| Primary Physics Major Study Plan for students intending to do postgraduate study in Astrophysics or High Energy Physics | | | | | | | |
|---|--|-------------------------------------|---|---|--|---|-------------------------------|
| Year 1 | | Year 2 | | Year 3 | | Year 4 | |
| Sem 1 | Sem 2 | Sem 1 | Sem 2 | Sem 1 | Sem 2 | Sem 1 | Sem 2 |
| Pair 1: Integrated Course in Social Sciences Pair 2: Integrated Course in Humanities | Pair 1: Integrated Course in Humanities Pair 2: Integrated Course in Social Sciences | Scientific Inquiry II | Artificial Intelligence | Communities and Engagement | Interdisciplinary II | PC4288/PC4288A Honours Projects in Physics (8 units)* | |
| Pair 1: Scientific Inquiry I Pair 2: Integrated Course in Asian Studies | Pair 1: Integrated Course in Asian Studies Pair 2: Scientific Inquiry I | Writing | PC2135 Thermodynamics and Statistical Mechanics | Interdisciplinary I | PC3246 Astrophysics I | PC4230 Quantum Mechanics III | PC4245 Particle Physics |
| Pair A: Data Literacy Pair B: Design Thinking | Pair A: Design Thinking Pair B: Data Literacy | Digital Literacy | PC2193 Experimental Physics and Data Analysis | PC3130 Quantum Mechanics II | PC3288 Advanced UROPS in Physics | PC4241 Statistical Mechanics | UE 3 |
| PC1101 Frontiers of Physics | PC2031 Electricity & Magnetism I | PC2130 Quantum Mechanics I | PC3274A Mathematical Methods in Physics II | PC3231 Electricity & Magnetism II | PC4274A Mathematical Methods in Physics III | PC4248 General Relativity | UE 4 |
| PC2174A Mathematical Methods in Physics I | PC2032 Classical Mechanics I | PC3261 Classical Mechanics II | UE 1 | PC3232 Nuclear and Particle Physics | UE 2 | PC4249 Astrophysics II | UE 5 |

Note: Students are strongly encouraged to complete all CHS Common Curriculum courses in their first two years except for the following 3 courses:

- Communities and Engagement course can be taken from Years 2 to 4
- Two Interdisciplinary courses can be taken in Years 3 and 4

* Graduation Requirements

Students must take at least one of the following courses in the UE space to fulfil the graduation requirements. It is recommended to take UPIP during a special term.

- PC4288 Honours Projects in Physics (8 units, count as two courses)
- PC coded Undergraduate Professional Internship Programme (UPIP, minimum 4 units, advised to be taken during a special term)

List of Elective Courses

The following mathematical methods courses are also recommended.

- PC5204B Special Topics in Physics: Analytic Approximations
- PC5274 Advanced Mathematical Methods in Physics