Delaware Department of Education
CTE & STEM Office
401 Federal Street, Suite 256
Dover, DE 19901
PHONE: 302.735.4015
Submit via email to: CTE.STEM@doe.k12.de.us

DELAWARE CTE PROGRAM OF STUDY APPLICATION

LOCAL EDUCATION AGENCY INFORMATION		
Local Education Agency (LEA):		
School(s) where the Program of Study will be Located:		**Program of Study Start Date:**
LEA CTE Coordinator Name:	**Phone:**	**E-Mail Address:**
Career Cluster Title: Arts, Audio/Video Technology & Communication	**Career Pathway Title:** Visual Arts	**Program of Study Title:** Digital Communication Technology (DCT)
CTE Program of Study Course Titles & Sequence: 1. Foundations of Digital Design (FDD) 2. Processes of Digital Production (PDP) 3. Applications of Digital Design (ADD)		
CTE Program of Study Request: ☒ State-model CTE Program of Study ☐ Local CTE Program of Study		

ASSURANCES & SIGNATURES	
CTE Program of Study approval and funding is contingent upon the following assurances: 1. The LEA will comply with Delaware Administrative Code, 14 DE Admin. 525, Requirements for Career and Technical Education Programs and the Delaware State Plan for the Carl D. Perkins Career and Technical Education Act of 2006; 2. The LEA will submit CTE program data as required by th Delaware Department of Education; 3. All teachers are certified in the appropriate CTE area and participate in program specific professional learning; 4. The LEA will convene and engage a program advisory committee for the purposes of program development, implementation, and continuous improvement; 5. All students have equal access to the program of study as well as early career/early college options; 6. Career and Technical Student Organizations are integral components of the program of study; 7. The LEA will maintain safe facilities and equipment aligned with the program of study goals; and 8. A process for continuous improvement has been established, which includes a model of evaluation and program improvement.	
LEA CTE Coordinator Signature:	**Date:**

LEA Chief School Officer Signature:	**Date:**

PROGRAM ADVISORY COMMITTEE MEMBER INFORMATION
Complete the list of program advisory committee members. Program of study representatives should include, but are not limited to: CTE and academic teachers, CTE/curriculum district coordinators, school counselors, business and industry representatives, labor representatives, and post-secondary partners. Community stakeholders including parents and students can also be considered. *Attach additional information if applicable*.

Name:	Title:
Affiliation:	
Address:	
Phone:	E-Mail:
Area of Expertise:	
Representing: ☐ Business/Industry ☐ Secondary Education ☐ Post-Secondary Education ☐ Community/Other	

Name:	Title:
Affiliation:	
Address:	
Phone:	E-Mail:
Area of Expertise:	
Representing: ☐ Business/Industry ☐ Secondary Education ☐ Post-Secondary Education ☐ Community/Other	

Name:	Title:

Affiliation:	
Address:	
Phone:	E-Mail:
Area of Expertise:	
Representing: ☐ Business/Industry ☐ Secondary Education ☐ Post-Secondary Education ☐ Community/Other – Community Partner, local business owner, parent	
Name:	Title:
Affiliation:	
Address:	
Phone:	E-Mail:
Area of Expertise:	
Representing: ☐ Business/Industry ☐ Secondary Education ☐ Post-Secondary Education ☐ Community/Other	
Name:	Title:
Affiliation:	
Address:	
Phone:	E-Mail:
Area of Expertise:	

Representing:

- ☐ Business/Industry
- ☐ Secondary Education
- ☐ Post-Secondary Education
- ☐ Community/Other

LABOR MARKET DEMAND

Certify that a labor market needs analysis has been completed for the proposed CTE program of study. Attach the *Labor Market Information (LMI) Review* document.

Access the *Labor Market Information (LMI) Review* document.

☒ The LEA certifies that regional, state, and local labor market data have been reviewed to assure a demand exists for the POS occupations and that the number of POS completers will not significantly exceed this demand. Department of Labor data are available and/or documented. Supporting evidence of supply and demand is submitted with this proposal.

