



University of  
Nottingham

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# Foundation Science



Challenge it



Succeed it



[nottingham.ac.uk/life-sciences](http://nottingham.ac.uk/life-sciences)

Undergraduate guide 2019

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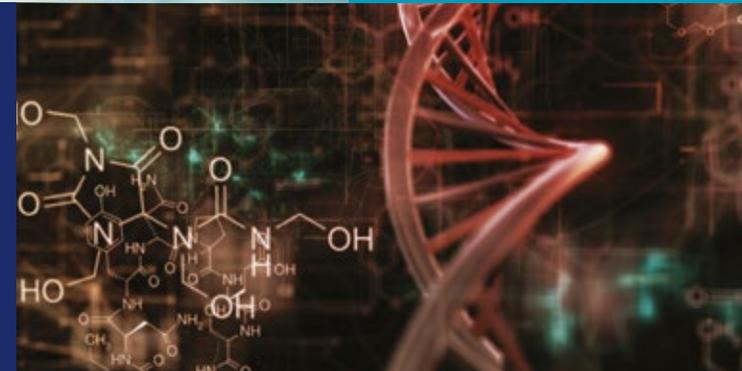
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Have a **guaranteed place on an undergraduate degree\***

\*Progression requirements apply. See page 10 for more information.

Gain key **laboratory skills and fieldwork experience**, preparing you for your future studies



“ Science with foundation year taught me the essentials I needed to know about university life, such as how to write an essay, how to research and how to manage my time. One thing I am sure of, is that the University made me more mature and responsible. ”

Peyman Ince, BSc Biochemistry



Get **involved** by choosing from **over 300 clubs and societies**



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Our UK campuses have won 20 Green Flag Awards between them



Join a course with a **high progression record**

**Gold standard teaching and learning**

Teaching Excellence Framework 2017



# Where could foundation science take you?

**Foundation science at the University of Nottingham was established in 2008 and has provided excellent students access to a range of science degree subjects. We encourage a range of high-level applicants from a variety of backgrounds.**

The course is taught by highly experienced teachers who help students gain the necessary skills to progress to degree level study. We promote the mixing of a variety of nationalities; home, European Union, and international, and offer students the chance to blend in with university life in the same beautiful location as other students.

Foundation science offers you a chance to progress to a range of different degrees in the Schools of Life Sciences, Biosciences, Chemistry, Health Sciences, Medicine, Pharmacy and Psychology. More detail is provided in this brochure and if you have any queries, please feel free to get in touch.

**Caroline Anderson**  
Admissions Tutor

A collection of teaching methods are used to give you a varied learning experience.



# Studying foundation science at Nottingham

**Foundation science is for talented students who do not have the right subjects to meet our entry requirements for undergraduate courses.**

You will study a range of modules designed to bring your subject knowledge and skills up to the required level for undergraduate study. If your qualifications prevent you from applying directly to an undergraduate programme, a foundation year could be your path to degree-level study.

## Is the foundation year for me?

The foundation year is ideal for:

- students who have good A level grades (BBB) but not in the right subjects for direct entry
- international students who have qualifications that are not accepted for direct entry
- mature students who have decided to return to education, and have evidence of recent study in the sciences

## Foundation science at Nottingham

The course is taught by highly experienced teachers who contribute to science teaching in a variety of different undergraduate degrees. They will help you gain the necessary skills to progress to degree study.

We ensure that the foundation course is fully integrated into your degree programme, and that the skills gained during the foundation year are an advantage to subsequent stages of your degree. For this reason, the success rate for students progressing from the Nottingham foundation programme is very high.

Based on the main University campus, you'll be part of the student community from day one. You'll have access to the same academic and social facilities on campus as other undergraduate students.

## Progression opportunities

The foundation science pathway is designed to allow progression on to your desired undergraduate degree. There are over 50 courses to choose from across seven schools. A full list can be found online at [nottingham.ac.uk/foundationscience](https://nottingham.ac.uk/foundationscience)

## Award winning campus

You'll study on University Park Campus, one of the most beautiful campuses in the UK and winner of 15 Green Flag Awards. The 300-acre landscaped site is set around a large boating lake.

With libraries, 12 halls of residence, outstanding sports facilities, a hotel, a health centre, banks, a hair salon, art galleries, a museum, a recital hall, the Students' Union, bars and two theatres, it really is the hub of student life.

To make it even better, the campus is around 10 minutes from Nottingham city centre by bus or tram.

