and 2.5 GPA -or- ACT composite score of 21 or COMPASS scores of: Reading - 80; Math - 36; Writing - 80 -or- Reading, math, and science skills at or above 10th grade level

Costs

No tuition for high school students. Adult students pay standard rate of \$900.00 per semester for full-time or \$450.00 per semester for part-time.

Costs for certifications vary and are not included in the price of tuition. All students are encouraged to complete at least one third-party certification.

Scholarships are available to fund half of all certification fees for students who successfully meet all the requirements outlined for preparation.

A \$15.00 non-refundable application fee is required for completion of an adult application for admissions to a career training program at Francis Tuttle.

3D Animation and Visual Effects

High School Student Information

This is a one or two-year program for high school juniors and seniors, depending upon the training option selected. Students attending only one year may elect to complete a series of courses designed to provide an overview of the opportunities available related to 3D Animation and Visual Effects. This option allows students to "try it out" before selecting a major in college related to 3D Animation and Visual Effects and results in becoming competent as a Special Effects Technician (recommended for high school students attending only one year; a prerequisite to all other career majors within this area).

The Animator, 3D Animator, 3D Modeler and Motion Graphic Artist certificates are designed to be completed in two years for high school juniors and/or seniors. Students may enroll in either the AM or PM session (subject to availability).

The sending school determines the number of credits earned upon successful completion of the program. High schools on block schedules award 4 credits per year and high schools on a traditional schedule award 3 credits per year. Credits are earned upon successful completion of the program. Credits are granted by the sending school districts.

Students eligible to receive an OHLAP scholarship may be granted OHLAP credits for technology units for specified courses.

High school students will be responsible for paying costs associated with industry certifications, which vary depending upon the certification(s) selected.

Adult Student Information

This is a one-year or two-year program for adult students depending on enrollment status. Students may enroll in the AM session or PM session (subject to availability).

Adult students will be responsible for paying costs associated with industry certifications, which vary, depending upon the certification(s) selected.

Program Content	Career Major:	<u>Special Effects Technician</u>	600 hours
		Courses:	
		Visual Illustration Tools/Applications	120 hours
		Professional Enhancement/Capstone	120 hours
		Digital Animation	120 hours
		Applied Principles of Animation	120 hours
	Motion Graphics and Visual Effects	120 hours	

3D Animation and Visual Effects

Program Content (continued)	Career Major:	<u>2D Animator</u>	840 hours
		Courses:	
		Visual Illustration Tools/Applications	120 hours
		Professional Enhancement/Capstone	120 hours
		Digital Animation	120 hours
		Applied Principles of Animation	120 hours
		Motion Graphics and Visual Effects	120 hours
		Creative Design & Digital Marketing	
		Techniques	120 hours
		Non-Linear Editing for Motion Graphics	120 hours
	Career Major:	<u>3D Modeler</u>	960 hours
	Courses:		
	Visual Illustration Tools/Applications	120 hours	
	Professional Enhancement/Capstone	120 hours	
	Digital Animation	120 hours	
	Applied Principles of Animation	120 hours	
	Motion Graphics and Visual Effects	120 hours	
	Creative Design & Digital Marketing		
	Techniques	120 hours	
	3D Modeling Techniques	120 hours	
	Enhanced Modeling Techniques	120 hours	
	Career Major:	<u>3D Animator</u>	960 hours
	Courses:		
	Visual Illustration Tools/Applications	120 hours	
	Professional Enhancement/Capstone	120 hours	
	Digital Animation	120 hours	
	Applied Principles of Animation	120 hours	
	Motion Graphics and Visual Effects	120 hours	
	Creative Design & Digital Marketing		
	Techniques	120 hours	
	3D Animation	120 hours	
	Dynamics & Special Effects for Motion		
	Graphics	120 hours	

3D Animation and Visual Effects

Program Content (continued)	Career Major:	<u>Motion Graphics Artist</u>	1200 hours
		Courses:	
		Visual Illustration Tools/Applications	120 hours
		Professional Enhancement/Capstone	120 hours
		Digital Animation	120 hours
		Applied Principles of Animation	120 hours
		Motion Graphics and Visual Effects	120 hours
		Creative Design & Digital Marketing Techniques	120 hours
		Non-Linear Editing for Motion Graphics	120 hours
		Non-Linear Editing for Motion Graphics	120 hours
		3D Animation	120 hours
		Dynamics & Special Effects for Motion Graphics	120 hours

College Credit Available Through an agreement with Oklahoma City Community College (OCCC), high school and adult students are eligible to earn college credit by successfully completing certain coursework.