☐ No data exist for POS due to a unique labor market demand. Supporting evidence of demand is submitted with this proposal. Evidence may include, but is not limited to: real-time labor market information, documentation of national, regional, state, or local labor trends, or letters from employers or workforce agencies documenting projected employment specific to the Career Cluster and Career Pathway.

ACADEMIC AND TECHNICAL SKILL STANDARDS

List the academic, technical, and workplace skills and knowledge used to develop the program of study.

Title and source of academic standards:

Common Core State Standards (CCSS)

The Common Core State Standards (CCSS) are national standards that set clear college- and career-ready expectations for kindergarten through 12th grade in English language arts/literacy and Mathematics. The standards help to ensure that students graduating from high school are prepared to take credit bearing introductory courses in two- or four-year college programs and enter the workforce. The standards were developed by the nation's governors and education commissioners, through their representative organizations, the National Governors Association Center for Best Practices (NGA) and the Council of Chief State School Officers (CCSSO). Teachers, parents, school administrators, and experts from across the country provided input into the development of the standards. The implementation of the Common Core, including how the standards are taught, the curriculum developed, and the materials used to support teachers as they help students reach the standards, is led entirely at the state and local levels. For more information on CCSS, please visit the link above.

Title and source of technical skill standards:

International Technology & Engineering Educators Associate (ITEEA) – Standards for Technological Literacy:

The Standards for Technological Literacy (STL) present a vision for what students should know and be able to do in order to be technologically literate. The standards describe the content for technology education programs in grades K-12 by setting forth a consistent expectation that ensures all students receive effective instruction about technology. The STL was created under the ITEEA Technology for All Americans Project and was developed with hundreds of educators and professionals. For more information on STL, please visit the link above.

Title and source of workplace or other skill standards, as applicable:

Common Career Technical Core (CCTC)

The Common Career Technical Core (CCTC) are national standards for Career & Technical Education (CTE) that help to inform the establishment of state standards and/or programs of study. The CCTC were developed by educators, school administrators, representatives from business and industry, faculty from higher education, as well as workforce and labor markets economists. The CCTC includes a set of standards for each of the sixteen (16) Career Clusters and the corresponding Career Pathways that help to define what students should know and be able to do after completing instruction in a program of study. The CCTC standards for Arts, Audio/Video Technology & Communications Career Cluster are reflected inside the courses for the Digital Communication Technology (DCT) program of study. The program has students apply the CCTC Arts, Audio/Video Technology & Communications standards. For more information on the CCTC, please visit the link above.

Career Ready Practices (CRP)

The Career Ready Practices (CRP) are a component of the CCTC framework and includes twelve (12) statements that address the knowledge, skills, and dispositions that are important to becoming career ready. The CRP describes the career-ready skills that educators should seek to develop in their students. These practices are not exclusive to a Career Pathway, program of study, discipline, or level of education and should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a career pathway. The CRP statements are embedded throughout the Digital Communication Technology (DCT) program of study to ensure students display the appropriate soft skills and workplace requirements necessary to be successful in a career. For more information on the CRP, please visit the link above.

EARLY CAREER AND EARLY COLLEGE OPPORTUNITIES

Identify CTE program of study early career opportunities, industry-recognized certifications and licenses, options for early college credit, two- and four-year degree and certification program alignment, and the technical skill attainment measures for the program of study. Attach all Memorandum of Understanding that serve as articulation/dual enrollment agreement(s).

Describe early career opportunities (i.e. work-based learning experiences and industry-mentored projects):

Students in the Digital Communication Technology program of study will participate in supervised client-based work experiences and industry-mentored projects focused on the design, development, and delivery of digital products based on identified design criteria and constraints. The LEA and DCT program advisory committee will identify clients to coach and mentor students throughout the design process and

identify opportunities to meet district, school, and community needs that lead to careers in public relations, marketing, web and digital communications and printing.

