

**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 1001	Professional Skills Part 1	0			
CS 1028	Programming for Science and Engineering	15	CS 1520	Computer Architecture	15
PX 1015	The Physical Universe A	15	CS1527	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 2013	Mathematics for Computing Science	15	CS 2510	Modern Programming Languages	15
CS 2018	Introduction to Data Management for Data Science	15	CS 2521	Algorithmic Problem Solving	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 3524	Distributed Systems and Security	15
PX 3014	Energy and Matter	15	CS 3528	Software Engineering and Professional Practice	15
PX 3017	Research & Computing Skills in Physics	15			
Plus two of the following courses					
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
These courses alternate on a two-year cycle. PX 4510 will run in 2019-20.					
Plus 15 credit points from courses of choice.					

**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 4047	Computational Intelligence	15			
PX 4007	Case Studies In Physical Sciences	15	PX 4514	Modelling Theory	15
PX 4012	Statistical Physics and Stochastic Systems	15			
<b>A graduating curriculum for the Honours programme must include 90 credit points from Level 4 courses.</b>					

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.