The college defines entrance requirements, which must be met before the college will grant credit. Students are responsible for meeting those requirements and completing the admission process.

Credit hours available at Francis Tuttle 36 hrs.

College Credit Information **Oklahoma City Community College**
Degree: Associate in Applied Science, Technology - Information Systems Industry
Emphasis: Interactive Media (3D Animation & Visual Effects program)

Course Number	Course Title	Credit Hours
DM12, Tech 2003	Advanced Interactive Media Applications	3
DM03, Tech 1003	Special Effects Technician	3
DM24, Tech 2003	Applied 3D Motion Graphics	3
DM05, Tech 2003	Digital Animation	3
DM25, Tech 2003	Motion Graphics and Visual Effects	3
DM02, Tech 1003	3D Graphics Modeling and Rigging Techniques	3
DM23, Tech 2003	Enhanced Modeling Techniques	3
DM11, Tech 2003	Non-Linear Editing	3
DM18, Tech 2003	3D Animation	3
DM15, Tech 2003	Dynamics & Special Effects for Motion Graphics	3

3D Animation and Visual Effects

College Credit Information	Oklahoma City Community College		
	Degree: Associate in Applied Science, Technology - Information Systems Industry Emphasis: Interactive Media (3D Animation & Visual Effects program)		
	Course Number	Course Title	Credit Hours
DM06, Tech 2003	Non-Linear Editing for Motion Graphics	3	
DM04, Tech 1003	Creative Design & Digital Marketing Techniques	3	

Courses

3D Animation

Students will utilize 3D animation tools and techniques for advanced key frame animation, animation layering, and motion as they produce an accurate digital representation of motion for film and/or video games. Techniques will include designing rigs that can be re-used as a basis for articulating similar characters and/or objects and utilizing scripting techniques to automate tasks and add efficiency to the workflow.

3D Modeling Techniques

Students will acquire and/or enhance modeling skills and texturing and lighting techniques for 3D characters and/or scenes.

Applied Principles of Animation

Students will integrate higher-level academic skills with drawing, animation and storyboarding techniques as they become familiar with principles of digital illustration and animation within a 3D motion graphics application.

Creative Design & Digital Marketing Techniques

Students will participate in experiences designed to foster professional creativity that will serve as a stimulation to develop exceptionally creative products through digital media. Principles of color and design theory, digital illustration and animation concepts, and digital photography will be reflected in the design of digital portfolios and demo reels that highlight skills and certifications.

Digital Animation

Students will utilize digital animation software and storyboarding techniques to plan the production of an animated project as they create finished animations, cartoons, and other short animations that utilize animated text, character movements that include walk cycles, turnarounds, voice (lip syncing), background sound, sound effects, camera movements, and include multiple scenes. Animation skills will evolve to support sites with interactive, engaging components, video for the web, interactive advertising, and motion graphics.

3D Animation and Visual Effects

**Courses
(continued)**

Dynamics & Special Effects for Motion Graphics

Students will explore Maya's system of tools for applying rigid and/or soft-body dynamics and simulate object behavior as they produce rendered animations of special effects like smoke, fire, particle systems, force fields, and turbulence.

Enhanced Modeling Techniques

Students will focus on developing intermediate modeling, sculpting, texturing, painting, and digital artistry skills as they utilize UV mapping techniques to define and apply textures to models.

Motion Graphics and Visual Effects

Students will foster creativity and innovation while designing motion graphics and visual effects that deliver stunning results.

Non-Linear Editing for Motion Graphics

Students will develop intermediate-level digital compositing skills and techniques for advanced visual effects as they work with professional, comprehensive software designed to achieve superior results for motion graphics and visual effects.

Non-Linear Editing for Motion Graphics

Students will combine non-linear editing skills with special effects for motion graphics as they acquire techniques used in enhancing and transferring computer generated animations to video and film and/or web-based delivery options.

