

# Programme Specification

<b>Programme Title and Name of Award</b>	BSc (Hons) Woodland Ecology and Conservation with Sandwich Placement		
<b>Academic Level</b>	6	<b>Total Credits</b>	480
<b>Professional Body Accreditation / Qualification</b>	This programme is accredited by the Institute of Chartered Foresters. On successful completion of this award, you will gain 7 qualifying points towards Professional Membership Entry (PME) of the Institute.		
<b>Date of Professional Body Accreditation</b>	22.01.2021	<b>Accreditation Period</b>	Open Ended Approval
<b>UCAS Code</b>	D502		
<b>HECoS Code</b>	100355 plant sciences 20% 100520 forestry and arboriculture 50% 101318 biodiversity conservation 30%		
<b>Criteria for Admission to the Programme</b>	The University's standard criteria for admissions apply. Please refer to the <a href="#">Applicant Information</a> pages of the University website for more information. For <a href="#">APL</a> , please refer to the University website.  Detailed criteria for admission to this programme can be found on the programme webpage <a href="https://www.cumbria.ac.uk/study/courses/undergraduate/woodland-ecology-and-conservation-with-sandwich-year/">https://www.cumbria.ac.uk/study/courses/undergraduate/woodland-ecology-and-conservation-with-sandwich-year/</a>		
<b>Teaching Institution</b>	N/A		
<b>Owning Department</b>	Science, Natural Resources and Outdoor Studies (SNROS)		
<b>Programme delivered in conjunction with</b>	N/A		
<b>Principal Mode of Delivery</b>	Face to Face		
<b>Pattern of Delivery</b>	Full Time  This programme may also be made available on an infill part-time basis at the discretion of the Institute Head of Student Recruitment and Portfolio Development.		

<b>Delivery Site(s)</b>	Ambleside
<b>Programme Length</b>	Full time, standard provision – 4 years / 7 years maximum
<b>Higher Education Achievement Report (HEAR)</b>	Upon successful completion of this programme, you may receive a Diploma Supplement/Higher Education Achievement Report (HEAR).
<b>Exit Awards</b>	<p>You may be awarded one of the following Exit Awards if you fail to achieve the requirements of the full programme.</p> <p>Cert HE Woodland Ecology and Conservation</p> <p>Dip HE Woodland Ecology and Conservation</p> <p>Dip HE Woodland Ecology and Conservation with Sandwich Placement</p> <p>BSc Woodland Ecology and Conservation with Sandwich Placement (Ordinary Degree).</p>
<b>Period of Approval</b>	1 <sup>st</sup> August 2020 to 31 <sup>st</sup> July 2026

### Cumbria Graduate Attributes

Throughout your studies, you will be provided with the skills and knowledge relevant to the global workplace. All successful graduates of the University of Cumbria will be:

- Enquiring and open to change
- Self-reliant, adaptable and flexible
- Confident in your discipline as it develops and changes over time
- Capable of working across disciplines and working well with others
- Confident in your digital capabilities
- Able to manage your own professional and personal development
- A global citizen, socially responsible and aware of the potential contribution of your work to the cultural and economic wellbeing of the community and its impact on the environment
- A leader of people and of places
- Ambitious and proud

### Programme Features

The Woodland Ecology and Conservation with Sandwich Placement programme has been designed to prepare you to be a new kind of graduate, one that the world desperately needs to meet the challenges of the 21<sup>st</sup> century. You will learn to truly understand and be prepared for the multiple objective needs of modern sustainable forest management. Graduates who are able to manage trees, woods and forests to protect biodiversity and optimise the delivery of benefits to human society directly through timber production and space for recreation, but also via less immediately obvious means such as regulating carbon, nutrient and water cycling and alleviating flooding can

contribute to the solutions to the twin key environmental challenges of our times: climate change and biodiversity loss.

As a student on the Woodland Ecology and Conservation with Sandwich Placement programme you will be able to join both the Forestry and the Conservation student societies and feel part of the National School of Forestry.