List industry-recognized certifications and/or licenses, as appropriate (include the partner organization and credential):

Describe early college credit options (i.e. advanced placement, dual enrollment, transcripted and/or articulated credit, credit by exam, pre-apprenticeship, other) and options for two- and four-year degree and/or certification program alignment (attach articulation/dual enrollment agreement). The partner organization and hours of credit earned should be included, as applicable:

Students who successfully complete the Digital Communication Technology (DCT) program of study will receive up to three (3) articulated credits at **Delaware Technical Community College (DTCC)** that may be applied to the following programs of study offered by DTCC. Credit is awarded based on submission and successful evaluation of the portfolio by DTCC faculty with the high school transcript submission and evaluation.

Advertising Design: 3 articulated credits; Delaware Technical Community College (DTCC)

- VSC115 – Intro to Design: 3 credits

Multimedia: 3 articulated credits; Delaware Technical Community College (DTCC)

- VSC115 – Intro to Design: 3 credits

Photo Imaging: 3 articulated credits; Delaware Technical Community College (DTCC)

- VSC115 – Intro to Design: 3 credits

List technical skill attainment measures for the program of study (i.e. industry recognized certification or license, advanced placement, dual enrollment, transcripted and/or articulated credit, credit by exam):

☐ Certification/credentialing exam (specify):
☐ Licensing exam (specify):
☐ Nationally recognized exam (specify):
☒ Advanced standing (specify):
Delaware Technical Community College:
VSC115 – Intro to Design: 3 credits
☐ Other (specify):

POS OVERVIEW, COURSE DESCRIPTIONS, END-OF-COURSE, AND PROGRAM ASSESSMENTS

Provide a CTE program of study overview that broadly describes the program and student expectations. Identify end-of-program assessment(s) and opportunities for students to participate in early college and early career experiences. List each course title in the CTE program of study. Provide an overview of each course and define what students should know and be able to demonstrate upon completion of each level. Identify appropriate end-of-course assessment(s).

CTE Program of Study Overview:

The Digital Communication Technology (DCT) program of study is a three (3) course Career & Technical Education (CTE) instructional program of study that requires students to apply the skills and tools of digital designers used in graphic design, pixel-based imagery manipulation, HTML coding, digital video production, vector image manipulation, digital illustration, and digital publishing. Students utilize strategies to solve open-ended problems while learning how to apply technical skills, creative skills, industry knowledge, documentation techniques, and processes using modern, industry-leading technology and software. Client-based learning experiences and industry-mentored projects introduce students to a wide array of related careers in public relations, marketing, web and digital communications and printing.

- **Foundations of Digital Design (FDD)** introduces students to the foundational principles, techniques, and skills of visual communications. Students learn the elements and principles of design, color theory, typography, packaging/promotional design, copyright/fair use, and image manipulation techniques along with the communication skills required to work within the media industry and client based realm. Students begin to develop the capstone cumulative professional portfolio.

- **Processes of Digital Production (PDP)** engages students to produce media and design content using the computer as an artistic medium. Students are prepared with the skills to develop digital files in Adobe Photoshop. Students learn raster image manipulation, editing, software application, publishing, digital media literacy, HTML coding, web development, and the delivery of digital products. Using the software, students will see their original design concepts and brainstorming come to actualization in the digital world. Students continue to develop the capstone cumulative portfolio through production of their media and design concepts.

- **Applications of Digital Design (ADD)** engages students in the use of the computer as an illustrative medium and film as an influential medium. Through the use of Adobe Illustrator and video production software, students prepare work in digital video production, video editing, and broadcasting of digital videos. Students are prepared in Adobe Illustrator with a focus on vector image manipulation, editing, illustration, publishing, and the delivery of digital products. Capstone skills learned from prior coursework are applied for students to develop client-based design work through district and community partnerships to with the completion of the capstone cumulative portfolio professional portfolio.

End-of-Program Assessment(s):

☐ Certification/credentialing exam (specify):
☐ Licensing exam (specify):
☐ Nationally recognized exam (specify):

☒ Other (specify): Professional Portfolio - Student Work Samples

Course title:

Foundations of Digital Design (FDD)

Course description (include prerequisites):

Foundations of Digital Design (FDD**)** introduces students to the foundational principles, techniques, and skills of visual communications. Students learn the elements and principles of design, color theory, typography, packaging/promotional design, copyright/fair use, and image manipulation techniques along with the communication skills required to work within the media industry and client based realm. Students begin to develop the capstone cumulative professional portfolio.

