Programme Specification: Foundation Year

For Academic Year 2025/26

1. Course Summary

Names of programme and award title(s)	Science Foundation Year
Award type	Foundation Year
Mode of study	Full-time
Framework of Higher Education Qualification (FHEQ) level of final award	Foundation Year
Normal length of the programme	1 year with progression onto a further three years at Keele
Maximum period of registration	The normal length as specified above plus 3 years
Location of study	Keele Campus
Accreditation (if applicable)	Not applicable
Regulator	Office for Students (OfS)
Tuition Fees	**UK students:** Fee for 2025/26 is £9,535* (September intake)

How this information might change: *Please read the important information at* http://www.keele.ac.uk/student-agreement/. *This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.*

* These fees are regulated by Government. We reserve the right to increase fees in subsequent years of study in response to changes in government policy and/or changes to the law. If permitted by such change in policy or law, we may increase your fees by an inflationary amount or such other measure as required by government policy or the law. Please refer to the accompanying Student Terms & Conditions. Further information on fees can be found at http://www.keele.ac.uk/studentfunding/tuitionfees/

2. What is a Foundation Year programme?

Keele has a long-standing Foundation Year programme that bridges the gap between further education and higher education, providing an alternative route into studying for a full degree. It involves an initial year of study that, following successful completion, will enable people to progress onto the first year of one of our eligible undergraduate degrees.

A foundation year might appeal to those who:

- May lack the confidence to enrol on a university degree and would like to acquire study skills and some entry-level knowledge on a subject area.

- Didn't manage to meet the entry requirements for their chosen degree course, but are still committed to pursuing that path and enrolling on that degree.

- May have been out of education for a while and feel they might need a refresher before taking on a full university degree.

- Are unsure whether university is for them, so would like a taster of university life before committing to a full degree.

3. Overview of the Programme

The Science Foundation Year provides a scientific background customised to individual students' needs, helping them to progress to the subsequent years of a degree programme at Keele. A broad range of modules is available from the life, physical, geographical and environmental sciences, mathematics, computing and psychology.

4. Aims of the programme

The broad aim of the programme is to provide preparation for subsequent study at Honours degree level in subjects provided in the Faculty of Natural Sciences. A full list of Honours degree programmes provided for the different subject areas in the Faculty of Natural Sciences can be found using the links below:

Biosciences: https://www.keele.ac.uk/study/undergraduate/subjectareas/biosciences/

Chemistry: https://www.keele.ac.uk/study/undergraduate/subjectareas/chemistry/

Computer Science and Mathematics:
https://www.keele.ac.uk/study/undergraduate/subjectareas/computerscienceandmathematics/

Forensic Science: https://www.keele.ac.uk/study/undergraduate/subjectareas/forensicscience/

Geography, Geology and Environment:
https://www.keele.ac.uk/study/undergraduate/subjectareas/geographygeologyandenvironment/

Physics and Astrophysics: https://www.keele.ac.uk/study/undergraduate/subjectareas/physicsandastroyphysics/

Psychology: https://www.keele.ac.uk/study/undergraduate/subjectareas/psychology/

5. What you will learn

The intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), can be described under the following headings:

- Subject knowledge and understanding
- Subject specific skills
- Key or transferable skills (including employability skills)

Subject knowledge and understanding

These are covered by the subject-specific modules, which are specific to individual programmes and not core to the Science Foundation Year.

Subject specific skills

These are covered by the subject-specific modules, which are specific to individual programmes and not core to the Science Foundation Year. Subjects also encourage the formation of appropriate study skills and commences the formation of employability skills.

Key or transferable skills (including employability skills)

Successful students will be able to:

- communicate effectively in writing and produce professional reports;
- communicate effectively orally and give formal presentations;
- work cooperatively and collaboratively in groups;
- utilize effective independent study skills;
- reflect on own skills and progress;
- manage time effectively and work towards deadlines;
- write assignments with both formal and informal structures;
- perform mathematical calculations and solve problems through the application of mathematical equations;
- derive and interpret the accuracy of numerical values obtained from calculations;

- use bespoke commercial software used to represent numerical data graphically.

