2015-2016 Course Sequence
BASc in Computer Engineering

1st YEAR (30 credits)

		Session	Prerequisite(s)
CHM1311	Principles of Chemistry	Fall	4U or OAC chemistry or equivalent
GNG1105	Engineering Mechanics	Fall	Physics 4U, advanced functions and Introductory Calculus 4U or equivalent
ITI1120	Introduction to Computing I	Fall	
MAT1320	Calculus I	Fall	MAT1339 or Ontario 4U Calculus and Vectors (MCV4U) or an equivalent
MAT1341	Introduction to Linear Algebra	Fall	MAT1339 or Ontario 4U Calculus and Vectors (MCV4U), or an equivalent
ITI1100	Digital Systems I	Winter	
ITI1121	Introduction to Computing II	Winter	ITI1120
MAT1322	Calculus II	Winter	MAT1320
MAT1348	Discrete Mathematics for Computing	Winter	
PHY1124	Fundamentals of Physics for Engineers	Winter	OAC or 4U Physics, MAT1320

2nd YEAR (36 credits)

		Session	Prerequisite(s)
CEG2136	Computer Architecture I	Fall	ITI1100
CSI2110	Data Structures and Algorithms	Fall	ITI1121, MAT1348
ELG2138	Circuit Theory I	Fall	ITI1100, MAT1341, MAT1322
MAT2322	Calculus III for Engineers	Fall	(MAT1322 or MAT1325 or MAT1332), (MAT1341 or CEGEP linear algebra)
ENG1112	Technical Report Writing	Fall	
SEG2105	Introduction to Software Engineering	Fall	ITI1121
ELG2136	Electronics I	Winter	ELG2138
ELG2911	Professional Practice in Information Technology and Engineering	Winter	
MAT2377	Probability and Statistics for Engineers	Winter	MAT1320 or MAT1330. Corequisite: MAT1322 or MAT1325 or MAT1332
PHY2323	Electricity and Magnetism	Winter	(MAT2121 or MAT2122 or MAT2322), (PHY1124 or {PHY1121, PHY1122} or {PHY1321, PHY1322} or {PHY1331, PHY1322})
SEG2106	Software Construction	Winter	CSI2110, SEG2105
Complementary Elective		Winter	

3rd YEAR (33 credits)

		Session	Prerequisite(s)
CEG3136	Computer Architecture II	Fall	CEG2136
CEG3155	Digital Systems II	Fall	CEG2136
ECO1192	Engineering Economics	Fall	
ELG3125	Signal and System Analysis	Fall	ELG2138
HIS2129	Technology, Society and Environment since 1800	Winter	
or			
PHI2394	Scientific Thought and Social Values	Fall	
MAT2384	Ordinary Differential Equations and Numerical Methods	Fall	MAT1341, (MAT1322 or MAT1325 or MAT1322)
CEG3156	Computer Systems Design	Winter	CEG3155
CEG3185	Introduction to Data Communications and Networking	Winter	MAT2377 or (MAT2371, MAT2375) or corequisite: ELG3126
CSI3131	Operating Systems	Winter	CEG2136, CSI2110
ELG3155	Introduction to Control Systems	Winter	ELG3125
Complementary Elective		Winter	

4th YEAR (30 credits)

Course	Title	Session	Prerequisite(s)
CEG4136	Computer Architecture III	Fall	CEG3136
CEG4912	Computer Engineering Design: Project I	Fall	CEG3136, CEG3156
Science Elective		Fall	
Technical Elective		Fall	
Technical Elective		Fall	
CEG4166	Real-Time Systems Design	Winter	CSI3131
CEG4913	Computer Engineering Design: Project II	Winter	CEG4912
Complementary Elective		Winter	
Technical Elective		Winter	
Technical Elective		Winter	