The approved program standard for Interactive Media Management program of instruction leading to an Ontario College Graduate Certificate delivered by Ontario Colleges of Applied Arts and Technology (MTCU funding code 79403)
Permission to Reproduce

Permission is hereby granted to the following institutions to reproduce this document, in whole or in part, in print or by electronic means, for the following specific purposes, subject to the conditions that follow:

1. By an Ontario college of applied arts and technology for the purposes of implementation of the program standard within a college program, including for the purpose of informing students, potential students, program advisory committees or others about programs of study.
2. By an educational institution or school, for the purpose of informing prospective college students about programs of study at Ontario colleges of applied arts and technology.

Conditions:

1. Every reproduction must be marked “©2012, Queen’s Printer for Ontario” at the beginning of the document or any part of it that is reproduced.
2. No other uses may be made of the document.
3. The document may not be reproduced for sale.
4. The Ministry may revoke the permission to reproduce at any time.

For permission to copy this document, in whole or in part, for other purposes or by other institutions, please contact

Ministry of Training, Colleges and Universities
Programs Branch, Program Standards and Evaluation Unit
23rd floor, Mowat Block
900 Bay Street
Toronto, Ontario
M7A 1L2

Telephone: (416) 325-2874; E-mail: susan.golets@ontario.ca

Inquiries regarding specific Media Arts Design programs offered by colleges of applied arts and technology in Ontario should be directed to the relevant college.

This publication is available on the Ministry's Website.

Cette publication est disponible sur le site Web du ministère.

©2012, Queen’s Printer for Ontario

Acknowledgements

The Ministry of Training, Colleges and Universities acknowledges with thanks the significant contribution of the many individuals and organizations who participated in the development of this program standard. In particular, the Ministry of Training, Colleges and Universities would like to acknowledge the important roles of

- all individuals and organizations who participated in the consultations;

- the coordinators of Interactive Media Management Programs for their assistance throughout the project, the project officer who led the development of the vocational standard, Mary Lou Trowell, seconded faculty member from Cambrian College.
# Table of Contents

## I. Introduction ............................................................................................................. 1  
   Development of System-Wide Program Standards ..................................................... 1  
   Program Standards ............................................................................................................. 1  
   The Expression of Program Standards as Vocational Learning Outcomes ............... 2  
   The Presentation of the Vocational Learning Outcomes ............................................. 2  
   The Development of a Program Standard ................................................................. 2  
   Updating the Program Standard ......................................................................................... 3  

## II. Vocational Standard .............................................................................................. 4  
   Preamble ............................................................................................................................ 4  
   Synopsis of the Vocational Learning Outcomes .......................................................... 5  
   The Vocational Learning Outcomes ............................................................................. 6  
   Glossary ............................................................................................................................16
I. Introduction

This document is the Program Standard for the Interactive Media Management program of instruction leading to an Ontario College Graduate Certificate delivered by Ontario colleges of applied arts and technology (MTCU funding code 79403).

Development of System-Wide Program Standards

In 1993, the Government of Ontario initiated program standards development with the objectives of bringing a greater degree of consistency to college programming offered across the province, broadening the focus of college programs to ensure graduates have the skills to be flexible and to continue to learn and adapt, and providing public accountability for the quality and relevance of college programs.

The Program Standards and Evaluation Unit of the Ministry of Training, Colleges and Universities has responsibility for the development, review, and approval of system-wide standards for programs of instruction at Ontario colleges of applied arts and technology.

Program Standards

Program standards apply to all similar programs of instruction offered by colleges across the province. Each program standard for a postsecondary program includes the following elements:

- **Vocational standard** (the vocationally specific learning outcomes which apply to the program of instruction in question),

- **Essential employability skills** (the essential employability skills learning outcomes which apply to all programs of instruction); and

- **General education requirement** (the requirement for general education in postsecondary programs of instruction).

Collectively, these elements outline the essential skills and knowledge that a student must reliably demonstrate in order to graduate from the program.

