

PROGRAM APPROVAL APPLICATION
NEW or SUBSTANTIAL CHANGE or LOCALLY APPROVED
(This application may not exceed 3 pages)

Fill In Form

Proposed Program Title: Interactive Media Arts

Projected Program Start Date: Fall 2017

College: Irvine Valley College

District: South Orange County Community College District

Contact Information

Voting Member: Corine Doughty

Title: Dean, Instruction, Economic and Workforce Development

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Goal(s) of Program (Check all that apply):

- Career Technical Education (CTE) Transfer Other

Type of Program (Check all that apply):

- Certificate of Achievement 12-17 (or 17-27 quarter) units Certificate of Achievement 18+ semester (or 27+ quarter) units
 Associate of Science Degree Associate of Arts Degree

Reason for Approval Request (Check One):

- New Program Substantial Change Locally Approved

Program Information

0614.10 Recommended [Taxonomy of Program \(TOP\) Code](#)
 27 Units for Major-Degree
 60 Total Units for Degree
 27 Required Units-Certificate

Written Form

1. Insert the description of the program as it will appear in the catalog. (See PCAH pp. 142 and 170)

The goal of the Interactive Media Arts (IMA) program is to prepare Digital Media Artists for careers in Immersive Media and Emerging Technologies. IMA is different than Digital Media Arts in that the graduate will go beyond basic animation, 3D art, and web design and instead be proficient within a concentration of sensory driven interaction, immersive user interface design, or digital asset creation for emerging technologies. Our graduates will design and build new immersive worlds and augmented experiences for real world interaction. Graduates will be prepared for careers in Virtual Reality, Augmented Reality, Sensor Driven Projection, and new immersive technologies used in marketing, entertainment, health care and education. Graduates of the program must demonstrate a proficiency in foundation art skills and their application to digital art creation within a concentration of sensory driven interaction, immersive user interface design, or digital asset creation for emerging technologies. Graduates will demonstrate proficiency within their concentrations to include digital art creation in 3D and 2D such as Modeling, Animation, Texturing and Lighting, interactive programming skills for sensor driven hardware devices and software game engines, immersive design storytelling, and digital asset management.

Students entering the program should have academic discipline and strong foundation art skills. Occupations in Interactive Media Arts are just beginning to surface and are projected to grow at an accelerated rate, but the student must be aware that the job market is competitive and driven by quality of applicant portfolio.

2. Provide a brief rationale for the program.

According to the Orange County 2015-2016 Workforce Indicator Report indicates creative jobs providing job opportunities, career pathways especially in digital media, computer gaming, entertainment and design. The Los Angeles Economic Development Council has projected that Orange County creative employment opportunities will expand by 3.4% - 1,700 jobs by 2018. Implementing the CCCCO Supply and Data for local shares, (SOC 27-1014) multimedia arts and Animators and (SOC 27-1019) Artists and Related Workers, All Others indicate the number of awards conferred annual is 30 and the demand is 54. The summary of data indicated there is an undersupply in this field.

3. Summarize the Labor Market Information (LMI) and employment outlook (including citation for the source of the data) for students exiting the program. (See PCAH pp. 85-88, 136, 147, 148, 165, 168, and 176)

Student completing this program can expect to earn an average of \$22.29 with annual openings of 51 per year through 2019 according to EMSI Multimedia Artists and Animators in Orange County, CA. The data reported in the LaunchBoard indicates Regional LMI trending up for Multimedia Artists and Animators SOC-27-1014) and “Digital Media Arts works in 3D/2D entertainment arts (games, animation, film), motion graphics and interactive media (web, mobile).” Students completing the program will have a competitive advantage as the Science, Technology Engineering, Arts and Math (STEAM) begins to increase especially in the small sector market. EDD employment projections do not adequately reflect the total employment of individuals employed the digital media/interactive arts. Many work for themselves and contractors for large companies including software programmers.

According to the California EDD, ES202 data: forecasts by LAEDC, Orange County job growth in digital media through 2019 is expected to increase 7.9%. The 2015 Otis Report on “The Creative Economy” published February 2016, provides the following Orange County economic contribution of the Digital Media Industry:

Area	Establishments	Jobs	Labor Income (\$millions)	Nonemployer Estab. (2012)	Total (Direct, Indirect, Induced) Contribution Output (\$billions)	Jobs	Labor Income (\$millions)	Taxes* (\$millions)
Los Angeles County	199	6,100	\$900.1	n/a	\$3.1	12,500	\$1,223.1	\$116.8
Orange County	124	5,200	691.0	n/a	2.9	10,200	959.7	96.9
Total	323	11,300	\$1,591.1	n/a	\$6.0	22,700	\$2,182.8	\$213.7

*Property, state and local personal income taxes, and sales taxes generated by earnings and spending of the direct and indirect workers
 Sources: California EDD, QCEW data, Bureau of the Census; Indirect contribution estimated by LAEDC

4. List similar programs at other colleges in the Los Angeles and Orange County Region which may be adversely impacted. (There is space for 10 listings, if you need more, please contact laocrc@rscdd.edu)

College	Program	Who You Contacted	Outcome of Contact
Coastline Community College	Sign Graphics Certificate; Visual Communications	Nancy Jones	No response
Cypress College	Sign Graphics Certificate ;Visual Communications	Steve Donley	Move forward
Fullerton College	Sign Graphics ; Visual Communications	Doug Benoit	Move forward
Goldenwest College	Digital Media	David Gatewood	No response
East Los Angeles	Animation ; Basic Graphic Technology; Multimedia	Christopher Whiteside	No response
Los Angeles Mission	Animation and 3-D Design; Graphics and Web Design; Multimedia Studios	Mark Hobbs	No response
Los Angeles Trade Tech	Sign Graphics ; Visual Communications	Marcia Wilson	No response

Orange Coast College	Digital Graphics Production; Display and Visual Presentation; Multimedia Certificate/AA/AS	Lisa Knuppel	No response
Saddleback College	Illustration/Animation	Tony Teng	No response
Santa Ana College	Art-3D Animation; Art-Digital Media	Kimberly Mathews	No response
Santa Monica College	Sign Graphics; Visual Com.	Patricia Ramos	No response
El Camino College	Arts/Digital Arts: Computer Animation; Arts/Digital Arts: Illustration; Arts/Digital Arts: Motion Graphics	Virginia Rapp	No response

5. List all courses required for program completion, including core requirements, restricted electives and prerequisites. (There is space for 20 listings, if you need more, please contact laocrc@rscdd.edu). (See PCAH pp. 143 and 171)

CoA/A.S. Interactive Media Arts Requirements	Dept. Name/#	Name	Unit	CSU-GE	IGETC	Sequence
Required Core (15 units)	IMA 40	Introduction to Game Design	3			Yr 1, Fall
	IMA 98	3D Modeling for Games and Film	3			Yr1, Fall
	IMA 30	3D Animation	3			Yr 1, Spring
	IMA 22	Visual Scripting	3			Yr 1, Spring
	ART 80	Drawing Fundamentals	3	C1		Yr 1, Fall
Three Courses (9 units)	ARTH 25	Art History Survey I: Western	3	C1	3A	Yr 2, Fall
	ARTH 23	African and Oceanic Art Survey of Asian Art	3	C1	3A	Yr 2, Fall
	ARTH 22	3D Design	3	C1	3A	Yr 2, Fall
	ART 41	2D Design and Color	3			Yr 2, Fall
	ART 40		3	C1		Yr 2, Fall

One elective courses (3 units)	IMA 20	Writing and Storyboarding for Games	3			Yr 1/2, Spring
	IMA 46	Concept Design and Visual Development	3			Yr 1/2, Spring
	IMA 88	3D Character Animation II	3			Yr 2, Fall/Spring
	IMA 99	Game Design II	3			Yr 1/2, Spring
	IMA 45	Environmental Design for Games	3			Yr 2, Spring
	IMA 89	Rigging for Animation	3			Yr 1, Spring
	IMA 179	Character and Layout Design	3			Yr 2, Fall
	IMA 96	2D Animation	3			Yr 1, Spring
	IMA 189	Environmental Texturing and Lighting	3			Yr 2, Fall
	IMA 190	Organic Modeling	3			Yr 1, Spring

6. Include any other information you would like to share.

In an April 2015 report, [Digi-Capital](#) estimated that by 2020 the VR/AR industry will be \$120 Billion. Per the report, Augmented/Virtual Reality to hit \$150 billion, disrupting mobile by 2020. A more recent report by [Goldman Sachs](#) projected that in an “accelerated” or optimistic scenario, total VR revenues by 2025 will be \$182 Billion, with VR hardware becoming a bigger market than TV.

Trained Interactive Media Artists will be in demand to assist marketing, entertainment, medical, education and many more supported industries in order to create product. Per the Augmented/Virtual reality Report Q3 2016, Virtual reality and Augmented reality job growth is expected to hit very high levels, so much so that available talent will be hard to find. Advisory board urged us to purchase the Virtual Reality Industry report: July 2015. Page 59 of the Virtual Reality Industry Report: July 2015 illustrates the number of new virtual reality companies from 2005-2015, and projects that virtual reality companies are being founded at 15x the rate of 2005.