# Our courses

Degree title	UCAS code	Duration	A levels	IB
<b>Single honours</b>				
BSc Science with Foundation Year	CGF0	4 years (1 year foundation)	BBB	30
MSci Science with Foundation Year	CFG0	5 years (1 year foundation)	BBB	30
Science Foundation Certificate	CFGZ	1 year	BBB	30

## BSc and MSci courses

These courses are open to United Kingdom and European applicants only.

BSc degrees are four years long (including the foundation year) and MSci degrees are five years long (including the foundation year). MSci courses are undergraduate masters-level degrees. They give you the opportunity to explore a subject in more depth and provide a good base for a career in research.

## Certificate

The Science Foundation Certificate is open to international (non-EU) applicants only. On successful completion, you may progress to an undergraduate course.

If you don't meet the academic or English language requirements for this course, you may wish to consider the foundation course run by the University of Nottingham International College. Find out more at [nottingham.ac.uk/internationalcollege](http://nottingham.ac.uk/internationalcollege)

## English language requirements

Students who score 5.0 in any element of their IELTS (irrespective of the overall score) will need to take an additional 20 credits of English Language modules and will be required to achieve 55% to 65% in each module, depending on which degree they wish to progress to. For example, progression to pharmacy will require 65% in each module.

Students who have IELTS 5.5 (no less than 5.0 in any element) will be considered for entry to foundation science but will be expected to complete an English Language module.

Students who have IELTS 6.0 (no less than 5.5 in any element) will not be required to complete an English Language module if they wish to progress to degrees in chemistry.

Students who have IELTS 6.5 (no less than 6.0 in any element) will not be required to complete an English Language module if they wish to progress to degrees in biosciences, life sciences, or psychology.

Students who have IELTS of 7.0 (no less than 6.0 in any element) will not be required to complete an English Language module if they wish to progress to pharmacy.

For details of other English language tests and qualifications we accept, please see [nottingham.ac.uk/go/alternativerequirements](http://nottingham.ac.uk/go/alternativerequirements)

# Course content

**The main subjects you will study are biology, chemistry and mathematics. This will provide you with the best possible background to enter the first year of your chosen degree programme.**

European and international students also have the opportunity to improve their written and spoken English skills at the University's Centre for Language Education (CELE). Find out more at [nottingham.ac.uk/cele](http://nottingham.ac.uk/cele)

Laboratory and project work is fundamental to the course, allowing you to develop analytical, team working and problem solving skills. The balance of skills and experience among our staff is used to carefully manage the transition between the student-centred learning common in schools and colleges, to the independent way of thinking that characterises our scientists.

Each full year at university consists of 120 credits. The below table shows what you'll study.

Module title	Credits
Foundation Biological Sciences	40
Foundation Year Chemistry	40
Mathematics for Foundation Science	20
Studying Science at University	20
Total = 120	

For students whose first language isn't English, there are additional English language modules. Depending on your IELTS score, you may need to take one or both modules.

English Language	10
English Language	10

Modules may change, for example due to curriculum developments. The above list is a sample of typical modules that we offer, not a definitive list. The most up to date information can be found on our website at [nottingham.ac.uk/ugstudy](http://nottingham.ac.uk/ugstudy)

# Course content

## Foundation Biological Sciences

This module will provide you with an introduction to life at the molecular, cellular, physiological, organismal, population and community levels, and provide the background to enable you to enter a range of degree programmes in the biological and environmental sciences.

Topics include:

- Biological molecules
- Cells and the cell cycle
- Exchange and transport systems in plants and animals
- Respiration and photosynthesis
- Nervous and hormonal control
- Biodiversity, classification and taxonomy
- Pathogens, disease and the immune response
- Evolution by natural selection
- Ecosystems, human activity and sustainability

Practical work is a vital component of foundation science, and you'll have the opportunity to develop various laboratory techniques. You'll also gain experience in carrying out fieldwork during a field trip to Attenborough Nature Reserve. You'll be taught how to write up practical experiments in the standard scientific format in preparation for progression to degree-level study.

## Foundation Year Chemistry

You'll learn to use the periodic table to make predictions about elements, the basics of chemical bonding and the forces between molecules and their shapes. Experimental work will enhance understanding and skills development.

You'll study quantitative aspects of chemistry-based laboratory activities, including appreciation of experimental error.

In this module, you will develop:

- the knowledge and understanding of safe laboratory practice
- familiarity with common techniques and equipment
- an appreciation of physical, inorganic and organic chemistry
- the need for careful recording of observation and measurements
- an awareness of sources of error
- conventional approaches to reporting experimental work

## Mathematics for Foundation Science

This module aims to prepare you with the necessary knowledge and understanding, competence and experience of the fundamentals of mathematics needed for a successful career in the sciences. It will enhance your proficiency in core areas such as basic mathematical techniques and algebra as well as applications of functions, calculus and statistical tools for analysing scientific data.

