

May 1, 2015

Subject: Important Notes and Curriculum Changes in the 2015-2016 Calendar

Dear Student,

Each May, all students enrolled in the **Software Engineering** program are mailed a letter advising them of curriculum changes that have occurred since their entry into the program. This letter and letters from previous years can be viewed at the following website:

<http://www.encs.concordia.ca/current-students/undergraduate-program-requirements/course-sequences/software-engineering/>

Students must meet the requirements of their program in the calendar for the year in which they graduate. This letter is to advise you of changes to your program that will appear in the **2015-2016** Calendar. These changes may affect your selection of courses. Should you have any questions regarding this issue, please do not hesitate to contact Student Academic Services at (514) 848-2424, extension 3055.

You can view the program requirements and course descriptions at the following website:
http://registrar.concordia.ca/calendar/pdf/calendar_pdf.html

VERY IMPORTANT: Students must have completed all 200-level courses required from their program before they can register for *any* 400-level course.

All 200-level courses within the program taken after September 1, 2012 which are prerequisites for other courses must be completed with a C- or higher. A 200-level course in which a student has obtained a D+ or lower must be repeated before attempting a course for which it is a prerequisite.

Students are required to graduate having met the substantial equivalent of the curriculum in force in the Winter Term prior to degree conferral.

You must apply for graduation. The application form can be found at:
<http://registrar.concordia.ca/convo/gradapp.html>.

The deadlines to apply for graduation are:

Spring Convocation January 15th, Fall Convocation July 15th.

1. Changes to the Engineering Core

There are no changes to the Engineering Core.

2. Changes to the Software Engineering Core

- a) The Software Engineering Core has **changed** from 72.50 credits to 73.50 credits.
- b) The minimum credits required for the Computer Science group has **changed** from 22.00 to 23.00 credits. Please note that students are responsible to take sufficient number of Technical Electives in order to obtain the total number of credits for their program.
- c) COMP 248 Object-Oriented Programming I has **changed** from 3.00 to 3.50 credits. Student who have taking this course before May 2015, will receive 3.00 credits. Please note students are responsible to take sufficient number of Technical Electives in order to obtain the total number of credits for their program.
- d) COMP 249 Object-Oriented Programming II has **changed** from 3.00 to 3.50 credits. Student who have taking this course before May 2015, will receive 3.00 credits. Please note students are responsible to take sufficient number of Technical Electives in order to obtain the total number of credits for their program.

Computer Science Group

COMP 232	Mathematics for Computer Science	3.00
COMP 248	Object-Oriented Programming I	3.50
COMP 249	Object-Oriented Programming II	3.50
COMP 335	Introduction to Theoretical Computer Science	3.00
COMP 346	Operating Systems	4.00
COMP 348	Principles of Programming Languages	3.00
COMP 352	Data Structures and Algorithms	3.00

TOTAL: 23 .00

3. Changes to the Basic Science Courses

- a) Title Change: Basic Science Courses has been **renamed** Basic and Natural Science Courses.
- b) BIOL 208 Environmental Biology (3.00 credits) was **removed** from the Basic and Natural Science Courses. As a transitional measure, students who have taken this course prior to May 2015 will received 3.00 credit and this course may be used towards their degree. *This transitional measure may be rescinded by June 2020.*

- c) BIOL 226 Biodiversity and Ecology (3.00 credits) was **removed** from the Basic and Natural Science Courses. As a transitional measure, students who have taken this course prior to May 2015 will received 3.00 credit and this course may be used towards their degree. *This transitional measure may be rescinded by June 2020.*
- d) CHEM 209 Discovering Biotechnology (3.00 credits) was **removed** from the Basic and Natural Science Courses. As a transitional measure, students who have taken this course prior to May 2015 will received 3.00 credit and this course may be used towards their degree. *This transitional measure may be rescinded by June 2020.*
- e) CHEM 234 Physical Chemistry I: thermodynamics (3.00 credits) was **removed** from the Basic and Natural Science Courses. As a transitional measure, students who have taken this course prior to May 2015 will received 3.00 credit and this course may be used towards their degree. *This transitional measure may be rescinded by June 2020.*
- f) GELO 206 Earthquakes, Drifting Continents and Volcanoes (3.00 credits) was **removed** from the Basic and Natural Science Courses. As a transitional measure, students who have taken this course prior to May 2015 will received 3.00 credit and this course may be used towards their degree. *This transitional measure may be rescinded by June 2020.*
- g) GEOL 208 The Earth, Moon and the Planets (3.00 credits) was **removed** from Basic and Natural Science Courses. As a transitional measure, students who have taken this course prior to May 2015 will received 3.00 credit and this course may be used towards their degree. *This transitional measure may be rescinded by June 2020.*
- h) PHYS 253 Electricity and Magnetism I (3.00 credits) was **removed** from the Basic and Natural Science Courses. As a transitional measure, students who have taken this course prior to January 2015 will received 3.00 credit and this course may be used towards their degree. *This transitional measure may be rescinded by June 2020.*
- i) PHYS 273 Energy and Environment (3.00 credits) was **removed** from the Basic and Natural Science Courses. As a transitional measure, students who have taken this course prior to May 2015 will received 3.00 credit and this course may be used towards their degree. *This transitional measure may be rescinded by June 2020.*
- j) PHYS 334 Thermodynamics (3.00 credits) was **removed** from the Basic and Natural Science Courses. As a transitional measure, students who have taken this course prior to May 2015 will received 3.00 credit and this course may be used towards their degree. *This transitional measure may be rescinded by June 2020.*
- k) PHYS 354 Electricity and Magnetism II (3.00 credits) was **removed** from the Basic and Natural Science Courses. As a transitional measure, students who have taken this course prior to May 2015 will received 3.00 credit and this course may

be used towards their degree. *This transitional measure may be rescinded by June 2020.*

- l) CIVI 231 Geology for Civil Engineers (3.00 credits) was **added to** the Basic and Natural Science Courses.
- m) ELEC 231 Introduction to Semiconductor Materials and Devices (3.50 credits) was **added to** the Basic and Natural Science Courses.
- n) ENGR 242 Statics (3.00 credits) was **added to** the Basic and Natural Science Courses.
- o) ENGR 243 Dynamics (3.00 credits) was **added to** the Basic and Natural Science Courses.
- p) ENGR 251 Thermodynamics I (3.00 credits) was **added to** the Basic and Natural Science Courses.
- q) ENGR 361 Fluid Mechanics I (3.00 credits) was **added to** the Basic and Natural Science Courses.
- r) MECH 221 Materials Science (3.00 credits) was **added to** the Basic and Natural Science Courses.

Basic and Natural Science Courses 2015-2016

Two Basic and Natural Science courses must be selected from the following, including at least one course marked *:

BIOL 206*	Elementary Genetics	3 .00
BIOL 261*	Molecular and General Genetics	3 .00
CHEM 217*	Introductory Analytical Chemistry I	3 .00
CHEM 221*	Introductory Organic Chemistry I	3 .00
CIVI 231	Geology for Civil Engineers	3 .00
ELEC 321	Introduction to Semiconductor Materials and Devices	3 .50
ENGR 242	Statics	3 .00
ENGR 243	Dynamics	3 .00
ENGR 251	Thermodynamics I	3 .00
ENGR 361	Fluid Mechanics I	3 .00
MECH 221*	Materials Science	3 .00
PHYS 252*	Optics	3 .00
PHYS 384*	Introduction to Astronomy	3 .00
PHYS 385*	Astrophysics	3.00

4. Software Engineering Options

a) General Option

- i. General Program option has **changed** from 17 credits to 16 credits.
- ii. Students must complete at least 16 credits with a minimum of 15 credits from one of the options listed below, including all the courses marked *, and at least one course marked **, and the remainder chosen from the electives list.

b) Computer Games option

- i. COMP 376 Introduction to Game Development (4.00 credits) has **changed** in that COMP 371 is a prerequisite and no longer available as a co-requisite.

c) Web Services and Application (WSA) Option.

There are no changes to the Web Services and Application (WSA) Option.

d) Real-Time, Embedded, and Avionics Software (REA) Option.

There are no changes to the Real-Time, Embedded, and Avionics Software (REA) Option.

5. Electives

- i. SOEN 431 Formal Methods (3.00 credits) has been **removed** from the list Technical Electives. As a transitional measure, students who have taken this course prior to May 2015 will receive 3.00 credit and this course may be used towards their degree. *This transitional measure may be rescinded by June 2020.*
- ii. COMP 465 Design and Analysis Algorithms (3.00 credits) has **removed** COMP 335 as a prerequisite.