Professional Enhancement/Capstone

This course features experiences designed to foster professional enhancement and preparation for employment and/or college. Experiences may include guest speakers, Business Professional of America projects, leadership opportunities, academic enhancement, and professional skills workshops. Students may also undertake special projects, cross-train or participate in workplace learning opportunities to enhance skills in accordance with industry demands.

Visual Illustration Tools/Applications

Students will use groundbreaking, creative tools to achieve extraordinary results as they create, revise, optimize and export interactive graphics for print, motion graphics, the Web or mobile devices.

**Licensure /
Certifications**

Students who successfully complete specific program curriculum and test preparation materials are prepared to take the following exams for vendor certification.

3D Animation and Visual Effects

**Licensure /
Certifications
(continued)** Adobe Certified Associate:
Rich Media Communication using Adobe Flash
Visual Communication using Adobe Photoshop Extended

Adobe Certified Expert (ACE):
After Effects

Apple Certified Pro:
Final Cut Pro

Students are responsible for exam fees; however, scholarships are available to fund half of all certification fees for students who successfully meet all the requirements outlined for preparation.

**Employment
Opportunities** Internet Based Businesses
Training Simulations for Real Estate, Military, Police, or Medical Personnel
Entrepreneur
Web Animation Departments
Entertainment Industry
Marketing Firms or Advertising Departments
Entertainment Industry; Film, Television, Video games
Training and e-Learning Departments
Any organization with in-house support for the following:
3D Modeling, Special Effects, Animation, or Motion Graphics

**Salary
Range** \$10.00 to \$30.00 per hour, 3D Modeling, 2D/3D Animation, Motion Graphics Artist, VFX Artist, Compositor, and Animator Occupations

3D Animation and Visual Effects

Occupational 3D Modeler---

Characteristics

- Studio art and/or ability to draw
- Demonstrate a high interest and/or aptitude for math, including geometry
- Demonstrate a high interest and/or aptitude for science, including anatomy and/or life sciences
- Demonstrate an understanding of stage lighting

3-D Animator---

- Demonstrate a high interest and/or aptitude for math, including trigonometry
- Demonstrate a high interest and/or aptitude for science, including physics

Motion Graphics Artist/VFX Artist/Composer---

- Demonstrate a high interest and/or aptitude for math, including geometry and trigonometry
- Demonstrate a high interest and/or aptitude for science, including physics, anatomy
- Demonstrate a high interest and/or aptitude for Language Arts and reasoning skills

All occupations:

- Ability to work in a team environment
- Analytical thinking skills
- Communication skills
- Flexibility, imagination, creativity, and an artistic aptitude
- Ability to adapt quickly to change--tools used change at an incredible pace
- Commitment to lifelong learning
- Ability to manage projects and tasks and meet deadlines
- Should possess strong sense of ownership; problem-solving skills; ability to adapt and work in different styles; a disciplined approach to quality, and the ability to develop work according to design specifications
- Attention to detail

Instructor(s)

Dana Myers
Interactive Media Instructor

Dana received a Bachelor of Science in Business Education from East Central University, Ada, Oklahoma. She completed the requirements for Francis Tuttle to become an Apple Authorized Training Center for Education and is an Apple Certified Trainer for Final Cut Pro. She is also an Adobe Certified Educator for Flash and Photoshop. Dana is a member of the Business and Information Technology Education division of the Oklahoma Association for Career and Technology Education (OkACTE) and the Association for Career and Technology Education (ACTE).

For further information, contact:

Career Planning Center - (405) 717-4900

3D Animation and Visual Effects

Nondiscrimination Policy

It is the policy of Francis Tuttle not to discriminate with regard to race, color, religion, gender, national origin, age, marital or veteran status, or disabilities. This policy shall be followed in the operation of its educational programs and activities, recruitment, admissions, employment practices and other educational services. Inquiries concerning application of this policy may be directed to the Human Resources Director, who serves as the Coordinator of Title IX; Section 504; and Americans with Disabilities Act for all campuses, at 12777 N. Rockwell, Oklahoma City, OK 73142-2789, (405) 717-7799.