

May 1, 2011

STUDENT NAME
ADDRESS

Subject: Important Notes and Curriculum Changes in the 2011-2012 Calendar

Dear Student,

Each May, all students enrolled in the **Computer Engineering** program are mailed a letter advising them of curriculum changes that have occurred since their entry into the program. This letter, included past ones, can also be viewed at the following address for your convenience:

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

This letter is to advise you of any additional changes that will appear in the 2011-2012 Calendar which 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.

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. Graduation Application deadlines:

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

<http://registrar.concordia.ca/convo/gradapp.html>.

1. Changes to the Engineering Core

There are no changes to the Engineering Core.

2. Changes to the Computer Engineering Core

COEN 316 Computer Architecture and Design has been added to the Computer Engineering Core as a transitional measure student who will graduate by June 2012 will not need to complete COEN 316.

SOEN 341 Software Process has been added to the Computer Engineering Core as a transitional measure student who will graduate by June 2012 will not need to complete SOEN 341.

3. Changes to the Computer Engineering Options

The *System Hardware Option* has been *deleted* from the Computer Engineering program. As a transitional measure students who are currently enrolled in the Systems Hardware Option who will graduate by June 2012 can either graduate with the old option or change to a new option.

The *System Software Option* has been *deleted* from the Computer Engineering program. As a transitional measure students who are currently enrolled in the Systems Software Option who will graduate by June 2012 can either graduate with the old option or change to a new option.

Avionics and Embedded Systems Option Core: has been *added* as an option in the Computer Engineering program. The Avionics and Embedded Systems option will consist of 26 credits made up of the following courses below.

COEN 320 Introduction to Real-time Systems

COEN 421 Embedded Systems and Software Design

ELEC 415 Flight Control Systems

ELEC 416 Avionic Navigation Systems

ENGR 418 Integration of Avionics Systems

Minimum of 9.50 credits must be chosen from the Computer Engineering Electives list

For students NOT selecting an Option:

A minimum of 26 credits must be chosen from the Computer Engineering Electives list. No more than 16 of these credits may be chosen from topic area C - Computer Science and Software Engineering.

Computer Engineering Electives

Courses are listed in groups to facilitate course selection

A. Hardware/Electronics/VLSI

COEN 313 Digital Systems Design II
COEN 315 Digital Electronics
COEN 451 VLSI Circuit Design
ELEC 312 Electronics II
ELEC 423 Introduction to Analog VLSI
ELEC 451 Computer-Aided Modeling and Design of Circuits
ELEC 458 Techniques in Electromagnetic Compatibility

B. Real-time and Software Systems

COEN 320 Introduction to Real-time Systems
COEN 345 Software Testing and Validation
COEN 421 Embedded Systems and Software Design
COEN 432 Applied Genetic and Evolutionary Systems

C. Computer Science and Software Engineering

COMP 335 Introduction to Theoretical Computer Science
COMP 353 Databases
COMP 371 Computer Graphics
COMP 426 Multicore Programming
COMP 428 Parallel Programming
COMP 442 Compiler Design
COMP 451 Database Design
COMP 465 Design and Analysis of Algorithms
COMP 472 Artificial Intelligence
COMP 474 Intelligent Systems
SOEN 342 Software Requirements and Specifications
SOEN 343 Software Architecture and Design I
SOEN 344 Software Architecture and Design II
SOEN 357 User Interface Design
SOEN 431 Formal Methods
SOEN 448 Management of Evolving Systems

D. Telecommunications, Networks and Signal Processing

COEN 445 Communication Networks and Protocols
ELEC 363 Fundamentals of Telecommunication Systems
ELEC 442 Digital Signal Processing
ELEC 462 Digital Communications
ELEC 465 Networks Security and Management
ELEC 472 Advanced Telecommunication Networks

E. Control Systems

ELEC 481 Linear Systems
ELEC 482 System Optimization
ELEC 483 Real-time Computer Control Systems
ENGR 245 Mechanical Analysis
ENGR 472 Robot Manipulators

F. Avionics

ELEC 415 Flight Control Systems
ELEC 416 Avionic Navigation Systems
ENGR 417 Standards, Regulations and Certification
ENGR 418 Integration of Avionics Systems

G. Other

COEN 498 Topics in Computer Engineering
ENGR 411 Special Technical Report