Individual colleges of applied arts and technology offering the program of instruction determine the specific program structure, delivery methods, and other curriculum matters to be used in assisting students to achieve the outcomes articulated in the standard. Individual colleges also determine whether additional local learning outcomes will be required to reflect specific local needs and/or interests.
The Expression of Program Standards as Vocational Learning Outcomes

Vocational learning outcomes represent culminating demonstrations of learning and achievement. They are not simply a listing of discrete skills, nor broad statements of knowledge and comprehension. In addition, vocational learning outcomes are interrelated and cannot be viewed in isolation of one another. As such, they should be viewed as a comprehensive whole. They describe performances that demonstrate that significant integrated learning by graduates of the program has been achieved and verified.

Expressing standards as vocational learning outcomes ensures consistency in the outcomes for program graduates, while leaving to the discretion of individual colleges curriculum matters such as the specific program structure and delivery methods.

The Presentation of the Vocational Learning Outcomes

The vocational learning outcome statements set out the culminating demonstration of learning and achievement that the student must reliably demonstrate before graduation.

The elements of the performance for each outcome define and clarify the level and quality of performance necessary to meet the requirements of the vocational learning outcome. However, it is the performance of the vocational learning outcome itself on which students are evaluated. The elements of performance are indicators of the means by which the student may proceed to satisfactory performance of the vocational learning outcome. The elements of performance do not stand alone but rather in reference to the vocational learning outcome of which they form a part.

The Development of a Program Standard

In establishing the standards development initiative, the Government determined that all postsecondary programs of instruction should include vocational skills coupled with a broader set of essential skills. This combination is considered critical to ensuring that college graduates have the skills required to be successful both upon graduation from the college program and throughout their working and personal lives.

A program standard is developed through a broad consultation process involving a range of stakeholders with a direct interest in the program area, including employers, professional associations, universities, secondary schools, and program graduates working in the field, in addition to students, faculty, and administrators at the colleges themselves. It represents a consensus of
participating stakeholders on the essential learning that all program graduates should have achieved.

Updating the Program Standard

The Ministry of Training, Colleges and Universities will undertake regular reviews of the vocational learning outcomes for this program to ensure that the Interactive Media Management Program Standard remains appropriate and relevant to the needs of students and employers across the Province of Ontario. To confirm that this document is the most up-to-date release, contact the Ministry of Training, Colleges and Universities.
II. Vocational Standard

All graduates of the Interactive Media Management program of instruction have achieved the ten vocational learning outcomes listed in the following pages, in addition to achieving the essential employability skills learning outcomes and meeting the general education requirement.

Preamble

Graduates of the Interactive Media Management program possess the ability to creatively design, develop and manage digital text, graphics, animation, video and audio for complex* interactive multimedia applications, including applications for the Internet and/or Mobile applications.

Working on team projects, and/or individually, graduates integrate knowledge and skill acquisition of media technology, interpersonal skills, project development and management, and ethical decision making. They function creatively and professionally within a rapidly changing workplace following industry standards.

Graduates are employed in many areas including multimedia production agencies, marketing and corporate communications departments, game studios, interactive marketing firms, advertising departments, film/television production companies, non-profit, education or government organizations and software design firms. Graduates are increasingly creating their own freelance and small business opportunities.

*See Glossary
Synopsis of the Vocational Learning Outcomes
Interactive Media Management (Ontario College Graduate Certificate)

The graduate has reliably demonstrated the ability to

1. facilitate effective completion of both individual and collaborative interactive media projects.
2. use and evaluate best practices and tools to design and develop dynamic, rich-media content.
3. conduct and evaluate a thorough assessment of the requirements of a complex* interactive media project.
4. coordinate the development, budgeting, planning and professional presentation of a complex* interactive media project.
5. design and coordinate a complex* media project (interface, navigation, graphics, text treatment) using best practice design and development principles and applying conceptual and theoretical frameworks.
6. manage the building of effective and dynamic complex* Web sites and/or mobile applications.
7. propose solutions to ethical and professional issues arising in an online environment.
8. apply research and conceptual skills to propose optimal solutions for mobile/multimedia/Web development problems and facilitate these skills within the project team.
9. provide creative leadership that results in the effective design, development and implementation of complex* interactive media projects.
10. evaluate the financial, technical and artistic success of a complex* interactive media project and present recommendations for improvement.

