

Division of Apprenticeship Standards (DAS)

Apprenticeship Program Summary Sheet

To: Adele Burnes, Chief
From: Miguel Silva
CC: DAS, Program Planning & Review Unit
Date: September 24, 2025

Program Name: Creative Technologist
Industry: Arts, Media & Entertainment
DAS File No.: 101463
Grant Awardee: No Yes CAI 2024/2025

Action(s):

- Proposed new apprentice program
- Existing apprenticeship program adding new occupations
- Existing apprenticeship program expanding area of operations
- Existing apprenticeship program changing work processes on approved occupations

Labor Organization(s) Representing Apprentices:

None

Request for Approval under Labor Code 3075:

Creative Technologist is not intended to train in the building and construction trades and is not eligible to dispatch apprentices to projects with public works, prevailing wage or skilled and trained workforce requirements within the meaning of Labor Code sections 1720 and 3075 and will not train or dispatch apprentices in the building and construction trades or firefighters occupations.

Comments:

Creative Technology Apprenticeship: Training the Future of Digital Storytelling: The Creative Technology Apprenticeship addresses the urgent need for skilled professionals in virtual production, real-time media, and immersive technologies. As entertainment, gaming, and design industries rapidly evolve, employers need a workforce trained in real-world production environments. Apprentices gain hands-on training across the full pipeline from pre-visualization and motion capture to real-time rendering, virtual sets, and post-production using tools like Unreal Engine, Maya, and motion capture systems. They earn while they learn, producing client-based projects, building professional portfolios, and developing essential skills in

problem-solving, collaboration, and technical artistry. Graduates are ready for high-demand careers such as Virtual Production Specialist, Motion Capture Technician, Technical Artist, and Creative Technologist. This program connects education with industry, fuels innovation, and ensures California’s creative workforce stays ahead in one of the fastest-growing sectors of the economy.

Creative Technologist will oversee the apprenticeship program herein and seeks approval from the Department of Industrial Relations, Division of Apprenticeship Standards for the following:

Proposed Occupation, Wage Rate & O*Net Code:

- Special Effects Artists and Animator O*Net: 27-1014.00
 Professional Worker Wage: \$66.48 per hour
 Proposed Apprentice Wage: \$21.42 per hour
 Proposed No. of Apprentices: 1

- Video Game Designer O*Net: 15-1255.01
 Professional Worker Wage: \$53.04 per hour
 Proposed Apprentice Wage: \$21.42 per hour
 Proposed No. of Apprentices: 2

- Camera Operators, Television, Video, Film O*Net: 27-4031.00
 Professional Worker Wage: \$30.90 per hour
 Proposed Apprentice Wage: \$21.42 per hour
 Proposed No. of Apprentices: 1

- Graphic Designer O*Net: 27-1024.00
 Professional Worker Wage: \$32.80 per hour
 Proposed Apprentice Wage: \$21.42 per hour
 Proposed No. of Apprentices: 1

Proposed Employers:

- Goal Line Studios 5959 Coronado Lane, Pleasanton, CA 94588
 - Occupation(s): Special Effects Artists and Animator, Video Game Designer, Camera Operators, Television, Video, Film

- 66 Training Services, LLC 8690 Sierra College Blvd. Ste 160-366 Roseville, CA 95661
 - Occupation(s): Graphic Designer

- First Person, Inc, 550 Bryant St. San Francisco, CA 94107
 - Occupation(s): Special Effects Artists and Animator, Graphic Designer

- Lightbreak, Inc. 1600A Central Avenue Alameda, CA 94501
 - Occupation(s): Special Effects Artists and Animator, Camera Operators, Television, Video, Film

- The International Future Computing Association, 34 Foothill Street, Whitby, Ontario, Canada L1R 2V6
 - Occupation(s): Video Game Designer

Creative Technologist Program Standards

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Article I Purpose and Policy

The parties hereto declare it to be their purpose and policy to establish an organized, planned system of apprenticeship, conducted as an education-sponsored, employer-based undertaking.

These standards have, therefore, been adopted and agreed upon under the Shelley-Maloney Apprentice Labor Standards Act of 1939, as amended, to govern the employment and training of apprentices in the trade, craft or occupation defined herein, to become effective upon their approval.

Article II Craft, Trade or Occupation, Related and Supplemental Instruction, Term of Apprenticeship, Ratio, Wage Schedule and Work Training

Occupation	O*Net Code	Attachment
Special Effects Artists and Animator	27-1014.00	B-1
Video Game Designer	15-1255.01	B-2
Camera Operators, Television, Video, Film	27-4031.00	B-3
Graphic Designer	27-1024.00	B-4

Article III Organization

For each employer participating in this program, an “Employer Agreement” (See Attachment D) will be provided to specify the information particular to that employer as noted herein, including the option to waive or offer participation on the committee, employer committee members will be selected as outlined in the rules & regulations.