Course knowledge and skills (what students will be able to do):

By the end of this course students will:

1. Apply the basic elements and principles of design to: identify basic elements of design including line, shape, color, value, texture, mass; explain the principles of design including balance, alignment, contrast, unity, proportion; demonstrate how to use basic elements and principles that are appropriate to various design modalities; interpret the four basic Design Layout Principles of proximity, alignment, repetition, contrast, the rule of thirds and the Rule of Phi; construct solutions to visual design problems using fundamental principles of design such as formal reference, touching, overlapping, spatial depth, and perspective; analyze various design materials for their use of levels of messaging; and develop design materials that demonstrate the use of the elements and principles of design both in print and digital production.

2. Create views and models of projects using scale, proportion, and measurement techniques to: apply scale to sketches and layouts in sketchbooks and design assignments; recognize formal reference, touching, overlapping, spatial depth, and perspective; understand scale creation and mathematics; and use a scale ruler to translate actual measurements to scale measurements.

3. Develop packaging and promotional design for a product that conforms to specific branding requirements to: create samples of packaging using naming, logo design, and positioning conventions through digital and print development; generate a branding campaign to expand a project's reach into various markets through media application and variety; explain and fabricate samples of product identity development such as container and packaging design; produce promotional design for various products through the identification of product and client need, branding application, and demographic study; identify target markets and audiences, as well as how to use graphic design to appeal to those target markets; and demonstrate the use of branding development from conceptualization to production.

4. Assess samples of page design, magazine structure, packaging, and visual display to understand their structures, and construct samples that are effective in conveying information to: examine

samples of page design, magazine structure, packaging, and visual display to understand their structures; describe levels of messaging: primary (direct level), sublevels, target audience, and audience connection (intellect, emotion, nostalgia, memorable devices); analyze the three aspects of successful composition pertaining to delivery of message, use of the elements and principles, and aesthetically pleasing content; develop a morgue file of creative solutions to visual problems that will serve as an idea library; and develop a concept-oriented problem solving process.

5. Utilize color theory and typography to enhance and further develop design skills through realistic assignment development to: describe the basic components of typographic forms through specific vocabulary use and identification of features; identify typography traits including set width, point size, counter space, serif, uppercase, lowercase, stem, stress, stroke, hairline, base line, waistline, ascender line, descender line, ascender, descender; recognize type styles including bold, italic, regular, condensed; identify various typefaces through analysis and introductory level typeface design including serif, sans serif, square serif, cursive/script, decorative/novelty, black letter; apply the fundamentals of basic color theory in a series of simple design projects; apply the concept of the color wheel and primary, secondary, tertiary colors; explain the use of subtractive and additive color in design development using color terminology; classify color schemes of complementary, monochromatic, dichromatic, analogous, and triadic; and analyze professional and peer level designs for use of typography and color theory to enhance audience understanding.

6. Compose, execute, and present projects that clarify and visually communicate a concept to a client while making use of constructive criticism to: develop poise and presentation skills through a series of increasingly formal project presentations; identify key elements of a solution to a visual communications problem that would be most effectively presented to a potential client; utilize formatting techniques including primary format requirements, design format for print and web, resolution print and web, and imposition; apply file exporting to .jpeg, .pdf, .png, .eps, .tiff, .gif, vector vs. bitmap; select, create, and present a concept for the marketing communications needs of a product or service using three visual elements and proper formatting techniques; create a formal presentation of the visual elements necessary to communicate an idea for a product or service; critique and analyze peer or professional designs through the application of specific vocabulary learned in class both through verbal and written form; and assess design need and develop clear presentation of design choices for web or print as well as final production needs including file format.

7. Implement professional technique for client based work through the use of the design process, work ethic, and time management to: assess client based need for requirements including layout development, formatting, and audience understanding; apply the design process of a 1st client meeting, research/brainstorm, thumbnail sketches, rough draft, second client meeting, initial draft, final meeting/edits, and final draft production; develop client design pieces that demonstrate quality use of the design elements and principles, color theory, typography, and audience engagement; utilize concepts of professionalism to demonstrate quality work ethic and time management for various client based projects and assignments; and demonstrate the application of copyright laws, copyright infringement, fair use, creative commons and trademark.

8. Employ basic Adobe Photoshop features to begin digital design development to: develop an understanding of the basic Photoshop interface through practice with new document set up; understand the use of image size, resolution, color setting, and filename development; apply the use of basic workspace features to develop digital design layout at an introductory level including the options bar, menu bar, toolbar, layers panel, move tool, panels/windows; demonstrate the application of foundational design concepts through digital design enhanced by Photoshop tools; and apply the use of the type tool, shape tool, gradient tool, and move tool.

End-of-Course Assessment(s):

- ☒ Teacher designed assessment and Portfolio, reviewed by teacher
- ☐ LEA designed assessment:
- ☐ Certification/credentialing exam (specify):
- ☐ Licensing exam (specify):
- ☐ Nationally recognized exam (specify):
- ☐ Other (specify):

Course title:

Processes of Digital Design (PDP)

Course description (include prerequisites):

Processes of Digital Production (PDP) engages students to produce media and design content using the computer as an artistic medium. Students are prepared with the skills to develop digital files in Adobe Photoshop. Students learn raster image manipulation, editing, software application, publishing, digital media literacy, HTML coding, web development, and the delivery of digital products. Using the software, students will see their original design concepts and brainstorming come to actualization in the digital world. Students continue to develop the capstone cumulative portfolio through production of their media and design concepts.

Prerequisite: Foundations of Digital Design (FDD)

Course knowledge and skills (what students will know and be able to do):

By the end of this course, students will be able to:

1. Demonstrate the use of the Macintosh platform to: access, use, and store data; use the various operational basics of the Macintosh system; create and store files in proper areas; and demonstrate the ability to organize workspace, files, and documents.

2. Apply the basic elements and principles of design to: explain image resolution, image size, and image file format for web, video, and print; define key terminology of digital images including dots per inch (dpi), and pixel count and dimension; demonstrate the understanding of image manipulation errors that occur when improper editing is used including pixelated image quality (low resolution) and stretched, manipulated, or distorted images; identify design principles, elements,

and image composition including elements of line, shape, color, value, texture, mass, principles of balance, alignment, contrast, unity, proportion, repetition, proximity, design layout principles of proximity, alignment, repetition, contrast, the rule of thirds and the Rule of Phi; and analyze various design materials for their use of levels of messaging; develop design materials that demonstrate the use of the elements and principles of design both print and digital.

3. Utilize project planning, project management, copyright and fair use, and teamwork principles to the design of visual communication projects to: interpret the purpose, audience, and audience needs for preparing image(s) that meet design brief requirements; apply design brief requirements including purpose, target audience, research information, branding, format requirements, demographics, and target audience; communicate design plans with other members of the design team and clients; apply critique technique throughout process of design; discuss standard copyright rules for images and image; describe project management tasks and responsibilities; and create a review and redesign cycle based on feedback.

4. Use Adobe Photoshop software to edit and create digital photography and digital images to: identify and explain elements of the Photoshop user interface and its functions including new document set up, workspace arrangement and design, options bar application, layers panel use, menu bar, and toolbar application and use; use image generating devices, and discuss the types of images they create; demonstrate the use of technical skills that are utilized by digital photographers in the field including frame, angle, ISO, aperture, shutter speed, dynamic lighting, composition development, and rule of thirds; utilize the adjustment layers of Photoshop to develop digital photography; demonstrate how to access digital images in Photoshop including importing images and the mini Adobe bridge tab; employ color correction using Photoshop through color correction tool and other features; illustrate layers and masks including application of layer styles, blending options, organizing layers through grouping, linking, folders, applying layer masks; demonstrate importing, exporting, organizing, and saving digital images including file extension application; produce and reuse images; and select the appropriate features and options required to implement a color management workflow.

5. Draw digital-based images and add text using Adobe Photoshop to: demonstrate working with selections through the application of various selection tools and their individual features found in the options bar including the rectangular marquee, elliptical marquee, lasso tool, polygonal lasso, magnetic lasso, magic wand and quick selection tool; employ guides and rulers, successfully transform, size, scale, rotate, warp and/or skew images; adjust or correct the tonal range, color, or distortions of an image; illustrate retouching and blending images using the patch tool, healing brush tool, spot healing tool, and clone stamp; demonstrate drawing and/or painting using Photoshop tools and corresponding panels such as the paint brush/paint brush panel, pencil tool and history brush tool; demonstrate manipulation of type using type warping and free transform features; use Photoshop filters and filter gallery; and apply the pen tool to design to create vector graphics using pen tool, add anchor point/subtract anchor point, setting anchor points, path panel and select and direct select tool.

6. Create images and graphics for web, print, and video to: prepare images for web, print, and video; define the use of print resolution minimum dpi as 300dpi, and web resolution use of 72dpi for format requirements; apply file exporting for use of jpeg, .pdf, .png, .eps, .tiff, .gif, and explain vector images compared to bitmap images; describe video frames per second (fps) in video planning and exporting formats including .mp4, .mov, and compression; and develop for web basic html, wysiwyg and cms use.

7. Present and defend designs, layouts, and technical merits of work, and use constructive criticism from formal critiques to make improvements to: demonstrate how to mount, matte, or use another method display work for presentation; and present design in a formal critique, incorporate constructive criticism to make improvements.

8. Demonstrate the application of basic web design techniques to develop an online portfolio to: explain how websites function on the internet in terms of search engine optimization, keyword search, hypertext markup language (HTML); develop basic html tags that allow for content management branding within a content management site including opening/closing tag, title, head, body, image and space; demonstrate the use of font development for the web including web safe fonts, text styles and contrasting type; apply basic web concepts and visual hierarchy to the development of a basic introductory webpage through an online content management or wysiwyg site (non-coding required) by applying 5 second rule, scanning patterns in terms of first seen- large blocks of color/images, second seen- graphics, third seen- text, divine proportions, continuity, law of Proximity, law of Similarity, law of Symmetry; and develop a portfolio of student work through an online content management system that has a base page, photography portfolio, and design portfolio.

End-of-Course Assessment(s):

- ☒ Teacher designed assessment and Portfolio, reviewed by teacher
- ☐ LEA designed assessment
- ☐ Certification/credentialing exam (specify):
- ☐ Licensing exam (specify):
- ☐ Nationally recognized exam (specify):
- ☐ Other (specify):

Course title:

Applications of Digital Design (ADD)

Course description (include prerequisites):

Applications of Digital Design (ADD) engages students in the use of the computer as an illustrative medium and film as an influential medium. Through the use of Adobe Illustrator and video production software, students prepare work in digital video production, video editing, and broadcasting of digital videos. Students are prepared in Adobe Illustrator with a focus on vector image manipulation, editing, illustration, publishing, and the delivery of digital products. Capstone skills learned from prior

coursework are applied for students to develop client-based design work through district and community partnerships to with the completion of the capstone cumulative professional portfolio.

Prerequisite: Processes of Digital Design (PDP)

Course knowledge and skills (what students will know and be able to do):

By the end of this course, students will be able to:

1. Apply the basic elements and principles of design to: identify basic elements of design including line, shape, color, value, texture, mass; explain the principles of design including balance, alignment, contrast, unity, proportion; demonstrate how to use basic elements and principles that are appropriate to various design modalities; interpret the four basic Design Layout Principles of proximity, alignment, repetition, contrast, the rule of thirds and the Rule of Phi; construct solutions to visual design problems using fundamental principles of design such as formal reference, touching, overlapping, spatial depth, and perspective; analyze various design materials for their use of levels of messaging; and develop design materials that demonstrate the use of the elements and principles of design both in print and digital production.

2. Employ project planning, project management, and teamwork as they pertain to the design of visual communication projects incorporating vector graphics to: interpret the purpose, audience, and audience needs for preparing images that meet design brief requirements; communicate design plans with other members of the design team and clients; discuss standard copyright rules for images and image use; describe project management tasks and responsibilities; and create a review and redesign cycle based on feedback and the design process previously learned.

3. Develop images and graphics for web, print, and video to: prepare images for web, print, and video; explain the difference between files saved for web and print; and demonstrate the use of file extensions for various client need.

4. Create, present, and defend designs, layouts, and technical merits of work, and use constructive criticism from formal critiques to make improvements to: mount, matte, or use another method display work for presentation; present design in a formal critique through specific vocabulary and concepts discussion; incorporate constructive criticism to make improvements; and provide constructive criticism in professional discussions for peer or client work.

5. Access, use, and store data using the Macintosh platform to: use the various operational basics of the Macintosh system; create and store files in proper areas that allow for simple access and organization of content; export files in correct format for video needs including web, film, and DVD creation.

6. Apply the basic elements and principles of design to: explain image resolution, image size, and image file format for web and video; identify design principles, elements, and image composition in terms of influence on video composition; and define key terminology of digital and video files including frames per second, NTSC, PAL, and compression rate.

7. Utilize project planning, project management, copyright, fair use, and teamwork principles to video production to: interpret the purpose, audience, and audience needs for preparing images that meet design brief requirements, communicate design plans with other members of the design team and clients; discuss standard copyright rules for images and image use; describe project management tasks and responsibilities including pre-production, production, and post-production concepts; develop projects using a system of design that allows for planning of content, script writing, storyboard development, shot list application, creative development, team conferencing, and job assignment; create a review and redesign cycle based on feedback; and develop various video compositions that allow for application of content.

8. Employ Adobe Premiere software or Final Cut Pro to edit video and create motion graphics to: identify and explain elements of the Premiere of FCP user interface and its functions as they pertain to quality video development; define key terminology of videography as it applies to editing including clip creation, effects, transitions, title placement, color correction, exposure correction, audio enhancement, and multiple track development; employ color grading, exposure, and effects using Premiere or FCP; discuss video editing concepts including the impact a jump cut has on video quality and the importance of continuity within film and video; identify the use of key frames within tracks for audio adjustment and video enhancement including scaling, opacity, and color balance; illustrate appropriate use of text layers and transitions within video development; apply layers and video timelines to create multi-level tracks; and import, export, and save media files for various format requirements.

9. Use digital video camera functions and video capturing techniques to: set exposure levels for subject matter; record video that demonstrates quality framing through lead room and headroom; explain the use of the rule of thirds for quality composition; identify the difference in footage using autofocus and manual focus; demonstrate an understanding of brightness within footage and how it impacts quality; record photographic images; create stabilized video through the application of learned techniques; develop film using various shot types including extreme wide shot, wide shot, full shot, mid shot, close up, extreme close up, master shot, establishing shot, over the shoulder shot, two shot, follow shot, cut in and cut away; apply various camera angles to footage including low angle, high angle, worm's eye view, bird's eye view, and perspective; discuss manipulation of camera settings and the impact they have on footage; identify lighting structures within film and apply them to original work; clarify the use of depth of field through written and visual explanation; utilize filming techniques such as trucking, dollying, panning, and tilting; enhance video footage through application of skills learned to develop quality film pieces within various genres; prepare video for web or digital versatile disc (DVD); prepare images for web and DVD; compress files using specified format requirements; create exported consolidated footage; create, present, and defend designs, layouts, and technical merits of work, and use constructive criticism in formal critiques to make improvements; mount, matte, or otherwise display work for presentation purposes; and develop complete video pieces within various genres and client need utilizing creative and technical skills.

End-of-Course Assessment(s):

- ☒ Teacher designed assessment
- ☒ LEA designed assessment- Portfolio Capstone Project
- ☐ Certification/credentialing exam (specify):
- ☐ Licensing exam (specify):
- ☐ Nationally recognized exam (specify):
- ☐ Other (specify):

PROGRAM OF STUDY CURRICULUM

Identify the method of technical and academic curriculum development (adopted, adapted, or developed in accordance with guidance from the program advisory committee).

