

Fanshawe College

FIRST: Fanshawe Innovation, Research, Scholarship, Teaching

Documentation (Approvals etc...)

Game - Design

2013

FANS 01303 - Video Game Design and Development CVS Application

Fanshawe College

Follow this and additional works at: [https://first.fanshawec.ca/
cae_digitalandperformingarts_gamedesign_documentation](https://first.fanshawec.ca/cae_digitalandperformingarts_gamedesign_documentation)



Ontario College Quality Assurance Service

Service de l'assurance de la qualité des collèges de l'Ontario



Ontario College Quality Assurance Service

Service de l'assurance de la qualité des collèges de l'Ontario

ONTARIO COLLEGES OF APPLIED ARTS AND TECHNOLOGY
CREDENTIALS VALIDATION SERVICE
APPLICATION FOR PROGRAM VALIDATION

This proposal will be sent to MTCU for Approval for Funding Yes No

1. College: Fanshawe College
2. College contact person responsible for this proposal: Name: Robert Reichhardt Title: Professor/Curriculum Coordinator Telephone: 226.374.6188 Electronic mail: reichhardt@fanshawec.ca
3. Proposed Program Title: Video Game Design & Development
4. Proposed Credential: (please indicate below) Local Board Approved Certificate <input type="checkbox"/> Ontario College Certificate <input type="checkbox"/> Ontario College Diploma <input type="checkbox"/> Ontario College Advanced Diploma - X Ontario College Graduate Certificate <input type="checkbox"/>
5. Proposed Program Outcomes: Please complete and attach the two Program Maps (Appendix A - Form 1 and Form 2) - Attached
6. Proposed Program Description: Please complete and attach the Program Description Form (Appendix B) - Attached
7. Proposed Program Curriculum: Please complete and attach the Program Curriculum Form (Appendix C) - Attached
8. Proposed Program Certification/Accreditation: Please complete and attach the Regulatory Status Form (Appendix D) - Attached
9. Date of Submission: November 8, 2013
10. Date of CVS Response: November 12, 2013
11. Validation Decision: <input checked="" type="checkbox"/> Proposal Validated (APS Number: FANS 01303)
Signed on behalf of CVS: <i>André Diez de Aux</i>

Send the completed form and required appendices to: klassen@ocqas.org. For detailed information on how to complete the Application for Program Validation, please refer to the Application Instructions document. For any additional information contact: The Ontario College Quality Assurance Service, 20 Bay Street, Suite 1600, Toronto, ON M5J 2N8; or by telephone at (647) 258-7682.



**ONTARIO COLLEGES OF APPLIED ARTS AND TECHNOLOGY
CREDENTIALS VALIDATION SERVICE
APPENDIX A - PROGRAM MAPS
(Vocational Program Outcomes & Essential Employability Skills Outcomes)**

Vocational Program Learning Outcomes:

Form 1 (attached) is provided to assist you in mapping your proposed program vocational learning outcomes against existing vocational outcomes found in either Provincial Program Standards or in Provincial Program Descriptions. When completing this form, please be sure to include the MTCU code (where applicable) for the program category being referenced.

Where there is a relevant Provincial Program Standard, the approved Vocational Learning Outcomes must appear in the first column, followed by your proposed program vocational learning outcomes.

Where there are no Provincial Program Standards, the first column will contain program outcomes from the Provincial Program Description. Again, your proposed program vocational learning outcomes will be added in the middle column.

NOTE: Both these types of documents can be obtained from staff at the CVS or at the Colleges Unit, MTCU. Electronic copies of the Program Descriptions can be found at <http://caat.edu.gov.on.ca/HTMLpages/Programs> while electronic copies of the Provincial Program Standards can be found at <http://www.edu.gov.on.ca/eng/general/progstan/index>

If there are no such programs in the province, this information will be provided in the left column. The proposed vocational program outcomes must be written in the middle column.

The last column will contain a list of the relevant curriculum proposed in your program to address the outcome in a manner that ensures the graduate will have reliably demonstrated the required skill or ability. Course numbers or course codes, corresponding to those provided in your list of courses (Appendix C), are sufficient in this column.

