

## DEGREE OF BACHELOR OF SCIENCE IN COMPUTING SCIENCE AND PHYSICS (04IF1370)

### DESIGNATED DEGREE OF BACHELOR OF SCIENCE IN COMPUTING SCIENCE AND PHYSICS (04IF1389)

Students must also comply with the University General Regulations and the Supplementary Regulations for the Degree of Bachelor of Science

**All the courses listed below are prescribed for this degree**

PROGRAMME YEAR 1 – 120 Credit Points					
First Half Session			Second Half Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
PD 1002	Getting Started at the University of Aberdeen	0			
CS 1032	Programming 1	15	CS 1533	Computer Systems and Architecture	15
PX 1015	The Physical Universe A	15	CS 1527	Object-Oriented Programming	15
MA 1005	Calculus I	15	PX 1513	The Physical Universe B	15
MA 1006	Algebra	15	MA 1508	Calculus II	15

PROGRAMME YEAR 2 – 120 Credit Points					
First Half-Session			Second Half-Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
CS 2020	Software Programming	15	CS 2513	Mathematics for Computing Science	15
CS 2019	Databases and Data Management	15	CS 2522	Algorithms and Data Structures	15
PX 2013	Light Science	15	PX 2505	Practical Optics and Electronics	15
PX 2015	Dynamical Phenomena	15	PX 2510	Relativity and Quantum Mechanics	15

PROGRAMME YEAR 3 – 120 Credit Points					
First Half-Session			Second Half-Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
CS 3028	Principles of Software Engineering	15	CS 3528	Software Engineering and Professional Practice	15
PX 3014	Energy and Matter	15			
PX 3020	Mathematical Methods in Physics	15			
Plus two of the following courses					
CS 3026	Operating Systems	15	CS 3518	Language and Computability	15
			CS 3534	Distributed Systems	15
Plus two of the following courses					
PX 3016	Introduction to the Solid State	15	PX 3510	Advanced Practical Physics	15
			EITHER PX 4510*	Structure of Matter and the Universe	15
			OR PX 4516*	Nuclear and Semiconductor Physics	15
*These courses alternate on a two-year cycle. PX 4516 will run in 2022-23.					

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**PLEASE SEE OVER →**

PROGRAMME YEAR 4 – 120 Credit Points					
First Half-Session			Second Half-Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
CS 4040	Research Methods	15	CS 4594	Joint Honours Computing-Physics Project	45
CS 4049	Introduction to Machine Learning and Data Mining	15			
PX 4007	Case Studies In Physical Sciences	15	PX 4514	Modelling Theory	15
PX 4012	Statistical Physics and Stochastic Systems	15			
A graduating curriculum for the Honours programme must include 90 credit points from Level 4 courses.					

Notes	
1.	Designated Programme: See Supplementary Regulation 1
2.	Candidates seeking entry to the Junior Honours programme must have accumulated, by award or recognition, or been exempted from, at least 240 credit points at levels 1 and 2, including those compulsory courses required to enter programme year 3.