POS technical and academic curriculum will be:

- ☐ Adopted (specify source):
- ☒ Adapted (specify source): Delaware Technical Community College (DTCC) VSC115; VSC160; VSC161; VSC190
- ☐ Developed locally (describe):
- ☐ Other (specify):

TEACHER CERTIFICATION

Provide valid teacher certification(s), candidate experience, pre-requisite and requisite licensure or certification requirement(s) for POS teachers.

POS teacher requirements include:

- ☒ Teacher certification(s) (list): Business or Marketing Education; Technology Education; Skilled and Technical Sciences (STS) in Web and Digital Communications; Visual Arts (Digital Communication Technology).
- ☒ Candidate experience (describe): Candidate may have experience in the creation of special effects, visual images using film, video, computers, or other electronic tools and media for use in creations, such as movies, music videos, commercials, layout and production design for advertisements, brochures, magazines, corporate reports, and product packaging or experience with the application of HTML, XML, Javascript, graphics applications, and other authoring tools to the design, editing, and publishing (launching) of documents, images, graphics, sound, and multimedia products on the World Wide Web. Candidate should also have a detailed understanding of Internet theory, web page standards and policies, elements of web page design, user interfaces, vector tools, special effects, interactive and multimedia components, search engines, navigation, morphing, e-commerce tools, and emerging web technologies. For more information, please see the Bureau of Labor Statistics: Web developers; and/or Multimedia Artists.
- ☐ Pre-requisite professional licensure or certification requirement(s) (list):
- ☐ Requisite professional licensure or certification requirement(s) (list):
- ☐ Other (describe):

VALUE-ADDED OPPORTUNITIES

List extended early career and college credit opportunities available during the student's senior year. Document transition services, cooperative learning experiences, additional dual enrollment, or other.

Opportunities for extended and accelerated learning include:

- ☐ Cooperative education (describe):
- ☐ Structured internship (describe):
- ☐ Dual enrollment (list):
- ☐ Advanced Placement (list):
- ☐ Transition services (describe):
- ☐ Other (describe):

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

Indicate the Career and Technical Student Organization (CTSO) that will be offered by checking the appropriate box.

- ☐ BPA
- ☐ DECA
- ☐ TSA

PROGRAM OF STUDY MATRIX

Complete the program of study matrix to demonstrate the alignment of academic and technical courses, culminating early career and early college experiences. Identify appropriate certification and licensure options, opportunities for obtaining early college credit (courses with articulated or dual enrollment credit agreements should be appropriately designated within the matrix), the post-secondary program sequence, and potential career options. Attach the Program of Study Matrix.

Access the Program of Study Matrix.

DEPARTMENT OF EDUCATION PROGRAM OF STUDY APPROVAL		
The following section will be completed by staff from the Delaware Department of Education, CTE & STEM Office and reported to the LEA as part of the CTE program of study approval process.		
Date Delaware CTE Program of Study Application Received:		
Local Education Agency (LEA): School(s):		Program of Study Start Date:
LEA CTE Coordinator Name:	Phone:	E-Mail Address:
Career Cluster & Code: Arts, AV Tech & Communications / 3	Career Pathway & Code: Visual Arts / 3.03	Program of Study Title & Code: Digital Communication Technology / 3.03604
CTE Program of Study Course Titles, Course Codes, and Funding Levels: 1. Foundations of Digital Design (FDD) / 3.03604011 / 2 2. Processes of Digital Design (PDD) / 3.03604022 / 3 3. Applications of Digital Design (ADD) / 3.03604033 / 3		
CTE Concentrator/Completer Course Titles: Concentrator Course: Processes of Digital Design (PDD) / 3.03604022 Completer Course: Applications of Digital Design (ADD) / 3.03604033		
CTE Program of Study Request: ☒ State-model CTE Program of Study ☐ Local CTE Program of Study		
CTE Program of Study Attachments: ☒ Labor Market Information (LMI) Review; ☒ Articulation/Dual Enrollment Agreement(s); and ☒ Program of Study Matrix.		
DDOE CTE & STEM Director Signature:		Date:
DDOE Chief Academic Officer Signature:		Date: