### New Program/Major or Minor/Concentration Proposal Form

**1.0 Degree Title**
Please specify the two degrees for concurrent degree programs

| B.A. & Sc. |

**2.0 Administering Faculty/Unit**

| Science |

**1.1 Major (Legacy= Subject)(30-char. max.)**

**1.2 Concentration (Legacy = Concentration/Option)**
If applicable to Majors only (30 char. max.)

| Computer Science |

**1.3 Minor (with Concentration, if Applicable) (30 char. max.)**

**2.0 Administering Faculty/Unit**

| Offering Faculty/Department |

| Science/School of Computer Science |

**3.0 Effective Term of Implementation**
(Ex. Sept. 2004 = 200409)

| Term |

| 200709 |

### 4.0 Rationale for new proposal

The School of Computer Science is currently revising all its programs. Currently, the only program the School offers for the BA&Sc is the Major Concentration in Foundations in Computer Science. However, this concentration only covers the more theoretical courses that the School offers. The new Major Concentration in Computer Science will provide a broader introduction to computer science, and thus will provide a more well-rounded education.

### 5.0 Program Information
Please check appropriate box(es)

**5.1 Program Type**

- [ ] Bachelor's Program
- [ ] Master's
- [ ] M.Sc. (Applied) Program
- [ ] Dual Degree/Concurrent Program
- [ ] Certificate
- [ ] Diploma
- [ ] Graduate Certificate
- [ ] Graduate Diploma
- [ ] Ph.D. Program
- [ ] Doctorate Program (Other than Ph.D.)
- [ ] Private Program
- [ ] Off-Campus Program
- [ ] Distance Education Program (By Correspondence)
- [ ] Other (Please specify)

**5.2 Category**

- [ ] Faculty Program (FP)
- [ ] Major
- [ ] Joint Major
- [ ] Major Concentration (CON)
- [ ] Minor
- [ ] Minor Concentration (CON)
- [ ] Honours (HON)
- [ ] Joint Honours Component (HC)
- [ ] Internship/Co-op
- [ ] Thesis (T)
- [ ] Non-Thesis (N)
- [ ] Other

**5.3 Level**

- [ ] Undergraduate
- [ ] Dentistry/Law/Medicine
- [ ] Continuing Ed (Non-Credit)
- [ ] Collegial
- [ ] Masters & Grad Dips & Certs
- [ ] Doctorate
- [ ] Post-Graduate Medicine/Dentistry
- [ ] Graduate Qualifying
- [ ] Postdoctoral Fellows

**5.4 Program Type**

| Faculty Program (FP) |

| Major |

| Joint Major |

| Major Concentration (CON) |

| Minor |

| Minor Concentration (CON) |

| Honours (HON) |

| Joint Honours Component (HC) |

| Internship/Co-op |

| Thesis (T) |

| Non-Thesis (N) |

| Other |

Please specify

**5.5 Program Type**

| Please specify |

### 6.0 Total Credits

| 36 |

### 7.0 Consultation with Related Units

- [ ] Yes
- [ ] No

**Financial Consult**

- [ ] Yes
- [ ] No

Attach list of consultations.
Entry for

Computer Science

The School of Computer Science, the discipline, and specific courses are described in The Faculty of Science section of the Calendar.

The School offers both a minor and a major concentration in computer science in the B.A. & Sc. They are considered Science programs.

Students are strongly encouraged to talk to an adviser of the School before taking complementary courses within the respective programs. Approval must be given by the School for the particular sequence of courses the student wishes to use for the major or minor concentration.

MAJOR CONCENTRATION IN COMPUTER SCIENCE (36 credits)

**Required Courses (24 credits)**
- COMP 202* (3) Introduction to Computing 1
- COMP 203 (3) Introduction to Computing 2
- or COMP 250 (3) Introduction to Computer Science
- COMP 206 (3) Introduction to Software Systems
- COMP 251 (3) Data Structures and Algorithms
- COMP 273 (3) Introduction to Computer Systems
- MATH 222 (3) Calculus 3
- MATH 240 (3) Discrete Structures 1

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

**Complementary Courses (12 credits)**
- 3 - 6 credits from:
  - MATH 223 (3) Linear Algebra
  - MATH 318 (3) Mathematical Logic
  - MATH 323 (3) Probability
  - MATH 324 (3) Statistics
  - MATH 340 (3) Discrete Structures 2

- At least 3 credits from:
  - COMP 330 (3) Theoretical Aspects: Computer Science
  - COMP 350 (3) Numerical Computing
  - COMP 360 (3) Algorithm Design Techniques

- At least 3 credits from:
  - COMP 302 (3) Programming Languages and Paradigms
  - COMP 303 (3) Software Development

The remaining credits selected from
- COMP 230 (3) Logic and Computability
- COMP 273 (3) Introduction to Computer Systems

and computer science courses at the 300-level or above (except COMP 364, COMP 396, COMP 400, COMP 431) and ECSE 508.
## 10.0 Approvals

### Routing Sequence

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### Submitted by

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<thead>
<tr>
<th>Name</th>
<th>Marisa Lento (for Judy Kenigsberg)</th>
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<tbody>
<tr>
<td>Phone</td>
<td>Ext. 00895</td>
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<tr>
<td>Email</td>
<td><a href="mailto:Marisa@cs.mcgill.ca">Marisa@cs.mcgill.ca</a></td>
</tr>
<tr>
<td>Submission Date</td>
<td>April 18, 2007</td>
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To be completed by ARR:

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New Program/Major or Minor/Concentration Proposal Form P1-3