

BIOLOGICAL SCIENCES

Overview

NFQ Level 8, Major Award

Students enter Second Science Biological Sciences from the First Science Area of Study: Biological and Chemical Sciences (CK402 (<https://ucc-ie-public.courseleaf.com/programmes/bscbf/>)) provided they have passed First Science.

The Second Science Biological Sciences programme consists of compulsory modules to the value of **55** credits, and additional elective modules to the value of **5** credits. In Third Science, students enter the honours degree programme in Biochemistry, Biotechnology, Microbiology, Neuroscience or Physiology. Students in Biochemistry, Microbiology and Neuroscience may elect to take a 5-credit optional work placement module in Third Year.

Quotas

There will be a total of 120 places available in Second Science Biological Sciences. Quotas apply for all other degree outlets – please see specific degree outlets for further details. Students who opt to enter Biological Sciences will be offered a place in order of merit based on their First Year University Examination results. In determining aggregation and progression, full marks obtained in all modules passed at the Summer Examination Board in the first attempt plus capped marks obtained in modules in Supplemental and Repeat Year Examinations are used unless mitigation has been granted by an Examination Board.

Note: entry to specific degree programmes in Third Science is also subject to quotas for each discipline.

Second Year - Biological Sciences

Students enter Second Biological Sciences from First Biological and Chemical Sciences (CK402) and can proceed to a BSc (Hons) Degree in Biochemistry, Biotechnology, Microbiology, Neuroscience or Physiology.

Third Year - Biological Sciences Degree Outlets, Quotas and Transfers

In **Third Science**, students enter the honours degree programme in one of the following:

- Biochemistry (<https://ucc-ie-public.courseleaf.com/programmes/bscbc/>)
- Biotechnology (<https://ucc-ie-public.courseleaf.com/programmes/bscbt/>)
- Microbiology (<https://ucc-ie-public.courseleaf.com/programmes/bscmb/>)
- Neuroscience (<https://ucc-ie-public.courseleaf.com/programmes/bscan/>)
- Physiology (<https://ucc-ie-public.courseleaf.com/programmes/bscpl/>)

Entry to the degree programmes is subject to quotas (See **Quotas** below). Each year of a degree programme has a core of compulsory modules and a specified number of elective modules to the total value of **60** credits.

Transfers into Third Year Biological Sciences may be possible for students who have met programme requirements. Please consult the relevant Head of School/Department.

Quotas

All students who pass the Second University Examination in Science may enter an honours degree programme in Third Science but entry to a particular programme is subject to a quota. Quota selection will be based on the aggregate of second year results in core modules. In filling the quotas, preference will be given to students passing the Second University Examination in Science in the first year of registration for the Second University Examination in Science, and in order of merit of aggregate marks obtained thereat. Remaining places, if any, will be filled in order of merit without distinction as to when the examination was completed. The decision as to the filling of such remaining places will be made after the results of the Autumn Supplemental Examination are known. The quotas for entry to the various degree programmes in Third Science are presented in the Table below.

| Third Degree Outlet | Quota |
|---------------------|-------|
| Biochemistry | 30 |
| Biotechnology | 20 |
| Microbiology | 30 |
| Neuroscience | 15 |
| Physiology | 15 |

Students who have passed Third Year may choose not to proceed to Fourth Year and may opt instead to be conferred with a BSc Ordinary Degree.

Fourth Year - Biological Sciences

In Fourth Science students take modules to the value of **60** credits.

Programme Requirements

For information about modules, module choice, options and credit weightings, please go to Programme Requirements (p. 1).

Programme Requirements

| Code | Title | Credits |
|---|--|---------|
| Year 1 | | |
| Students take 60 credits as follows: | | |
| <i>Core Modules</i> | | |
| BC1001 | Introduction to Biochemistry and the Biological Basis of Disease | 5 |
| BL1002 | Cells, Biomolecules, Genetics and Evolution | 5 |
| BL1004 | Physiology and Structure of Plants and Animals | 5 |
| CM1200 | Fundamentals of Modern Chemistry Part 1 | 10 |
| CM1201 | Fundamentals of Modern Chemistry Part 2a | 10 |
| MA1001 | Calculus for Science Part 1 | 5 |
| MA1002 | Calculus for Science Part 2 | 5 |
| MB1003 | Microbiology in Society | 5 |
| PY1010 | Physics for Biological and Chemical Sciences | 10 |
| Year 2 | | |
| Students take 60 credits as follows - all listed core modules (55 credits) and 5 credits of elective modules: | | |
| <i>Core Modules</i> | | |
| Biochemistry | | |
| BC2001 | Biomolecules | 5 |

| | | |
|---|---|----|
| BC2002 | Principles of Metabolic Pathways | 5 |
| Biotechnology | | |
| BT2001 | Introduction to Biotechnology | 5 |
| Molecular Biology | | |
| ML2001 | Introductory Molecular Biology | 5 |
| Microbiology | | |
| MB2005 | Fundamentals of Microbiology | 5 |
| MB2006 | Principles of Microbiology | 5 |
| Neuroscience | | |
| AN2003 | Principles of Human Structure | 5 |
| AN2020 | Introduction to Neuroscience, the Brain and Behaviour | 5 |
| Physiology | | |
| PL2021 | Introductory Physiology I | 5 |
| PL2022 | Introductory Physiology II | 5 |
| Statistics | | |
| ST2001 | Introduction to Biostatistics | 5 |
| <i>Elective Modules</i> | | |
| Students take modules to the value of 5 credits from the following: | | 5 |
| Semester 1 | | |
| Chemistry | | |
| CM2001 | Main Group and Transition Element Chemistry (5) | |
| CM2002 | Fundamentals of Organic Chemistry (5) | |
| CM2003 | Energetics and Kinetics (5) | |
| Plant Science | | |
| PS2001 | Introduction to Plant Biotechnology (5) | |
| Zoology | | |
| ZY2000 | Vertebrate Diversity (5) | |
| Semester 2 | | |
| Chemistry | | |
| CM2007 | Spectroscopy (5) | |
| Ecology | | |
| AE2001 | Fundamentals of Ecology (5) | |
| Year 3 | | |
| Select one of the following: | | 60 |
| Biochemistry (https://ucc-ie-public.courseleaf.com/programmes/bscbc/) | | |
| Biotechnology (https://ucc-ie-public.courseleaf.com/programmes/bscbt/) | | |
| Microbiology (https://ucc-ie-public.courseleaf.com/programmes/bscmb/) | | |
| Neuroscience (https://ucc-ie-public.courseleaf.com/programmes/bscan/) | | |
| Physiology (https://ucc-ie-public.courseleaf.com/programmes/bscpl/) | | |