Essential Employability Skills Outcomes:

A mapping of the Essential Employability Skills (EES) will be done on Form 2 (attached).

The instructions / requirements for this map are the same as for the Vocational Program Map. The first three columns contain the approved skill categories, the defining skills, and the EES learning outcomes. The last column will contain the proposed curriculum (as listed in Appendix C) that will ensure the meeting of these outcomes.



**ONTARIO COLLEGES OF APPLIED ARTS AND TECHNOLOGY
 CREDENTIALS VALIDATION SERVICE**

APPENDIX A - PROGRAM MAPS

Form 1 - Vocational Program Outcomes

PROVINCIAL PROGRAM STANDARD VOCATIONAL LEARNING OUTCOMES / PROVINCIAL PROGRAM DESCRIPTION OUTCOMES MTCU CODE: 61900	PROPOSED PROGRAM VOCATIONAL LEARNING OUTCOMES	PROPOSED PROGRAM CURRICULUM (COURSE NAME & NUMBER) ADDRESSING THE OUTCOME (From Appendix C)
1. Design unique gaming environments, levels and characters.	1. Design original concept art, models and animations for game characters.	MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – Digital Drawing 1, 2, 3 & 4 MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Texture 1 & 2 & 3 MMED-XXXX – Modelling 1 & 2 MMED-XXXX – Thesis Capstone
2. Develop, test and evaluate procedures for the creation, design and development of games.	2. Create sophisticated processes and methodologies that generate the framework for a video game.	MMED-XXXX – 3D Asset Development 1 & 2 MMED-XXXX – Thesis Capstone 1 & 2 MMED-XXXX – Portfolio Development 1 & 2 MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – UNITY 1 & 2
3. Create games by applying programming concepts.	3. Apply a variety of coding and scripting solutions in the production of video game projects.	MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Thesis Capstone 1 & 2
4. Develop, debug and modify code to meet design specifications for games.	4. Incorporate industry standard video game testing methodologies into the game development process	MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Thesis Capstone 1 & 2
5. Conceptualize and create 2D and 3D artwork for use in games.	5. Conceptualize and create 2D and 3D artwork for use in games.	MMED-XXXX - Texture 1 & 2 & 3 MMED-XXXX - Modelling 1 & 2 MMED-XXXX - Digital Drawing 1, 2, 3 & 4 MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – Animation 1



PROVINCIAL PROGRAM STANDARD VOCATIONAL LEARNING OUTCOMES / PROVINCIAL PROGRAM DESCRIPTION OUTCOMES MTCU CODE: 61900	PROPOSED PROGRAM VOCATIONAL LEARNING OUTCOMES	PROPOSED PROGRAM CURRICULUM (COURSE NAME & NUMBER) ADDRESSING THE OUTCOME (From Appendix C)
6. Create and produce digital components, games and documentation using a variety of computer platforms.	6. Use current and relevant software and technologies in the creation of digital assets, characters and game levels.	MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – Digital Drawing 1, 2, 3 & 4 MMED-XXXX – Animation 1 MMED-XXXX – Animation (MOCAP) MMED-XXXX – Animation – Rigging MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Texture 1 & 2 & 3 MMED-XXXX – Modelling 1 & 2 MMED-XXXX – Production Technology 1 & 2
7. Choose game strategies and patterns based on an analysis of past and present trends.	7. Create video games in different genres using market based data and historical precedents.	MMED-XXXX – Game Theory MMED-XXXX – Technological Survey MMED-XXXX – Art & Design Survey MMED-XXXX – Game Design 1 & 2 & 3
8. Contribute as an individual and a member of a team and provide leadership as required.	9. Contribute as an individual and team member to the creation of video games using game industry development practices and strategies.	MMED-XXXX – 3D Asset Development 1 & 2 MMED-XXXX – Thesis Capstone 1 & 2 MMED-XXXX – Portfolio Development 1 & 2 MMED-XXXX – Business – Project Management
10. Complete all work in compliance with Canadian laws and policies.	8. Complete all work using authorized industry standard tools and software.	MMED-XXXX – Portfolio Development 1 & 2 MMED-XXXX – Thesis Capstone 1 & 2 MMED-XXXX – Business – Project Management
11. Produce and present business communication, documentation and information effectively and accurately in written and verbal form for game creation and development.	9. Produce and incorporate written documents into video game proposals, business plans, marketing strategies, creative briefs and presentations.	MMED-XXXX – Thesis Capstone 1 & 2 MMED-XXXX – Portfolio Development 1 & 2 MMED-XXXX – Business – Project Management
12. Adapt game designs to meet requirements of the current marketplace.	10. Develop digital strategies to build video games for a wide variety of platforms and end users.	MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Thesis Capstone 1 & 2 MMED-XXXX – Business – Project Management
13. Produce animated cut-scenes and sequences in the form of digital video and event-driven real-time animations utilizing a game engine.	11. Utilize a variety of digital applications including video & audio editing and special effects software in the design of video games	MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Animation 1 MMED-XXXX – Animation (MOCAP)



