Career-Technical Credit Transfer (CT)²
Interactive Media Technology Career-Technical Assurance Guide (CTAG)
February 20, 2015

The following courses, indicated by a Career-Technical Articulation Number (CTAN), are eligible for post-secondary credit and transfer among Ohio's public secondary career-technical institutions and state institutions of higher education. The SCTAI alignment document with ODE competencies and post-secondary learning outcomes can be found on the ODHE website at https://www.ohiohighered.org/sctai/ctags.

CTIM001 2-D Animation	**Credits: 3 Semester Hours**
Advising Notes: In order to access post-secondary college credit for this CTAN, the student must adhere to the following: • Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program. • Successfully complete the **ODE secondary course [Animation (145115)]** and earn a qualifying score on the corresponding End of Course examination of 55 **or higher**. Students should be able to create animations using software such as *Adobe Flash^{tm}* and have some basic knowledge of scripting. This class will commonly be taught using *Adobe Flash^{tm}*.	**CERTIFICATE OF AFFIRMATION** can be used for course submission through CEMS. https://www.ohiohighered.org/transfer/ct2/affirmation
CTIM002 Raster Graphics	**Credits: 3 Semester Hours**
Advising Notes: In order to access post-secondary college credit for this CTAN, the student must adhere to the following: • Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program. • Successfully complete the **ODE secondary course [Creating and Editing Digital Graphics (145100)]** and earn a qualifying score on the corresponding End of Course examination of **55 or higher**. **This class will commonly be taught using *Adobe Photoshop.***	**CERTIFICATE OF AFFIRMATION** can be used for course submission through CEMS. https://www.ohiohighered.org/transfer/ct2/affirmation

CTIM003 Vector Graphics	Credits: 3 Semester Hours
Advising Notes: In order to access post-secondary college credit for this CTAN, the student must: • Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program. • Successfully complete the **ODE secondary course [Multimedia and Image Management Techniques (145105)]** and earn a qualifying score on the corresponding End of Course examination of **60 or higher**. This class will commonly be taught using *Adobe Illustrator^{tm}*.	**CERTIFICATE OF AFFIRMATION** can be used for course submission through CEMS. https://www.ohiohighered.org/transfer/ct2/affirmation
CTIM004 Internet and Web Languages	Credits: 3 Semester Hours
Advising Notes: In order to access post-secondary college credit for this CTAN, the student must: • Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program. • Successfully complete the **ODE secondary course [Web Design (145010)]** and earn a qualifying score on the corresponding End of Course examination of **55 or higher**. This course is NOT a pre-requisite for Graphical Web Design. Students need not fulfill the requirements for this class to receive credit for the Graphical Web design class if they meet the outcomes of Graphical Web Design.	**CERTIFICATE OF AFFIRMATION** can be used for course submission through CEMS. https://www.ohiohighered.org/transfer/ct2/affirmation
CTIM005 Graphical Website Design	Credits: 3 Semester Hours
Advising Notes: In order to access post-secondary college credit for this CTAN, the student must: • Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program. • Successfully complete the **ODE secondary course [Interactive Application Development (145125)]** and earn a qualifying score on the corresponding End of Course examination of **55 or higher**. Graphical Website Design is a course designed to use software such as Adobe Dreamweaver^{tm} to create and manage a Website.	**CERTIFICATE OF AFFIRMATION** can be used for course submission through CEMS. https://www.ohiohighered.org/transfer/ct2/affirmation

CTIM006 Digital Video Production	Credits: 3 Semester Hours
Advising Notes: In order to access post-secondary college credit for this CTAN, the student must: • Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program. • Successfully complete the **ODE secondary course [Video and Sound (145110)]** and earn a qualifying score on the corresponding End of Course examination of **60 or higher**. This course may use any number of editing platforms and equipment relevant to the industry.	**CERTIFICATE OF AFFIRMATION** can be used for course submission through CEMS. https://www.ohiohighered.org/transfer/ct2/affirmation
CTIM007 3-D Modeling and Animation	Credits: 3 Semester Hours
Advising Notes: In order to access post-secondary college credit for this CTAN, the student must: • Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program. • Successfully complete the **ODE secondary course [3D Techniques (145120)]** and earn a qualifying score on the corresponding End of Course examination of **55 or higher**.	**CERTIFICATE OF AFFIRMATION** can be used for course submission through CEMS. https://www.ohiohighered.org/transfer/ct2/affirmation
CTIM008 Electronic Publishing	Credits: 3 Semester Hours
Advising Notes: In order to access post-secondary college credit for this CTAN, the student must: • Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program. • Successfully complete the **ODE secondary course [Design Techniques (145095)]** and earn a qualifying score on the corresponding End of Course examination of **55 or higher**.	**CERTIFICATE OF AFFIRMATION** can be used for course submission through CEMS. https://www.ohiohighered.org/transfer/ct2/affirmation

Each CTAN identifies the learning outcomes that are equivalent or common in introductory technical courses. In order for students to be able to receive credit under these agreements, the career-technical programs and the state institutions of higher education must document that their course/program content matches the learning outcomes in the CTANs. In accordance with Ohio Revised Code 3333.162, industry standards and certifications provide documentation of student learning. Recognized industry standards are expectations established by business, industry, state agencies, or professional associations. These standards define training program curricular requirements, establish certification or licensure criteria, and often serve as the basis for program accreditation. Where there are not recognized industry standards that define curriculum, statewide faculty panels define the curricular requirements, then seek input and consensus from institutions statewide.

Requirements and Credit Conditions:

1. The receiving institution must have a comparable program, major, or courses that have been approved through submission to the Ohio Department of Higher Education (CT)[2] approval process for the CTANs listed in this document.
2. Credits apply to courses in the specified technical area at Ohio's public institutions of higher education, provided that the institution offers courses in the specific technical area. In the absence of an equivalent course, and when the institution offers the technical program, the receiving institution will guarantee to grant and apply an equivalent credit value of the Career-Technical Articulation Number (CTAN) toward the technical requirements of the specific degree/certificate program.
3. The applicant must provide proof to the receiving institution that she/he completed a course or program that has been approved through the (CT)[2] approval process and that she/he holds the appropriate credential or has passed the end-of-course assessment(s).
4. A career-technical student seeking credit under the terms of this CTAG must apply and be accepted to the college within three years of completing a career-technical education program/course or within the currency of the industry certificate or license.
5. A career-technical student who meets all eligibility criteria will receive the credit hour value for the comparable course(s) as offered at the receiving state institution of higher education.
6. The admission requirements of individual institutions and/or programs are unaffected by the implementation of (CT)² outcomes.
7. The transfer of credit through this CTAG will not exempt a student from the residency requirements at the receiving institution.

Secondary Career-Technical students must complete the courses in the Interactive Media pathway to be eligible for credit under this CTAG. This pathway is outlined in the Ohio Department of Education's *Information Technology Career Field Technical Content Standards.*

CTIM001 – 2-D Animation

General Course Description: 2-D Animation focuses on the creation and distribution of interactive, computer-based animations. Students create **tweened** and cell animations as well as interactive animations and navigation structures. Students gain basic knowledge of common scripting languages such as *ActionScript.*

Credits: 3 Semester Hours

Learning Outcomes:

1. * Utilize the interface and tools of industry standard 2-D Animation authoring software
2. * Create 2-D animations using industry standard authoring software
3. * Create interactive 2-D animations
4. * Perform advanced editing techniques within 2-D Animations
5. * Integrate 2-D animations with other applications
6. * Generate images in the appropriate output format for intended use
7. * Incorporate interactive media elements such as sound, video, vector, and raster graphics in a 2-D animation

*****Asterisk Indicates Essential Learning Outcomes***

CTIM002 – Raster Graphics

General Course Description: Raster graphics covers the use of editing and creating pixel based images. Students manipulate images by improving image quality, adding graphic design elements, and building compositions for the use in other interactive media projects or as their own documents. Topics range from the capturing of raw images through a completed project.

Credits: 3 Semester Hours

Learning Outcomes:

1. * Utilize the interface and tools of industry standard raster graphics editing software
2. * Create and edit raster graphics using industry standard hardware and software
3. * Perform advanced editing techniques with raster graphics
4. * Integrate raster graphics with other applications
5. * Generate images in the appropriate output format for intended use
6. * Use various methods of acquiring raster graphics including digital cameras, scanning, and stock media

Asterisk Indicates Essential Learning Outcomes

CTIM003 – Vector Graphics

General Course Description: Vector Graphics focuses on the creation and editing of resolution-independent images. Students use digital drawing techniques to create vector graphics for the use in other interactive media projects or as independent compositions. Topics range from the creation of vector graphics through choosing the appropriate output method for their intended use.

Credits: 3 Semester Hours

Learning Outcomes:

1. * Utilize the interface and tools of industry standard vector graphics editing software
2. * Create vector graphics using drawing tools with industry standard tools
3. * Edit vector graphics using industry standard hardware and software
4. * Perform advanced editing techniques with vector graphics
5. * Integrate vector graphics with other applications
6. * Generate images in the appropriate output format for intended use

Asterisk Indicates Essential Learning Outcomes

CTIM004 – Internet and Web Languages

General Course Description: Internet and Web Languages is an introductory course in Internet technologies and creating Web sites using markup, styling, and scripting languages such as HTML and CSS. Students understand the general nature, function, and structure of the Internet and World Wide Web and develop a simple, static, Web site using a text editor.

Credits: 3 Semester Hours

Learning Outcomes:

1. * Articulate how the Internet and World Wide Web function, including the client/server architecture, the role of Internet Service Providers, and apply basic Internet applications
2. * Understand the issues related to interface design for the World Wide Web
3. * Explain the nature and functions of Web various Web languages, including but not limited to HTML, XHTML, XML, CSS, JavaScript
4. * Create a Web page using a text editor, and standard Web languages
5. * Design a static Web site including page layout and navigation using a text editor

Asterisk Indicates Essential Learning Outcomes

CTIM005 – Graphical Website Design

General Course Description: Graphical Web Site Design concentrates on the development and Management of Web sites using a WYSIWYG Web site management tool. Students create a multimedia Web site from the project planning stage through usability testing.

Credits: 3 Semester Hours
Learning Outcomes:

1. * Understand customer needs, information requirements and project scope for Web site development
2. * Create and maintain a Web site using industry standard Web development and management software
3. * Create a page layout using industry standard Web development and management software
4. * Add multimedia elements to a Web site
5. * Understand a Web site usability test

Asterisk Indicates Essential Learning Outcomes

CTIM006 – Digital Video Production

General Course Description: Digital Video focuses on the development of video from the pre-production process through the production and post-production phases. Students plan, shoot, edit, and distribute a video as part of a production team. Topics include preparing a script, developing a shot list, videography, editing footage, adding sound tracks, exporting and rendering video for various uses in various formats.

Credits: 3 Semester Hours
Learning Outcomes:

1. * Provide technical support tasks of video pre-production
2. * Analyze the relationship between the various members of a video production team
3. * Operate video cameras, camcorders, and other equipment
4. * Identify video formats characteristics, benefits, and limitations
5. * Edit digital video including adding sounds, still images, and sound
6. * Import and export digital video
7. * Utilize a video production cycle for pre-production, production, and post-production

Asterisk Indicates Essential Learning Outcomes

CTIM007 – 3-D Modeling and Animation

General Course Description: This course covers the basics of 3-D modeling and animation techniques, including lighting/shadow, textures and cameras. Students learn to identify and use an industry standard 3-D development environment to create characters and graphics.

Credits: 3 Semester Hours

Learning Outcomes:

1. * Utilize the interface and tools of industry standard 3-D Animation development environments
2. * Apply the principles of 3-D modeling
3. * Create, Texture and Render 3-D models using industry standard development environments
4. * Perform basic and advanced 3-D animation and image generation techniques

Asterisk Indicates Essential Learning Outcomes

CTIM008 – Electronic Publishing

General Course Description: Electronic publishing focuses on the creation of print and electronic documents using industry-standard page-layout software. Students learn to plan, create and distribute electronic publications.

Credits: 3 Semester Hours

Learning Outcomes:

1. * Plan page-layout projects
2. * Choose appropriate media elements to meet project output needs
3. * Understand color models
4. * Apply graphic design principles
5. * Integrate knowledge of typography in interactive media projects

Asterisk Indicates Essential Learning Outcomes

Interactive Media Panel Participants
Fall 2014

Justin McCrea	Stark State College	SCTAI Lead Panel Expert
Tom Dulaney	Eastern Gateway Community College	SCTAI Lead Expert
Dave Hubble	University of Cincinnati	SCTAI Panel Expert
Brittney Miller	Central Ohio Technical College	SCTAI Panel Expert
Cindy Berelsman	Wright State University	SCTAI Panel Expert
Maria Bleahu	Stark State College	Item Writer
Teresa Richter	Wright State University	Item Writer
Jeff Stickler	Hocking College	Item Writer
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Aaron Stewart	Ohio Department of Education	Program Specialist
Dr. Robert Haas	Ohio Department of Higher Education	SCTAI Special Coach
Jamilah Tucker	Ohio Department of Higher Education	Director of Career-Technical Transfer Initiatives
Anne Skuce	Ohio Department of Higher Education	Senior Associate Director, SCTAI
Misty McKee	Ohio Department of Higher Education	Assistant Director, SCTAI
Jessi Spencer	Ohio Department of Higher Education	Administrative Coordinator of SCTAI