McGill Joint Honours in Physics and Computer Science

Fall U1

COMP 250
Intro to Computer Science

MATH 240
Discrete Structures

Prereq. MATH 133

MATH 248
Hon. Advanced Calculus

Prereq. MATH 133 and MATH 222

PHYS 251
Hon. Classical Mechanics 1

Prereq. PHYS 131 and MATH 222

PHYS 257
Experimental Methods 1

Coreq. PHYS 251

Winter U1

MATH 247
Hon. Applied Linear Algebra

Prereq. MATH 133

MATH 249
Hon. Complex Variables

Prereq. MATH 248

MATH 325
Hon. ODEs

Prereq. MATH 222

PHYS 241
Signal Processing

Prereq. PHYS 142

PHYS 258
Experimental Methods 2

Prereq. PHYS 257

Fall U2

COMP 206
Intro to Software Systems

Prereq. COMP 250

COMP 350
Numerical Computing

Prereq. MATH 222, MATH 247 and COMP 250

PHYS 253
Thermal Physics

Prereq. PHYS 131, MATH 222 and CHEM 120

PHYS 350
Hon. Electricity and Magnetism

Prereq. MATH 248 and MATH 325

PHYS 357
Hon. Quantum Physics 1

Prereq. MATH 247 and PHYS 251

Winter U2

COMP 273
Intro to Computer Systems

Prereq. COMP 206

COMP 252
Hon. Algorithms and Data Structures

Prereq. COMP 250 and MATH 240

PHYS 362
Statistical Mechanics

Prereq. MATH 248 and PHYS 253

PHYS 457
Hon. Quantum Physics 2

Prereq. PHYS 357

Fall U3

2 courses selected from:
COMP 303: Software Design
COMP 310: Operating Systems
COMP 330: Theory of Computation

COMP 302
Programming Languages and Paradigms

Prereq. COMP 250

PHYS 352
Hon. Electromagnetic Waves

Prereq. PHYS 350

2 courses selected from:
PHYS 404 Climate Physics
PHYS 434 Optics
MATH 323: Probability

Winter U3

COMP 362: Hon. Algorithm Design or any 400- or 500-level COMP course

PHYS 479
Hon. Research Project or
COMP 400
Project in Computer Science

PHYS 351: Hon. Classical Mech 2
PHYS 359: Advanced Physics Lab 1
PHYS 432: Fluids
MATH 340: Discrete Math
or any 500-level PHYS course,
or any 400- or 500-level COMP course