Computational Biochemistry B.Sc. Honours Course Map

First year	Second year	Third year	Fourth year

First year

CHEM 1001, CHEM 1002
General Chemistry

BIOL 1103, BIOL 1104
Foundations of Biology

MATH 1007, MATH 1107
Elementary Calculus I and Linear Algebra I

PHYS 1007, PHYS 1008
Elementary University Physics

COMP 1005, COMP 1006
Introduction to Computer Science I & II

Second year

BIOC 2200
Cellular Biochemistry

BIOC 2300
Physical Biochemistry
or
CHEM 2103
Physical Chemistry I

BIOL 2104
Introductory Genetics

CHEM 2203, CHEM 2204
Organic Chemistry I & II
CHEM 2303
Analytical Chemistry II
CHEM 2501
Introduction to Inorganic and Bioinorganic Chemistry

STAT 2507
Introduction to Statistical Modeling I
MATH 2007
Elementary Calculus II
COMP 2401
Introduction to Systems Programing

Third year

BIOC 3101 and 3102
General Biochemistry
BIOC 3103 and 3104
Practical Biochemistry
BIOC 3202
Biophysical Techniques and Applications
BIOC 3008
Introduction to Bioinformatics

BIOL 3104
Molecular Genetics

Fourth year

BIOC 4008
Computational Systems Biology

1.5 credits from courses such as:
BIOC 2400, BIOC 3400
Independent Research I & II
BIOC 4202
Mutagenesis and DNA Repair
MATH 2107
Linear Algebra II
STAT 2509
Introduction to Statistical Modeling II
*These are a few examples

Honours Project (1.0 credit):
BIOC 4906
Interdisciplinary Research Project
BIOC 4908
Research Project

1.0 credit from list of approved courses in COMP 2000 level or above

0.5 credit from Free Electives

2.0 credits in approved courses outside the Faculties of Science and Engineering (may include NSCI 1000)

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