



(07/2004)

<p>1.0 Degree Title Please specify the two degrees for concurrent degree programs</p> <input type="text" value="B.Sc."/>	<p>2.0 Administering Faculty/Unit</p> <input type="text" value="Science"/>
<p>1.1 Major (Legacy= Subject)(30-char. max.)</p> <input type="text" value="Computer Science: Computer Games Option"/>	<p>Offering Faculty/Department</p> <input type="text" value="Science"/>
<p>1.2 Concentration (Legacy = Concentration/Option) If applicable to Majors only (30 char. max.)</p> <input type="text"/>	<p>3.0 Effective Term of Implementation (Ex. Sept. 2004 = 200409) Term</p> <input type="text" value="201009"/>
<p>1.3 Minor (with Concentration, if Applicable) (30 char. max.)</p> <input type="text"/>	

4.0 Rationale for new proposal

The recent revision of the BSc Major in Software Engineering included an increase of the credit weight of COMP 361 from 3 to 6. This is a required course for the program under consideration. As a result, we have to decrease the number of complementary credits in order to prevent the total number of credits from rising. The increase in the number of credits of COMP 361 reflects a significant increase in the depth of this course and it is thus felt that an introductory course like COMP 335 (Introduction to Software Engineering) would be superfluous. Furthermore, COMP 304 and COMP 303 overlap significantly, hence we decided to drop the former and require the latter.

5.0 Program Information  
Please check appropriate box(es)

<p>5.1 Program Type</p> <input checked="" type="checkbox"/> Bachelor's Program <input type="checkbox"/> Master's <input type="checkbox"/> M.Sc. (Applied) Program <input type="checkbox"/> Dual Degree/Concurrent Program <input type="checkbox"/> Certificate <input type="checkbox"/> Diploma <input type="checkbox"/> Graduate Certificate <input type="checkbox"/> Graduate Diploma <input type="checkbox"/> Ph.D. Program <input type="checkbox"/> Doctorate Program (Other than Ph.D.) <input type="checkbox"/> Private Program <input type="checkbox"/> Off-Campus Program <input type="checkbox"/> Distance Education Program (By Correspondence) <input type="checkbox"/> Other (Please specify) <input type="text"/>	<p>5.2 Category</p> <input type="checkbox"/> Faculty Program (FP) <input checked="" type="checkbox"/> Major <input type="checkbox"/> Joint Major <input type="checkbox"/> Major Concentration (CON) <input type="checkbox"/> Minor <input type="checkbox"/> Minor Concentration (CON) <input type="checkbox"/> Honours (HON) <input type="checkbox"/> Joint Honours Component (HC) <input type="checkbox"/> Internship/Co-op <input type="checkbox"/> Thesis (T) <input type="checkbox"/> Non-Thesis (N) <input type="checkbox"/> Other Please specify <input type="text"/>	<p>5.3 Level</p> <input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Dentistry/Law/Medicine <input type="checkbox"/> Continuing Ed (Non-Credit) <input type="checkbox"/> Collegial <input type="checkbox"/> Masters & Grad Dips & Certs <input type="checkbox"/> Doctorate <input type="checkbox"/> Post-Graduate Medicine/Dentistry <input type="checkbox"/> Graduate Qualifying <input type="checkbox"/> Postdoctoral Fellows
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<p>6.0 Total Credits</p> <input type="text" value="62-67"/>	<p>7.0 Consultation with Related Units      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Financial Consult      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Attach list of consultations.</p>
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## 8.0 Program Description (Maximum 150 words)

This is an option to the major that prepares the student to design and implement computer games. There is an emphasis on courses that require large scale software projects. Students take a required course in computer graphics and a year-long software project course. The complementaries are constrained to ensure that they receive exposure to relevant additional material like animation, simulation, AI or software development.

## 9.0 List of proposed program for the New Program/Major or Minor/Concentration.

If new concentration (option) of existing Major/Minor (program), please attach a program layout (list of all courses) of existing Major/Minor.

