

2015-2016 Course Sequence

BASc in Civil Engineering

1st YEAR (30 credits)

CHM1311	Principles of Chemistry	Fall
ENG1112	Technical Report Writing	Fall
GNG1105	Engineering Mechanics	Fall
GNG1106	Fundamentals of Engineering Computation	Fall
MAT1320	Calculus I	Fall
CVG1107	Civil Engineering Graphics and Seminars	Winter
MAT1322	Calculus II	Winter
MAT1341	Introduction to Linear Algebra	Winter
PHY1122	Fundamentals of Physics II	Winter
ECO1192	Engineering Economics	Winter

Prerequisite(s)

4U or OAC chemistry or equivalent

Physics 4U, advanced functions and Introductory Calculus 4U or equivalent

One of MAT1339, Ontario 4U Calculus and Vectors (MCV4U) or an equivalent

MAT1320
MAT1339 or Ontario 4U Calculus and Vectors (MCV4U), or an equivalent
OAC or 4U Physics; corequisite: MAT1320 (preferred) or MAT1330

2nd YEAR (36 credits)

CVG2132	Fundamentals of Environmental Engineering	Fall
CVG2141	Civil Engineering Materials	Fall
CVG2149	Civil Engineering Mechanics	Fall
MAT2322	Calculus III for Engineers	Fall
MAT2384	Ordinary Differential Equations and Numerical Methods	Fall
Elective		Fall
CVG2107	Geotechnical Materials and Processes	Winter
CVG2116	Introduction to Fluid Mechanics	Winter
CVG2140	Mechanics of Materials I	Winter
CVG2171	Surveying and Measurements	Winter
CVG2181	Numerical Modelling in Civil Engineering	Winter
MAT2377	Probability and Statistics for Engineers	Winter

Prerequisite(s)

CHM1311
CHM1311
GNG1105, MAT1322, PHY1122
(MAT1322 or MAT1325 or MAT1332),
(MAT1341 or CEGEP linear algebra)

MAT1341, (MAT1322 or MAT1325 or MAT1332)

CVG2149, MAT1322
GNG1105

GNG1106, MAT2322, MAT2384

MAT1320 or MAT1330; corequisite: MAT1322 or MAT1325 or MAT1332

3rd YEAR (33 credits)

CVG3109	Soil Mechanics I	Fall
CVG3116	Hydraulics	Fall
CVG3120	Hydrology	Fall
CVG3140	Theory of Structures I	Fall
CVG3141	Mechanics of Materials II	Fall
PHI2394	Scientific Thought and Social Values	Fall
or		
HIS2129	Technology, Society and Environment since 1800	Winter
CVG3106	Soil Mechanics II	Winter
CVG3132	Physical / Chemical Unit Operations of Water and Wastewater Treatment	Winter
CVG3147	Structural Steel Design I	Winter
CVG3148	Reinforced Concrete Design I	Winter
Science Elective		Winter

Prerequisite(s)

CVG2107, CVG2140
CVG2116
MAT2377
CVG2140, CVG2149
CVG2140, CVG2149, MAT2384

CVG3109

CVG2116, CVG2132
CVG2141, CVG3140, CVG3141. Corequisite: MAT2377
CVG2141, CVG3140

4th YEAR (33 credits)

CVG4001 Introduction to Civil Engineering Project

CVG4108 Geotechnical Design

CVG4148 Theory of Structures II

CVG4150 Highway and Transportation Engineering

CVG4175 Field Investigations

Elective

CVG4113 Hydraulics of Water Supply and Sewer Systems

CVG4130 Advanced Environmental Engineering

CVG4907 Engineering Design Project

GNG4170 Engineering Law

Technical Elective

Session

Fall

Fall

Fall

Fall

Fall

Fall

Winter

Winter

Winter

Winter

Winter

Prerequisite(s)

CVG3106, CVG3116, CVG3132, CVG3147, CVG3148

CVG3109, CVG3106

CVG2181, CVG3140

CVG2171, CVG2107, CVG2141

CVG2132, CVG3116, CVG3106

CVG3116

CVG2132

CVG4001