Article IV Jurisdiction

These standards shall apply to the employer and employee organizations signatory hereto; their members, to other employers who subscribe hereto or who are party to a collective bargaining agreement with an employee organization(s) signatory hereto, and to all apprentice agreements hereunder.

Area Covered by Standards: All CA Counties

Article V Functions

The functions of the apprenticeship committee shall be to:

- 1) develop an efficient program of apprenticeship through systematic on-the-job training with related and supplemental instruction and periodic evaluation of each apprentice;
- 2) serve in an advisory capacity with employers and employees in matters pertaining to these standards;
- 3) ensure the program's ability, including financial ability, and commitment to meet and carry out its responsibilities under federal and state law and regulations applicable to the apprenticeable occupation and for the welfare of the apprentice;
- 4) aid in the adjustment of apprenticeship disputes;
- 5) develop fair and impartial selection procedures and an affirmative action plan in accordance with existing laws and regulations and apply them uniformly in the selection of applicants for apprenticeship.

Article VI Responsibilities

The responsibilities of the apprenticeship committee shall be to:

- 1) supervise the administration and enforcement of these standards;
- 2) adopt such rules and regulations as are necessary to govern the program provided that the rules and regulations do not conflict with these standards;
- 3) conduct orientations, workshops or other educational sessions for employers to explain the apprenticeship program's standards and the operation of the apprenticeship program;
- 4) pass upon the qualification of employers and, when appropriate, to suspend or withdraw approval;
- 5) conduct on-going evaluation of the interest and capacity of employers to participate in the apprenticeship program and to train apprentices on the job;
- 6) make periodic evaluations of each apprentice's on-the-job training and related and supplemental instruction;
- 7) ensure safe work site facilities, skilled workers as trainers at the work site, and safe equipment sufficient to train apprentices;
- 8) determine the qualifications of apprentice applicants and ensure fair and impartial treatment of applicants for apprenticeship selected through uniform selection procedures;
- 9) file a signed copy, written or electronic, of each apprentice agreement with the Division of Apprenticeship Standards, within 30 days of execution, with copies to all parties to the agreement;
- 10) establish and utilize a procedure to record and maintain all records of the apprentice's worksite job progress and progress in related and supplemental instruction;

- 11) establish and utilize a system for the periodic review and evaluation of the apprentice's progress in job performance and related instruction;
- 12) discipline apprentices, up to and including termination, for failure to fulfill their obligations on-the-job or in related instruction, including provisions for fair hearings;
- 13) annually prepare and submit a Self-Assessment Review as well as a Program Improvement Plan to the Chief of the Division of Apprenticeship Standards;
- 14) ensure training and supervision, both on the job and in related instruction, in first aid, safe working practices and the recognition of occupational health and safety hazards;
- 15) ensure training in the recognition of illegal discrimination and sexual harassment;
- 16) establish an adequate mechanism to be used for the rotation of the apprentice from work process to work process to ensure the apprentice of complete training in the apprenticeable occupation including mobility between employers when essential to provide exposure and training in various work processes in the apprenticeable occupation;
- 17) establish an adequate mechanism that will be used to provide apprentices with reasonably continuous employment in the event of a lay-off or the inability of one employer to provide training in all work processes as outlined in the standards;
- 18) comply with meaningful representation requirements for the interests of apprentices in the management of the program where apprentices are at least equally represented on an advisory panel established by the apprenticeship committee responsible for the operation of the program;
- 19) adopt changes to these standards, as necessary, subject to the approval of the parties hereto and the Chief of the Division of Apprenticeship Standards.

Article VII Definition of an Apprentice

An apprentice is a person at least 16 years of age, who has met the requirements for selection under the selection procedures of participating employer, who is engaged in learning a designated craft or trade and who has entered into a written apprentice agreement under the provisions of these standards.

Article VIII Duties of an Apprentice

Each apprentice shall satisfactorily perform all work and learning assignments both on the job and in related instruction and shall comply with the rules, regulations and decisions of the apprenticeship committee.

Article IX Apprenticeship Agreement

- 1) Each apprenticeship agreement shall conform to the State law governing apprenticeship agreements, and shall be signed by the employer, by the program sponsor, and by the apprentice and must be approved by the apprenticeship committee.
- 2) Each apprentice shall be furnished with a copy of or be given an opportunity to study these standards before registration. These standards shall be considered a part of the apprenticeship agreement as though expressly written therein.
- 3) If the apprentice is under 18 years of age, the agreement must be signed by the apprentice's parent or guardian. When the period of training extends beyond 18, the apprenticeship agreement shall likewise be binding to such a period as may be covered.

Article X Termination and Transfer of Agreements

- 1) During the probationary period, an apprenticeship agreement shall be terminated by the apprenticeship committee at the request in writing of either party. After such probationary period, an apprenticeship agreement may be terminated by the Administrator by mutual agreement of all the parties thereto or cancelled by the Administrator for good and sufficient reason.
- 2) If an employer is unable to fulfill his/her obligations to train under any apprenticeship agreement or in the event of a layoff, the apprenticeship committee may, with the approval of the Administrator, transfer such agreement to any other employer if the apprentice consents, and such other employer agrees to assume the obligation of said apprenticeship agreement.