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight under the headings of: Required Courses, Complementary Courses, Elective Courses)

Existing Program: 62-69 credits	Revised Program : 62-67 credits
Required Courses: 41-44 credits	Required Courses: 47-50 credits
COMP 202* 3 Introduction to Computing 1	COMP 202* 3 Introduction to Computing 1
COMP 206 3 Introduction to Software Systems	COMP 206 3 Introduction to Software Systems
COMP 250 3 Introduction to Computer Science	COMP 250 3 Introduction to Computer Science
COMP 251 3 Data Structures and Algorithms	COMP 251 3 Data Structures and Algorithms
COMP 273 3 Introduction to Computer Systems	COMP 273 3 Introduction to Computer Systems
COMP 302 3 Programming Languages and Paradigms	COMP 302 3 Programming Languages and Paradigms
	*** COMP 303 3 Software Development ***
COMP 308 1 Computer Systems Lab	COMP 308 1 Computer Systems Lab
COMP 310 3 Operating Systems	COMP 310 3 Operating Systems
COMP 322 1 Introduction to C++	COMP 322 1 Introduction to C++
COMP 330 3 Theoretical Aspects: Computer Science	COMP 330 3 Theoretical Aspects: Computer Science
COMP 361 3 Systems Development Project	*** COMP 361 6 Systems Development Project ***
COMP 557 3 Fundamentals of Computer Graphics	COMP 557 3 Fundamentals of Computer Graphics
MATH 222 3 Calculus 3	MATH 222 3 Calculus 3
MATH 223 3 Linear Algebra	MATH 223 3 Linear Algebra
MATH 240 3 Discrete Structures 1	MATH 240 3 Discrete Structures 1
MATH 323 3 Probability	MATH 323 3 Probability
Complementary Courses: 21-25 credits	Complementary Courses: 15-17 credits
3 credits selected from:	3 credits selected from:
COMP 350 3 Numerical Computing	COMP 350 3 Numerical Computing
COMP 360 3 Algorithm Design Techniques	COMP 360 3 Algorithm Design Techniques
6-8 credits selected from:	6-8 credits selected from:
COMP 303 3 Software Development	<del>COMP 303 3 Software Development (Deleted)</del>
COMP 304 3 Object-oriented Design	<del>COMP 304 3 Object-oriented Design (Deleted)</del>
COMP 335 3 Software Engineering Methods	<del>COMP 335 3 Software Engineering Methods (Deleted)</del>
COMP 529 4 Software Architecture	COMP 529 4 Software Architecture
COMP 533 3 Object-oriented Software Development	COMP 533 3 Object-oriented Software Development
6-8 credits selected from:	COMP 424 3 Topics: Artificial Intelligence 1
COMP 424 3 Topics: Artificial Intelligence 1	COMP 507 3 Computational Geometry
COMP 507 3 Computational Geometry	COMP 521 4 Modern Computer Games
COMP 521 4 Modern Computer Games	COMP 522 4 Modelling and Simulation
COMP 522 4 Modelling and Simulation	*** COMP 559 4 Computer Animation ***
6 credits selected from:	6 credits selected from:
COMP 409 3 Concurrent Programming	COMP 409 3 Concurrent Programming

Attach extra page(s) as needed

8.0 Program Description (Maximum 150 words)

9.0 List of proposed program for the New Program/Major or Minor/Concentration.

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Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight under the headings of: Required Courses, Complementary Courses, Elective Courses)

COMP 421 3 Database Systems	COMP 421 3 Database Systems
COMP 535 3 Computer Networks 1	COMP 535 3 Computer Networks 1
OR	OR
COMP 435 3 Basics of Computer Networks	COMP 435 3 Basics of Computer Networks

10.0 Approvals

Routing Sequence	Name	Signature	Date
Department	<input type="text"/>	<input type="text"/>	<input type="text"/>
Curric/Acad Committee	<input type="text"/>	<input type="text"/>	<input type="text"/>
Faculty 1	<input type="text"/>	<input type="text"/>	<input type="text"/>
Faculty 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
Faculty 3	<input type="text"/>	<input type="text"/>	<input type="text"/>
SCTP	<input type="text"/>	<input type="text"/>	<input type="text"/>
GS	<input type="text"/>	<input type="text"/>	<input type="text"/>
APPC	<input type="text"/>	<input type="text"/>	<input type="text"/>
Senate	<input type="text"/>	<input type="text"/>	<input type="text"/>

Submitted by

Name

Phone

Email

Submission Date

To be completed by ARR:

CIP Code