Keele Graduate Attributes

The Keele Graduate Attributes are the qualities (skills, values and mindsets) which you will have the opportunity to develop during your time at Keele through both the formal curriculum and also through co- and extra-curricular activities (e.g., work experience, and engagement with the wider University community such as acting as ambassadors, volunteering, peer mentoring, student representation, membership and leadership of clubs and societies). Our Graduate Attributes consist of four themes: **academic expertise, professional skills, personal effectiveness, and social and ethical responsibility.** You will have opportunities to engage actively with the range of attributes throughout your time at Keele: through your academic studies, through self-assessing your own strengths, weaknesses, and development needs, and by setting personal development goals. You will have opportunities to discuss your progress in developing graduate attributes with, for example, Academic Mentors, to prepare for your future career and lives beyond Keele.

6. How is the programme taught?

The programme will be delivered through a mixture of lectures, tutorials, seminars, workshops, computer classes, laboratory classes, problem-based learning and team-based learning. There will be activities outside of the classroom such as online directed learning activities and field trips. In addition, students are expected to undertake a large amount of independent study and revision.

Digital Learning give students access to a variety of high quality, on-demand digital resources that students have access to including pre-recorded lecture videos, curated Microsoft Sway presentations and OneNote documents.

Lectures are normally delivered asynchronously and available for students to engage with prior to the associated taught session/s.

Tutorials and **seminars** are small group sessions with a member of staff. Usually there is much more participation by students than in lectures. There is often opportunity for students to suggest the topics to be discussed, to ask questions and even to lead part of the session. Tutorials and seminars usually support the material delivered in the lectures; seminars often allow students and/or staff to introduce supplementary material.

Workshops are small group sessions based around an activity. These may be individual or group activities. A member of staff facilitates the session but the learning comes largely through the undertaking of the activity. Some workshops will complement the material delivered in the lectures rather than build on it directly.

Laboratory classes provide opportunity for students to perform experiments and other practical work under supervision.

In **computer laboratories** students complete tasks using a wide variety of computer applications. Members of staff are available to provide guidance.

Team-based learning and **problem-based learning** are group work classes that are facilitated by a tutor. Students complete a series of tasks to actively learn about a subject.

Directed learning activities are set by tutors, that will be completed by students independently, or as part of a group.

Independent study includes revision, wider reading around the subject, preparation and writing of assignments, preparatory reading, preparation for seminars and tutorials, and developing skills to complement the material delivered in class. Reading lists are provided to help students direct their reading.

Apart from these formal activities, students are also provided with regular opportunities to talk through particular areas of difficulty, and any special learning needs they may have, with their Academic Mentors or module lecturers on a one-to-one basis.

7. Teaching Staff

All Foundation Year Centre staff already have or are completing formal teaching qualifications and collectively have many years experience of teaching on foundation year programmes. Many are engaged in scholarship relating to teaching and learning. In some cases teaching may be delivered by staff from other Schools in the University, or external experts in their field contracted to deliver specific teaching.

The University will attempt to minimise changes to our core teaching teams, however, delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff turnover, for example where key members of staff leave or fall ill may result in changes to the programme's content. The University will endeavour to ensure that any impact on students is limited if such changes occur.

8. What is the structure of the programme?

The Science Foundation Year provides 120 credits worth of study during the academic year.

The academic year runs from September to June and is divided into two semesters. The number of weeks of teaching may vary from programme to programme but you can normally expect up to 12 weeks of teaching for each semester. You can generally expect to attend scheduled teaching sessions between the end of September and mid-December (semester 1), and from mid-January to the end of April (semester 2).

There are usually two reassessment periods. Semester 1 reassessment period usually takes place at the end of May beginning of June. Semester 2 reassessment period usually takes place mid-August.

Each module is usually a self-contained unit of study and each is usually assessed separately with the award of credits on the basis of 1 credit = 10 hours of student effort.

Students take a combination of modules to a total of 120 credits: compulsory modules will be those related to their intended degree programmes after their Foundation Year. Depending on their degree choice their may be some free choice. Modules are worth 15 or 30 credits.

An outline of the structure of the programme is provided below.

Module Lists

Foundation Year

Students will study modules on the subject area aligned with their chosen degree area: Life Science, Chemistry, Computer Science, Geography, Geology and the Environment; Mathematics, Physics or Psychology.

Alongside these modules, students will either study additional modules on appropriate Scientific methods or, when the chosen degree pathway is aligned with more than one subject area, modules on a second subject area.