PROVINCIAL PROGRAM STANDARD VOCATIONAL LEARNING OUTCOMES / PROVINCIAL PROGRAM DESCRIPTION OUTCOMES MTCU CODE: 61900	PROPOSED PROGRAM VOCATIONAL LEARNING OUTCOMES	PROPOSED PROGRAM CURRICULUM (COURSE NAME & NUMBER) ADDRESSING THE OUTCOME (From Appendix C)
		MMED-XXXX – Animation – Rigging MMED-XXXX – 3D Asset Development 1 & 2
14. Support the creation of pre-production and production elements of game design utilizing observational skills, technical skills, and traditional and digital media.	12. Apply project management methodologies and best practises in the creation of all work.	MMED-XXXX – Portfolio Development 1 & 2 MMED-XXXX – Game Theory MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – Capstone 1 & 2 MMED-XXXX – Asset Development 1 & 2



**ONTARIO COLLEGES OF APPLIED ARTS AND TECHNOLOGY
 CREDENTIALS VALIDATION SERVICE**

APPENDIX A - PROGRAM MAPS

Form 2 - Essential Employability Skills Outcomes

SKILL CATEGORIES	DEFINING SKILLS Skill areas to be demonstrated by the graduates	ESSENTIAL EMPLOYABILITY SKILLS OUTCOMES The graduate has reliably demonstrated the ability to:	PROPOSED CURRICULUM (COURSE NAME & NUMBER) ADDRESSING THE OUTCOMES (From Appendix C)
COMMUNICATION	Reading Writing Speaking Listening Presenting Visual Literacy	Communicate clearly, concisely, and correctly in the written, spoken, and visual form that fulfils the purpose and meets the needs of the audience	MMED-XXXX – Game Theory MMED-XXXX – Technological Survey MMED-XXXX – Art & Design Survey MMED-XXXX – Digital Drawing 1, 2, 3 & 4 MMED-XXXX – Portfolio Development 1&2 MMED-XXXX – Business – Project Management MMED-XXXX – Thesis Capstone 1 & 2
		Respond to written, spoken, or visual messages in a manner that ensures effective communication	MMED-XXXX – Game Theory MMED-XXXX – Technological Survey MMED-XXXX – Art & Design Survey MMED-XXXX – Portfolio Development 1&2 MMED-XXXX – Business – Project Management MMED-XXXX – Digital Drawing 1, 2, 3 & 4 MMED-XXXX – Thesis Capstone 1 & 2
NUMERACY	Understanding and applying mathematical concepts and reasoning Analysing and using numerical data Conceptualizing	Execute mathematical operations accurately	MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – Animation (MOCAP) MMED-XXXX – Animation – Rigging MMED-XXXX – Production Technology 1&2 MMED-XXXX – UNITY 1 & 2 MMED-XXXX – 3D Asset Development 1&2