This module covers:

- algebra and algebraic manipulation
- linear algebra
- functions and trigonometry
- differential calculus
- integral calculus
- simple modelling
- elementary probability
- statistics

## Studying Science at University

This module introduces you to the nature and processes of studying science at university, as well as how to communicate science effectively. It will address the transition into university study and the qualities necessary to be a successful scientist. Skills developed will include:

- strategies for reading efficiently
- making notes effectively and writing scientifically
- making enquiries using the scientific method
- finding, evaluating and summarising multiple sources on the internet and in the library
- time-management and teamwork

## English Language

Students who require extra support for English language during the foundation programme will study these modules. Topics covered include essay writing, laboratory reports and presentation skills.



# Example timetable

Below is an example first year timetable which will give you an idea of how your time will be spent.

An example timetable for year one							
	9-10am	10-11am	11am-12pm	12-1pm	1-2pm	2-3pm	3-4pm 4-5pm
Mon			Lecture Maths for Foundation Science			Tutorial Studying Science at University	Workshop Foundation Year Chemistry
Tues	Lecture Foundation Year Chemistry		Lecture Foundation Biological Sciences			Lecture Studying Science at University	
Wed	Practical Laboratory Sessions						
Thurs			Workshop Studying Science at University			Workshop Maths for Foundation Science	Workshop Foundation Biological Sciences
Fri							English Language

## Progression requirements

Schools	Progression routes	Progression requirements	Exceptions and extra requirements
Life Sciences	All degrees	55% required in both Foundation Year Chemistry and Foundation Biological Sciences modules and 40% overall	Sport and Exercise Science: 60% in both Foundation Year Chemistry and Foundation Biological Sciences modules and 60% overall
Biosciences	All degrees	55% required in both Foundation Year Chemistry and Foundation Biological Sciences modules and 40% overall	Nutrition/Dietetics: 55% in Foundation Year Chemistry and Foundation Biological Sciences modules and 55% overall – subject to interview
Pharmacy	All degrees*	60% required in the Foundation Year Chemistry module and 60% average overall	65% in both English Language modules (if taken)
Chemistry	All degrees except those involving physics or a higher level of maths**	60% required in the Foundation Year Chemistry module and 60% average overall	
Health Sciences	Sport Rehabilitation	55% required in both Foundation Year Chemistry and Foundation Biological Sciences modules and 40% overall	Subject to a successful interview
	Physiotherapy	60% required in both Foundation Year Chemistry and Foundation Biological Sciences modules and 60% average overall	Subject to a successful interview
Medicine	Medical Physiology and Therapeutics	55% required in both Foundation Year Chemistry and Foundation Biological Sciences modules and 40% overall	
Psychology	All degrees	60% overall average	International only; 55% in both English Language modules (if taken)

\* International students who wish to be considered for progression to pharmacy are encouraged to apply for the foundation year through UCAS. All students interested in progression to pharmacy may be required to give further information and are not guaranteed selection for interview. If invited for interview, they will be expected to show motivations for being a pharmacist, knowledge of the profession, scientific understanding and demonstration of good communication skills.

\*\* The following courses only: Chemistry BSc F100, Chemistry MSci F101, Chemistry with a Year in Industry MSci F105, Chemistry with an International Study Year MSci F103, Medicinal and Biological Chemistry BSc F017, Medicinal and Biological Chemistry MSci FC1R, Medicinal and Biological Chemistry with an Assessed Year in Industry MSci CF71.



# Engaging study, incredible results

## Teaching and learning

You will benefit from a wide range of teaching and learning styles. How you will study will vary depending on the module, but you can typically expect:

- lectures
- seminars
- tutorials
- laboratory sessions
- fieldwork
- workshops
- multimedia and internet-based systems

You'll be encouraged to take part in group discussions and activities. Theoretical-based sessions are usually supported by practical workshops where you can gain hands-on experience.

## Assessment

Typically, examinations count for around 60% of the module mark and coursework contributes 40%. Exams happen twice a year at the end of each semester.

## Student support

When you start the course, you will be assigned a personal tutor. Personal tutors are members of academic staff in the school and they will:

- monitor your academic progress and check on your wellbeing
- provide exam marks and help you reflect on feedback
- act as a first point of contact for any guidance on academic or personal matters

Additionally, the school has a dedicated Welfare Team who are available to provide advice on more complex issues.