Article XI Lay-off

- 1) If for any reason a lay-off of an apprentice occurs, the apprenticeship agreement shall remain in effect unless cancelled by the Administrator. However, credit for related instruction shall be given when the apprentice continues such instruction during the lay-off.
- 2) There shall be no liability on the part of the employer, the program, or the committee for an injury sustained by an apprentice engaged in schoolwork at a time when the apprentice is unemployed.

Article XII Controversies

All controversies or differences concerning apprenticeship agreements that cannot be adjusted locally by the apprenticeship committee or otherwise shall be submitted to the Administrator for determination.

Article XIII Certificate of Completion

- 1) In addition to previous on-the-job training and related school instruction, which is of an approved nature, the Apprentice shall have completed not less than an additional six (6) months as an apprentice under the laws of the State of California and demonstrated mastery of the skills and knowledge of the prescribed program.
- 2) In recognition of unusual ability and progress, the apprenticeship committee may decrease the term of apprenticeship for an individual apprentice not more than twelve and one-half percent (12½%).
- 3) Upon evidence of satisfactory completion of apprenticeship, and upon the recommendation of the apprenticeship committee, each apprentice will be issued a Certificate of Completion by the authority of the Chief of the Division of Apprenticeship Standards and the Interagency Advisory Committee on Apprenticeship.

Article XIV Equal Opportunity in Apprenticeship

The recruitment, selection, employment and training of apprentices during their apprenticeship shall be without discrimination because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation or veteran or military status.

Creative Technologist will ensure selection procedures meet objective standards and maintain a fair and equitable selection process for all applicants.

Article XV Written Applications

Applications for apprenticeship will be accepted on a rolling basis annually:

Please send an email to kleeper@dvc.edu with the subject line: Application Creative Technologist Apprenticeship Program.

In your email, provide the following: Cover Letter, Resume, Portfolio/Link showcasing your animation, game, virtual production, or film projects.

Article XVI Records

All records will be maintained, in written or electronic form, for five (5) years and kept at:

Creative Technologist
321 Golf Club Road, Pleasant Hill, CA 94523

Article XVII Annual Compliance

Creative Technologist will submit an annual compliance report to the Division of Apprenticeship Standards as requested by the Division.

Creative Technologist agrees to accept electronic signatures for these Standards and all related Division of Apprenticeship Standards documents.

The foregoing standards are hereby agreed to and adopted by Creative Technologist on August 11, 2025 (Committee approval date).

Employer Organization

Creative Technologist
321 Golf Club Road, Pleasant Hill, CA 94523

Joann Denning, Chair of Art Digital Media, Diablo Valley College Date

The foregoing apprenticeship standards, being in conformity with the applicable California Labor Code, California Code of Regulations and Federal Regulations, are hereby approved

(DAS approval date)

Adele Burnes, Chief Date
Division of Apprenticeship Standards

Attachment A

List of Committee Members

Creative Technologist
321 Golf Club Road, Pleasant Hill, CA 94523
(510) 220-7163
jdenning@dvc.edu

There is hereby established the above-named master apprenticeship committee. The committee shall consist of four (4) members, who shall be selected by and represent the employer organization(s) signatory hereto. In addition, there shall be one (1) apprenticeship consultant representing the Division of Apprenticeship Standards and one (1) advisor from the Local Education Agency and such other advisors as the committee shall determine. Such advisors and the apprenticeship consultant shall act without vote.

Joann Denning
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Television
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Committee Advisors

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Attachment B-1

Training Schedule and Working Conditions

Creative Technologist

Occupation

Occupation: Special Effects Artists and Animator
O*Net Code: 27-1014.00

Article I Term of Apprenticeship and Probation

The standard term of apprenticeship shall be a competency-based approach, with approximately 2000 on-the-job training (OJT) hours, 216 related and supplemental instruction (RSI) hours, and completed within approximately 24 months.

The period of probation shall be reasonable in relation to the full apprenticeship term, with full credit given for such period toward completion of the apprenticeship, and in no event shall exceed the shorter of 25 percent of the length of the program or one year. The period of probation shall be three (3) months.

Article II Wage Schedule

Professional Worker Wage:

\$66.48 per hour effective 8/11/2025.

Apprentice Wage and Advancement Schedule:

In no case shall an Apprentice receive a starting wage that is less than the applicable federal, state or local entity (city or county) minimum wage, whichever is higher for the county or city where the apprentice is working. The applicable minimum wage law shall establish the effective date of the minimum wage.

To advance from one period to the next, the apprentice shall have met the following requirements:

1st period	0% Competencies	\$ 21.42 /hour
2nd period	50% Competencies	\$ 21.92 /hour
3rd period	100% Competencies	\$ 22.42 /hour

Hours of Work and Working Conditions and Overtime Provision:

Eight (8) hours of labor constitutes a day's work. Employment beyond eight hours in any workday or more than six (6) days in any workweek requires the employee to be compensated for the overtime at not less than one and one-half times the employee's regular rate of pay for all hours worked in excess of eight hours, up to and including 12 hours in any workday, and for the first eight hours worked on the seventh consecutive day of work in a workweek; and double the employee's regular rate of pay for all hours worked in excess of 12 hours in any workday and for all hours worked in excess of eight on the seventh consecutive day of work in a workweek. If employers utilize an alternative workweek schedule in accordance with the California Industrial Welfare Commission Orders, the overtime will be determined and paid in accordance with the applicable alternative workweek provisions.

The workday and workweek and all other conditions of employment for apprentices shall conform to all applicable laws and regulations and shall not be greater than for those of a professional worker.

Overtime shall not be allowed if it will interfere with or impair the training or be detrimental to the health and safety of the apprentice.

Article III Work-Training

- 1) The employer shall see that all apprentices are under the supervision of a qualified professional worker or instructor and shall provide the necessary diversified experience and training in order to develop the apprentice into a proficiently skilled worker, as outlined herein.
- 2) Each apprentice shall be trained in the use of new equipment, materials and processes as they come into use in the occupation.
- 3) The major categories in which apprentices will be trained (although not necessarily in the order listed) are as follows:

Competency Check List

Demonstrates Fundamentals: Apprentice can perform the task with some coaching.

Proficient in Task: Apprentice performs task properly and consistently.

Completion Date: Date apprentice completes final demonstration of competency.

Detailed Work Activities Initial and date each task when Competency Check List has been completed.

Work Processes (Professional Competencies) and Performance Areas**1) General Practices**

- a) Demonstrate understanding of the organization's mission, production culture, safety protocols, and broadcast/video/film production standards.
- b) Accept and implement creative and technical feedback to improve media content and visual storytelling.
- c) Collaborate across departments, including creative, technical, editorial, and production teams.
- d) Maintain professionalism across physical and virtual environments, including on-set, in-studio, and remote collaboration tools.
- e) Exhibit adaptability and a continuous learning mindset in emerging creative technology environments.

2) Production Planning, Pipeline Protocols, and Project Management

- a) Apply knowledge of production planning, including shot lists, storyboards, tech scouting, and equipment prep for real-time and AI-supported productions.
- b) Demonstrate familiarity with camera workflows in virtual production and AI-assisted environments (e.g., volumetric capture, real-time compositing).
- c) Use scheduling, budgeting, and digital project management tools to meet production milestones and delivery deadlines.
- d) Follow industry standards for asset management, file labeling, and cloud-based backup systems used across media pipelines.
- e) Coordinate with post-production teams to ensure compatibility and accuracy of footage capture and asset delivery.

3) Project Development and Creation

- a) Operate cameras and related technologies in traditional, real-time, and virtual production settings.
- b) Use industry-standard software and hardware (e.g., Unreal Engine, DaVinci Resolve, Adobe Suite, AI-enhanced editing tools) to capture and produce content.
- c) Contribute to integrated projects that leverage new technologies, including LED volumes, motion tracking, and machine learning-assisted framing/composition.
- d) Communicate visual ideas and problem-solve technical challenges on-set and during production.
- e) Execute production plans from concept to post-production, ensuring creative vision and technical accuracy align with project requirements.

Article IV Related Instruction

Apprentices shall satisfactorily complete prescribed courses of related and supplemental instruction, which will not be less than 216 hours. Related and supplemental instruction will be provided by Diablo Valley College.

Time spent in related and supplemental instruction may not be compensated.

Course Name	Hours
<p>Intro to Virtual Production <i>Description: This course covers technical and visual aspects of virtual production in a hands-on studio production environment. Students apply virtual production tools to film production projects, animation, and game design. Topics include pre-visualization, blocking, lighting, locations, real-time game engines, visual effects (VFX) workflows, motion capture, camera tracking, safe use of equipment, on-set protocols, industry terminology, and 3D art teams.</i></p>	54 Hours
<p>Python Programming <i>Description: This course presents an introduction to the Python language. Topics covered include: primitive and collection data types, operators and statements, loops and branching, functions and variable scoping, modules and packages, object-oriented programming, file handling and exceptions, and an introduction to Graphical User Interface (GUI) programming.</i></p>	54 Hours
<p>3D Layout and Lighting <i>Description: This course presents the basic concepts of three-dimensional (3D) modeling and animation. Students explore the production of 3D computer animation including modeling, animation, rigging, and texture mapping. Students will also plan, design and produce 3D animation projects.</i></p>	54 Hours
<p>Animation and Game Studio Practice <i>Description: This course immerses students in a collaborative, studio-based environment where they develop creative projects from concept to completion using industry-standard tools and workflows. Students will identify and articulate personal goals, demonstrate proficiency in video editing, web design, 3D modeling, and game design software, apply conceptual and problem-solving skills to develop prototypes and narratives, translate ideas into user-centered visual solutions, and exhibit professional behavior and strong work ethics.</i></p>	54 Hours
Total Hours	216 Hours

Article V Ratio

The ratio of apprentices to professional workers shall be:

- 1) Ratio #1: Each professional worker may supervise one (1) apprentice(s)

Attachment B-2

Training Schedule and Working Conditions

Creative Technologist

Occupation

Occupation: Video Game Designer

O*Net Code: 15-1255.01

Article I Term of Apprenticeship and Probation

The standard term of apprenticeship shall be a competency-based approach, with approximately 2000 on-the-job training (OJT) hours, 216 related and supplemental instruction (RSI) hours, and completed within approximately 24 months.