*See Glossary

Note: The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance.
The Vocational Learning Outcomes

1. The graduate has reliably demonstrated the ability to facilitate effective completion of both individual and collaborative interactive media projects.

Elements of the Performance

- identify strengths and challenges of performance both as an individual and as a member of a media project team
- identify and discuss areas of professional development to improve performance as an interactive media professional
- develop a schedule, using principles of time management and input from the team as appropriate, to complete interactive media projects on time and effectively
- use and promote effective interpersonal communication skills with clients and team members
- select, use and encourage conflict resolution strategies appropriately
- create and coordinate a working environment that facilitates resolution of conflict
- use and share strategies to manage stress and adapt to job pressures due to the rapidly changing nature of the interactive media work environment
- use online project management systems to produce collaborative environments
- assess and critique the quality of team members’ efforts positively and productively
2. *The graduate has reliably demonstrated the ability to*

   *use and evaluate best practices and tools to design and develop dynamic, rich-media content.*

**Elements of the Performance**

- perform basic computer skills, including word processing, using spreadsheets, and digital presentation competently within the interactive media context
- manage digital files, including organization, storage, compression, transmission and meta-tagging
- create, use and explain relational and non-relational databases
- use image editing software appropriately and competently
- select and use appropriate software to edit and mix sound effectively
- use video editing tools and applications competently
- use authoring tools to create and/or tailor pre-made scripts for complex* interactive experiences
- design and implement themes and templates for industry standard content management systems
- research new technologies using a variety of credible resources
- evaluate new software packages and make recommendations when appropriate

*See Glossary*
3. The graduate has reliably demonstrated the ability to conduct and evaluate a thorough assessment of the requirements of a complex* interactive media project.

Elements of the Performance

- identify and clearly articulate in writing and verbally the goals of a complex* interactive media project
- articulate the requirements of the client, and provide assistance when appropriate
- identify and describe the role of the end user
- describe the project deliverables precisely
- describe the project constraints (e.g., timeframe, cost, system and resource constraints, expertise needed etc.)
- evaluate the software and hardware that will be used in the project
- examine any copyright or legal issues that may impact the project and research possible solutions
- identify any accessibility issues that may impact the project
- identify and assess how the success of the project will be measured

*See Glossary
4. *The graduate has reliably demonstrated the ability to*

co-ordinate the development, budgeting, planning and professional presentation of a complex* interactive media project.

**Elements of the Performance**

- identify, analyze and troubleshoot the relevant policies, procedures and regulations that impact a project
- establish, promote and maintain a professional relationship with clients
- assess and manage risks
- use principles of project management and controls and adapt as necessary
- write and critique effective proposals and creative briefs/pitches
- analyze and manage key tasks and essential deliverables in complex* projects
- manage complex* interactive media* projects that involve multidisciplinary teams
- prepare, present and defend a project estimate, using industry standards and practices and sound business concepts
- contribute to the development and management of budgets for complex* projects
- present a complex* interactive media project plan to a prospective client or a collaborative team in a professional manner

*See Glossary*
5. The graduate has reliably demonstrated the ability to
design and co-ordinate a complex* media project (interface, navigation, graphics, text treatment) using best practice design and development principles, and applying conceptual and theoretical frameworks.

Elements of the Performance

- analyze the factors that influence how individuals receive and process information and how these impact the creation of quality interactive media products/projects
- research, critique and apply current and emerging design concepts and theories relevant to the interactive media field
- explain the interrelationships among typography, graphics, audio, video, animation, photography and interactivity
- evaluate relevant technologies, development or authoring tools, mark-up, scripting or programming languages and approaches, and decide which are appropriate to use
- assess technology issues, (e.g., bandwidth, throughput, system requirements etc.) and recommend appropriate blend of technologies to use
- design appropriate, fit for purpose interfaces or environments that follow universal design
- create effective and imaginative thumbnails, roughs, storyboards and flowcharts
- determine and defend the correct workflow and pipeline for the interactive project
- represent ideas and concepts in the design of a complex* interactive media project effectively (e.g., proof of concept)
- define and build a rapid prototype for a complex* interactive media project
- review and make any necessary revisions to designs appropriately and competently
- explain and support design decisions both in previously produced projects and current complex* projects
- analyze and apply current media theory to create an interactive media project

*See Glossary
6. The graduate has reliably demonstrated the ability to

manage the building of effective and dynamic complex* Web sites
and/or mobile applications.

