## 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 1533	Computer Systems and Architecture	15
CS 1032	Programming 1	15	CS1527	Object-Oriented Programming	15
PX 1015	The Physical Universe A	15	PX 1513	The Physical Universe B	15
MA 1005	Calculus I	15			
MA 1006	Algebra	15	MA 1508	Calculus II	15

PROGRAMME YEAR 2 – 120 Credit Points					
First Half-Session			Second Half-	Session	
Course	Course Title	Credit	Course	Course Title	Credit
Code		Points	Code		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

First Half-Ses	sion		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			
PX3019	Mathematical and Computational Methods in Physics	15			
	Plus tr	wo of the fo	llowing cours	es	
CS 3026	Operating Systems	15	CS 3518	Language and Computability	15
			CS 3534	Distributed Systems	15
	Plus t	wo of the fo	llowing cours	es	
PX 3016	Introduction to the Solid State	15	PX 3510	Advanced Practical Physics	15
			<b>EITHER</b> PX 4510	Structure of Matter and the Universe (see Note 1) or	15
			<b>OR</b> PX 4516	Nuclear and Semiconductor Physics (see Note 1)	15

PLEASE SEE OVER  $\rightarrow$ 

First Half-Ses	ssion		Second Half-	Session	
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
CS 4040	Research Methods	15			
CS 4049 OR CS 4048	Introduction to Machine Learning and Data Mining Robotics	15	CS 4594	Joint Honours Computing-Physics Project	45
PX 4007	Case Studies In Physical Sciences	15			
PX 4012	Statistical Physics and Stochastic Systems	15	PX 4514	Modelling Theory	15

	Notes
1	Designated Programme:
1.	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.