Sustainability is a concept initially developed about forestry by von Carlovitz in 1713. Timber production, as long as harvested trees are replaced with new seedlings, is the original renewable energy source. The importance of biodiversity, of both species and habitats, not just for their intrinsic value, but because they provide benefits to human society is increasingly recognised by new approaches such as the ecosystem services and natural capital approaches. Understanding woodland ecology is vital to knowing how to conserve and enhance our most precious woodlands throughout the world, but, for example, in ancient semi-natural woodlands in the UK, but also to protecting biodiversity in commercial forest plantations. The Woodland Ecology and Conservation with Sandwich Placement programme is important and distinctive because it provides you with an excellent mix of content, combining the three pillars of the modern concept of sustainability as outlined by the Brundtland Commission in 1987: economic growth, environmental protection and social equality. This means that graduates are highly employable. The Forestry Commission and forest management companies, such as Tilhill Forestry and Egger Forest Management, need students with traditional forestry skills who can identify, monitor and manage for biodiversity, while organisations such as Natural England, Scottish Natural Heritage, the National Trust, the Wildlife Trusts and even the Woodland Trust, often have excellent conservation experts who do not know how to manage their woodlands to benefit from their economic potential which can then provide vital funds for conservation activities.

Woodland Ecology and Conservation is a BSc programme, but because we recognise that forest and woodland management is a career that many do not consider when choosing A Levels, and others career change into later in life, we do not expect you to come with Science A Levels. Of course, prior knowledge can help, but we consider it our privilege to help students from all kinds of backgrounds transition into the programme. We do insist on GCSE grade C Maths or equivalent as there is inevitably some quantification of trees, woods and forests in terms of their timber value, but also of the biodiversity they contain.

We are fortunate in the UK to have three of the main world forest types accessible to us: temperate, oceanic and (hemi) boreal, so international students find that the use of British forests and woodlands as a case study gives skills that are transferable, even to tropical forest ecosystems. Approximately one third of the Woodland Ecology and Conservation programme is delivered outside, predominantly at sites within the Lake District National Park, a UNESCO World Heritage Site. Typically you will also participate in a study tour to Scotland to visit iconic Caledonian pinewoods and see large scale upland forestry during your level 4 studies, and participate in a study tour to lowland England (and sometimes Wales) at the end of level 5 to see more broadleaved woodland management (some additional costs may apply with these study tours). Although we are not able to visit tropical forests for a day trip, you have the option of an overseas study tour, at the end of level 5 This currently goes to Gambia, but the destination may change (there are greater additional costs, such as the flights, associated with this option).

Field trips might be walk and talk, often across challenging upland terrain, but more often also include field data collection. Current student feedback suggests that they recognise that they are notably fitter at the end of the course than at the beginning of it and in recent years the link between outdoor experiences and activities and good mental health are becoming increasingly apparent. Students are increasingly being encouraged to innovate and those who are entrepreneurial have the option of choosing Business Skills as a final year module which includes developing a plan for a small business. As explained above, environment and sustainability are at the heart of this programme.

The Woodland Ecology and Conservation with Sandwich Placement programme commenced in 2014, so that the first graduates are still only in their early career. However, the programme is intended to provide you with the skills to be future leaders. Silviculture (managing trees for multiple objectives) and biodiversity protection are inevitably key themes within the curriculum, but so is learning to understand how to manage trees to adapt to and mitigate climate change. There is a strong vocational element to first year modules, learning the skills to succeed in summer jobs and in early career employment. Second year modules begin to develop your management skills, assessments increasingly include presentations. By third year, we expect you to be surprising us with the depth and reach of your knowledge, especially as you will be challenging us by bringing real world experiences into discussions following your placement year, by this stage we hope to be guiding your learning rather than directing it. It is vital to this development that you succeed on the double module dissertation. We want our students to have the confidence to be able to identify a research question and be able to design a way to test it that can then be analysed and written up into a thesis. Our aim is that your dissertation should have real world application, perhaps using a site with have volunteered for, or a study for a local landowner to help them with evidence for their woodland management decision making. Many students are inspired to do a develop a research proposal and collect data during their placement year. At level 5, we offer a choice between three optional modules for the final 20 credits required at that level. This enables students to begin to consider the kind of future careers that they wish to acquire specialist knowledge towards pursuing. At level 6 the final 40 credits can be chosen from a suite of six 20 credit modules. However, it must also be noted that optional choices are always subject to availability, especially when delivered across programmes.

Most current Woodland Ecology and Conservation with Sandwich Placement graduates have initially joined forestry and/or conservation organisations in the UK to begin their careers. However, now the earliest graduates have been out in the real world for a couple of years, some are considering research opportunities, on taught MSc programmes or, for example, PhD study at Edinburgh University. Research informed teaching is embedded at all levels of the programme to inspire students to consider both management and research pathways in their future career according to their talents and interests.

## Aims of the Programme

The overall aims of the Programme are:

1. Prepare graduates for employment in the forestry and wildlife conservation sectors
2. Allow students to develop a critical awareness of woodland ecology and conservation from a multi-disciplinary perspective
3. Ensure future graduates in woodland ecology and conservation have the key biodiversity skills in species identification and understanding of surveying techniques to give them credibility working alongside specialist botanists, entomologists etc
4. Enable students to critically evaluate and apply key concepts underpinning professional practice within the woodland conservation and ecology sector
5. Provide opportunity for development of relevant and appropriate skills that are requirement of graduates and prerequisite for continuing personal and professional development
6. Ensure students have the right mix of work experience and academic qualifications to succeed on graduation.

## Level Descriptors

Level Descriptors describe in general terms the expected outcomes you will achieve at each level of study as you progress through your programmes. They describe the relative demand, complexity, depth of learning and learner autonomy associated with a particular level of learning and achievement. The University's Level Descriptors are aligned to the national [Framework for Higher Education Qualifications](#) (FHEQ) and are a key mechanism for ensuring the academic standards of the University's provision.

At Level 4: (Usually Year 1 undergraduate), you will be able to demonstrate that you have the ability:

- To apply a systematic approach to the acquisition of knowledge, underpinning concepts and principles and deploy a range of subject specific, cognitive and transferable skills.
- Evaluate the appropriateness of different approaches to solving well defined problems and communicate outcomes in a structured and clear manner.
- Identify and discuss the relationship between personal and work place experience and findings from books and journals and other data drawn from the field of study.

At Level 5: (Usually Year 2 undergraduate), you will be able to demonstrate that you have the ability:

- To apply and evaluate key concepts and theories within and outside the context in which they were first studied.
- Select appropriately from and deploy a range of subject-specific, cognitive and transferable skills and problem solving strategies to problems in the field of study and in the generation of ideas effectively communicate information and arguments in a variety of forms.
- Accept responsibility for determining and achieving personal outcomes.
- Reflect on personal and work place experience in the light of recent scholarship and current statutory regulations.

At Level 6: (Usually Year 3 undergraduate), you will be able to demonstrate that you have the ability:

- To critically review, consolidate and extend a systematic and coherent body of knowledge.
- Critically evaluate concepts and evidence from a range of resources.
- Transfer and apply subject-specific, cognitive and transferable skills and problem solving strategies to a range of situations and to solve complex problems.
- Communicate solutions, arguments and ideas clearly and in a variety of forms.
- Exercise considerable judgement in a range of situations.
- Accept accountability for determining and achieving personal and group outcomes.
- Reflect critically and analytically on personal and work place experience in the light of recent scholarship and current statutory regulations.

### **Programme Outcomes – Knowledge and Understanding**

The programme provides opportunities for you to develop and demonstrate the following:

**After 120 credits of study (CertHE) you will be able to demonstrate:**

- K1.** Graduates have a well-grounded understanding of the scientific and socio-economic principles underlying forestry.
- K2.** Graduates have a well-grounded understanding of the issues of sustainable development, conservation of biodiversity and landscapes, and environmental protection.
- K3.** Graduates have a well-grounded understanding of the structure, function and resilience of forest ecosystems.

**After 240 credits of study (DipHE) you will be able to demonstrate:**

- K4.** Graduates will be able to:
  - i describe and explain the distribution and features of the world's forests
  - ii describe the processes that control the structure and function of forest ecosystems and explain how they vary in time and space
  - iii describe and discuss the main threats to the world's forests and explain the concept of forest resilience.
- K5.** Graduates have a well-grounded understanding of the functions and impacts of forests. Demonstrate comprehension and intelligent engagement with biogeochemical cycles and pathways. Discuss and demonstrate comprehension of nutrient and energy flow through individuals, populations and communities, understand the structure, biogeography and diversity of ecosystems in relation to climate, geology, soils, paleo-historical, taxonomic and evolutionary factors, discuss and critically analyse patterns of distribution of organisms in relation to biotic and abiotic factors.
- K6.** Apply critical understanding of ecological methodologies and data analyses

**After 360 credits of study and a Sandwich Placement Year (DipHE with Sandwich Placement) you will be able to demonstrate:**

The ability to put the Knowledge and Understanding gained at level 4 and level 5 above into practice in a workplace setting, gaining experience whilst being a benefit to your placement employer.

**After 480 credits of study (BSc Hons with Sandwich Placement) you will be able to demonstrate:**

- K7.** Graduates have a comprehensive understanding of the meaning and practice of sustainable forest management. They demonstrate excellent knowledge of the literature, creative application of the material, and have a capacity for synthesis.
- K8.** Critically analyse and evaluate the effects of such human interactions on natural populations and ecosystems, evaluate the impacts of harvesting resources, controlling pest/pathogens and different approaches to species management.
- K9.** Demonstrate an appreciation of the multidisciplinary approach required to address ecological and environmental issues.