The period of probation shall be reasonable in relation to the full apprenticeship term, with full credit given for such period toward completion of the apprenticeship, and in no event shall exceed the shorter of 25 percent of the length of the program or one year. The period of probation shall be three (3) months.

Article II Wage Schedule

Professional Worker Wage:

\$53.04 per hour effective 8/11/2025.

Apprentice Wage and Advancement Schedule:

In no case shall an Apprentice receive a starting wage that is less than the applicable federal, state or local entity (city or county) minimum wage, whichever is higher for the county or city where the apprentice is working. The applicable minimum wage law shall establish the effective date of the minimum wage.

To advance from one period to the next, the apprentice shall have met the following requirements:

1st period	0% Competencies	\$ 21.42 /hour
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3rd period	100% Competencies	\$ 22.42 /hour

Hours of Work and Working Conditions and Overtime Provision:

Eight (8) hours of labor constitutes a day's work. Employment beyond eight hours in any workday or more than six (6) days in any workweek requires the employee to be compensated for the overtime at not less than one and one-half times the employee's regular rate of pay for all hours worked in excess of eight hours, up to and including 12 hours in any workday, and for the first eight hours worked on the seventh consecutive day of work in a workweek; and double the employee's regular rate of pay for all hours worked in excess of 12 hours in any workday and for all hours worked in excess of eight on the seventh consecutive day of work in a workweek. If employers utilize an alternative workweek schedule in accordance with the California Industrial Welfare Commission Orders, the overtime will be determined and paid in accordance with the applicable alternative workweek provisions.

The workday and workweek and all other conditions of employment for apprentices shall conform to all applicable laws and regulations and shall not be greater than for those of a professional worker.

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- 2) Each apprentice shall be trained in the use of new equipment, materials and processes as they come into use in the occupation.
- 3) The major categories in which apprentices will be trained (although not necessarily in the order listed) are as follows:

Competency Check List

Demonstrates Fundamentals: Apprentice can perform the task with some coaching.

Proficient in Task: Apprentice performs task properly and consistently.

Completion Date: Date apprentice completes final demonstration of competency.

Detailed Work Activities Initial and date each task when Competency Check List has been completed.

Work Processes (Professional Competencies) and Performance Areas**1. General Practices**

- a) Demonstrate a working understanding of the game studio or organization's mission, vision, policies, and development culture.
- b) Accept and incorporate critique from team members, leads, and stakeholders to iteratively refine game design concepts, prototypes, and systems.

- c) Collaborate across interdisciplinary teams including narrative designers, programmers, 3D artists, UI/UX designers, and sound designers.
- d) Navigate and adhere to studio workflows and development pipelines from concept to post-launch support.
- e) Maintain professionalism across collaborative platforms such as version control systems (e.g., Git), project management tools (e.g., JIRA, Notion), and real-time virtual workspaces (e.g., Miro, Discord).

2) **Production Planning, Pipeline Protocols, and Project Management**

- a) Apply knowledge of creative technologies including real-time engines (e.g., Unity, Unreal), procedural generation, AI-enhanced design tools, and virtual collaboration environments.
- b) Understand and contribute to game production pipelines including prototyping, level design, playtesting, iteration, and optimization.
- c) Utilize project planning tools and agile methodologies to track milestones, coordinate deliverables, and manage design documentation.
- d) Follow best practices in asset naming, versioning, source control, and collaborative design documentation across all phases of production.
- e) Collaborate with tech leads and producers to assess technical requirements, constraints, and opportunities for innovation.

3) **Project Development and Creation**

- a) Apply a working understanding of core game design principles including systems design, level design, mechanics balancing, player feedback loops, and accessibility.
- b) Utilize industry-standard software and tools (e.g., Unity, Unreal Engine, Figma, Blender, Adobe Suite) to develop and implement game assets and features.
- c) Contribute to team projects integrating AI tools, procedural design systems, real-time multiplayer environments, or immersive XR elements.
- d) Communicate clearly with teams and stakeholders, translating creative ideas into actionable design documents, prototypes, and visualizations.
- e) Plan and execute gameplay systems or content modules within production timelines, incorporating feedback from testing and QA cycles.
- f) Balance creative vision with user experience and technical feasibility in design iterations, ensuring a compelling and playable game experience.