Optional modules	Module Code	Credits	Period
Foundations of Mathematical Methods	FYO-00217	30	Semester 1
Foundations of Computational Theory and Programming	FYO-00221	30	Semester 1
Sustainability in Action	FYO-00346	15	Semester 1
Foundations of Scientific Practice	FYO-00362	15	Semester 1
Foundations in Physics (15)	FYO-00374	15	Semester 1
Foundations of Computational, Mathematical, and Academic Skills	FYO-00380	30	Semester 1
Foundations in Ecosystems and Biodiversity	FYO-00386	30	Semester 1
Foundations in Life Sciences	FYO-00390	30	Semester 1
Foundations in Chemistry	FYO-00392	30	Semester 1
Foundations in Psychology	FYO-00394	30	Semester 1
Foundations in Physics	FYO-00396	30	Semester 1
Mathematical Competency	FYO-00378	0	Semester 1-2
Advancing Chemistry	FYO-00191	30	Semester 2
Advancing Geography, Geology and the Environment	FYO-00195	30	Semester 2
Advancing Life Sciences	FYO-00199	30	Semester 2
Advancing Psychology	FYO-00203	30	Semester 2
Advancing Physics	FYO-00207	30	Semester 2
Advancing Programming	FYO-00225	15	Semester 2
Advancing Computing: Client-Led Collaborative Design	FYO-00227	15	Semester 2
Advancing Mathematical Methods	FYO-00229	30	Semester 2
Advancing Scientific Practice	FYO-00364	30	Semester 2
Advancing Computer Science and Mathematics: Cryptographic Espionage	FYO-00382	30	Semester 2
Advancing Ecosystems and Biodiversity	FYO-00388	30	Semester 2

Foundation Year Module Rules

In Semester 1 students study the foundation modules that follow onto the appropriate advancing modules in Semester 2.

Learning Outcomes

The table below sets out what students learn in the programme and the modules in which that learning takes place. Details of how learning outcomes are assessed through these modules can be found in module specifications.

Foundation Year

Subject Knowledge and Understanding	
Learning Outcome	**Module in which this is delivered**
Apply knowledge and understanding of scientific ideas, processes, techniques and procedures:- in a theoretical or practical context when handling qualitative or quantitative data. Analyse, interpret and evaluate scientific information, ideas and evidence, in order to: make judgments and reach conclusions, to develop and refine practical design and procedures.	Through modules across the Science programme.

Intellectual skills	
Learning Outcome	**Module in which this is delivered**
Develop an open and questioning approach to ideas, demonstrating curiosity, independence of thought and the ability to appreciate a range of perspectives and then:- plan for, and apply, your ability creatively to solve problems using a range of different approaches and techniques, determine which techniques are appropriate for the issue at hand.	Through modules across the Science programme.

Key or Transferable Skills (graduate attributes)	
Learning Outcome	**Module in which this is delivered**
Demonstrate the ability and motivation to:- participate responsibly and collaboratively as an active citizen in the communities in which you live and work, be flexible in rapidly changing and uncertain external environments and to update skills and knowledge as circumstances require.	Through modules across the Science programme.

9. Final and intermediate awards

Students successfully completing the programme with 120 credits will be eligible for the Certificate in Foundation Year Studies.

The certificate will only be awarded to students who successfully complete the Keele Foundation Year and then choose not to continue their studies at Keele.

10. How is the Programme Assessed?

The wide variety of assessment methods used on this programme at Keele reflects the broad range of knowledge and skills that are developed as you progress through the degree programme. Teaching staff pay particular attention to specifying clear assessment criteria and providing timely, regular and constructive feedback that helps to clarify things you did not understand and helps you to improve your performance. The following list is representative of the variety of assessment methods used on your programme:

- **Class Test**: An opportunity for students to apply their knowledge and/or understanding within time-restricted conditions (typically up to 1 hr) during a timetabled session as an integral part of a module. Class tests may be conducted on campus or online (e.g., via the KLE) and are set and scheduled by module leaders. Students should be informed of the date, time, and duration of any class test at the beginning of the module.
- **Computer Task**: A computer-based assessment that may involve using specific software to solve a problem or series of problems.
- **Essay**: A piece of formal writing on a specific subject, or in response to a specific question that develops an argument using evidence.
- **Essay Plan**: The basic outline of an essay which helps learners to organise ideas and highlight key arguments.
- **Examination (Exam)**: An opportunity for students to apply their knowledge and/or understanding under

invigilated conditions (typically 2-3 hours but can be shorter). All examinations should take place on campus, or in an alternative agreed setting. Examinations can also be practical in nature.
- **Group Presentation:** Work completed as a group is presented, typically to an audience including the module lead, other academic staff and peers. This may be accompanied by visuals such as PowerPoint slides.
- **Laboratory Book**: A record of specific tasks, actions and/or research undertaken in the laboratory.
- **Laboratory Practicals**: An assessment of specific practical task undertaken in the laboratory.
- **Laboratory Report**: A lab report describes the aim, methods, results and conclusions of an experiment conducted in a laboratory.
- **Multiple Choice Questions:** A series of questions where learners will need to choose one from a number of optional answers. This may take place under timed exam conditions or in the learner's own time, may be digital or paper-based and may or may not have a time limit.
- **Online Tasks:** A number of computer-based exercises, typically completed via the Keele Learning Environment.
- **Portfolio**: A series of tasks and/or collection of evidence which evidences a learner's application of skills and knowledge. The artifacts within a portfolio may be in written, physical and/or digital format, or as a combination of formats.
- **Poster**: A summary of a topic, idea, or key research findings presented in a visual way. Poster assessments may, or may not, be accompanied by short oral presentations and/or question and answer sessions.
- **Professional Development**: An individual evaluation of skills, values, interests and/or work performance.
- **Presentation**: A talk given to an audience which may be accompanied by visuals such as PowerPoint slides and which typically includes the opportunity for the audience to ask questions.
- **Problem Sheets**: A series of short answer questions or tasks, typically related to material recently covered in classes, which require individual's to apply their skills and knowledge in order to arrive at an answer.
- **Project**: A task or activity which seeks to achieve a specific aim and/or series of objectives.
- **Report**: A concise, written account of a task or activity, or something that has been investigated. Reports often involve analysing a problem and/or data, summarising key findings and providing solutions.
- **Research Report**: A structured document which presents a comprehensive account of a research project including the results of the investigations, a summary of key findings and conclusions.
- **Review**: A piece of work requiring learners to critically reflect upon and/or evaluate a book, journal article, podcast, website or other piece of written, printed, audio or audio-visual work. Reviews can be in written, audio or audio-visual form.

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You will also be assessed formatively to enable you to monitor your own progress and to assist staff in identifying and addressing any specific learning needs. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions.

11. Contact Time and Expected Workload

This contact time measure is intended to provide you with an indication of the type of activity you are likely to undertake during this programme. The data is compiled based on module choices and learning patterns of students on similar programmes in previous years. Every effort is made to ensure this data is a realistic representation of what you are likely to experience, but changes to programmes, teaching methods and assessment methods mean this data is representative and not specific.

Students will study different modules depending on their chosen degree pathway. Consequently, individual students will experience a different mix of contact time and assessment types. The figures below are an example of activities that a student may expect on your chosen course. Contact time includes scheduled activities such as: lecture, seminar, tutorial, project supervision, demonstration, practical classes and labs, supervised time in labs/workshop, fieldwork and external visits. The figures are based on 1,200 hours of student effort each year for full-time students.

Activity

	Scheduled learning and teaching activities	Guided independent Study	Placements
Foundation Year	33%	67%	0%

12. Accreditation

This programme does not have accreditation from an external body.

13. University Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at: http://www.keele.ac.uk/student-agreement/

Regulation C2 contain important information and covers all of the University's Foundation Year programmes at Level 3 and sets out;

- the fundamental structure of these programmes,
- the requirements to obtain an award,
- the requirements to progress to the next level of study at Keele,
- and academic failure.

Regulation C2 - Foundation Programmes can be found on Keele University's website - Regulation C2 - Keele University

14. What are the typical admission requirements for the Programme?

See the relevant course page on the website for the admission requirements relevant to this programme: https://www.keele.ac.uk/study/

Please note: All non-native English speaking students are required to undertake a diagnostic English language assessment on arrival at Keele, to determine whether English language support may help them succeed with their studies. An English language module may be compulsory for some students during their first year at Keele.