## Library and computing facilities

The University recently invested £18m in the redevelopment of the George Green Library for science and engineering students, providing more study space as well as additional computers. Laptops and iPads are also available for students to borrow for use in the library.

In addition, you'll have access to an extensive collection of printed and online library resources. This includes both on and off-campus access to a wide range of databases, ejournals and ebooks relevant to your studies.



How do I apply?

# How to apply

All applications for undergraduate study at Nottingham, including applications by international students, must be made through UCAS.

Applications should be made online at [ucas.com](https://ucas.com) and candidates will be notified of decisions through UCAS Track.

## Your personal statement

This is the section of your UCAS form that tells us most about you, and you should make the best use of it. Be as specific and detailed as you can – we would like to see that you are a student who can work hard, be self-motivated and make the best possible use of the opportunities that our courses offer you. We would also like to hear about any skills you have gained through extracurricular activities.

## Minimum entry requirements

Unless otherwise stated in individual course profiles, all UK applicants should have GCSE English grade 4 (C) as a minimum.

## Alternative qualifications

In this brochure you will find our A level and International Baccalaureate entry requirements but we accept a much broader range of qualifications. For more details, visit [nottingham.ac.uk/ugstudy/applying](https://nottingham.ac.uk/ugstudy/applying)

## GCSE reform

Following the reform of GCSE grading in England from A\*-G to 9-1, we have adopted Ofqual's recommended equivalence. This means that GCSE grade A\*=9, A=7, B=5/6 and C=4. GCSE qualifications taken outside of the UK will still be graded A\* to G.

[nottingham.ac.uk/ugstudy/applying](https://nottingham.ac.uk/ugstudy/applying)

Around one-third of our UK students receive our means-tested core bursary, worth up to £2,000 a year (2018 entry figure; subject to change). For details, see [nottingham.ac.uk/financialsupport](https://nottingham.ac.uk/financialsupport)

## Flexible admissions policy

In recognition of our applicants' varied experience and educational pathways, we employ a flexible admissions policy. If we judge that your situation has adversely affected your achievement, then we will consider this when assessing your academic potential. Some courses may make a slightly lower offer. For more information about this policy, see [nottingham.ac.uk/ugstudy/applying](https://nottingham.ac.uk/ugstudy/applying)

## Mature applicants

We encourage applications from mature applicants who have a significant gap in education. You should apply through UCAS. Find out more at [nottingham.ac.uk/mature](https://nottingham.ac.uk/mature)

## International applicants

The University provides a range of information and advice for international applicants. If you are unable to attend an open day, we can meet you in your country at one of our overseas events or arrange an individual visit to the University. For further information please visit [nottingham.ac.uk/go/international-applicants](https://nottingham.ac.uk/go/international-applicants)

## Deferred entry

Applicants who wish to defer their entry by a year will not be at a disadvantage. Please tell us something about your plans for your gap year in your UCAS personal statement.

## Equal opportunities policy

The University aims to create the conditions whereby students and staff are treated solely on the basis of their merits, abilities and potential, regardless of gender, race, colour, nationality, ethnic or national origin, age, socio-economic background, disability, religious or political beliefs, trade union membership, family circumstances, sexual orientation or other irrelevant distinction.

Experience it



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[nottingham.ac.uk/studywithus/studyabroad](https://nottingham.ac.uk/studywithus/studyabroad)

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200+

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[su.nottingham.ac.uk](https://su.nottingham.ac.uk)



Student Service Centres on all UK campuses for support and advice

[nottingham.ac.uk/student-services](https://nottingham.ac.uk/student-services)



One of the UK's leading universities for sport\* with over 70 student sports clubs

[nottingham.ac.uk/sport](https://nottingham.ac.uk/sport)

\* British Universities and Colleges Sports Standings, 2016-17.

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Choose from 9 modern languages to study alongside your course

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For undergraduate enquiries contact:  
Student Recruitment Enquiries Centre



+44 (0)115 951 5559



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This publication  
is available in  
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This brochure has been drafted in advance of the academic year to which it applies. Every effort has been made to ensure that the information contained in this brochure is accurate at the time of publishing, but changes (for example to course content) are likely to occur given the interval between publication and commencement of the course. It is therefore very important to check our website for any updates before you apply for the course by following [nottingham.ac.uk/ugstudy](http://nottingham.ac.uk/ugstudy). Where there is a difference between the contents of this brochure and our website, the contents of the website take precedence.