Climate Science

Overview

The School of Biological, Earth and Environmental Sciences (BEES) offers a number of Honours streams including Climate Science. Honours in Climate Science introduces undergraduate students to research and project work of relevance to various endeavours in climate dynamics, global climate change, and extremes of weather and climate. Students undertake a supervised research project that places emphasis on scientific research methods, the use of relevant specialised techniques, critical thinking and scientific communication via written submissions and oral presentations. The learning and teaching philosophy underpinning this program is centred on Honours students taking on their ‘role as a researcher’ to develop these skills and the relevant advanced disciplinary knowledge with some degree of independence. The program, run over three sessions, includes a Research Proposal (which may include a literature review and a risk management component) and a substantial independent Research Project under the close supervision of academics in the school of BEES. These components are complemented by more formal seminars and workshops, focusing on graduate attributes (scientific communication, risk management, ethics and professional development) as well as School (and Institute/Centre) seminars.
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<tr>
<th><strong>Faculty</strong></th>
<th>Faculty of Science</th>
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<tbody>
<tr>
<td><strong>School</strong></td>
<td>School of Biological, Earth and Environmental Sciences</td>
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<tr>
<td><strong>Study Level</strong></td>
<td>Undergraduate</td>
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<tr>
<td><strong>Minimum Units of Credit</strong></td>
<td>48</td>
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<tr>
<td><strong>Specialisation Type</strong></td>
<td>Honours</td>
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<tr>
<td>Program(s) in which this honours is available</td>
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<td>-----------------------------------------------</td>
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<tr>
<td>Bachelor of Advanced Science (Honours) - <strong>BAdvSci(Hons)</strong></td>
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<tr>
<td>3962 <strong>Advanced Science (Honours)</strong></td>
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<tr>
<td>Faculty: Faculty of Science</td>
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<tr>
<td>Campus: Kensington</td>
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<td>Units of Credit: 192</td>
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<td>Typical Duration: 4 Years</td>
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<tr>
<td>Bachelor of Science (Honours) - <strong>BSc(Hons)</strong></td>
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<tr>
<td>4500 <strong>Science (Honours)</strong></td>
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<td>Faculty: Faculty of Science</td>
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<td>Campus: Kensington</td>
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<td>Units of Credit: 48</td>
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<td>Typical Duration: 1 Years</td>
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Specialisation Structure

Students must complete 48 UOC.

Core Course

Students must take BEES4517 Biological, Earth and Environmental Science Honours three times for a total of 48 UOC

BEES4517  |  16 UOC
Biological, Earth and Environmental Sciences Honours

Enrolment Disclaimer

Unless advised otherwise by your program authority, you should follow the rules for the handbook for the year you commenced your program. You are also responsible for ensuring you enrol in courses according to your program requirements. myUNSW enrolment checks that you have met enrolment requirements such as pre-requisites for individual courses but not that a course will count towards your program requirements.
Additional Information

The Honours Stream in Climate Science has the following assessment items:

Literature Review and Research Proposal

A 4500 word (max. length) written Research Proposal providing a detailed account of published scientific investigations relevant to the project being undertaken and a Risk Management component. This component is completed under the direction of a duly appointed Honours Supervisor. This Research Proposal is graded by two independent Examiners and forms 12.5% of the total Honours Grade.

Project Thesis

This component is completed under the direction of a duly appointed Honours Supervisor. This project works towards the completion of a written manuscript summarising the research and results of the Research Project. This manuscript is a maximum of 9,000 words and is marked by the two assigned Examiners. This component contributes 82.5% to the final Honours Grade.

Final Seminar

A 20 minute presentation covering the results of the Research Project. This seminar is assessed by members of the School of BEES Honours Committee and is worth 5% of the total Honours Grade.

There are other compulsory activities which do not contribute to an Honours Grade but are required for the successful completion of the Honours Program in the School of BEES. These include:

- Attendance at Honours program classes which includes a Peer Reviewed Introductory Seminar;
- Submission of a Problem Statement (staff graded);
- Attendance at a Risk Management Workshop, an Ethics Workshop and Professional Development Workshops;
- Attendance at School seminars.

Honours Grade Calculation

- Literature Review and Research Proposal (12.5%)
A guide to allocation of Honours classes and what is expected of students within the School of BEES is as follows:

Honours Grade >85 (Honours Class 1)
Work of superior quality in all aspects of research, scientific writing, and oral presentation, demonstrating the ability to organise information in a clear and concise manner, the integration of information from a wide range of sources and containing clear examples of excellent critical evaluation.

Honours Grade 75-84 (Honours Class 2.1)
Work of very good quality in all aspects of research, scientific writing, and oral presentation, but showing lesser ability to organise information in a clear and concise manner, integrate information from range of sources and critically evaluate the literature and research data.

Honours Grade 65-74 (Honours Class 2.2)
Good quality in all aspects research, scientific writing, and oral presentation but with inadequacies in understanding, critical skills, organisation and presentation.

Honours Grade 50-64 (Honours Class 3)
Adequate quality work with significant deficiencies in understanding, critical skills, organisation and presentation.

Admission Requirements and Process

Admission Requirements

The BEES Climate Science Honours Program is available to all students who have met the entry requirements outlined below and is typically offered to Bachelor of Science (3970) and Bachelor of Science Environmental Management (3965) students who have completed a relevant Major sequence. Entry is also possible for students from other cognate disciplines at the discretion of the Program Convener or the School of BEES Honours Coordinator. External students are welcome into all School of BEES Honours Programs but require approval of the Honours Coordinator and will require evidence of the completion of equivalent study.

Students seeking to enrol in Honours are required to have completed a total of 144 units of credit and all the requirements for the Bachelor of Science (or equivalent). Admission into the BEES Honours Program is subject to academic performance and
the number of places available in the School's Honours program. Typically students require a Credit average (≥65% weight average mark; WAM) in their undergraduate degree for entry into Honours. Where students have an overall WAM that is less than, but close to a Credit, the School of BEES may take into consideration a student's academic performance in their Major area of study when assessing an application for Honours.

Students must apply to the School of BEES for admission to enrol in the Honours program: admission requirements and the number of places available are determined by the Head of School or nominee and are subject to the availability of resources. All decisions regarding admission to the School of BEES Honours program are final.

Admission Process

Potential students must first apply for acceptance into the School of BEES Honours Program and into the Climate Science stream and, following receipt of an offer of acceptance, students can proceed with enrolment. Application and Enrolment procedures are described on the BEES Honours Program webpage (http://www.bees.unsw.edu.au/current/honours). It is highly recommended that students approach possible Honours Supervisors well before the deadlines to discuss potential Research Projects: supervisors and potential projects can also be found on the BEES Honours webpage. Students may also identify potential supervisors and projects via UNSW Research (research.unsw.edu.au). Students should then download and complete an application form and submit it to the BSB Student Office before the submission deadline. Please note that this application must include an offer to supervise the Research Project as is detailed in the application form. Students accepted into the Program will receive an offer of acceptance letter from the Honours Coordinator, and can then proceed with full enrolment.

Pathways

Students who successfully complete the School of BEES Honours Program are qualified to continue further in their research careers by undertaking postgraduate studies by research (Masters or PhD level). Students who successfully complete the BEES Honours Program in Climate Science receive some Advanced Standing in the Masters of Environmental Management (Program 8623) and students achieving a high Honours Grade (Class 1 or 2.1) may apply for an Australian Postgraduate Award (APA) PhD scholarship to support such studies.

Graduates of the BEES Honours Program are also well qualified to work in various
endeavours. Past graduates have found employment in the private sector (e.g. resource and environmental management companies, environmental consultancies etc.) and in the public sector (local, state or federal government agencies and regulatory bodies). Potential careers are very broad as the generic skills acquired during an Honours year are widely applicable and highly sought after: in particular Honours students are equipped with advanced disciplinary knowledge, project design and management skills, consideration of Occupational Health and Safety issues and advanced (written and verbal) communication skills.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)