SKILL CATEGORIES	DEFINING SKILLS Skill areas to be demonstrated by the graduates	ESSENTIAL EMPLOYABILITY SKILLS OUTCOMES The graduate has reliably demonstrated the ability to:	PROPOSED CURRICULUM (COURSE NAME & NUMBER) ADDRESSING THE OUTCOMES (From Appendix C)
CRITICAL THINKING & PROBLEM SOLVING	Analysing Synthesizing Evaluating Decision-making	Apply a systematic approach to solve problems	MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – Digital Drawing 1, 2, 3 & 4 MMED-XXXX – Animation 1 MMED-XXXX – Animation (MOCAP) MMED-XXXX – Animation – Rigging MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Texture 1 & 2 & 3 MMED-XXXX – Modelling 1 & 2 MMED-XXXX – 3D Asset Development 1&2 MMED-XXXX – Production Technology1&2 MMED-XXXX – Acting for Animators
	Creative and innovative thinking	Use a variety of thinking skills to anticipate and solve problems	MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – Digital Drawing 1, 2, 3 & 4 MMED-XXXX – Animation 1 MMED-XXXX – Animation (MOCAP) MMED-XXXX – Animation – Rigging MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Texture 1 & 2 & 3 MMED-XXXX – Modelling 1 & 2 MMED-XXXX – 3D Asset Development 1&2 MMED-XXXX – Production Technology1&2
INFORMATION MANAGEMENT	Gathering and managing information Selecting and using appropriate tools and technology for a task or a project Computer literacy	Locate, select, organize, and document information using appropriate technology and information systems	MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – Digital Drawing 1, 2, 3 & 4 MMED-XXXX – Animation 1 MMED-XXXX – Animation (MOCAP) MMED-XXXX – Animation – Rigging MMED-XXXX – UNITY 1 & 2



SKILL CATEGORIES	DEFINING SKILLS Skill areas to be demonstrated by the graduates	ESSENTIAL EMPLOYABILITY SKILLS OUTCOMES The graduate has reliably demonstrated the ability to:	PROPOSED CURRICULUM (COURSE NAME & NUMBER) ADDRESSING THE OUTCOMES (From Appendix C)
	Internet skills	Analyse, evaluate, and apply relevant information from a variety of sources	MMED-XXXX – Texture 1 & 2 & 3 MMED-XXXX – Modelling 1 & 2 MMED-XXXX – 3D Asset Development 1&2 MMED-XXXX – Production Technology1&2
INTERPERSONAL	Team work Relationship management Conflict resolution Leadership Networking	Show respect for the diverse opinions, values, belief systems, and contributions of others	MMED-XXXX – Acting for Animators MMED-XXXX – Acting 2 MMED-XXXX – Thesis Capstone 1 & 2 MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Game Theory MMED-XXXX – Business – Project Management MMED-XXXX – Production Technology1&2
		Interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals	MMED-XXXX – Thesis Capstone 1 & 2 MMED-XXXX – Acting for Animators MMED-XXXX – Acting 2S MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – UNITY 1 & 2 MMED-XXXX – Business – Project Management
PERSONAL	Managing self Managing change and being flexible and adaptable Engaging in reflective practices Demonstrating personal responsibility	Manage the use of time and other resources to complete projects	MMED-XXXX – Thesis Capstone 1 & 2 MMED-XXXX – Portfolio Development 1&2 MMED-XXXX – Business – Project Management MMED-XXXX – Game Design 1 & 2 & 3 MMED-XXXX – UNITY 1 & 2 MMED-XXXX – 3D Asset Development 1&2



**ONTARIO COLLEGES OF APPLIED ARTS AND TECHNOLOGY
CREDENTIALS VALIDATION SERVICE**

APPENDIX B - PROGRAM DESCRIPTION

PROGRAM DESCRIPTION: (including occupational areas where it is anticipated graduates will find employment)

The Video Game Design & Development program at Fanshawe College is an intensive three-year advanced diploma focusing on the tools and techniques necessary to gain employment in the video game industry. The goal of the program is to provide students with the professional and artistic skills necessary to create compelling and innovative games. Foundational courses will provide students with an understanding of the various components of a video game through studies in art & design theory, modelling, animation, texturing, anatomy, and drawing. Students will study more advanced concepts of game design such as rigging, motion capture and game design throughout the second year. During the final year, students will assemble a portfolio of their work showcasing their abilities along with a demonstration of a fully functional video game. A vibrant and growing video game industry will allow students to find entry-level positions in the video game industry as concept artists, animators, level and game designers.

