

# 2004/2005 CURRICULUM - SOFTWARE ENGINEERING

ENTRY FROM CEGEP (Total Credits - 108/109)

<p>First (Fall) Semester ( TOTAL = 17 cr )</p> <p><b>COMP 202 Introduction to Computing 1</b> (3 cr)  <b>EDEC 206 Communication in Engineering</b> (3 cr)  <b>MATH 262 Intermediate Calculus</b> (3 cr)  <b>MATH 263 Ordinary Differential Equations and Linear Algebra</b>  (3 cr, C - MATH 262)  <b>MIME 221 Engineering Professional Practice</b> (2 cr)  XXXX xxx General Complementary I (3 cr)</p>	<p>Second (Winter) Semester ( TOTAL = 15 cr )</p> <p><b>COMP 250 Introduction to Computer Science</b> (3 cr, P - COMP 202)  <b>ECSE 200 Fundamentals of EE</b> (3 cr, C - MATH 263 or MATH 325)  <b>ECSE 221 Intro. to Computer Engineering</b> (3 cr, P - COMP 202)  <b>MATH 264 Advanced Calculus</b> (3 cr, P - MATH 262)  <b>MATH 270 Applied Linear Algebra</b> (3 cr, P - MATH 263)</p>
<p>Third (Fall) Semester (TOTAL = 17 cr )</p> <p><b>COMP 206 Introduction to Software Systems</b> (3 cr, P - COMP 250)  <b>COMP 302 Programming Languages and Paradigms</b> (3 cr, P - COMP 250)  <b>ECSE 210 Circuit Analysis</b> (3 cr, P - ECSE 200)  <b>ECSE 291 Electrical Measurements Lab</b> (2 cr, C - ECSE 210)  <b>ECSE 321 Intro. to Software Engineering</b> (3 cr, P - COMP 202 or COMP 208)  <b>ECSE 322 Computer Engineering</b> (3 cr, P - ECSE 200 / MECH 383 and  ECSE 221)</p>	<p>Fourth (Winter) Semester ( TOTAL = 15 cr )</p> <p><b>COMP 361 Systems Programming Project</b> (3 cr, P-COMP 206)  <b>ECSE 303 Signals and Systems 1</b> (3 cr, P-ECSE 210, MATH 247/270;  C-MATH 249/381)  <b>ECSE 330 Introduction to Electronics</b> (3 cr, P - ECSE 210)  <b>MATH 363 Discrete Mathematics</b> (3 cr, P - MATH 264 and MATH 270)  <b>MATH 381 Complex Variables &amp; Transforms</b> (3 cr, P-MATH 264)</p>
<p>Fifth (Fall) Semester ( TOTAL = 15 cr )</p> <p><b>COMP 251 Data Struct. &amp; Algorithms</b> (3 cr, P- COMP 250 and MATH 240/363)  <b>ECSE 305 Probability and Random Sig. 1</b> (3 cr, P - ECSE 303)  <b>ECSE 429 Software Validation</b> (3 cr, P-ECSE 321)  <b>MIME 310 Engineering Economy</b> (3 cr)  XXXX xxx Technical Complementary I (3 cr)</p>	<p>Sixth (Winter) Semester ( TOTAL = 15 cr )</p> <p><b>COMP 360 Algorithm Design Techniques</b> (3 cr, P - COMP 251)  <b>ECSE 427 Operating Systems</b> (3 cr, P - ECSE 322 or COMP 273)  <b>ECSE 428 Software Engineering Practice</b> (3 cr, P-ECSE 321 or  COMP 335)  XXXX xxx Technical Complementary II (3 cr)  XXXX xxx General Complementary II (3 cr)</p>
<p>Seventh (Fall) Semester ( TOTAL = 15 cr )</p> <p><b>COMP 330 Theoretical Aspects of Computer Science</b> (3 cr, P - COMP 251)  <b>COMP 420 Files and Databases</b> (3 cr, P-COMP 302)  <b>ECSE 495 Software Engineering Project</b> (3 cr, P-ECSE 321 and  42 departmental credits)  XXXX xxx Technical Complementary III (3 cr)  XXXX xxx Technical Complementary IV (3 cr)</p>	

All courses are core courses except for technical complementaries and general complementaries. Core courses are shown in boldface above. All core courses must be passed with a grade "C" or better. Also, a grade of "C" is required for an ECSE xxx core course in order to proceed with its follow-on ECSE xxx course(s), and a grade of "C" is required for a MATH xxx course in order to proceed with its follow-on MATH xxx course(s). A grade of "D" is only acceptable for non-core courses.

Technical Complementaries are selected from a prescribed list of courses offered by the Departments of Computer Science and Electrical and Computer Engineering.

General complementary studies requirements:

**1) U0, freshman students,** must complete 3 credits from a special list which relate to the Impact of Technology on Society and 6 credits from a special list of Humanities and Social Sciences, and Administrative Studies and Law (see Section 3.4, Page 207 of the 2004-2005 McGill University Calendar).

**2) U1, (students from Quebec CEGEP and French Baccalaureate),** must complete 3 credits from a special list which relate to the Impact of Technology on Society and 3 credits from a special list of Humanities and Social Sciences, and Administrative Studies and Law (see Section 3.4, Page 207 of the 2004-2005 McGill University Calendar).