Article IV Related Instruction

Apprentices shall satisfactorily complete prescribed courses of related and supplemental instruction, which will not be less than 216 hours. Related and supplemental instruction will be provided by Diablo Valley College.

Time spent in related and supplemental instruction may not be compensated.

Course Name	Hours
<p>3D Layout and Lighting</p> <p><i>Description: This course presents the basic concepts of three-dimensional (3D) modeling and animation. Students explore the production of 3D computer animation including modeling, animation, rigging, and texture mapping. Students will also plan, design and produce 3D animation projects.</i></p>	54 Hours
<p>Python Programming</p> <p><i>Description: This course presents an introduction to the Python language. Topics covered include: primitive and collection data types, operators and statements, loops and branching, functions and variable scoping, modules and packages, object-oriented programming, file handling and exceptions, and an introduction to Graphical User Interface (GUI) programming.</i></p>	54 Hours
<p>Motion Capture Performance Animation</p> <p><i>Description: This course presents acting techniques with applications to character animation, scene construction, and storytelling. Exploration in creating movement and gesture and how it relates to believable characterization for animation will be covered.</i></p>	54 Hours
<p>Animation and Game Studio Practice</p> <p><i>Description: This course immerses students in a collaborative, studio-based environment where they develop creative projects from concept to completion using industry-standard tools and workflows. Students will identify and articulate personal goals, demonstrate proficiency in video editing, web design, 3D modeling, and game design software, apply conceptual and problem-solving skills to develop prototypes and narratives, translate ideas into user-centered visual solutions, and exhibit professional behavior and strong work ethics.</i></p>	54 Hours
Total Hours	216 Hours

Article V Ratio

The ratio of apprentices to professional workers shall be:

- 1) Ratio #1: Each professional worker may supervise one (1) apprentice(s)

Attachment B-3

Training Schedule and Working Conditions

Creative Technologist

Occupation

Occupation: Camera Operators, Television, Video, Film
O*Net Code: 27-4031.00

Article I Term of Apprenticeship and Probation

The standard term of apprenticeship shall be a competency-based approach, with approximately 2000 on-the-job training (OJT) hours, 216 related and supplemental instruction (RSI) hours, and completed within approximately 24 months.

The period of probation shall be reasonable in relation to the full apprenticeship term, with full credit given for such period toward completion of the apprenticeship, and in no event shall exceed the shorter of 25 percent of the length of the program or one year. The period of probation shall be three (3) months.

Article II Wage Schedule

Professional Worker Wage:

\$30.90 per hour effective 8/11/2025.

Apprentice Wage and Advancement Schedule:

In no case shall an Apprentice receive a starting wage that is less than the applicable federal, state or local entity (city or county) minimum wage, whichever is higher for the county or city where the apprentice is working. The applicable minimum wage law shall establish the effective date of the minimum wage.

To advance from one period to the next, the apprentice shall have met the following requirements:

1st period	0% Competencies	\$ 21.42 /hour
2nd period	50% Competencies	\$ 21.92 /hour
3rd period	100% Competencies	\$ 22.42 /hour

Hours of Work and Working Conditions and Overtime Provision:

Eight (8) hours of labor constitutes a day's work. Employment beyond eight hours in any workday or more than six (6) days in any workweek requires the employee to be compensated for the overtime at not less than one and one-half times the employee's regular rate of pay for all hours worked in excess of eight hours, up to and including 12 hours in any workday, and for the first eight hours worked on the seventh consecutive day of work in a workweek; and double the employee's regular rate of pay for all hours worked in excess of 12 hours in any workday and for all hours worked in excess of eight on the seventh consecutive day of work in a workweek. If employers utilize an alternative workweek schedule in accordance with the California Industrial Welfare Commission Orders, the overtime will be determined and paid in accordance with the applicable alternative workweek provisions.

The workday and workweek and all other conditions of employment for apprentices shall conform to all applicable laws and regulations and shall not be greater than for those of a professional worker.

Overtime shall not be allowed if it will interfere with or impair the training or be detrimental to the health and safety of the apprentice.

Article III Work-Training

- 1) The employer shall see that all apprentices are under the supervision of a qualified professional worker or instructor and shall provide the necessary diversified experience and training in order to develop the apprentice into a proficiently skilled worker, as outlined herein.
- 2) Each apprentice shall be trained in the use of new equipment, materials and processes as they come into use in the occupation.
- 3) The major categories in which apprentices will be trained (although not necessarily in the order listed) are as follows:

Competency Check List

Demonstrates Fundamentals: Apprentice can perform the task with some coaching.

Proficient in Task: Apprentice performs task properly and consistently.

Completion Date: Date apprentice completes final demonstration of competency.

Detailed Work Activities Initial and date each task when Competency Check List has been completed.

Work Processes (Professional Competencies) and Performance Areas**1) General Practices**

- a) Demonstrate understanding of the organization's mission, production culture, safety protocols, and broadcast/video/film production standards.

