

Honours in Chemistry information

Contact

Prof Brendan Kennedy, Honours and Graduate Diploma Coordinator

School of Chemistry, Room 358

Telephone: +61 2 9351 5783

Email: brendan.kennedy@sydney.edu.au

Important dates

- **Honours week:** 10-13 September 2019. Chemistry will be holding an information session on **Wednesday, 11 September 2019** in Chemistry Lecture Theatre 4 from 12:00 noon to 2:00 pm.
- **Local and International students:** Honours commencing in Semester 1, 2020. Applications close 30 November 2019.
- **Commencement and completion dates for 2020** can be found on the [Honours in Science](#) page ([PDF, 40kb](#)).

Research projects

In the Honours year you undertake a research project under the supervision or co-supervision of a member of staff, write a thesis and attend advanced courses and seminars. This year introduces you to research, which is all about designing experiments so that you can find out more about yourself and the world in which you live.

An Honours year is highly regarded by prospective employers and widens the range of employment possibilities. The generic skills you will gain will be useful in any future career – academia and industry alike. You will:-

1. develop time-management skills;
2. gain freedom to do independent research;
3. be trained to analyse scientific data and communicate scientific information in written and oral form, and
4. learn to develop your own hypotheses, design experiments to test them, and use your results to refine your hypotheses or develop new ones. You will also learn a number of modern research techniques under the guidance of your academic supervisor to ensure your research is at the frontier of knowledge.

Honours projects are listed under the potential Honours supervisor's name. Projects may be undertaken with a single supervisor or with joint supervision, as indicated by each project description. If you would like to pursue any supervised or co-supervised Honours project not currently listed please talk to the supervisor(s) involved. The supervisor or co-supervisor must then submit this new project to the Honours coordinator and receive written approval prior to the closing date for Honours applications.

We impose a quota of 2.5 Full-time equivalent (FTE) Honours students for each academic member of staff to ensure every Honours student receives adequate supervision. Co-supervised projects within the School of Chemistry are counted as 0.5 FTE for each staff member involved. Joint projects with external supervisors, in other Departments or other Universities, are counted as 0.5 FTE for the internal supervisor for the first such project but as 1.0 FTE for any subsequent project or projects.



Eligibility

To be eligible for entry into the School of Chemistry Honours program, students must have qualified for the award of a relevant pass degree and be considered by the School and their Faculty to have the requisite knowledge and aptitude for an Honours course.

Graduates from the University of Sydney

Graduates from the University of Sydney require a SCIWAM (Science Weighted Average Mark) of 65+ or an average of 65 (or greater) in at least 48 credit points of relevant intermediate or senior science units of study. In addition, applicants must have previously completed at least 12 credit points of senior chemistry and a related major.

Graduates from other Australian universities

Graduates from other Australian Universities require, as a minimum, a SCIWAM of 65+. The Faculty of Science automatically calculates each applicant's SCIWAM when the application for Honours is received. In addition, applicants must have completed substantial senior chemistry (equivalent to a University of Sydney "major") at the university in which they completed their pass degree.

International students

International applicants require an equivalent level of performance in their pass degree to that required from domestic applicants, and must have completed substantial senior chemistry (equivalent to a University of Sydney "major") at the university in which they completed their pass degree. The University of Sydney International Office assesses each International applicant's academic qualifications and determines whether they satisfy the conditions for entry into the program.

Students who are unsure of their eligibility should email a full CV to the Honours Coordinator, Prof Brendan Kennedy, who will provide a preliminary assessment.

Graduate diploma in science

Students who have satisfied the requirements for the BSc degree or equivalent but who are not eligible to enrol in the Honours course may instead enrol in the Graduate Diploma in Science. This is a full fee paying course offered through the Faculty of Science and consists of equivalent work to that carried out by candidates enrolled in the Honours course. Further information on this course can be obtained from the Faculty of Science.

Enrolment

Detailed information on how and when to enrol will be provided to successful applicants.

When completing enrolment forms, successful applicants should list the following course codes:

February admission:

UNIT CODE	UNIT NAME	SEMESTER OFFERED
CHEM4011	Chemistry Honours A	Semester 1 2020
CHEM4012	Chemistry Honours B	Semester 1 2020
CHEM4013	Chemistry Honours C	Semester 2 2020
CHEM4014	Chemistry Honours D	Semester 2 2020

July admission:

UNIT CODE	UNIT NAME	SEMESTER OFFERED
CHEM4011	Chemistry Honours A	Semester 2 2020
CHEM4012	Chemistry Honours B	Semester 2 2020
CHEM4013	Chemistry Honours C	Semester 1 2021
CHEM4014	Chemistry Honours D	Semester 1 2021

Commencement and completion dates

- **Commencement and completion dates for 2020** can be found on the [Honours in Science](#) page ([PDF, 40kb](#)).

Students who intend to commence Honours in Semester 2 should note that there will be a compulsory 4 week suspension of research work from mid-December to mid-January.

An Orientation Session for students commencing Honours in Semester 1 will be held in early February. Attendance at this session is compulsory. The orientation session will include instruction on laboratory safety, including the use of materials safety data sheets and procedures required to undertake research in the school. Requirements relating to the use of computing facilities within the school, e-mail accounts and keys will also be covered.

Assessment

The Honours program is research-based, and thus the major component (90%) of the Honours mark is based on the research carried out during the year. This is assessed by the thesis and the research seminar, with each student's supervisor assessing overall research performance across the whole of the program. The minor assessment component (10%) is coursework, which may be examined by a written report, exam, oral presentation or assignment.

Honours relocation allowance

The School of Chemistry will offer up to \$4,000 to assist with relocation expenses for outstanding international students or students who have completed a Pass degree at a university outside the Sydney area and who enrol in the Honours program at The University of Sydney. There is no application form. Students who wish to be considered for these funds should submit a list of expenses incurred (e.g., airfare, petrol money, removalist costs, etc.) plus original receipts, to the Honours Coordinator, School of Chemistry, as soon as they have enrolled and commenced their Honours year in the first week of February or July.

Safety health and wellbeing

The University is committed to providing a safe and healthy workplace, and requires all its activities to conform to relevant state and federal legislation. This commitment is detailed in the WHS Policy published on the [Safety Health & Wellbeing](#) page.

This legislation places a legally binding onus on all of us to ensure that we provide a safe working environment for our colleagues and ourselves. This responsibility resides with every individual, and failure to comply with the duties outlined in the Act and Regulation is a criminal offence, and can incur a heavy fine.

How does this affect you as a student?

The University of Sydney has an obligation to ensure that everything asked of you in the teaching laboratories has been through a Hazard Identification, Risk Assessment and Control (HIRAC) procedure before you come into the lab. This obligation now becomes yours. You are required to perform your own risk assessment of everything you propose to do in laboratories. This involves not only taking note of the hazards of all chemicals you will be using, but also considering the risks of the processes involved in your experimental work.

Hazard information on chemicals is available from Safety Data Sheets (SDS), and SDSs may be provided to you as hard copies in your lab, or you can access them via the [School of Chemistry Safety Handbook](#) and then go to ChemAlert.

Examples of processes you should consider involved are temperature, pressure, mixing incompatible chemicals, and specialist equipment (moving parts, electric shock). Included in this assessment should be the identification of appropriate Personal Protective Equipment (PPE), how you will manage any spills, and methods of waste disposal.

Minimum laboratory wear in all School of Chemistry laboratories is:

1. Covered footwear (ballet slippers are NOT adequate, and the top of the foot is to be fully enclosed), preferably with non-slip soles.
2. A lab coat, buttoned up, not loose. Do not wear the lab coat outside the laboratory as you run the risk of contaminating others with chemical 'dirt' from your lab coat.
3. Safety glasses that meet the Australian Standard minimum frame size.
4. Long hair to be tied back.

In some areas there may be additional PPE requirements, or exemptions from the above list. Every laboratory is sign posted with a Safety Placard indicating the hazards located in that space, the PPE required to be put on before entering, and people to contact in the event of an incident occurring. Besides the paperwork involved, there is a legally binding obligation on you as an individual to ensure that you do not do anything that may endanger yourself, your work colleagues or fellow students, by skylarking in the laboratory or performing unauthorised experiments.

Failure to observe the Safety Regulations may lead to you being expelled from the laboratory. OH&S is an important aspect of your life as a professional scientist, and we are all obliged to take it extremely seriously. Think carefully about what you do, and how and where you do it, and create habits that will protect yourself and others for a life time. If you observe something, or someone doing something, you feel is dangerous or unsafe in your laboratory, report it immediately to a member of staff.

Relationship between Honours and previous research

The School of Chemistry acknowledges that incoming Honours students will have a wide range of previous research experience. The School attempts to ensure parity in the assessment of students and so has established the following guidelines concerning the relationship between a student's proposed Honours project and any previous research experience.

Students who have undertaken research work in the semester break immediately prior to Honours

Students may not carry out research in a research group in which they propose to do Honours (either as a paid research assistant or as a volunteer) in the semester break leading up to the start of Honours.

Students who have undertaken research work in the semester prior to Honours

Students may not carry out an Honours project that is an extension of a research project they have been involved in (either as TSP project, a paid research assistant or as a volunteer) in the semester prior to commencement of Honours.

