

**UNIVERSITY OF NEW BRUNSWICK
SOFTWARE ENGINEERING MATRIX**

Start in 2013-14

YEAR 1		YEAR 2		YEAR 3		YEAR 4	
TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6	TERM 7	TERM 8
MATH 1003 Intro to Calculus I (4-0-0) <input type="checkbox"/>	MATH 1013 Intro to Calculus II (4-0-0) <input type="checkbox"/>	CS 2043 Software Eng. I (3-1*-2) <input type="checkbox"/>	CS 2333 Computability & Formal Languages (3-1-0) <input type="checkbox"/>	CS 2253** Machine Level Programming (3-0-2) <input type="checkbox"/>	SWE 4403^(b) Software Architecture and Design Patterns (3-0-3) <input type="checkbox"/>	SWE 4040 Design Project (1*-0-6) <input type="checkbox"/>	
MATH 1503 Intro to Linear Algebra (4-0-0) <input type="checkbox"/>	CS 1003 * Int. to Computer Programming (3-1-3*) <input type="checkbox"/>	CS 1303 Discrete Structures (3-1-0) <input type="checkbox"/>	INFO 1103^(a) Data & Information Management (3-0-3) <input type="checkbox"/>	CS 2383 *** Data Structures & Algorithms (3-1-0) <input type="checkbox"/>	CS 3613 Programming Languages (3-1-0) <input type="checkbox"/>	SWE 4103 or 4203 Software Quality OR Software Evolution (3-0-3*) <input type="checkbox"/>	ECE3812 or CS3873 Data Comm. and Networking (3-0-3*) <input type="checkbox"/>
CS 1073 Computer Prog. I (in Java) (3-2-0) <input type="checkbox"/>	CS 1083 Computer Prog. II (in Java) (3-2-0) <input type="checkbox"/>	ECE 2213 Digital Systems I (3-1-3*) <input type="checkbox"/>	ECE 2412 or CS3113 Simulation and Engineering Analysis (3-1-2) <input type="checkbox"/>	ECE 3221 Computer Organization (3-1-3*) <input type="checkbox"/>	CS 3503 Systems Analysis, Design & Proj. Mgmt. (3-1-0) <input type="checkbox"/>	CS 3383 **** Algorithm Design & Analysis (3-1-0) <input type="checkbox"/>	TE <input type="checkbox"/>
PHYS 1081 ***** Foundations of Physics for Engineers (3-0-3) <input type="checkbox"/>	ECE 1813 Electricity and Magnetism (3-1-3*) <input type="checkbox"/>	ECE 2701 Electric Circuits and Electronics (3-1-3*) <input type="checkbox"/>	CSE Eng. Economics (CE 3963/ME 3232) (3-0-0) <input type="checkbox"/>	SWE 4103 or 4203 Software Quality OR Software Evolution (3-0-3*) <input type="checkbox"/>	ECE 3232 Embedded Systems Design (3-0-2) <input type="checkbox"/> <small>(replaces ME2613)</small>	CS 3413 Operating Systems I (3-0-2) <input type="checkbox"/>	TE <input type="checkbox"/>
ENGG 1003 Technical Communications (2-0-3) <input type="checkbox"/>	CHEM 1982 + CHEM 1987 Chemistry (3-0-3) <input type="checkbox"/>	BAS SCI <input type="checkbox"/>	BAS SCI <input type="checkbox"/>	CSE Humanities & Social Sciences <input type="checkbox"/>	ECE 3242 Computer Architecture (3-1-3*) <input type="checkbox"/>	TE <input type="checkbox"/>	CSE open <input type="checkbox"/>
ENGG 1015 Design & Problem Solving (1-0-2) <input type="checkbox"/>		STAT 2593 Probability & Statistics ((3-0-0) <input type="checkbox"/>	CSE Impact of Technology on Society <input type="checkbox"/>				ENGG 4013 Law & Ethics (3-0-0) <input type="checkbox"/>
ENGG 1001 Lecture Series <input type="checkbox"/>							
21	20	24	21	19	20	20	21

* Replaced APSC 1023 Mechanics II in 2009
***** Replaced APSC 1013 Mechanics I in 2010

Total Ch: 166

CSE - Complementary Studies Elective; see www.cs.unb.ca/~bgn/swe for more info on CSEs

TE - Technical Elective

BAS SCI Basic Science Elective

** Replaced CS 2023 Proc. Program Dev. in 2010

*** Replaced CS 3323 Int. to Data Structures in 2010

**** Replaced CS 3933 Algorithms in 2010

(a) Replaced INFO 2103 in 2011, which replaced CS 2533 in 2008

(b) Replaced CS 3043 in 2012

Updated: May 31, 2013