



<p>1.0 <input style="width: 90%;" type="text" value="Major Computer Science"/></p> <p>1.1 <input style="width: 90%;" type="text" value="B.A. &amp; Sc."/></p> <p>1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.) <input style="width: 90%;" type="text" value="Software Engineering"/></p> <p>1.3 Minor (with Concentration, if applicable) (30 char. max.)</p> <p>1.4 Category</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Faculty Program (FP)</td> <td style="width: 50%; border: none;">Honours (HON)</td> </tr> <tr> <td style="border: none;">Major</td> <td style="border: none;">Joint Honours</td> </tr> <tr> <td style="border: none;">Joint Major</td> <td style="border: none;">Component (HC)</td> </tr> <tr> <td style="border: none; background-color: yellow;">Major Concentration (CON)</td> <td style="border: none;">Internship/Co-op</td> </tr> <tr> <td style="border: none;">Minor</td> <td style="border: none;">Thesis (T)</td> </tr> <tr> <td style="border: none;">Minor Concentration (CON)</td> <td style="border: none;">Non-Thesis (N)</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Other</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Please specify</td> </tr> </table> <p style="text-align: center;"><input style="width: 50%;" type="text"/></p> <p>1.5 <input style="width: 90%;" type="text" value="B.A.&amp;Sc.; Major Concentration in Software Engineering"/></p>	Faculty Program (FP)	Honours (HON)	Major	Joint Honours	Joint Major	Component (HC)	Major Concentration (CON)	Internship/Co-op	Minor	Thesis (T)	Minor Concentration (CON)	Non-Thesis (N)		Other		Please specify	<p>2.0 Administering Faculty/Unit <input style="width: 90%;" type="text" value="Science"/></p> <p>Offering Faculty/Department <input style="width: 90%;" type="text" value="Science / Computer Science"/></p> <p>3.0 Effective Term of revision or retirement Please give reasons in 5.0 "Rationale" in the case of retirement (Ex. Sept. 2004 = 200409)      Retirement</p> <p>Term: <input style="width: 80%;" type="text" value="201209"/></p> <p>4.0 Existing Credit Weight      Proposed Credit Weight</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: 1px solid black; text-align: center;">36-37</td> <td style="width: 50%; border: 1px solid black; text-align: center;">36-37</td> </tr> </table> <p>5.0 Rationale for revised program</p> <div style="border: 1px solid black; padding: 10px; min-height: 150px;"> <p>This is a minor change that is due to a course retirement (COMP 431) in the list of Complementary Courses.</p> <p style="text-align: right;"><input type="checkbox"/></p> </div>	36-37	36-37
Faculty Program (FP)	Honours (HON)																		
Major	Joint Honours																		
Joint Major	Component (HC)																		
Major Concentration (CON)	Internship/Co-op																		
Minor	Thesis (T)																		
Minor Concentration (CON)	Non-Thesis (N)																		
	Other																		
	Please specify																		
36-37	36-37																		

6.0 Revised Program Description (Maximum 150 words)

**CURRENT**

This Major concentration provides a program of study that covers the subject commonly known as "Software Engineering". This program may be used to satisfy part of the requirements for a B.A. & Sc. degree. This program does not lead to certification as a Professional Engineer.

Students may complete this program with a minimum of 36 credits or a maximum of 37 credits depending on their choice of complementary courses.

**PROPOSED**

The Major Concentration Software Engineering focuses on the techniques and methodology required to design and develop complex software systems and covers the subject commonly known as "Software Engineering".

MATH 133, MATH 140, and MATH 141 (or their equivalents) must be completed prior to taking courses in this program.

Note: This program does not lead to certification as a Professional Engineer.

7.0 List of existing program and proposed program

Existing program as of Calendar 2010/2011 online

Revised program

MAJOR CONCENTRATION IN SOFTWARE ENGINEERING (36-37 credits)

**Required Courses (30 credits)**

COMP 202\* (3) Introduction to Computing 1  
COMP 206 (3) Introduction to Software Systems  
COMP 250 (3) Introduction to Computer Science  
COMP 251 (3) Data Structures & Algorithms  
COMP 273 (3) Introduction to Computer Systems  
COMP 302 (3) Programming Languages & Paradigms  
COMP 303 (3) Software Development  
COMP 421 (3) Database Systems  
MATH 223 (3) Linear Algebra  
MATH 240 (3) Discrete Structures 1

\*Students who have sufficient knowledge in a programming language do not need to take COMP 202 and can replace it with additional computer science complementary course credits.

**Complementary Courses (6-7 credits)**

6-7 credits selected from:

COMP 322 (1) Introduction to C++  
COMP 361 (6) Systems Development Project  
COMP 529 (3) Software Architecture  
COMP 533 (3) Object-Oriented Software Development  
Or any computer science course at the 300-level or above, excluding COMP 364, COMP 396, and COMP 431.

MAJOR CONCENTRATION IN SOFTWARE ENGINEERING (36-37 credits)

**Required Courses (30 credits)**

COMP 202\* (3) Introduction to Programming  
COMP 206 (3) Introduction to Software Systems  
COMP 250 (3) Introduction to Computer Science  
COMP 251 (3) Algorithms and Data Structures  
COMP 273 (3) Introduction to Computer Systems  
COMP 302 (3) Programming Languages & Paradigms  
COMP 303 (3) Software Development  
COMP 421 (3) Database Systems  
MATH 223 (3) Linear Algebra  
MATH 240 (3) Discrete Structures 1

\*Students who have sufficient knowledge in a programming language do not need to take COMP 202 and can replace it with additional computer science complementary course credits.

**Complementary Courses (6-7 credits)**

6-7 credits selected from:

COMP 322 (1) Introduction to C++  
COMP 361 (6) Systems Development Project  
COMP 529 (4) Software Architecture  
COMP 533 (3) Object-Oriented Software Development  
Or any computer science course at the 300-level or above, excluding COMP 364, COMP 396, and **COMP 400**.

Attach extra page(s) as needed

8.0 Consultation with  
Related Units

Yes  No

Financial Consult  Yes  No

Attach list of consultations

9. 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