

# 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
<b>Year 1</b>		
Students take <b>60</b> 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
<b>Year 2</b>		
Students take <b>60</b> credits as follows - all listed core modules ( <b>55</b> credits) and <b>5</b> 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)	
<b>Year 3</b>		
Select <b>one</b> of the following:		60
Biochemistry ( <a href="https://ucc-ie-public.courseleaf.com/programmes/bscbc/">https://ucc-ie-public.courseleaf.com/programmes/bscbc/</a> )		
Biotechnology ( <a href="https://ucc-ie-public.courseleaf.com/programmes/bscbt/">https://ucc-ie-public.courseleaf.com/programmes/bscbt/</a> )		
Microbiology ( <a href="https://ucc-ie-public.courseleaf.com/programmes/bscmb/">https://ucc-ie-public.courseleaf.com/programmes/bscmb/</a> )		
Neuroscience ( <a href="https://ucc-ie-public.courseleaf.com/programmes/bscan/">https://ucc-ie-public.courseleaf.com/programmes/bscan/</a> )		
Physiology ( <a href="https://ucc-ie-public.courseleaf.com/programmes/bscpl/">https://ucc-ie-public.courseleaf.com/programmes/bscpl/</a> )		