PHYSICS – MINOR (SCIENCE)

PHYS-Z

Subject: Administered by the Department of Physics, Engineering Physics, and Astronomy.
Plan: Consists of 48.00 units as described below.
Program: The Plan, in combination with a Major plan in another subject, and with sufficient electives, will lead to an Honours Bachelors Degree.

Note: Requirements for this program have been modified. Please consult the 2023-2024 (https://queensu-ca-public.courseleaf.com/archive/2023-2024/)*Calendar* for the previous requirements.

Code	Title	Units
1. Core		
A. Complete 6.00 units from the following:		**6.00**
PHYS 104	Fundamental Physics	
PHYS 106	General Physics	
B. Complete the following:		
PHYS 206	Dynamics	3.00
PHYS 212	Vibrations and Waves	3.00
PHYS 213	Computational Methods in Physics	3.00
PHYS 239	Electromagnetism	3.00
PHYS 242	Relativity and Quanta	3.00
PHYS 250	Foundations of Experimental Physics	3.00
C. Complete the following:		
PHYS 344	Introduction to Quantum Mechanics	3.00
PHYS 372	Thermodynamics	3.00
2. Option		
A. Complete 6.00 units from the following:		**6.00**
PHYS 216	Introduction to Astrophysics	
PHYS at the 300-level or above		
3. Supporting		
A. Complete 6.00 units from the following:		**6.00**
MATH 120	Differential and Integral Calculus	
or		
MATH 121	Differential and Integral Calculus	
or		
MATH 123 & MATH 124	Differential and Integral Calculus I and Differential and Integral Calculus II	
B. Complete 3.00 units from the following:		**3.00**
MATH 221	Vector Calculus	
MATH 280	Advanced Calculus	
C. Complete the following:		
MATH 225	Ordinary Differential Equations	3.00
Total Units		**48.00**

4. Notes

A. When used towards the requirements of a B.Sc. Program, a total of 48.00 units, including the Plan units, must be in the physical and natural sciences or mathematics.

B. A maximum of 6.00 units from courses offered by other Faculties and Schools may be counted toward the program and/or Plan requirements. This includes courses in BMED, COMM, GLPH, HSCI, LAW, NURS, and courses offered by Smith Engineering.