- b) Accept and implement creative and technical feedback to improve media content and visual storytelling.
- c) Collaborate across departments, including creative, technical, editorial, and production teams.
- d) Maintain professionalism across physical and virtual environments, including on-set, in-studio, and remote collaboration tools.
- e) Exhibit adaptability and a continuous learning mindset in emerging creative technology environments.

2) Production Planning, Pipeline Protocols, and Project Management

- a) Apply knowledge of production planning, including shot lists, storyboards, tech scouting, and equipment prep for real-time and AI-supported productions.
- b) Demonstrate familiarity with camera workflows in virtual production and AI-assisted environments (e.g., volumetric capture, real-time compositing).
- c) Use scheduling, budgeting, and digital project management tools to meet production milestones and delivery deadlines.
- d) Follow industry standards for asset management, file labeling, and cloud-based backup systems used across media pipelines.
- e) Coordinate with post-production teams to ensure compatibility and accuracy of footage capture and asset delivery.

3) Project Development and Creation

- a) Operate cameras and related technologies in traditional, real-time, and virtual production settings.
- b) Use industry-standard software and hardware (e.g., Unreal Engine, DaVinci Resolve, Adobe Suite, AI-enhanced editing tools) to capture and produce content.
- c) Contribute to integrated projects that leverage new technologies, including LED volumes, motion tracking, and machine learning-assisted framing/composition.
- d) Communicate visual ideas and problem-solve technical challenges on-set and during production.
- e) Execute production plans from concept to post-production, ensuring creative vision and technical accuracy align with project requirements.

Article IV Related Instruction

Apprentices shall satisfactorily complete prescribed courses of related and supplemental instruction, which will not be less than 216 hours. Related and supplemental instruction will be provided by Diablo Valley College.

Time spent in related and supplemental instruction may not be compensated.

Course Name	Hours
3D Layout and Lighting <i>Description: This course presents the basic concepts of three-dimensional (3D) modeling and animation. Students explore the production of 3D computer animation including modeling, animation, rigging, and texture mapping. Students will also plan, design and produce 3D animation projects.</i>	54 Hours
Intro to Virtual Production <i>Description: This course covers technical and visual aspects of virtual production in a hands-on studio production environment. Students apply virtual production tools to film production projects, animation, and game design. Topics include pre-visualization, blocking, lighting, locations, real-time game engines, visual effects (VFX) workflows, motion capture, camera tracking, safe use of equipment, on-set protocols, industry terminology, and 3D art teams.</i>	54 Hours
Motion Capture Performance Animation <i>Description: This course presents acting techniques with applications to character animation, scene construction, and storytelling. Exploration in creating movement and gesture and how it relates to believable characterization for animation will be covered.</i>	54 Hours
Animation and Game Studio Practice <i>Description: This course immerses students in a collaborative, studio-based environment where they develop creative projects from concept to completion using industry-standard tools and workflows. Students will identify and articulate personal goals, demonstrate proficiency in video editing, web design, 3D modeling, and game design software, apply conceptual and problem-solving skills to develop prototypes and narratives, translate ideas into user-centered visual solutions, and exhibit professional behavior and strong work ethics.</i>	54 Hours
Total Hours	216 Hours

Article V Ratio

The ratio of apprentices to professional workers shall be:

- 1) Ratio #1: Each professional worker may supervise one (1) apprentice(s)

Attachment B-4

Training Schedule and Working Conditions

Creative Technologist

Occupation

Occupation: Graphic Designer
O*Net Code: 27-1024.00

Article I Term of Apprenticeship and Probation

The standard term of apprenticeship shall be a competency-based approach, with approximately 2000 on-the-job training (OJT) hours, 216 related and supplemental instruction (RSI) hours, and completed within approximately 24 months.

The period of probation shall be reasonable in relation to the full apprenticeship term, with full credit given for such period toward completion of the apprenticeship, and in no event shall exceed the shorter of 25 percent of the length of the program or one year. The period of probation shall be three (3) months.

Article II Wage Schedule

Professional Worker Wage:

\$32.80 per hour effective 8/11/2025.

Apprentice Wage and Advancement Schedule:

In no case shall an Apprentice receive a starting wage that is less than the applicable federal, state or local entity (city or county) minimum wage, whichever is higher for the county or city where the apprentice is working. The applicable minimum wage law shall establish the effective date of the minimum wage.

To advance from one period to the next, the apprentice shall have met the following requirements:

1st period	0% Competencies	\$ 21.42 /hour
2nd period	50% Competencies	\$ 21.92 /hour
3rd period	100% Competencies	\$ 22.42 /hour

Hours of Work and Working Conditions and Overtime Provision:

Eight (8) hours of labor constitutes a day's work. Employment beyond eight hours in any workday or more than six (6) days in any workweek requires the employee to be compensated for the overtime at not less than one and one-half times the employee's regular rate of pay for all hours worked in excess of eight hours, up to and including 12 hours in any workday, and for the first eight hours worked on the seventh consecutive day of work in a workweek; and double the employee's regular rate of pay for all hours worked in excess of 12 hours in any workday and for all hours worked in excess of eight on the seventh consecutive day of work in a workweek. If employers utilize an alternative workweek schedule in accordance with the California Industrial Welfare Commission Orders, the overtime will be determined and paid in accordance with the applicable alternative workweek provisions.

The workday and workweek and all other conditions of employment for apprentices shall conform to all applicable laws and regulations and shall not be greater than for those of a professional worker.

Overtime shall not be allowed if it will interfere with or impair the training or be detrimental to the health and safety of the apprentice.

Article III Work-Training

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- 2) Each apprentice shall be trained in the use of new equipment, materials and processes as they come into use in the occupation.
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Competency Check List

Demonstrates Fundamentals: Apprentice can perform the task with some coaching.

Proficient in Task: Apprentice performs task properly and consistently.

Completion Date: Date apprentice completes final demonstration of competency.

Detailed Work Activities Initial and date each task when Competency Check List has been completed.

Work Processes (Professional Competencies) and Performance Areas

- 1) **General Practices**
 - a) Demonstrate a working understanding of the studio or organization's creative vision, production culture, workflows, and team structure.

- b) Accept and apply feedback from directors, art leads, and interdisciplinary team members to iterate and improve visual assets through an agile design process.
- c) Collaborate with technical artists, animators, game designers, and developers to deliver visually aligned and production-ready assets.
- d) Understand operational workflows in digital content pipelines, including integration into real-time engines and collaborative platforms.
- e) Maintain professionalism across digital communication tools (e.g., Slack, Miro, Ftrack, ShotGrid), in collaborative virtual environments, and during production reviews.

2) Production Planning, Pipeline Protocols, and Project Management

- a) Apply knowledge of creative technologies used in gaming, animation, and virtual production such as Unreal Engine, Unity, and AI-powered design platforms.
- b) Demonstrate proficiency in digital production workflows including asset design, concept development, environment layout, UI/UX for interactive systems, and cinematic design.
- c) Use project management tools (e.g., Notion, Jira, Trello) to plan, track, and deliver visual assets according to production schedules.
- d) Follow studio standards for asset tracking, naming conventions, version control, and file backup in shared production environments.
- e) Collaborate with pipeline teams to ensure visual assets are optimized and properly implemented into the engine or animation timeline.

3) Project Development and Creation

- a) Apply design principles such as composition, motion, lighting, typography, and color in the context of interactive, animated, and immersive media.
- b) Utilize industry-standard tools (e.g., Adobe Creative Suite, Blender, Figma, Substance 3D, Unreal Engine, Runway ML) to design assets for characters, environments, UI, motion graphics, and cinematic sequences.
- c) Contribute to visual development for in-game cinematics, virtual sets, previsualization, and interactive experiences in collaboration with directors and department leads.
- d) Produce and refine assets through real-time iteration, ensuring visual cohesion across gameplay, animation, and virtual environments.
- e) Communicate design intent clearly through boards, prototypes, style guides, and presentations tailored for both creative and technical audiences.
- f) Execute design deliverables under production timelines, integrating feedback and aligning with evolving project goals and technical requirements.

Article IV Related Instruction

Apprentices shall satisfactorily complete prescribed courses of related and supplemental instruction, which will not be less than 216 hours. Related and supplemental instruction will be provided by Diablo Valley College.

Time spent in related and supplemental instruction may not be compensated.

Course Name	Hours
Intro to Virtual Production <i>Description: This course covers technical and visual aspects of virtual production in a hands-on studio production environment. Students apply virtual production tools to film production projects, animation, and game design. Topics include pre-visualization, blocking, lighting, locations, real-time game engines, visual effects (VFX) workflows, motion capture, camera tracking, safe use of equipment, on-set protocols, industry terminology, and 3D art teams.</i>	54 Hours
Motion Graphics <i>Description: This course focuses on the creative design skills required to create effective motion graphics. Students will create motion graphics utilizing digital video and various graphic file formats.</i>	54 Hours
Game Design <i>Description: This course will present techniques for the development of interactive game environments. Students will create multiple levels, integrate game mechanics, and apply visual design concepts in the development process. The course follows basic industry production structure to immerse students in the game design process and will introduce node based programming tool sets to be applied to level designs.</i>	54 Hours
Animation and Game Studio Practice <i>Description: This course immerses students in a collaborative, studio-based environment where they develop creative projects from concept to completion using industry-standard tools and workflows. Students will identify and articulate personal goals, demonstrate proficiency in video editing, web design, 3D modeling, and game design software, apply conceptual and problem-solving skills to develop prototypes and narratives, translate ideas into user-centered visual solutions, and exhibit professional behavior and strong work ethics.</i>	54 Hours
Total Hours	216 Hours

Article V Ratio

The ratio of apprentices to professional workers shall be:

- 1) Ratio #1: Each professional worker may supervise one (1) apprentice(s)