

Computational Biology Study Plan

For students with all 3 Science subjects

(For Student Cohorts of AY2004/05 and AY2005/06)

<p>Semester 1 (24 MC)</p> <p>SSxxxx Singapore Studies GEMxxx (Unrestricted) CM1121 Basic Organic Chemistry MA1101R Linear Algebra I MA1102R Calculus LSM1101 Biochemistry Of Biomolecules</p>	<p>Semester 2 (20 MC)</p> <p>GEMxxx (Unrestricted) CS1101C Programming Methodology LSM1102 Molecular Genetics PC1432 Physics IIE 1 Breadth module outside Faculty</p>
<p>Semester 3 (22 MC)</p> <p>LSM2101 Metabolism And Regulation ST2131 Probability * LSM2201 Experimental Biochemistry (or LSM2202) * MA2214 Combinatorial Analysis (or CS1231) 1 Unrestricted elective</p>	<p>Semester 4 (21 MC)</p> <p>CS1102C Data Structures and Algorithms * CZ2105 Numerical Methods I (or MA2213) * LSM2104 Essential Bioinformatics And Biocomputing (or CS2220) ST2132 Mathematical Statistics LSM2102 Molecular Biology</p>
<p>Semester 5 (20 MC)</p> <p>LSM3231 Protein Structure and Function ST3236 Stochastic Process I CS2102 Database Systems PC2267 Biophysics I 1 Level 3000 elective</p>	<p>Semester 6 (20 MC)</p> <p>CZ3252/LSM3241 Bioinformatics & Biocomputing MA3259 Mathematical Methods in Genomics 2 Unrestricted electives 1 Level 3000 elective</p>
<p>Semester 7 (17 MC)</p> <p>CB4199 Honours Project CZ4225 Methods in Computational Biology LSM4241 Functional Genomics 1 Level 4000 elective</p>	<p>Semester 8 (17 MC)</p> <p>CB4199 Honours Project CZ4226 Advanced Bioinformatics 1 Level 4000 elective 1 Unrestricted elective</p>

Total MC = 161

- * LSM2201 Experimental Biochemistry (in Sem 1) or LSM2202 Experimental Molecular Cell Biology (in Sem 2)
- * CZ2105 Numerical methods I (in Sem 2) or MA2213 Numerical analysis 1 (in Sem 1)
- * MA2214 Combinatorial Analysis (both Sem) or CS1231 Discrete Structures (both Sem)
- * LSM2104 Essential Bioinformatics and Biocomputing (both Sem) or CS2220 Introduction to Computational Biology (in Sem 2)