

# PHYS + MATH: DOUBLE MAJOR EXAMPLE\*

Recommended for careers in physics research or academia, astronomy, astrophysics



## YEAR 1

T1	PHYS145   15 points Practical Skills for Scientists: Applications in Physics	PHYS101   15 points Introduction to Physics * may be required for PHYS142/MATH142	MATH161   15 points Discrete Mathematics and Logic	<i>Elective:</i> STAT193 or COMP102 or SPCE101
T2	PHYS142   15 points Calculus-based physics	MATH151   15 points Algebra	MATH142   15 points Calculus 1B	<i>Elective:</i> COMP103, COMP132, MATH177, at least one COMP100 in year 1

## YEAR 2

T1	PHYS243   15 points Classical Mechanics and Relativity	PHYS245   15 points Methods of Experimental Physics	MATH244   15 points Ordinary Differential Equations	MATH277   15 points Mathematical Statistics
T2	PHYS241   15 points Quantum Mechanics and Kinetic Theory	PHYS242   15 points Electromagnetism I	MATH243   15 points Multivariable Calculus	MATH251   15 points Linear Algebra

## YEAR 3

T1	PHYS305   15 points Thermal and Statistical Physics	PHYS307   15 points Quantum Physics	MATH301   15 points Partial Differential Equations	<i>Elective:</i> MATH309 or MATH311
T2	PHYS304   15 points Electromagnetism and Wave Optics	PHYS345   15 points Advanced Methods of Experimental Physics	MATH321   15 points Introduction to Applied Mathematics	<i>Elective:</i> MATH324 or MATH361 or MATH381

\*: For full details on degree requirements visit: <https://www.wgtn.ac.nz/explore/degrees/science/requirements?major=physics&otherMajor=mathematics>