## **Curriculum Structure for BSc in Physics**

Topic Semester	Mechanics	Quantum Mechanics	Electricity & Magnetism	Thermodynamics & Statistical Physics	Experimental Physics	Mathematical methods	Computational Physics	Languages	Others
1A	PHY1101 (3CU) <sup>%</sup> Introductory Classical Mechanics					Select one from below (3CU)* <sup>@</sup> MA1200 Calculus and Basic Linear Algebra I or MA1300 Enhanced Calculus and Linear Algebra I	CS1302 Introduction to Computer Programming*	Select one from below (3CU) <sup>&amp;</sup> : GE1401 University English or LC0200A English for Academic Purposes 1	CSCI1001 (0 CU) <sup>%</sup> Employability for Scientists
									GE course (3CU)
1B PHY12 General			PHY1202 (3CU) General Physics II			Select one from below (3CU)* <sup>®</sup> MA1201 Calculus and Basic Linear Algebra II or MA1301 Enhanced Calculus and Linear Algebra II		Select one from below (3 CU) <sup>&amp;</sup> GE2401 English for Science or LC0200B English for Academic Purposes 2	Select one from below (3CU) <sup>%</sup> : CHEM1101 Introduction to Chemistry or CHEM1200 Discovery in Biology or CHEM1300 Principles of General Chemistry or MA1501 Coordinate Geometry or MA1502 Algebra
						<b>3</b>			CSCI1002 (0CU) <sup>%</sup> Career Lab for Scientists
2A					PHY2212 (3 CU) Measurement and Instrumentation	MA2158 (3CU) Linear Algebra and Calculus			GE1501 (3 CU) <sup>&amp;</sup> Chinese Civilisation - History and Philosophy
									GE course (3 CU)
2B		PHY3202 (3 CU) Modern Physics	PHY3204 (3 CU) Waves and Optics	PHY3290 (3CU)	PHY2213 (3 CU) Advanced				GE course (3CU)
			PHY2191 (3 CU) Electricity and Magnetism	Thermodynamics	Measurement and Instrumentation				
3A		PHY3251 (3 CU) Quantum	PHY3205 (3 CU)		PHY3231 (3 CU) Advanced				Free electives (6CU)
		Mechanics	Electrodynamics		Instrumentation Lab				GE course (3CU)
3B		PHY3272 (3 CU) Introduction to Solid State Physics					PHY3115 (3 CU) Introduction to Computational Physics		Free electives (6CU)
4A	Select one from below (3 CU): PHY4216 Project or PHY4217 Dissertation								
	Major electives (12 CU)								
4B	Select one from below: PHY4217 Dissertation (3CU) or CSCI4003 Co-operative Education Placement Project for Science Students (6CU) <sup>#</sup>							Free electives (6CU)	
.5		Major electives (6 or 9 CU <sup>^</sup> )							,

<sup>&</sup>lt;sup>%</sup> College Requirement

<sup>\*</sup> College-specified Course

<sup>&</sup>lt;sup>&</sup> University Requirement

<sup>&</sup>lt;sup>®</sup> Students with HKDSE Mathematics Extended Part Module 2 (Levels 4 –5) are required to take MA1300 and MA1301 instead of MA1200 and MA1201.

<sup>\*</sup> Students who take CSCI4003 need to continue their studies in the following Summer Term and Semester A. They are also required to take CSCI4001 simultaneously.

 $<sup>\</sup>hat{\ }$  Students need to take 9CUs for major electives if they select PHY4216 in Sem 4A.