**Programme Outcomes – Skills and other Attributes (including Employability Skills)**

The programme provides opportunities for you to develop and demonstrate the following:

**After 120 credits of study (CertHE) you will be able to demonstrate:**

- S1.** The diagnostic skills for plant identification of trees, shrubs and ground cover plants and the features of plants in a landscape setting. Exhibit practical fieldwork skills including but not limited to taxonomic identification of organisms.
- S2.** Theory and application of tree, stand and timber measurement. Appropriate technologies for inventory: application, pros and cons.
- S3.** Ability to write and format a professional report style document.

**After 240 credits of study (DipHE) you will be able to demonstrate:**

- S4.** Practical fieldwork skills including but not limited to ecological survey techniques. Ecological and habitat assessment Landscape assessment and character mapping. Site assessment and classification. Species choice related to ecology, use and management options.
- S5.** Developments in inventory and resource management including use of GIS, GPS, remote sensing etc.
- S6.** An understanding of the regulatory environment for forestry

**After 360 credits of study (DipHE with Sandwich Placement) you will be able to demonstrate:**

That the Skills and other Attributes (including Employability Skills) demonstrated at level 4 and level 5 above are not purely theoretical, but have been proven and honed in a workplace setting.

**After 480 credits of study (BSc Hons with Sandwich Placement) you will be able to demonstrate:**

- S7.** Production of long-term management plans to meet clearly defined objectives.
- S8.** Ability to prepare and present in a professional manner.
- S9.** Undertake independent study, data analysis and scientific writing.

## External and Internal Reference Points

The following Subject Benchmark Statements and other external and internal reference points have been used to inform the Programme Outcomes:

Woodland Ecology and Conservation with Sandwich Placement is identified as being at the interface between two Quality Assurance Agency Subject Benchmark Statements. These have been used to inform the Programme Outcomes for Knowledge and Understanding.

The main one used is the QAA 2016 Subject Benchmark Statement: Agriculture, Horticulture, Forestry, Food, Nutrition and Consumer Sciences. All the subject-specific benchmark standards for forestry have been used, but where they add to these, the ones for rural environmental sciences have also been incorporated.

**Forestry** is the application of physical, biological, economic and sociological principles to the sustainable management of trees, woodlands and forests for the benefit of society.

Degree programmes in **forestry** are designed to develop the knowledge and skills of those who go on to work in forestry and related professions. Graduates have a thorough understanding of the physical, biological, economic and sociological principles and processes that underpin forestry. They are able to apply such principles and processes to the sustainable management of trees, woodland and forests for multiple goods and ecosystem services (for example, production of wood and non-wood forest products, carbon sequestration, protection of soil and water, and recreation and other cultural services). They understand the commercial, social and environmental contexts in which



forestry is practised and the consequences of forestry for the rural economy, society and the environment.

The second one is the QAA 2015 Subject Benchmark Statement: Biosciences, particularly the standards for ecology and experimental biology.

The Programme Outcomes for Skills and other Attributes (including Employability Skills) have predominantly been informed but the Institute of Chartered Foresters accreditation criteria, specifically the Detailed Competencies for Accreditation and Recognition as this provides a measure of quality of the course within the forestry profession.

The programme has also been developed in reference to the following internal documents:

- University Academic Strategy 2014-20;
- Departmental Business Plan for Science, Natural Resources and Outdoor Studies;
- Learning, Teaching and Assessment Strategy 2017-2022
- UoC Strategic Plan
- UoC Academic Regulations and Academic Procedures and Processes

## Graduate Prospects

Your course is designed to provide you with the skills and knowledge that will enable you to become woodland ecologists/conservationists. Our graduates are successful in finding early career employments employment as site managers with conservation organisations.

Your course is also designed to provide you with the skills and knowledge that will enable you to be an effective forest manager. This is why the current version receives three quarters of the Institute of Chartered Foresters accreditation points available despite not being a traditionally forest management only focussed programme. Our graduates are highly successful in finding forestry employment as managers or supervisors.

An exciting future awaits our graduates, being an expert in woodland ecology and conservation will give our graduates the prospect of contributing to society through their careers in numerous ways. For example, protecting biodiversity is increasing recognised as essential to our own survival on the planet, and increasing our understanding through research of how that biodiversity benefits us, through so called ecosystem services is an expanding field of study. Woodlands need to adapt to the impacts of anthropogenic climate change and experts in woodland ecology can help them do this. Help is necessary because trees are long lived, static organisms with slow generation times. Perhaps most importantly of all, researchers and managers are needed to help trees, woods and forests combat climate change through their mitigation potential. Our graduates are increasingly being expected to understand the best ways to maximise how trees remove carbon dioxide from the atmosphere through net photosynthesis, how they can store the greatest amount of carbon in their ecosystems, especially in the soil, and how wood products can substitute for higher carbon footprint materials to give a carbon substitution effect. Our future depends on lots of methods being developed to combat climate change, arguably the greatest challenge of our times, but because managing woodlands is one of the only ways of actually removing some of our greenhouse gas emissions that are already in the atmosphere, our graduates have vital expertise to offer as practitioners, researchers, teachers and policy makers in their future careers.

Many of the members of the Institute of Chartered Foresters will retire in the next twenty years. Succession planning is an issue recognised by forestry organisations and the current prospects for graduate employment in the forestry sector are good. Several large forestry employers offer graduate schemes and these have included Tillhill Forestry, Scottish Woodlands and Forestry Commission England. These opportunities have led to full-time employment for our students.



Your degree also provides opportunities for further studies through Masters degrees or Doctoral study. Recent students have gone on to study MSc Conservation and Forest Protection, MSc in Environment and Forest Management, and MSc European Forestry. Former graduates are also studying PhD degrees in topics as diverse as pest management in Florida, expansion of montane scrub in northern England and applying an ecosystem services approach to forest management.

## **Learning, Teaching and Assessment Strategies employed to enable the Programme Outcomes to be Achieved and Demonstrated**

As a student at the University of Cumbria, you are part of an inclusive learning community that recognises diversity. You will have opportunities to learn by interacting with others in a collegiate, facilitative and dynamic learning environment. Teaching, assessment and student support will allow equal and equitable opportunities for you to optimise your potential and develop autonomy.

We seek to create a stimulating and innovative community of learning, whether encountered on campus or at a distance, or in the workplace. Facilitated by our expert practitioner staff, you will experience a learning environment that is well equipped, flexible, and stimulating.

### **Learning and Teaching**

The teaching, learning and assessment strategy of the BSc (Hons) Woodland Ecology and Conservation with Sandwich Placement programme is designed to be student-centred and flexible whilst being challenging and stimulating, and has been designed in line with the University's Learning, Teaching and Assessment Strategy 2017-22. It supports different learners' needs at different stages of development so ensuring equality to access to learning. We use a wide range of teaching styles and contexts as well as assessment techniques to give you the opportunity to develop an expansive skill set of value to today's contemporary workplace.

The University's Learning, Teaching and Assessment Strategy has three themes; (1) Excellence in Learning, Teaching and Assessment, (2) Responsive Learner Support and (3) Employability & Graduateness. The approaches adopted in your programme reflect these. Above all, learning, teaching and assessment are designed to engage you in experiences that are enriching, enjoyable and intellectually stimulating.

The focus of your learning will be achieved through the integration of academic study and practical activity and application. We are situated within one of the world's best-known National Parks, where people live and work next to and amongst some of the most iconic landscapes in England. Consequently, field work is one of the main pillars of your programme, allowing you to continually put theory and concept into context, enabling you to explore real world scenarios and develop your problem-solving abilities. As a result, we blend extensive field and laboratory work (including use of GIS) opportunities throughout your programme. For example, at Level 4 you will have the opportunity to participate in a range of free half-day and full day fieldtrips and a one week residential study tour that explore the fundamentals of Woodland Ecology and Conservation by considering what is in front of you and recognising the processes that define our discipline. As you move into Level 5, we deepen your knowledge through more investigative exercises to appreciate the complexities of the real world, and recognising the diversity of approaches to 'doing' Woodland Ecology and Conservation, including another one week residential study tour outside the region. By Level 6, you will be undertaking independent field research for your dissertation as well as participating in a final one or two night residential study tour.

In addition to working individually, you will typically be embedded in small team and group working to help you develop these critical skills ready for the workplace. You are encouraged to reflect upon your skills development in learning and personal contexts so they develop your ability to make appropriate choices and decisions through a structured supportive tutorial system. Above all,

learning, teaching and assessment are designed to engage you in experiences that are enriching, enjoyable and intellectually stimulating.

Your tutors are experienced in woodland ecology and conservation as a discipline and in teaching. They have either a background in management of woodland or in research and have strong involvement in the sector. You will benefit from their practice-based knowledge and from the links they have developed during their careers.

A range of learning and teaching approaches are used in your course so as to match the way that you learn. Delivery of your course is through practical sessions in the forest and in the classroom, through lectures and seminars and through field visits. The location of the campus at Ambleside allows us to access a large area of woodland, managed for many different objectives. The teaching facilities at the Ambleside campus are of a good standard and you have access to specialised teaching rooms such as a computer suite and laboratories.

While most assessment is individual, there are opportunities for group-working, particularly in outdoor practical sessions where data is collected. This will help you develop collaborative and organisational skills ready for the workplace. You are encouraged to reflect on your skills development and relate it to those required in the workplace. Most foresters work in small teams and so developing social, collaborative and organisational skills is important.

Campus-based learning is the predominant experience with attendance at all scheduled sessions seen as imperative to your progression. This is further enhanced by the use of our 'virtual learning environment' (VLE) 'Blackboard' where each module studied has a designated blackboard site providing not only standard lecture and practical material, but supplementary reading, virtual exercises and online forums. This blended approach allows for flexibility in learning whereby materials may be accessed at your convenience on site or via remote access. Most assignments are also submitted through Turnitin on Blackboard.

You will be supported in your learning through structured personal tutorials and thorough and timely feedback on your assignments. We take marking very seriously and operate an internal moderation process where a sample of marked assignments are reviewed by a colleague to ensure fair and consistent grading and quality of feedback.

You will be supported in the progressive acquisition of subject knowledge and skills, gradually advancing towards more independent learning at Level 6, whilst developing a reflective approach to personal progress. This means many of the skills you learn are transferable across modules and build up through the levels. For example, in Level 4 we explore collection of basic information about trees and woodland and its presentation, skills which are then developed in modules at Level 5, such as Biodiversity Monitoring, Forest Health and Protection and Geographical Information Systems (GIS) and which in turn are used in level 6 modules such as your Dissertation and the Forest Plan. At each level your analytical and planning skills are developed further.

This programme is focused on providing you with the skills and knowledge to become a competent woodland ecologist and/or forest manager. Employability is therefore an important aim of the programme. Modules such as Measuring Trees and Forests at level 4, Biodiversity Monitoring at level 5 and Forest Plan at level 6 provide vital employability skills because they combine real world woodland data collection techniques with professional report standard assignments to demonstrate your understanding not only of how to undertake the work yourself, but also that you have the depth of knowledge to supervise the work of others in future and would be capable of critically appraising the quality of the results. Many of the assignments are designed to reflect the skills that would be required in the workplace and which involve collection of information, analysis and presentation of results. Another important element is using forest information to develop practical plans for managing woodlands.

## **Assessment**

The main drivers of this strategy are to:

- provide innovative, challenging and stimulating assessment which will enable you to develop the knowledge and professional skills required for employment.
- be student-centred, flexible and modern in both content and approach.
- be fully supported by, and integrated with technological approaches such as the Blackboard virtual learning environment (VLE).
- impart academic rigour to the teaching and learning processes.
- support the development of independence, autonomy and self-reflection.
- support learners' needs at different stages of development.

Personal development and reflective practice will take place throughout the programme and will be implemented through the wide range of activities as well as via our structured personal tutorial process (see below).

### **Summative and Formative Assessment**

The BSc (Hons) Woodland Ecology and Conservation with Sandwich Placement assessment strategy has been developed in-line with the University of Cumbria Learning, Teaching and Assessment Strategy 2017-22. Consequently, we employ a wide range of different assessment methods appropriate to the needs of the module and its content, specifically to allow you to practice key skills and attributes that feed into your future employability. The range of assessment methods employed within the programme includes:

- Fieldwork reports, particularly making use of primary field notebooks
- Laboratory reports
- Computer-based assessments
- Essays or reports
- Problem-solving exercises
- Critical analysis of 'real life' case studies
- Oral, audio-visual and poster presentations
- Role-play to simulate real-world situations in the field and classroom
- Dissertations
- Peer and self-assessment
- Group-work
- Seen and unseen examinations
- Short note class tests

The very first assignment is a tree identification test, the second, first written, assignment is a professional report. Once the students have learnt the style requirement of this, it becomes the default assignment format for written work. This is an essential employability skill. Students produce posters and undertake group presentations at level 4, move to individual presentations in level 5 and are expected to present confidently in level 6. This is another essential employability skill.

At the start of each academic year, an assessment schedule is published on the National School of Forestry Programme Sites within Blackboard to give you a clear indication of when the deadlines for submission occur for all modules within your Woodland Ecology and Conservation with Sandwich Placement programme. We use the National School of Forestry site to make you feel part of a larger discipline, you also have access to the Conservation Programmes Blackboard site. The programme team works very carefully to distribute assessment throughout the academic year to avoid bunching of assessment; however, it is also your responsibility to plan and manage your time within this assessment framework. Feedback from current students indicates that they prefer personalised, rather than anonymous, marking where we comment on their progress across modules. However, anonymous marking is the preferred option within the university and this may change. All submitted assessments are marked by the appropriate member of the programme team (usually the person that designed the assessment), and marking is internally moderated before provisional marks and feedback are released. A selection of work will be sampled by our external examiner (an equivalent

academic delivering similar courses at another university) to ensure quality and comparability of marking and assessment with national and sectoral norms.

Personal development and reflective practice will take place throughout the programme and will be implemented through the wide range of assessment and feedback activities (both formative and summative) as well as via our structured personal tutorial process. Throughout the BSc Woodland Ecology and Conservation with Sandwich Placement programme, you will participate in the shared Forestry, Conservation and Geography sequence of group and individual tutorials (see below).

Within the BSc Woodland Ecology and Conservation with Sandwich Placement programme, we believe that engaging with feedback is probably the most important stage of the learning process. Modules contain formative feedback opportunities, typically early in the module, to enable your development towards the summative assessments, and our focus in giving feedback is to highlight ways in which you can improve your future work.

All of this is ultimately focussed on enabling you to embark on a relevant career as a woodland ecology and conservation graduate. Our close links to industry ensure that our teaching is focussed on real world issues and the assignments reflect work you would be likely to do in your future career. For example, although we have some exams, our key coursework expectation is delivery of a professional report style document. Presentations are not always popular with students, but used as an assessment technique because this is vital preparation for the expectations of the employers of our future graduates.

## **Student Support**

We provide responsive learning support that promotes student success. Our approach to learning support is designed to support achievement and progression, champion inclusivity and accessibility, prepare you for opportunities beyond study, and promote independence and resilience, enabling you to achieve your potential.

As a student of the University of Cumbria, you will be taught by academics and expert practitioners who facilitate learning through structured inquiry. You will be provided with access to high quality academic resources through physical and digital libraries and will be supported to develop skills that enable you to become a critical, reflective, discerning and independent learner and researcher.

### **Induction**

You will have an exciting and stimulating induction week. This is designed to introduce you to your classmates, to the facilities and services offered by the University and to your programme of study. Normally there are two full-day outings. The first combines all forestry and conservation programmes and allows you to meet your classmates and other students you will study with. The second is normally for National School of Forestry students only and has a more woodland specific focus. There are also a number of generic sessions, such as library and information services, financial and mental health services, a laboratory induction and an introduction to the equipment stores.

### **Personal Tutoring**

You will also be allocated a Personal Tutor. Your Personal Tutor will be proactively involved in the delivery of your programme and will have contact with you throughout your time at the University. They will support your learning and development, including through tutorials, Progress Reviews and other support as outlined in the Personal Tutoring Policy. In The Forestry, Conservation and geography group we have a structured approach to personal tutorials focused on raising your academic achievement and employability.

### **Personal Development Planning**

The range of personal and employment skills that are developed through the modules in your programme are described in the following two tables. You will note that there are some modules, such as Professional Development, Research Methods and Data Analysis, and Dissertation where there are many opportunities to develop your personal skills.

For several modules, team working skills are employed for aspects such as data collection. This is important as most forestry jobs involve working in small teams. You will be required to organise yourself and others and plan your activities. Examples of modules using group data collection are the Measuring Trees and Forests, Silviculture module, Ecology module and the Forest Plan.

### **Library and Academic Support (based in Information Services)**

Module leaders will collaborate with Library and Academic Advisors to ensure that your reading and resource lists are current and items are available via the library discovery tool OneSearch. In order to maximise access, availability and usefulness, ebooks and electronic journal titles will, in most cases, be prioritised. You can access a wide range of electronic and print content using [OneSearch](#) and you can find out more about key texts, databases and journals for your subject by accessing the library's [subject resources webpages](#). Where appropriate, module reading and resource lists will be made available to you electronically using the University's [online reading and resource list system](#).

The [Skills@Cumbria](#) service can help support your academic skills and success throughout your programme. The service is delivered by a team of professional Library and Academic Advisors. It includes a suite of [online self-help resources](#) accessible 24/7 via the University's website and Blackboard site. It also provides group and individual advice and guidance accessible through and alongside your course and by different means such as face to face, email or virtual. Visit [skills@cumbria](#) for more details.

