# Bachelor of Science, Major in Chemistry

## ENTRY REQUIREMENTS

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|---|---|
| **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.<br>For astronomy and astrophysics, and applied physics majors: HSC Physics.<br>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.**

### CORE ZONE

**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.

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|---|---|
| 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 |
| MOLS3003 | PACE: Molecular Sciences Project |

### CORE ZONE

**Essential Units: Major Chemistry**

**Complete each unit below. 80 credit points.**

| | |
|---|---|
| CHEM1001 | Foundations of Chemical and Biomolecular Sciences 1 |
| CHEM1002 | Foundations of Chemical and Biomolecular Sciences 2 |
| CHEM2201 | Analysis and Measurement |
| CHEM2401 | Physical Chemistry I |
| CHEM2601 | Synthesis |
| CHEM3202 | Advanced Analysis and Measurement |
| CHEM3601 | Advanced Synthesis |
| CHEM3801 | Medicinal Chemistry |

### FLEXIBLE ZONE

**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).

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