Elements of the Performance

• use principles of programming and content management to create a
  functional and maintainable product
• write and edit copy for interactive media products, using correct spelling,
  following rules of grammar and punctuation, and which is suited to target
  audience
• choose correct assets to meet project goals
• create a clear and effective interface following best practices
• use creative images that are appropriate to the design theme of the site or
  application
• edit and output video projects for distribution over the Web and other
distribution formats
• edit existing audio material to meet appropriate sound requirements
• create attractive animations within specified parameters and constraints
  relating to the target platform and medium and that are suitable for
intended purpose
• integrate streaming of audio and video content effectively for complex*
  projects.
• develop standards compliant web pages that are cross-browser, cross
  platform and cross-device compatible, accessible and highly useable
• use an appropriate mark-up language to control the structure of the
  site/application, in compliance with relevant standards, guidelines or
  conventions
• use cascading style-sheets (CSS) to control the presentation of web pages
• combine media technologies effectively
• use industry standard coding techniques to create a dynamic and
  complex* web site
• manipulate, validate and store data in a variety of forms
• employ Interface components, load external assets, and display
  information in a variety of forms
• build full, production-ready e-commerce web application, including
  shopping carts
• develop, produce and implement content for online and/or mobile
  environments, e-learning, interactive installations and/or social networks,
and for commercial, entertainment, educational and public environments
  competently
• test and debug a product to support its correct operation within specified
  parameters and with typical end users

*See Glossary
7. The graduate has reliably demonstrated the ability to propose solutions to ethical and professional issues arising in an online environment.

- identify, analyze and propose solutions for issues relating to concepts of intellectual property and copyright that occur commonly in the interactive media field
- outline a legal contract to compensate for the services of interactive media professionals
- propose solutions for issues of privacy, confidentiality and data protection that may arise during the implementation of a media project
- evaluate compliance with all laws, regulations, agreements and requirements
- analyze ethical conflicts and provide rationales for decisions
8. The graduate has reliably demonstrated the ability to 

apply research and conceptual skills to propose optimal solutions for mobile/multimedia/Web development problems and facilitate these skills within the project team.

- search out credible resources to keep abreast of current and emerging trends in interactive media design, concepts and use of technology
- access resources that provide best practice information for all aspects of an interactive media project
- access market research to identify market gaps and opportunities to develop products
- access credible resources for relevant standards and conventions relating to all aspects of the media field
- locate sources of materials (audio, video, authoring etc.) suitable for meeting the creative aspects of any project
- solve complex* problems using a variety of innovative methods and approaches
- assist team members to access relevant, credible and current resources

*See Glossary
9. The graduate has reliably demonstrated the ability to

provide creative leadership that results in the effective design, development and implementation of complex* interactive media projects.

- explain the process of thinking within a critical framework
- apply critical thinking tools and techniques to resolve complex* problems within a media project
- reflect upon the process used to create an interactive media project describing impact of own contribution to the project
- integrate and draw upon a wide range of materials/experiences to create a complex* interactive media project
- model different ways of using familiar tools and techniques
- produce a project that meets the technical, creative and resource requirements of an interactive media project at a professional level
- encourage team members to think creatively and critically

*See Glossary
10. The graduate has reliably demonstrated the ability to

evaluate the financial, technical and artistic success of a complex* interactive media project and present recommendations for improvement.

- determine and measure the criteria that would be used to assess the success of an interactive media project
- evaluate the experience of the end user in terms of navigation, interaction, accessibility and experience
- evaluate the client's satisfaction with the interactive media project
- evaluate whether both individual and collaborative media projects were accomplished on time and within specified budget
- assess personal and group compliance with relevant laws and standards
- evaluate the ability of the team to work collaboratively
- propose and facilitate revisions to complex* projects as determined

*See Glossary
Glossary

Complex - Term used to describe an interactive media project that has many different and connected parts and that may be confusing and difficult both to understand and carry to completion.
(Adapted from the Oxford Dictionary, 2012; the MacMillan Dictionary, 2012; the Webster's College Dictionary, 2012)