Overview

The Bachelor of Advanced Science (Honours) is the degree of choice for innovative thinkers with exceptional scientific knowledge and skills. It's designed for talented students and offers the flexibility to tailor the degree in a way that works for them. The degree offers students access to advanced level courses and includes an Honours year. Students will study foundation courses, which may include subjects such as biology, chemistry, physics and maths, before choosing a major (or two) and really explore what inspires them most. In their fourth year, students undertake an Honours year which involves a supervised research project and in some cases, advanced coursework. Outstanding Honours students may continue their studies in a higher research degree.
<table>
<thead>
<tr>
<th><strong>Faculty</strong></th>
<th>Faculty of Science</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campus</strong></td>
<td>Kensington</td>
</tr>
<tr>
<td><strong>Study Level</strong></td>
<td>Undergraduate</td>
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<td><strong>Typical duration</strong></td>
<td>4 Years</td>
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<td><strong>Delivery Mode</strong></td>
<td>Face-to-face</td>
</tr>
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<td><strong>Intake Period</strong></td>
<td>Term 1, Term 2, Term 3</td>
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<tr>
<td><strong>Academic Calendar</strong></td>
<td>3+ Calendar</td>
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<td><strong>Minimum Units of Credit</strong></td>
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<td><strong>Award(s)</strong></td>
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<td><strong>UAC Code</strong></td>
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Learning Outcomes

1. Effective and appropriate communication in both professional (intra and interdisciplinary) and social (local and international) contexts.

2. Teamwork, collaborative and management skills including the ability to recognise opportunities and contribute positively to collaborative scientific research, and to demonstrate a capacity for self management, teamwork, leadership and decision making based on open-mindedness, objectivity and reasoned analysis in order to achieve common goals and further the learning of themselves and others.

3. Information literacy including the ability to make appropriate and effective use of information and information technology relevant to their discipline.

4. Appreciation and respect of the social, cultural and global context of science with an ability to communicate across cultures and to develop an international professional network.

5. Independently identify and formulate solutions to complex problems with intelligence, initiative and judgement in scholarship that demonstrates advanced knowledge and critical thinking of the underlying principles and concepts in one or more disciplines, and knowledge of research principles and methods.

6. Capability and motivation for intellectual development; including capacity for creativity, critical evaluation, entrepreneurship and demonstrating a commitment to their own learning, motivated by personal autonomy, accountability, curiosity and an appreciation of the value of learning.

7. Research, enquiry and high level analytical thinking abilities including the ability to construct new concepts or create new understanding through the process of enquiry, critical analysis and problem solving, including constructing a research project, that demonstrates technical skills in research and design.

8. Ethical, social and professional understanding including the ability to critically reflect upon broad ethical principles and codes of conduct in order to behave consistently with a personal respect and commitment to ethical practice and social
Graduate Capabilities:

For more information on Graduate Capabilities, please click on this link.
Program Structure

Students must complete 192 UOC as a standalone program.

Students in the Advanced Science (Honours) program are expected to complete **192 UOC** of courses.

**156 UOC of Science courses:**
- At least one approved Bachelor of Advanced Science (Honours) major
- SCIF1131
- 48 UOC Honours year
- Science elective courses. Science courses are defined in "Table 1" in the Additional Information section.

**24 UOC Free Electives.** These courses can be taken from any Faculty of the University at any stage of your program.

**12 UOC General Education courses.** Please see the rules regarding General Education below. These courses can be taken at any stage in your program.

Please click the Sample Programs link below to view a typical enrolment pattern for this program.

Core Courses

Students must take 6 UOC of the following courses

Note: Students in the Vision Science major should take VISN1101 Seeing the World Perspectives from Vision Science instead. Students in Engineering Dual Programs should take ENGG1000 Introduction to Engineering Design and Innovation.

**SCIF1131 | 6 UOC**
Introductory Skills for Science

Majors

Students must complete at least one Science major selected from the list below.

When offered in a particular major, students must take higher versions of any Level 2 or 3 courses. Any variation to this must be approved by the Associate Dean (Academic Programs) or nominee.

Bioinformatics is a 96 UOC major, students will not be able to complete this major as
part of a double degree within the minimum UOC. This major will involve extra time and costs to meet the degree requirements and may have visa implications for international students. Contact the Science Student Centre for more details.

**MAJOR:**

ANATA1  |  72 UOC
Anatomy

BINFB1  |  96 UOC
Bioinformatics

BIOCG1  |  90 UOC
Genetics

BIOCL1  |  84 UOC
Molecular and Cell Biology

BIOSG1  |  78 UOC
Ecology

BIOSJ1  |  78 UOC
Biology

BIOTB1  |  84 UOC
Biotechnology

CHEMB1  |  78 UOC
Chemistry

CLIMB1  |  84 UOC
Climate Systems Science

CLIMC1  |  84 UOC
Climate Dynamics

GEOGG1  |  78 UOC
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<tr>
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<tr>
<td>GEOLS1</td>
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<td>MATHJ1</td>
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<tr>
<td>MATHK1</td>
<td>60</td>
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<tr>
<td>MATHO1</td>
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<tr>
<td>MATSB1</td>
<td>78</td>
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<td>MICRE1</td>
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<td>66</td>
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<tr>
<td>PHSLB1</td>
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Geography
Earth Science

Mathematics

Statistics

Advanced Physical Oceanography

Materials Science

Microbiology

Marine and Coastal Science

Neuroscience

Pathology

Pharmacology

Physiology
PHYSC1 | 90 UOC  
Advanced Physics

PSYCA1 | 78 UOC  
Psychology

VISNA1 | 84 UOC  
Vision Science

**Honours Specialisations**

Students must complete at least one Science Honours stream selected from the list below.

**HONOURS:**

ARCYBH | 48 UOC  
Palaeoscience

BABSBH | 48 UOC  
Bioinformatics

BIOCFH | 48 UOC  
Molecular and Cell Biology

BIOCGH | 48 UOC  
Genetics

BIOSKH | 48 UOC  
Biology

BIOSLH | 48 UOC  
Ecology

BIOTBH | 48 UOC  
Biotechnology
<table>
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<tr>
<th>Code</th>
<th>Hours</th>
<th>Course</th>
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<tbody>
<tr>
<td>CHEMFH</td>
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<td>Chemistry</td>
</tr>
<tr>
<td>CLIMDH</td>
<td>48</td>
<td>Climate Science</td>
</tr>
<tr>
<td>GEOGTH</td>
<td>48</td>
<td>Geography</td>
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<tr>
<td>GEOLMH</td>
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<td>Geology</td>
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<tr>
<td>MATHAH</td>
<td>48</td>
<td>Applied Mathematics</td>
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<tr>
<td>MATHNH</td>
<td>48</td>
<td>Physical Oceanography</td>
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<td>MATHPH</td>
<td>48</td>
<td>Pure Mathematics</td>
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<tr>
<td>MATHTH</td>
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<td>Statistics</td>
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<td>MSCIJH</td>
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<td>Marine Science</td>
</tr>
<tr>
<td>NEURBH</td>
<td>48</td>
<td>Neuroscience</td>
</tr>
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</table>
Free Electives

Students can take up to a maximum of 24 UOC of the following courses.

These courses are recommended for students who wish to develop their research skills.

- SCIF2041 - Research Internship A (6 UOC)
- SCIF3041 - Research Internship B (6 UOC)
- BABS3301 - Biomolecular Science Laboratory Project (Advanced) (6 UOC)
- CHEM3997 - Special Project in Chemistry 3 (12 UOC)
- CHEM3998 - Special Project in Chemistry 2 (6 UOC)
Minors

Students may choose to complete an optional minor in one of the following areas, using their Science and/or free electives

MINOR:

ANATB2 | 36 UOC
Anatomy

ARCYB2 | 36 UOC
Palaeosciences

BIOCD2 | 42 UOC
Molecular Biology

BIOSD2 | 42 UOC
Biology

CHEMD2 | 48 UOC
Chemistry

CLIMA2 | 42 UOC
Climate Science

GEOLF2 | 36 UOC
Geology

MATHC2 | 36 UOC
Mathematics

MATHD2 | 36 UOC
Statistics

MSCIH2 | 36 UOC
Marine Science
General Education

Students must take 12 UOC of the following courses.

Any course defined as a Science course cannot be taken as General Education (GE). All other courses can be used to fulfil the GE requirement of this program, including GEN#-coded courses. Any exceptions to these rules must be approved by the Associate Dean (Academic Programs) or nominee.

any General Education course

Course Information Rule

GEN# courses cannot count towards the free elective component, or towards science core courses or science electives in the program. Any exceptions to these rules must be approved by the Associate Dean (Academic Programs) or nominee.

Excluded General Education Courses

Students may not undertake any of the following excluded courses.
any Computer Science course

any Food Technology course

any course offered by Faculty of Science

any General Education - Faculty of Science course

any Medical Science course

**Maximum Level 1 UOC**

A maximum of 72 UOC of Level 1 courses can be taken, including any General Education or mainstream Level 1 course taken to fulfil either the General Education or the Free Elective requirement.

any level 1 course

**Minimum Level 1 Science UOC**

Students must complete a minimum of 24 UOC of the following courses.

any level 1 Anatomy course

any level 1 Computer Science course

any level 1 Food Technology course

any level 1 course offered by Faculty of Science

any level 1 Neuroscience course

any level 1 Pathology course

any level 1 Pharmacology course
any level 1 Physiology course

any level 1 Medical Science course

**Minimum Science UOC**

Students must take 'science' courses so that the major plus SCIF1131, plus Honours year plus 'science' courses total 156 units of credit.

any Anatomy course

any Computer Science course

any Food Technology course

any course offered by Faculty of Science

any Neuroscience course

any Pathology course

any Pharmacology course

any Physiology course

any Medical Science course

**Minimum Level 3 Science UOC**

Students must complete a minimum of 30 UOC of the following courses.

any level 3 Anatomy course

any level 3 Computer Science course
any level 3 Food Technology course

any level 3 course offered by Faculty of Science

any level 3 Neuroscience course

any level 3 Pathology course

any level 3 Pharmacology course

any level 3 Physiology course

any level 3 Medical Science course

Level 2 Maturity Requirements

Students must have completed 30 UOC before taking any of the following courses.

any level 2 course

Double Counting

Students cannot complete a minor with the same name as their nominated major, and Level II and III courses cannot be double-counted between majors and minors. More than one minor may be completed subject to the limit on double-counting. Students must declare their minor(s) before their final semester.

Level 3 Maturity Requirements

Students must have completed 72 UOC before taking any of the following courses.

any level 3 course

Sample Programs

To access sample program(s), please visit:

Sample Science Programs
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.
Related Programs

Related Double Degree Programs

Bachelor of Music - **BMus**
Bachelor of Advanced Science (Honours) - **BAdvSci(Hons)**

**3458 Music / Advanced Science (Honours)**

Faculty: Faculty of Arts and Social Sciences, Faculty of Science
Campus: Kensington
Units of Credit: 288
Typical Duration: 6 Years

Read More

Bachelor of Music (Honours) - **BMus (Hons)**
Bachelor of Advanced Science (Honours) - **BAdvSci(Hons)**

**3472 Music (Honours) / Advanced Science (Honours)**

Faculty: Faculty of Arts and Social Sciences, Faculty of Science
Campus: Kensington
Units of Credit: 288
Typical Duration: 6 Years

Read More

Bachelor of Economics - **BEc**
Bachelor of Advanced Science (Honours) - **BAdvSci(Hons)**

**3566 Economics / Advanced Science (Honours)**

Faculty: UNSW Business School, Faculty of Science
Campus: Kensington
Units of Credit: 240
Typical Duration: 5 Years

Read More

Bachelor of Commerce - **BCom**
Bachelor of Advanced Science (Honours) - **BAdvSci(Hons)**

**3593 Commerce / Advanced Science (Honours)**

Faculty: UNSW Business School, Faculty of Science
Campus: Kensington
Units of Credit: 240
Typical Duration: 5 Years

Read More

Bachelor of Advanced Science (Honours) - BAdvSci(Hons)
Bachelor of Engineering (Honours) - BE (Hons)

3762 Advanced Science (Honours) / Engineering (Honours)

Faculty: Faculty of Science, Faculty of Engineering
Campus: Kensington
Units of Credit: 288
Typical Duration: 6 Years

Read More

Bachelor of Advanced Science (Honours) - BAdvSci(Hons)
Bachelor of Science - BSc

3782 Advanced Science (Honours) / Computer Science

Faculty: Faculty of Science, Faculty of Engineering
Campus: Kensington
Units of Credit: 240
Typical Duration: 5 Years

Read More

Bachelor of Advanced Science (Honours) - BAdvSci(Hons)
Bachelor of Social Research and Policy - BSRP

3938 Advanced Science (Honours) / Social Research and Policy

Faculty: Faculty of Science, Faculty of Arts and Social Sciences
Campus: Kensington
Units of Credit: 264
Typical Duration: 5.7 Years

Read More

Bachelor of Advanced Science (Honours) - BAdvSci(Hons)
Bachelor of Arts - BA

3948 Advanced Science (Honours) / Arts

Faculty: Faculty of Science, Faculty of Arts and Social Sciences
Campus: Kensington
Units of Credit: 240
Typical Duration: 5 Years

Read More
Bachelor of Advanced Science (Honours) - BAdvSci(Hons)

Bachelor of Fine Arts - BFA

3957 Advanced Science (Honours) / Fine Arts

Faculty: Faculty of Science, Faculty of Art & Design
Campus: Kensington, Paddington
Units of Credit: 240
Typical Duration: 5 Years

Read More

Bachelor of Advanced Science (Honours) - BAdvSci(Hons)
Bachelor of Laws - LLB

3997 Advanced Science (Honours) / Law

Faculty: Faculty of Law, Faculty of Science
Campus: Kensington
Units of Credit: 288
Typical Duration: 6 Years

Read More

Related Programs

Bachelor of Biotechnology (Honours) - BBiotech(Hons)

3053 Biotechnology (Honours)

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 192
Typical Duration: 4 Years

Read More

Bachelor of Psychology (Honours) - BPsych(Hons)

3632 Psychology (Honours)

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 192
Typical Duration: 4 Years

Read More

Bachelor of Science and Business - BSc&Bus

3925 Science and Business
Bachelor of Science (Advanced Mathematics) (Honours) - BSc(AdvMath)(Hons)

**3956 Advanced Mathematics (Honours)**

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 192
Typical Duration: 4 Years

Read More

Bachelor of Science - BSc

**3970 Science**

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 144
Typical Duration: 3 Years

Read More

Bachelor of Science (International) - BSc(International)

**3987 Science (International)**

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 192
Typical Duration: 4 Years

Read More
**Program Requirements**

**Recognition of Prior Learning**

UNSW Students may be granted Recognition for Prior Learning (RPL) which may or may not reduce the amount of learning required to achieve a degree at UNSW. Generally, RPL is only granted based on the completion of tertiary-level studies, but in exceptional circumstances may also include non-formal or informal learning such as professional experience. RPL will not be granted based on partly completed tertiary courses. All applications for RPL at UNSW are subject to UNSW Recognition of Prior Learning (Coursework Programs) Policy and Procedures. Students seeking credit for courses completed at another university are required to submit documentary evidence (course outlines, academic transcripts) to support their application, and to nominate the course(s) for which they seek credit. In addition, the following conditions apply for all UNSW Science programs (including the Science component of dual award programs): Specified course credit, i.e. credit granted for an exact or near exact equivalence to a course at UNSW, will not be granted when more than 7 years has elapsed from the successful completion of the course (or other learning) and the student’s commencement in the Science program. Where this time period is shorter it will be stipulated in the individual rules for the relevant program. Unspecified course credit (e.g. General Education or free electives) will not be granted when more than 10 years has elapsed from the successful completion of the course (or other learning) and the student’s commencement in the Science program. Students may only receive credit of up to a maximum of 50% of the coursework component of their Science program, excluding Honours. For most undergraduate programs this will be 72 UOC. For dual award programs that include a Science component, it will be a maximum of 50% of the Science component of the dual degree, excluding Honours. Credit for the other program will be assessed by the Faculty that administers that program. Applications for RPL will only be assessed for students who have accepted a place to study in a UNSW Science program. Students must formally apply for RPL unless they become a UNSW student as part of a formal Articulation Agreement. Applications for RPL should be made as early as possible in the student’s program. Students who are readmitted into a Science program after a period of unapproved absence or deferment, or after exclusion, will not necessarily retain credit for all units completed at UNSW prior to the absence if the date of completion of the units of study is greater than the 7 and 10-year rules outlined in points 1 and 2 above. In these cases, the credit retained will be decided by the Associate Dean (Academic Programs) in consultation (when necessary) with the Program and/or Course Authority.
Progression Requirements

Progression to stages 2, 3, and 4 of this program is subject to academic performance. Students will be required to attain a weighted average mark (WAM) of 70 in each term. If a student does not maintain this minimum level of academic performance, they will be transferred to the Bachelor of Science.

Where students successfully complete a total of 144 UoC and all the requirements of the first three years of the program, including Level I/II/III, major, and general education requirements, they can apply for admission into the fourth-year honours component. There are two exceptions to this requirement. For students planning to undertake Honours in Psychology, a WAM of 75 in PSYC courses in the student's major is required. For students planning Honours in any disciplines in the School of Mathematics and Statistics, a WAM of 70 in Level 3 courses taken for the major is also required. Students whose results do not meet these requirements may still be admitted to Honours subject to supervision and resources being available, and at the discretion of the Head of School.

If a student is not permitted to progress in the Advanced Science (Honours) they will be required to transfer to, and graduate from, program 3970 Bachelor of Science. Students should be aware that not all Advanced Science (Honours) majors are available in 3970, meaning that graduation in 3970 may occur in a less specialised major. Entry to Honours may still be possible by application to enter program 4500 Bachelor of Science (Honours).

Students enrolled in the Advanced Science (Honours) program who wish to take out the Bachelor of Science award at pass level without proceeding to Honours, are required to transfer to the Science program (3970). Applications to transfer should be lodged with the Science Student Centre no later than the census date for the term in which the student expects to satisfy requirements. Students applying after that date may not be able to graduate in the next round of ceremonies.

For more information on university policy on progression requirements please visit Academic Progression.
Recognition of Achievement

University Medal

The University Medal is awarded to recognise outstanding academic performance by a bachelor degree student in line with the University Medal Policy and University Medal Procedure.

Honours Classes

Students completing Honours will be considered for the award of Honours according to the following scale (based on performance in Stage 4 and the calculation described in the particular discipline area):

- Honours Class 1: mark or weighted average of 85 or greater;
- Honours Class 2 Division 1: mark or weighted average from 75 to 84;
- Honours Class 2 Division 2: mark or weighted average from 65 to 74;
- Honours Class 3: mark or weighted average below 65;

A student's Honours Grading is calculated only on their performance in the final year of the program. Each School has its own method for calculating Honours gradings and this is clearly articulated at a stream level in the Handbook.
**Additional Information**

**University Medal**

Nominees for the University Medal will be determined by Schools within the Faculty of Science in accordance with UNSW University Medal policies and procedures.

**Definition of 'Science' courses**

**Table 1**

**Talented Students' Program and Accelerated Progression**

The Science **Talented Students' Program (TSP)** introduces high performing students - entering the Bachelor of Science or Bachelor of Advanced Science (Honours) - to the Faculty of Science and helps them develop specific skills during their degree. The program offers these students exposure to research within the Faculty and provides a degree that is flexible and tailored to suit students' needs and talents.

Invitation to participate in the TSP is made by the Dean of Science on the basis of superior secondary education performance (ATAR or equivalent), all incoming students are assessed for eligibility including non-high school leavers. High performing current UNSW Science students, in the BSc or BAdvSci(Hons), will be invited to join at the end of their first year. Contact the Science Student Centre for more details.

**Faculty of Science Rules**

The Faculty of Science has some rules that relate to all students enrolled in programs offered by the Faculty in relation to recognition for prior learning, general education, course exclusions, study load, and cross-institutional study. All students should read the information contained on the Faculty General Rules and Requirements page.

**Science Handbook Rules and Editions**

Students must follow the program rules and requirements in the UNSW Handbook published in the year they commence their studies with the Faculty of Science.

Students who transfer from another UNSW Faculty into Science (for example, from a Bachelor of Arts into a Bachelor of Science) must follow the program rules and
requirements in the UNSW Handbook published in the year of their transfer.

Students, who are readmitted to UNSW after a period of unapproved absence or deferment, or after exclusion, must satisfy the program rules in the Handbook published in the year of their readmission. In addition, these students may be subject to restrictions on which courses taken at UNSW may be counted on their return. In some cases, students returning from an unapproved absence may be required to repeat courses. See the Recognition of Prior Learning (RPL) and Advanced Standing sections above for more details. Students who take approved leave or deferment will follow the Handbook for the year of their original commencement unless otherwise approved by the Associate Dean (Academic Programs).
Program Fees

At UNSW fees are generally charged at course level and therefore dependent upon individual enrolment and other factors such as student's residency status. For generic information on fees and additional expenses of UNSW programs, click on one of the following:

- Domestic Students
- Commonwealth Supported Students
- International Students

Additional Expenses

This depends on the courses taken. Some courses may require the purchase of notes, textbooks, manuals, laboratory equipment such as lab coats, or have field trip expenses.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions