

Professional Technical Studies: Information Technology Cluster
Interactive Media Pathway

Strand:

PT-ITM1

Interactive Media Customer Requirements

Students identify client needs and product expectations.

Standard:

PT-ITM1a: The student will gather data to identify customer requirements so as to:

Component:

PT-ITM1a.1: determine client's needs and expected outcomes.

Standard:

PT-ITM1b: The student will interpret and evaluate customer requirements so as to:

Components:

PT-ITM1b.1: determine purpose of the interactive media product;

PT-ITM1b.2: determine the target audience; and

PT-ITM1b.3: determine the interactive media elements to be used.

Strand:

PT-ITM2

Interactive Media Product Specifications

Students derive product specifications based on client needs and expectations.

Standard:

PT-ITM2a: The student will prepare functional specifications for interactive media product so as to:

Components:

PT-ITM2a.1: develop flowchart and/or navigational blueprints;

PT-ITM2a.2: determine delivery platform;

PT-ITM2a.3: design user interface; and

PT-ITM2a.4: design navigational schematic.

Standard:

PT-ITM2b: The student will create final project plan so as to:

Components:

PT-ITM2b.1: identify and obtain tools and resources to do the job;

PT-ITM2b.2: identify and evaluate risks;

PT-ITM2b.3: develop detailed task list;

PT-ITM2b.4: identify critical milestones; and

PT-ITM2b.5: identify interdependencies.

Strand:

PT-ITM3

Tools for Media Production, Development, and Project Management

Students select technology tools based on client requirements and product specifications.

Standard:

PT-ITM3a: The student will select and use appropriate software tools so as to:

Components:

PT-ITM3a.1: demonstrate proficiency in the use of digital-imaging techniques and equipment;

PT-ITM3a.2: synthesize available interactive media technologies into a unified presentation using appropriate authoring software;

PT-ITM3a.3: demonstrate knowledge of available graphics software programs;

PT-ITM3a.4: manipulate images; and

PT-ITM3a.5: demonstrate knowledge of the basic principles of animation.

Strand:

PT-ITM4

Web Programming and Hosting

Students learn Web site management including programming, bandwidth issues, client/server management, and Web site hosting.

Standard:	PT-ITM4a:	The student will demonstrate knowledge of Internet programming basics so as to:
Components:	PT-ITM4a.1:	recognize the importance of Internet programming standards;
	PT-ITM4a.2:	demonstrate knowledge of standard Internet programming coding;
	PT-ITM4a.3:	differentiate between various versions of Internet programming;
	PT-ITM4a.4:	demonstrate knowledge of how to use standard programs to produce an Internet application;
	PT-ITM4a.5:	identify authoring programs specifically designed for Internet programming production;
	PT-ITM4a.6:	compare/contrast features, strengths, and weaknesses of different authoring programs;
	PT-ITM4a.7:	identify cross-platform issues; and
	PT-ITM4a.8:	keep up-to-date with new and emerging trends related to Internet programming.
Standard:	PT-ITM4b:	The student will understand the differences between a client and a server so as to:
Component:	PT-ITM4b.1:	differentiate between a client and a server.
Standard:	PT-ITM4c:	The student will understand how bandwidth affects data transmission and onscreen image so as to:
Component:	PT-ITM4c.1:	demonstrate knowledge of how bandwidth affects data transmission and on-screen image.
Standard:	PT-ITM4d:	explain the differences in hosting a Web site on a local server versus at an ISP (Internet Service Provider) so as to:
Component:	PT-ITM4d.1:	compare the advantages and disadvantages of running your own server versus using a server provider.
Standard:	PT-ITM4e:	The student will apply knowledge of basic Web programming so as to:
Components:	PT-ITM4e.1:	demonstrate knowledge of how to interface client/server;
	PT-ITM4e.2:	identify standard scripting languages (e.g., JavaScript, VBScript); and
	PT-ITM4e.3:	demonstrate knowledge of the uses and advantages/ disadvantages of various scripting languages.
Standard:	PT-ITM4f:	The student will explain features and functions of Web-browsing software so as to:
Components:	PT-ITM4f.1:	demonstrate knowledge of the role of browsers in reading files on the World Wide Web
	PT-ITM4f.2:	identify how different browsers and browser settings affect the look of a Web page; and

PT-ITM4f.3: demonstrate knowledge of the characteristics and use of plug-ins.

Strand:

PT-ITM5

Creation and Implementation of Interactive Media Products

Students use functional specifications to create interactive media products.

Standard:

PT-ITM5a: The student will implement functional design criteria so as to:

Components:

PT-ITM5a.1: identify, use, and create reusable components;

PT-ITM5a.2: create and produce content; and

PT-ITM5a.3: create and refine design concepts.

Standard:

PT-ITM5b: The student will create product visual design so as to:

Components:

PT-ITM5b.1: apply principles and elements of design;

PT-ITM5b.2: apply color theory to select appropriate colors;

PT-ITM5b.3: create and/or implement the look and feel of the product;

PT-ITM5b.4: create graphical images;

PT-ITM5b.5: apply knowledge of typography;

PT-ITM5b.6: alter digitized images using an image manipulation program; and

PT-ITM5b.7: evaluate visual appeal.

Standard:

PT-ITM5c: The student will produce or acquire content so as to:

Components:

PT-ITM5c.1: produce or acquire graphics content;

PT-ITM5c.2: produce or acquire animation content;

PT-ITM5c.3: produce or acquire audio content; and

PT-ITM5c.4: produce or acquire video content.

Standard:

PT-ITM5d: The student will integrate media elements so as to:

Components:

PT-ITM5d.1: integrate the use of photographic special effects into media presentations; and

PT-ITM5d.2: integrate photographically derived images with hand-drawn graphic images.

Strand:

PT-ITM6

Testing of Interactive Media Product

Students systematically test the product and make product revisions based on test results.

Standard:

PT-ITM6a: The student will develop and implement a test plan so as to:

Components:

PT-ITM6a.1: perform usability tests;

PT-ITM6a.2: assess product effectiveness;

PT-ITM6a.3: test product for reliability; and

PT-ITM6a.4: revise product design based on test results.

Strand:

PT-ITM7

Use of Writing/Publishing Applications

Students collaborate with others to accomplish goals and objectives.

Standard:

PT-ITM7a: The student will use technology to create and publish information so as to:

Components:	PT-ITM7a.1: create documents (e.g., letters, memos, reports) both with and without templates;
	PT-ITM7a.2: format text using basic formatting functions (e.g., paragraph spacing, margins, bullets, numbering); and
	PT-ITM7a.3: employ word-processing utility tools (e.g., track changes, thesaurus).
Standard:	PT-ITM7b: The student will prepare complex publications so as to:
Components:	PT-ITM7b.1: create new word-processing forms, style sheets, and templates;
	PT-ITM7b.2: prepare publications using desktop-publishing software;
	PT-ITM7b.3: format new desktop-publishing files;
	PT-ITM7b.4: organize content and standardize format from various sources;
	PT-ITM7b.5: output desktop-publishing files; and
	PT-ITM7b.6: create nonprint output for publication (e.g., PDF, postscript).
Standard:	PT-ITM7c: The student will prepare reports and other business communications, integrating graphics and other nontext elements so as to:
Components:	PT-ITM7c.1: use advanced formatting features (e.g., headers/footers/dropped caps, indexing);
	PT-ITM7c.2: place graphics in a document; and
	PT-ITM7c.3: enhance publications using different fonts, styles, attributes, justification, etc.
Strand:	PT-ITM8
	Grammar, Punctuation, and Terminology Students apply mechanics of writing.
Standard:	PT-ITM8a: The student will use description of audience and purpose to prepare written documents so as to:
Components:	PT-ITM8a.1: use technical terms and concepts;
	PT-ITM8a.2: incorporate and use references effectively and accurately; and
	PT-ITM8a.3: report objective and/or subjective information.
Standard:	PT-ITM8b: The student will use computer skills to design and develop written and supporting material so as to:
Component:	PT-ITM8b.1: format written documents with correct font and layout for easy reading.
Strand:	PT-ITM9
	Applications in Computer Graphics Students use technology to create computer graphics.
Standard:	PT-ITM9a: The student will analyze multimedia applications of software/hardware for the purposes of visual communications so as to:
Components:	PT-ITM9a.1: exhibit knowledge of graphic design and related software;
	PT-ITM9a.2: create examples of computer graphics in commercial applications; and
	PT-ITM9a.3: export animations as animated files.

Strand:

PT-ITM10

Leadership and Teamwork

Students collaborate with others to accomplish goals and objectives.

Standard:

PT-ITM10a: The student will produce interactive media as member of a development team so as to:

Components:

PT-ITM10a.1: implement functional design criteria;

PT-ITM10a.2: create product visual design;

PT-ITM10a.3: produce or acquire content; and

PT-ITM10a.3: participate in iterative development with clients and team members.