VOCATIONAL PROGRAM LEARNING OUTCOMES: (vocational program learning outcomes must be consistent with the requirements of the Credentials Framework for the proposed credential)

The graduate has reliably demonstrated the ability to:

1. Design original concept art, models and animations for game characters.
2. Create sophisticated processes and methodologies that generate the framework for a video game.
3. Apply a variety of coding and scripting solutions in the production of video game projects.
4. Incorporate industry standard video game testing methodologies into the game development process
5. Conceptualize and create 2D and 3D artwork for use in games.
6. Use current and relevant software and technologies in the creation of digital assets, characters and game levels.
7. Create video games in different genres using market based data and historical precedents.
8. Contribute as an individual and team member to the creation of video games using game industry development practices and strategies
9. Complete all work using authorized industry standard tools and software.
10. Produce and incorporate written documents into video game proposals, business plans, marketing strategies, creative briefs and presentations.
11. Develop digital strategies to build video games for a wide variety of platforms and end users.
12. Utilize a variety of digital applications including video & audio editing and special effects software in the design of video games
13. Apply project management methodologies and best practices in the creation of all work.

ADMISSION REQUIREMENTS: ...

OSSD with courses from the College (C), University (U), University/College (M), or Open (O) stream

- OR -

Academic and Career Entrance Certificate (ACE)

- OR -

Ontario High School Equivalency Certificate (GED)

- OR -

Mature Applicant with appropriate preparation



Ontario College Quality Assurance Service

Service de l'assurance de la qualité des
collèges de l'Ontario

Program Rationale – Video Game Design & Development

'No other sector has experienced the same explosive growth as the computer and video game industry. Our creative publishers and talented workforce continue to accelerate advancement and pioneer new products that push boundaries and unlock entertainment experiences. These innovations in turn drive enhanced player connectivity, fuel demand for products, and encourage the progression of an expanding and diversified consumer base.'

-Michael Gallagher, President and CEO, Entertainment Software Association

Canada is home to some of the most innovative and renowned game development studios in the industry, including Bioware in Edmonton, Electronic Arts and Rockstar in Vancouver, UBISOFT in Toronto and Montreal, and Digital Extremes in London Ontario.

In Canada there are three major industry centres for video game development: Vancouver, Montreal and Toronto. All of these centres are internationally recognised hubs of the game industry. Canada possesses one of the world's strongest technical infrastructures for gaming. Statistics show that 95% of households own a personal computer with high-speed internet access and a further 61% own a video game console. Currently the global market for interactive game sales is approximately \$70 billion USD (2013). Canada accounts for approximately 4% of sales or \$2 billion USD. (ESAC Essential Facts 2013 guide)

In the last five years there has been a substantial increase in the development of video game programs at the community college level in Ontario. Seneca, Centennial, George Brown, Humber, Durham, Niagara, and Sheridan colleges all have video game programs of varying sizes and complexities. Sheridan College is the first college to create an advanced four-year degree program in game design. The desire for video game education abroad has grown substantially leading some colleges to open satellite programs in Asia.

Fanshawe College is the only major college in Canada that does not currently have a video game program. Although many colleges offering these programs saturate the GTA, the south-western region remains unrepresented. This is a good opportunity to capitalize on so that our local students do not leave to study video game in the GTA. Consequently - given the availability - prospective students from the GTA may choose to study video game design at Fanshawe. London ON has experienced explosive growth in the video game industry over the last 10 years. Companies including Digital Extremes, Big Blue Bubble, Antic Entertainment and Big Viking Games have created a video game cluster that is attracting talent from around the world. With a growing game industry in London a natural extension would be to offer the education to feed that industry with Fanshawe talent.

This proposed Video Game program would prepare students for careers in the 3D Animation, Video Game and Special FX industries. This three-year intensive, advanced diploma program, will draw from the Interactive Media, Fine Art and Graphic Design programs currently offered at Fanshawe as well as graduates from other colleges and universities.