TSP students

Students may not carry out an Honours project that is an extension of a TSP project conducted in the semester prior to commencement of Honours. A student may work within a given research group in the semester prior to Honours, then progress to Honours in that group, provided the research projects are distinct. There must be transparency in the nature of the two projects and this will be assessed by the TSP and Honours Coordinators prior to commencement of Honours. Overlap between TSP projects and potential Honours projects need not be considered for the period before the semester prior to Honours. The exception to this is if a student has carried out more than one TSP project associated with the group in which they would like to do Honours; in such a case the TSP coordinator and Honours coordinator will assess whether the Honours project is suitably different from previous projects.

When approving Honours supervisors for a student, the Honours Coordinator will consult with the TSP coordinator to help identify any possible overlaps and to allow the Honours coordinator to contact the supervisor(s) concerned and obtain written assurance from the supervisor(s) that any relevant projects are distinct. If an Honours student ultimately cites any work in their thesis that has arisen from a TSP project conducted in the semester prior to Honours, the relevant TSP report would need to be made available to the student's thesis examiners on request. Failure to disclose any prior, relevant TSP research is unethical. It is the responsibility of the student, rather than the supervisor, to adhere to these guidelines.

Research assistants or volunteers

Students may not carry out an Honours project that is an extension of paid or unpaid research in the semester prior to commencement of Honours. A student may work within a given research group in the semester prior to Honours, then progress to Honours in that research group, provided the research projects are distinct. There must be transparency in the nature of the two projects and this will be assessed by the Honours Coordinator and the Associate Head of School (Teaching) prior to commencement of Honours. Overlap between previous paid or unpaid research work and potential Honours projects need not be considered for the period before the semester prior to Honours. The exception to this is if a student has carried out more than one semester of research within the group in which they would like to do Honours; in such a case the Honours coordinator and Associate Head of School (Teaching) will assess whether the Honours project is suitably different from previous projects.

Students who have received payment in cash or kind for research work

Students may not carry out an Honours project within a research group from which they have received payment either in cash or kind (e.g., as a research assistant, conference registration, travel or accommodation charges) in the 6 month period leading up to the start of Honours. The only exception to this rule is if a student is presenting their own research work, in which case, and only with prior permission from the Honours Coordinator or the Associate Head of School (Teaching), the potential research supervisor may cover conference expenses.

How to Apply

STEP 1

All applicants, including Honours and Graduate Diploma in Science, must apply directly to the School of Chemistry by submitting the [School of Chemistry Honours Application form](#).

- **Local and International students:** Honours commencing in Semester 1, 2020. Applications close 30 November 2019.
- **Commencement and completion dates for 2020** can be found on the [Honours in Science](#) page ([PDF, 40kb](#)).

The School of Chemistry Honours online application form requires applicants to nominate preferences for supervision. When deciding on their preferences, applicants should not only refer to the information in the [Honours Projects document \(PDF 9.3Mb\)](#), but make an effort to talk to a number of staff members about possible Honours projects. Each member of the chemistry staff has selected a number of projects. These projects are intended to be examples of current research work. Most members of staff have other interesting projects available and in many cases it is possible to design a project which caters for a student's particular interests. We encourage intending Honours applicants to contact potential supervisors in October. Intending applicants should phone or email the staff members in whom they're interested to arrange an appointment to discuss possible projects.

For those students thinking of continuing, after Honours, with a higher degree such as an MSc or a PhD you should keep in mind that there is a limit on the number of higher degree students that a staff member can supervise based on the level of experience of the current students in a group and what other support is available. This limit is to ensure that there is sufficient supervision for all Chemistry graduate students.

While students are strongly encouraged to undertake an Honours year in the project that they find most engaging, we mention this limit at this point just in case it is of interest for individuals. If this is the case, we encourage you to discuss this issue with the staff members with whom you are considering doing Honours or with the Honours Coordinator.

While every effort will be made to accommodate your first preference of supervisor, please note that allocation of Honours and postgraduate students to individual research groups depends on space, resources and supervisor availability. Hence it is essential that you include FOUR preferences on your application form. In mid-December, you will be informed of the outcome of your application and, if successful, will be notified of your supervisor's name and contact details.

Application form for the School of Chemistry
[School of Chemistry Honours Application form](#)

STEP 2

ALL applicants (including those currently enrolled in the final year of a degree at this University) must apply to the University of Sydney.

- For more information on how to apply visit the [Bachelor of Science \(Honours\)](#) page.
- For Graduate Diploma in Science applicants please visit the [Graduate Diploma in Science](#) page.

Applicants should note that the online Faculty application form does not need to be signed by a representative from the School of Chemistry. However, for the application for Honours to Faculty you will be asked to provide proof of contact with a relevant academic (email is acceptable) in Chemistry. This can be your proposed supervisor, or can be the email you receive once you have completed the School of Chemistry's own online application process. If you are undertaking joint or double Honours, proof of contact will be required for both Honours areas. Please view the Faculty of Science page "[Honours in Science](#)" which is separate from the School of Chemistry's online application process as outlined in step 1 above.