

Suggested course plan for students enrolled in the B.Sc./B.E. combined course leading to a Physics major and entry to Physics Honours

Year 1	BSc/BE[237.5pnts]	1st year of course		B.Sc./B.E.	B.Sc./B.E.
Semester	Code	Subject Name	Points	Electrical stream	Computer Stream
1	640-121/141	Physics	12.5	12.5	12.5
1	620-121/141	Mathematics 1A	12.5	12.5	12.5
1	433-141	Computing Fundamentals A	12.5	12.5	12.5
1	431-102	Engineering [Digital Electronics & Microprocessors]	12.5	12.5	12.5
2	640-122/142	Physics	12.5	12.5	12.5
2	620-113/123/143	Applied Mathematics	12.5	12.5	12.5
2	620-112/122/142	Mathematics 1B	12.5	12.5	12.5
2	431-103	Engineering [Electrical Circuits]	12.5	12.5	12.5
Total Science points for year*				75	75

* Also incorporates compulsory CS units

Year 2	2nd year of course		Points	Electrical stream	Computer Stream
1	640-223/243*	Quantum Mechanics and Thermal Physics	12.5	12.5	12.5
1	431-204	Programmable Logic & Microcon	12.5	12.5	12.5
1	431-210	Circuit Analysis	12.5	12.5	12.5
1	433-142	Computer Fundamentals B	12.5	12.5	12.5
2	620-231/3	Vector Analysis	12.5	12.5	12.5
2	620-232/4	Mathematical Methods	12.5	12.5	12.5
2	431-221	Fundamental Signals & Systems	12.5	12.5	12.5
2	431-222	Electronic Devices & Circuits	12.5	12.5	12.5
Total Science points for year*				50	50

* Also incorporates compulsory CS units

Students who completed Computing Fundamentals B in first year instead of Applied Maths will need to modify their course plan accordingly. Electrical stream students could take Engineering Maths instead of Maths 231 and 232, but must ensure they have sufficient Science p

Year 3	3rd year of course		Points	Electrical stream	Computer Stream
1	640-237	Astrophysics and Optics II*	12.5	12.5	12.5
1	620-201 or 431-325	Engineering & CS options	12.5	12.5	12.5
1	431-326 or 431-324		12.5	12.5	12.5
1	431-330	[Design laboratory]	12.5	12.5	12.5
2	640-225/245*	Electromagnetism and Relativity	12.5	12.5	12.5
2	640-234	Further classical and quantum mechanics*	12.5	12.5	12.5
2	640-381 or 431-328	Sensors or Eng. Option	12.5	12.5	12.5
2	431-328 or 431-329	Engineering and CS subjects	12.5	12.5	12.5
2	640-299**	Laboratory	12.5		
Total Science points for year				25	25

* Choose one to avoid overload

** Electrical and computer engineering streams are exempted from 299 Laboratory work

Note: the Eng. Handbook Entry should be checked by contacting both Physics & Eng course advisors.

Year 4	4th year of course		Points	Electrical stream	Computer Stream
	Enrol in standard 300-level Science subjects. See relevant section of course advice document.				
Total Science points for year				100	100

Year 5	5th year of course	
	Enrol in 4th year of Engineering course	