ONTARIO COLLEGES OF APPLIED ARTS AND TECHNOLOGY
 CREDENTIALS VALIDATION SERVICE

APPENDIX C - PROGRAM CURRICULUM

Semester	Course Code*	Course Title (and brief course description)
1	MMED XXXX	INTRODUCTION TO 3D – This course will introduce students to the 3D environment using an industry standard 3D application. Topics will include: modelling, animating, lighting and rendering techniques. Both practical techniques and theoretical principles of 3D development will be explored.
1	MMED XXXX	DIGITAL DRAWING 1 – This is an introductory course into the study of two-dimensional design. Focus will be on using digital drawing tools & techniques to help visualize ideas. Topics will include realism, shading, lighting, colour, analysis of form, and concepts of light, space and surface. Students will refine their abilities to conceptualize, and develop drawings for gaming purposes.
1	MMED XXXX	ART & DESIGN SURVEY – This course will focus on the art & design disciplines and movements of the 19th, 20th and 21st centuries. Lectures include topics on art forms, industrial design, architecture, graphic design, typography and global design movements.
1	MMED XXXX	GAME THEORY – In this course, students will be introduced to the world of game design. They will consider how certain aspects of games are implemented into various game designs. Students will study the origins of game companies such as XBOX, Nintendo, SEGA, ATARI, etc. as well as develop an understanding of the cultural and societal issues as it relates to game development. Additional topics will include ethical issues in game design, genres, AI and the future of gaming.
1	MMED XXXX	ACTING FOR ANIMATORS - In this course students will be introduced to the various acting techniques necessary for animators to understand the relationship between physical action and their digital characters. It will cover the connection between thinking and emotion as well as thinking and physical action.
1	MMED XXXX	ANATOMY 1 – This is a course designed to teach digital artists the fundamentals of human anatomy and its relationship to the various aspects of character design (modelling, rigging and animation). It will cover human bone and musculature structures as well as individual body parts, skeleton mechanics etc. Study of action poses and movement will be also covered.
1	WRIT XXXX	WRIT
1	GEAA XXXX	GEN-ED
2	MMED XXXX	ANIMATION 1 – In the course students will explore the basic foundation principles of 2D and 3D animation. Topics will include: stretch & squash, anticipation, timing and motion, action, exaggeration, space, etc. Traditional and digital techniques will be explored.
2	MMED XXXX	DIGITAL DRAWING 2 - This is a continuation of Digital Drawing 1. Students will build on their previous drawing knowledge and explore intermediate techniques such as deconstructing complex objects into basic shapes making them easier to render.
2	MMED XXXX	TECHNOLOGY SURVEY – This course will introduce students to several of the supporting technologies for game design, production design, and animation. These technologies include 3D scanning, 3D printing, facial motion capture and full body motion capture. This course will also reinforce key principles such as file management, exporting formats and file storage.
2	MMED XXXX	TEXTURE 1 – This course will focus on using 3D Max with Photoshop to introduce the essential elements and concepts for texturing, lighting and rendering.
2	MMED XXXX	MODELING 1 – In this course students will explore the principles of 3D modelling. The course will address modelling techniques and how they relate to different applications such as digital characters, game environments etc. Students will learn about 3D geometry including the design of wireframe characters.
2	MMED XXXX	ANATOMY 2 - This is a continuation of Anatomy 1. Students will build on their previous anatomical knowledge and explore the intermediate aspects of the human body. Drawing from a live model will be an important component of this course.
2	MMED XXXX	GAME DESIGN 1 - This course is designed to introduce students to the broad field of game design. Students will learn not only what defines a game but also why people enjoy game play. This will include an introduction to concepts such as meaningful choice, intrinsic and extrinsic motivations and the difference between games and play. A hand's on, analytical and experimental interaction with games will provide the foundation for game design.
2	COMM XXXX	COMM



ONTARIO COLLEGES OF APPLIED ARTS AND TECHNOLOGY
CREDENTIALS VALIDATION SERVICE

APPENDIX C - PROGRAM CURRICULUM

Semester	Course Code*	Course Title (and brief course description)
3	MMED XXXX	ACTING 2 – <i>This course is a continuation of Acting for Animators.</i> In this course students will continue to explore and refine acting techniques
3	MMED XXXX	DIGITAL DRAWING 3 - This course is a continuation of Digital Drawing 2. Emphasis will be on developing technical ability. Human movement, expression, point of view, emotion and acting fundamentals will also be covered.
3	MMED XXXX	UNITY 1 - This course is designed to provide students with a strong design foundation in Unity 3D. Topics will include development for mobile and desktop games, proper use of scale, importing assets, proxy level design, adding lights, effects, textures and creating reusable assets.
3	MMED XXXX	TEXTURE 2 - This course expands on the first semester course by exploring advanced techniques for texturing. Students will learn how to unwrap, create advanced environment textures and skyboxes.
3	MMED XXXX	MODELING 2 - <i>This course is a continuation of Modeling 1.</i> In this course students will expand on their previous knowledge by learning advanced concepts in modeling. These will include the creation of 'high and low' poly meshes, organic and hard surface modeling as well as modeling for game characters, quadrupeds etc.
3	MMED XXXX	PRODUCTION TECHNOLOGY – Students will be introduced to basic product design and explore how to design and fabricate their own products using industry standard software and tools that include a 3D Scanner and 3D Printer. This course will cover basic premises such as Conceptualizing a Product, and Prototyping.
3	GEAA XXXX	GEN-ED
4	MMED XXXX	ANIMATION (MOCAP) – This course is designed to introduce students to the concept of motion capture for film and video game. Various industry standard motion capture systems will be discussed. Students will use a motion capture system to capture data and apply that data in an industry standard 3D application. Additional content will include suit preparation, data capture and clean-up.
4	MMED XXXX	DIGITAL DRAWING 4 - <i>This course is a continuation of Digital Drawing 3.</i> Additional content for this course will include further study of human anatomy, musculature culminating in the creation of an ecorche.
4	MMED XXXX	UNITY 2 – <i>This course is a continuation of Unity 1.</i> Additional intermediate content for this course will include: Basic scripting implementation, controllers, particle systems, physics and export formats, game functionality and real-time simulations as well as the processes for publishing a game.
4	MMED XXXX	TEXTURE 3 - <i>This course is a continuation for Texture 2.</i> Students will learn advanced concepts of texturing as applied to game characters, game assets and game environments.
4	MMED XXXX	ANIMATION RIGGING - This course will introduce the principles of rigging as applied to bipedal characters. Utilizing the basic rigging tools (Bones, Biped, CAT etc.) students will explore the role of animation and creating lifelike movement in their characters.
4	MMED XXXX	PRODUCTION TECHNOLOGY – This course will focus on the iterative process of production design and will expand on the design work of the previous semester. Students will attempt to improve on their previous designs and test their prototypes in focus groups.
4	MMED XXXX	GAME DESIGN 2 – <i>This course is a continuation of Game Design 1.</i> It will explore more advanced themes of game design and investigate the genres of Serious Gaming, Simulations, Gamification, Edu-Games etc.
4	GEAA XXXX	GEN-ED



ONTARIO COLLEGES OF APPLIED ARTS AND TECHNOLOGY
CREDENTIALS VALIDATION SERVICE

APPENDIX C - PROGRAM CURRICULUM

Semester	Course Code*	Course Title (and brief course description)
5	MMED XXXX	GAME DESIGN 3 - This course is a continuation of Game Design 2. In this course students will expand on their previous knowledge and learn advanced problem solving techniques as related to game and level design. They will create levels from concept through to production and play testing. Additional content for this course will include: level design, artificial intelligence theory and (scripting), gameplay styles and limitations, gameplay analysis, level construction, architecture techniques, and design principles. By the course end, students will create a level complete with 3D assets, lighting, effects, and scripting.
5	MMED XXXX	PORTFOLIO DEVELOPMENT 1 – The goal of this course is to provide instruction and direction for the creation of an individual game portfolio. Students will research and create delivery options for their game demo such as a portfolio websites etc. They will be encouraged to find their own ‘specialization’ and tailor their portfolio accordingly. Additional content will include: interview process, resume, social media marketing, freelancing issues, contracts etc.
5	MMED XXXX	THESIS CAPSTONE 1 – This will be the final portion of the Video Game program. Student s will form interdisciplinary teams with the goal of completing a finished video game.
5	MMED XXXX	3D ASSET DEVELOPMENT 1 – Students will be introduced to the concept of ‘asset tracking’ for video game projects. Various asset tracking tools will be considered and appropriate tracking systems will be applied to their game projects.
5	GEAA XXXX	GEN-ED
6	MMED XXXX	3D ASSET DEVELOPMENT 2 – <i>This is a continuation of 3D Asset Development 1.</i> Students will continue to utilize asset tracking tools and software to ensure timely delivery of their 3D assets.
6	MMED XXXX	PORTFOLIO DEVELOPMENT 2 - <i>This course is a continuation of Portfolio Development 1.</i> In this course students will continue to work on and refine their individual portfolios.
6	MMED XXXX	THESIS CAPSTONE 2 – <i>This course is a continuation of Thesis Capstone 1.</i> In this course, students will experience the full life cycle of video game production from concept to full production. They will work in groups to create a final completed video game project overcoming technical obstacles as well as managing project scope. Team work, time management and conflict resolution issues will conclude the content for this course.
6	MMED XXXX	BUSINESS – PROJECT MANAGEMENT – The goal of this course is to provide students with the critical entrepreneurial skills to network and get established in their prospective field.



Ontario College Quality Assurance Service

Service de l'assurance de la qualité des
collèges de l'Ontario

**ONTARIO COLLEGES OF APPLIED ARTS AND TECHNOLOGY
CREDENTIALS VALIDATION SERVICE
APPENDIX D – REGULATORY STATUS FORM**

MANDATORY REGULATORY REQUIREMENTS

Where licensing or certification is **required by legislation** for entry to practice in the profession or trade, the Ministry of Training, Colleges and Universities requires that colleges ensure that their programs will meet the requirements of the regulatory body in order to be approved for funding.

- There is a legislative requirement that program graduates must be certified or licensed by a regulatory authority to practice or work in the occupation.

Name of regulatory authority _____

- (A*)** The program has been accredited or approved by the regulatory authority or its identified third party?

OR

- (B*)** The college is working toward accreditation with the regulatory authority.

Status of application and expected date of achievement _____

- (C*)** If the regulatory authority does not accredit educational programs directly or by an identified third party, has it formally acknowledged (e.g. in its published or legislated registration requirements) that the program graduates will be eligible to write any required certifying or registration exam or that the program is otherwise recognized for the purposes of certifying or registering a graduate?

***Please submit an acknowledgement and/or evidence from the regulatory authority to support (a) or (b) or (c) above.**



VOLUNTARY REQUIREMENTS

Colleges may choose to have a program accredited or recognized by a voluntary membership organization or association. Graduate eligibility for association recognition or adherence to standards imposed by the body is **not a requirement** for program funding approval by the Ministry of Training, Colleges and Universities.

Recognition of the program by a voluntary professional body:

Is being sought: Name of professional body: _____

The college is working toward recognition.

Status of application and expected date of achievement: From the Global Risk Management Institute, Inc. for accreditation of credits towards the Canadian Risk Management (CRM) designation, expected to be approved in the Summer 2013. (Fanshawe College is currently accredited to offer one of three courses required for the CRM designation; this course is offered in Business – Insurance diploma program.)

Recognition has been received.

- From the Insurance Institute of Canada for the use of their Chartered Insurance Professional (CIP) curriculum and the opportunity for the students to challenge the national exams for credits towards their Chartered Insurance Professionals (CIP) designation. Copy of endorsement letter attached.

★ **Please submit an acknowledgement and/or evidence from the voluntary association that recognition has been received.**

Recognition is not being sought (*please note there may be titling implications for programs that are not compliant in an area where other existing programs are*).