Recognition of Prior Learning (RPL) is considered on a case-by-case basis and those interested should contact the Programme Director. The University's guidelines on this can be found here: https://www.keele.ac.uk/qa/programmesandmodules/recognitionofpriorlearning/

15. How are students supported on the programme?

All students have an Academic Mentor. They see their Academic Mentor on a regular basis throughout the academic year, and they will also be available at specific times during their working week, as necessary. The Academic Mentor will book individual progress meetings with each student at least four times during the Foundation Year. There is also a dedicated Science Foundation Year Programme Director and a nominated leader for each Module. The course will be taught by staff in the Foundation Year Centre and from elsewhere in the University. There is also support from a team of administrators led by the Foundation Year Centre Manager. All students have access to the University's Student Services Centre and the Students' Union as necessary.

16. Learning Resources

All modules will be delivered through a combination of face-to-face and virtual contact. Most of the taught sessions will be in small classrooms with directed learning activities to be completed at other times. Some study will be undertaken in computer laboratories or practical laboratories under supervision from staff and postgraduate demonstrators. Support materials, course regulations and student handbooks will be available electronically on the Keele Learning Environment (Blackboard). All students will be registered with the library and have access to reading lists, course books and journals, and computing and printing facilities. All students have access to additional study skills support through the Student Learning section of the Keele's Student Services Centre.

17. Other Learning Opportunities

Students are encouraged to participate in a wide range of activities offered by the University and the Students' Union, including societies, sports and volunteering. Involvement can be recognized in a number of ways including the Higher Education Achievement Record and Keele SU awards.

18. Additional Costs

Activity	Estimated Cost
Equipment - scientific calculator for Mathematics and Science modules only	£15
Laboratory book for lab-based modules	£1.50

These costs have been forecast by the University as accurately as possible but may be subject to change as a result of factors outside of our control (for example, increase in costs for external services). Forecast costs are reviewed on an annual basis to ensure they remain representative. Where additional costs are in direct control of the University we will ensure increases do not exceed 5%.

As to be expected there will be additional costs for inter-library loans and potential overdue library fines, print and graduation. We do not anticipate any further costs for this programme.

19. Quality management and enhancement

The quality and standards of learning in this programme are subject to a continuous process of monitoring, review and enhancement.

- The Education Committee of the Foundation Year Centre is responsible for reviewing and monitoring quality management and enhancement procedures and activities across the Centre.
- Individual modules and the programme as a whole are reviewed and enhanced every year in the annual programme review which takes place at the end of the academic year.
- The programmes are run in accordance with the University's Quality Assurance procedures and are subject to periodic reviews under the Revalidation process.

Student evaluation of, and feedback on, the quality of learning on every module takes place every year using a variety of different methods:

- The results of student evaluations of all modules are reported to module leaders and reviewed by the Programme Committee as part of annual programme review.
- Feedback received from representatives of students in all three years of the programme is considered and acted on at regular meetings of the Student Staff Voice Committee.

The University appoints senior members of academic staff from other universities to act as external examiners on all programmes. They are responsible for:

- Approving examination questions
- Confirming all marks which contribute to a student's degree
- Reviewing and giving advice on the structure and content of the programme and assessment procedures

Information about current external examiner(s) can be found here:
http://www.keele.ac.uk/qa/externalexaminers/currentexternalexaminers/

20. The principles of programme design

The programme described in this document has been drawn up with reference to, and in accordance with the guidance set out in, the following documents:

a. UK Quality Code for Higher Education, Quality Assurance Agency for Higher Education:
http://www.qaa.ac.uk/quality-code
b. Keele University Regulations and Guidance for Students and Staff: http://www.keele.ac.uk/regulations

Version History

This document

Date Approved: 23 June 2025

Previous documents

Version No	Year	Owner	Date Approved	Summary of and rationale for changes
1	2024/25	KATE JURY	19 June 2024	
1	2023/24	KATE JURY	21 April 2023	
1	2022/23	SIMON RIMMINGTON	21 April 2022	
1	2021/22	SIMON RIMMINGTON	09 June 2021	
1.1	2020/21	SIMON RIMMINGTON	28 October 2020	Additional information added to Section 8 to incorporate a January enrolment point.
1	2020/21	SIMON RIMMINGTON	14 May 2020	
1	2019/20	SIMON RIMMINGTON	14 May 2020	