

Bachelor of Science, Major in Applied Physics

ENTRY REQUIREMENTS

Assumed Knowledge	For astronomy and astrophysics, mathematics, statistical data science and applied physics majors: HSC Mathematics Advanced (Band 4), or equivalent. If you haven't met the required minimum level of achievement (Band 4 or equivalent), you can undertake an alternative introductory unit of study in that area.
Recommended Studies	HSC Mathematics Advanced or equivalent, at least 2 units of science. For astronomy and astrophysics, and applied physics majors: HSC Physics. For mathematics major: HSC Mathematics Extension 1 (Band E2) or HSC Mathematics Extension 2, or equivalent.

COURSE STRUCTURE

Core Zone 160 Units + Flexible Zone 80 Units
= 240 Credit points.

Essential units = Each unit is 10 credit points.

Capstone unit = 10 credit points

FOSE3000 Making Science Work for You and Society: Capstone

Essential units = 20 credit points

FOSE1000 Becoming a Scientist

FOSE2000 The Science Practitioner

Elective units - Statistics = 10 credit points - contains 20

Complete 10 credit points from the following options.

STAT1170 Introductory Statistics

STAT1371 Statistical Data Analysis

Elective Units - Data & Computing = 10 credit points - contains 20

Complete 10 credit points from the following options.

- Students enrolling in Astronomy, **Applied Physics**, Mathematics or Statistical Data Science majors must enrol in FOSE1030.
- Student enrolling in Biology, Biotechnology, Chemistry, Human Biology, Earth and Environmental Sciences, and Physiological Sciences major must enrol in FOSE1025.
- Students enrolling in double majors that requires both FOSE1025 and FOSE1030 can complete the other Data & Computing unit not selected below in the Other Science - 20 credit points option set.

FOSE1025 Scientific Computing

FOSE1030 Introduction to Python Programming

Elective Units - Other Science = 20 credit points

Complete 20 credit points from Any 1000 or 2000 level unit coded ASTR, BIOL, CHEM, EESC, ENVS, MATH, PHYS, PSYU, STAT, BMOL, MOLS, FOSE

Elective units - PACE = 10 credit points

Complete 10 credit points from the following PACE options.

MOLS3002 PACE: Engaging the Community in Science

PHYS3810 PACE: Professional Experience in Physics and Astronomy

Essential Units: Major Applied Physics

Complete each unit below. 80 credit points.

PHYS1010 Modern Mechanics

PHYS1020 Electric and Magnetic Interactions

PHYS2010 Classical Mechanics

PHYS2020 Electromagnetism and Relativity

PHYS2030 Quantum Physics

PHYS3010 Advanced Electromagnetism and Optics

PHYS3140 Foundations for Quantum Information

PHYS3180 Condensed Matter and Nanoscale Physics

Flexible Zone = 80 credit points

You can use your flexible zone to enroll in any Undergraduate unit for which you meet the requisites. You may also use your flexible zone to complete a second major or a minor(s).

CORE ZONE

FLEXIBLE ZONE

Scan the QR code to
find out more

