

### Minor Program Adjustment

<b>Faculty:</b> Faculty of Business and IT	<b>Date:</b> Sept 18, 2017
<b>Program:</b> Game Development & Entrepreneurship	
<b>Undergraduate:</b> <input checked="" type="checkbox"/>	<b>Graduate:</b> <input type="checkbox"/>

*Minor Program Adjustments include: New required courses, Deletion of required courses, Other changes to degree requirements or program learning outcomes, New academic requirements or changes to existing requirements.*

**Motion: That CPRC approve the changes to the Game Development Bridge program as presented.**

### Proposal Brief

#### Summary of the proposed change

Modification of the Bridge Pathways Program to better suit incoming students to avoid repetition and increase learning outcomes based on the college program they have completed. Minor cleanup to accommodate new course names as well.

#### Description of the ways in which the proposed change will enhance the program and/or opportunities for students

Attached are 2 Bridge Pathways Program maps (A & B).

**Map A** is suited towards students who are coming from a college program that has a strong emphasis on computer programming. This identification allows us to ensure they receive breadth in Technical Art as needed for the industry and they would not have received this in their college program.

**Map B** is suited towards students who are coming from a college program that does **NOT** have a strong emphasis on computer programming but rather an emphasis on game art or interactive media arts.

This identification allows us to ensure they acquire the requisite programming skills through the introduction to programming course and a few other technical courses in place of their Technical Art courses which they would have received credit for from their college program.

This classification will allow us to ensure that students succeed more effectively in the program by filling in the knowledge gaps based on the focus of their prior institution being heavy on one area or another of game development.

Also attached is a list of programs that have been currently vetted by the FBIT Advising team and the Game Development Program Director that identifies which map (if any) students from college programs in Ontario should be assigned.

**Process of consultation with other units if the change(s) involves students, staff, and/or faculty from other programs or courses**

Consultation with the faculty Academic Advising team to ensure these changes work with pre-req's and credit restrictions and general flow.

### **Analysis of financial and enrolment implications**

These proposals have a net-zero financial impact and can only increase retention.

### **Proposed Implementation Date (state term, e.g. Fall 2017)**

Summer 2018

### **Transition Plan (include a plan for all current students in the program, by year level)**

None required as this only affects incoming bridge students.

### **Calendar Copy and/or Program Maps (highlight revisions to existing curriculum)**

### **General information and admission requirements**

Admission is competitive. The specific average or standing required for admission varies from year to year. Students are selected by taking into consideration a wide range of criteria including grades, distribution of subjects taken, and performance in subjects relevant to the academic program. Possession of the minimum requirements does not guarantee acceptance. Preference will be given to applicants with the best qualifications.

To qualify for the Game Development and Entrepreneurship major, students must have a completed two- or three-year Ontario college diploma in Game Development (or equivalent) with a minimum 3.0 GPA (B average on a 4.3 scale) or three-year university degree with a minimum 3.3 GPA (B+ average on a 4.3 scale). Graduates of two- or three-year Ontario college diploma programs in other disciplines should contact UOIT to determine their admission eligibility for this program.

Students admitted to the Bridge program will be required to complete five core bridge courses.

### **Bridge requirements**

**Map A – Students from colleges that emphasize Computer Programming**

**Map B – Students from colleges that emphasize game art or interactive media arts**

- BUSI 1700U – Introduction to Entrepreneurship
- INFR 1020U – Essential Mathematics for Games I
- INFR 1030U – Essential Mathematics for Games II
- INFR 2140U – Object Oriented Programming

plus one of:

- INFR 2810U – Computer Architecture (Map A)
- INFR 1100U – Introduction to Programming (Map B)

**After Bridge completion**

Students who successfully complete the Bridge program with a minimum 2.0 GPA (C average on a 4.3 scale) in each course are eligible to enter into the third year of the Bachelor of Information Technology, Game Development and Entrepreneurship program.

**Program Map A-from Computer Programming Colleges****Year 3****Semester 1 (15 credit hours)**

- **BUSI 2550U – Introduction to Project Management**
- INFR 1350U – Introduction to Computer Graphics
- INFR 2310U – Computer Animation: Algorithms and Techniques
- INFR 2330U – Intermediate Game Design
- **Add: INFR2345U – Modelling and Animations Systems 1**
- INFR 2395U – Game Development Workshop I \*
- INFR 4560U – Law and Ethics in Game Development

**Semester 2 (15 credit hours)**

- **BUSI 2700U – Entrepreneurial Finance**
- **Add: BUSI2200U – Marketing Management**
- **Add: BUSI3730U – Creative Problem Solving, Entrepreneurship and Imagination**
- INFR 2350U – Intermediate Computer Graphics
- **INFR 2370U – Game Sound**
- **INFR 2810U – Computer Architecture**
- INFR 2820U – Algorithms and Data Structures
- INFR 2396U – Game Development Workshop II \*
- **Add: INFR3315U – Cinematic Systems Design**

**Year 4****Semester 1 (15 credit hours)**

- **BUSI 2120U – Accounting for IT**
- BUSI 4340U – Business of Gaming
- INFR 3110U – Game Engine Design and Implementation
- INFR 3335U – Social and Multiplayer Game Design
- **Add: INFR3345U – Modelling and Animation Systems II**
- INFR 4350U – Human-Computer Interaction for Games
- One of:
- BUSI 4798U – Incubator I \*\* or
- BUSI 4990U – Capstone Study Project I \*\*\*

**Semester 2 (15 credit hours)**

- **BUSI 2210U – Marketing in the Information Technology Sector**
- INFR 3350U – Games User Research
- INFR 3830U – Distributed Systems and Networking
- INFR 4320U – Artificial Intelligence for Gaming
- Technical Elective
- One of:
- BUSI 4799U – Incubator II \*\* or
- BUSI 4995U – Capstone Study Project II \*\*\*

**Program Map B – From Game Art or Interactive Media Arts****Year 3****Semester 1 (15 credit hours)**

- BUSI 2550U – Introduction to Project Management
- INFR 1350U – Introduction to Computer Graphics
- INFR 2310U – Computer Animation: Algorithms and Techniques
- INFR 2330U – Intermediate Game Design
- INFR 2395U – Game Development Workshop I \*
- INFR 4560U – Law and Ethics in Game Development

**Semester 2 (15 credit hours)**

- BUSI 2700U – Entrepreneurial Finance
- Add: BUSI 2200U – Marketing Management
- Add: BUSI3730U – Creative Problem Solving, Entrepreneurship and Imagination
- INFR 2350U – Intermediate Computer Graphics
- INFR 2370U – Game Sound
- INFR 2810U – Computer Architecture
- INFR 2820U – Algorithms and Data Structures
- INFR 2396U – Game Development Workshop II \*

**Year 4****Semester 1 (15 credit hours)**

- BUSI 2120U – Accounting for IT
- BUSI 4340U – Business of Gaming
- INFR 3110U – Game Engine Design and Implementation
- INFR 3335U – Social and Multiplayer Game Design
- INFR 4350U – Human-Computer Interaction for Games
- Add: Technical Elective
- One of:
- BUSI 4798U – Incubator I \*\* or
- BUSI 4990U – Capstone Study Project I \*\*\*

**Semester 2 (15 credit hours)**

- BUSI 2210U – Marketing in the Information Technology Sector
- INFR 3350U – Games User Research
- INFR 3830U – Distributed Systems and Networking
- INFR 4320U – Artificial Intelligence for Gaming
- Add: Technical Elective
- One of:
- BUSI 4799U – Incubator II \*\* or
- BUSI 4995U – Capstone Study Project II \*\*\*

**APPROVAL DATES**

Curriculum Committee approval	October 23, 2017
Faculty Council approval	November 2, 2017
CPRC Approval	17 November 2017
Submission to Academic Council	

A is for programming heavy

B is for media heavy

<b><u>College</u></b>	<b><u>Program</u></b>	<b><u>Bridge Map</u></b>
Algonquin	Animation	B
Algonquin	Game Development	B
Algonquin	Computer Programmer	A
Algonquin	Computer Systems Technician	NONE
Algonquin	Interactive Multimedia Design	NONE
Cambrian College	Animation	B
Cambrian College	Computer Systems Technician	NONE
Centennial College	Software Engineering Technology - Interactive Gaming	A
Centennial College	Animation - 3D	B
Centennial College	Game Art & Design	B
Centennial College	Software Engineering Technician	NONE
Confederation College	Computer Programmer	A
Confederation College	Interactive Media Development	NONE
Durham College	Animation - Digital Production	B
Durham College	Game Development	B
Durham College	Animation - Digital	NONE
Durham College	Computer Programmer	A
Durham College	Computer Programmer Analyst	NONE
Durham College	Computer Systems Technician	NONE
Durham College	Computer Systems Technology	NONE
Durham College	Contemporary Web Design	NONE
Georgian College	Computer Programmer	A
Georgian College	Computer Programmer Analyst	NONE
Georgian College	Web Animation & Design	NONE
Humber College	Computer Programmer	A
Humber College	3D animation, Art, and Design	A
Humber College	Game Programming	A
Humber College	Multimedia 3D Animation	B
Humber College	Multimedia Design and Development	NONE
Humber College	Web Design and Interactive Media	NONE
Loyalist College	Animation	B

SAIT Polytechnic	Information Technology (Majors: Computer Systems and Software Development)	NONE
Sault College	Computer Programmer	A
Sault College	Computer Programmer Analyst	NONE
Seneca College	Animation	B
Seneca College	Computer Programmer	A
Seneca College	Computer Programming & Analysis	NONE
Seneca College	Digital Media Arts	NONE
Sheridan College	Computer Programmer	A
St. Lawrence College	Game Development Technician	NONE

## 2018 Bridge Pathways Program A

*for students coming from a college program that is programming heavy*

<b>BRIDGE*</b>	<b>BUSI 1700U</b> Introduction to Entrepreneurship	<b>INFR 1020U</b> Essential Mathematics for Games I	<b>INFR 1030U</b> Essential Mathematics for Games II	<b>INFR 2810U</b> Computer Architecture	<b>INFR 2140U</b> Object Oriented Programming
<b>Year 3 Fall</b>	<b>INFR 1350U</b> Introduction to Computer Graphics	<b>INFR 2310U</b> Computer Animation: Algorithms & Techniques	<b>INFR 2330U</b> Intermediate Game Design	<b>INFR 2345U</b> Modelling and Animation Systems I	<b>INFR 4560U</b> Law & Ethics of Game Development
	<b>INFR 2395U</b> Game Development Workshop I				
<b>Year 3 Winter</b>	<b>INFR 2350U</b> Intermediate Computer Graphics	<b>INFR 2820U</b> Algorithms & Data Structures	<b>INFR 3315U</b> Cinematic Systems Design	<b>BUSI 3730U</b> Creative Problem Solving, Entrepreneurship and Imagination	<b>BUSI 2200U</b> Marketing Management
	<b>INFR 2396U</b> Game Development Workshop II				
<b>Year 4 Fall</b>	<b>INFR 3110U</b> Game Engine Design & Implementation	<b>INFR 4350U</b> Human Computer Interaction for Games	<b>INFR 3335U</b> Advanced Game Design	<b>INFR 3345U</b> Modelling and Animation Systems II	<b>BUSI 4340U</b> Business of Gaming
	<b>BUSI 4990U</b> Capstone I				
<b>Year 4 Winter</b>	<b>INFR 4320U</b> Artificial Intelligence for Gaming	<b>INFR 3350U</b> Game User Research	<b>INFR 3830U</b> Distributed Systems & Networking	Technical Elective	<b>BUSI 4995U</b> Capstone II

\* Note: Students normally complete the Bridge term in Spring/Summer. Students who take the Bridge in Fall/Winter will be required to take Game Development Workshop I & II, INFR 1395U and INFR 1396U along with the courses listed above.

Information contained herein is subject to change at the discretion of the Faculty of Business and I.T., and is distributed to students for course schedule planning assistance. Any questions should be addressed to the FBIT Academic Advising office (fbitadvising@uoit.ca).

## 2018 Bridge Pathways Program B

*for students coming from a college program that is more media heavy*

Year Term	Course	Course	Course	Course	Course
<b>BRIDGE*</b>	<b>BUSI 1700U</b> Introduction to Entrepreneurship	<b>INFR 1020U</b> Essential Mathematics for Games I	<b>INFR 1030U</b> Essential Mathematics for Games II	<b>INFR 1100U</b> Introduction to Programming	<b>INFR 2140U</b> Object Oriented Programming
<b>Year 3 Fall</b>	<b>INFR 1350U</b> Introduction to Computer Graphics	<b>INFR 2310U</b> Computer Animation: Algorithms & Techniques	<b>INFR 2330U</b> Intermediate Game Design	<b>BUSI 2550U</b> Introduction to Project Management	<b>INFR 4560U</b> Law & Ethics of Game Development
	<b>INFR 2395U</b> Game Development Workshop I				
<b>Year 3 Winter</b>	<b>INFR 2350U</b> Intermediate Computer Graphics	<b>INFR 2820U</b> Algorithms & Data Structures	<b>INFR 2370U</b> Game Sound	<b>BUSI 3730U</b> Creative Problem Solving, Entrepreneurship and Imagination	<b>BUSI 2200U</b> Marketing Management
	<b>INFR 2396U</b> Game Development Workshop II				
<b>Year 4 Fall</b>	<b>INFR 3110U</b> Game Engine Design & Implementation	<b>INFR 4350U</b> Human Computer Interaction for Games	<b>INFR 3335U</b> Advanced Game Design	Technical Elective	<b>BUSI 4340U</b> Business of Gaming
	<b>BUSI 4990U</b> Capstone I				
<b>Year 4 Winter</b>	<b>INFR 4320U</b> Artificial Intelligence for Gaming	<b>INFR 3350U</b> Game User Research	<b>INFR 3830U</b> Distributed Systems & Networking	Technical Elective	<b>BUSI 4995U</b> Capstone II

\* Note: Students normally complete the Bridge term in Spring/Summer. Students who take the Bridge in Fall/Winter will be required to take Game Development Workshop I & II, INFR 1395U and INFR 1396U along with the courses listed above.

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