### **IT and Technical Support**

Technology is an invaluable asset when it comes to studying, so it's important you know how to make the most out of the excellent [facilities](#) we have available. Our aim is to ensure you can access university electronic resources from anywhere or any device, whether on or off campus. The [Student Hub](#) is your one-stop gateway to all university systems, Outlook email, and OneDrive.

Whether you consider yourself a computer expert or you're not confident about your IT skills, we're always around to ensure you get the level of support you need. We have a wealth of information and support available on the [website](#) and have a dedicated IT Service Desk where you can talk to someone by phone or log your question online from anywhere, at any time.

### **Student Support Services**

Student Support Services offer a wide range of support, including: careers and employability, financial help, counselling, health and wellbeing and support for disabled students and those with specific learning requirements. We also offer mentoring by trained students which you can request at any point during your studies. We know that you want to get the most out of your programme, make the best use of your time and find or continue in the career you always dreamed of. Access university support and facilities easily and quickly via the [website](#) and/or via the Student Services guidance tile on the [Student Hub](#).

In addition to the range of guidance above, you have the opportunity to further develop your personal, academic and professional skills by taking part in a number of initiatives coordinated and delivered by professional services advisers:

### **Headstart**

Head Start is a self-learning pre-entry module that is completed online and at your own pace. The module gives new undergraduate students an opportunity to prepare for their transition into university and to start to develop the academic skills that will help them become successful students.

All UG students are given the opportunity to register and complete Head Start prior to entry on their main programme of study. If you haven't been able to complete Head Start before starting your course, you can access the module via Blackboard by selecting the Skills@Cumbria tab and then the Head Start tile. Learning at university, academic writing and referencing are the key topics introduced in the module and previous students have told us how useful they have found the online resources and activities.

### **Head Start Plus**

Head Start Plus is also an online skills development course, designed to support students who are about or who have just started study at level 5 or 6 (2<sup>nd</sup> and 3<sup>rd</sup> year undergraduate). This course is particularly recommended to students who may not have studied at HE level for some time or who are transitioning into the higher HE levels. The course provides a useful refresh on academic skills and practice and an insight into the expectations of tutors at those levels.

This course is free and available via the Open Education Platform powered by Blackboard. To access the course, follow the link to <https://openeducation.blackboard.com/cumbria> and set-up a free account with Open Education. Once logged on, select the course free of charge and work through it at your own pace.

### **Peer Mentoring @ Cumbria**

You will be allocated a student Mentor who will be in touch to offer a non-judgemental and friendly hand and to help with various aspects of your student experience, from making friends to settling in, to helping you understand the expectations of academic study and dealing with assessment worries.

### **Mature Students' Events**

Whether it is a coffee morning, lunchtime gathering or a social event, there are events happening throughout the year to link you up with other mature students who will also be juggling a number of commitments alongside their studies.

### **Help is at Hand Events**

Keep a look out for these interactive events on campus around October and January. You are encouraged to attend these as they showcase the range of support available here and give you the opportunity to talk to people from Finance, Accommodation, the Students' Union, the Wellbeing and Disability Team etc.

### **Career Ahead+**

Career Ahead+ is the University of Cumbria's Employability Award. Completing Career Ahead+ will help you recognise and develop your skills, providing a greater opportunity for you to get the job you want when you graduate. The award is based on what employers look for in an ideal candidate, in relation to skills, knowledge and experience. You will be supported with career direction, gaining experience, and providing all the skills needed to complete the perfect application and be successful in that all important job interview. Contact [careerahead@cumbria.ac.uk](mailto:careerahead@cumbria.ac.uk) or visit [www.cumbria.ac.uk/careerahead](http://www.cumbria.ac.uk/careerahead) for more information.

Programme Curriculum Map					
Academic Level	Current Module Code	Module Title	Credits	Module Status*	Programme Outcomes achieved
4	HSOF4101	Introduction to Managing Trees, Woods and Forests	10	Compulsory	K1, K2, S1, S3
4	HSOF4102	Measuring Trees and Forests	20	Compulsory	K1, S1, S2, S3
4	HSOF4103	Silviculture	20	Compulsory	K1, K2, K3
4	HSOF4110	Woodland Ecology	20	Compulsory	K2, K3, S1, S3
4	HSOF4100	Forestry Fundamentals	10	Compulsory	K1, S3
4	HSOC4105	Biodiversity 1	20	Compulsory	K2, S1, S3
4	HSOC4106	Biodiversity 2	20	Compulsory	K2, S1, S3
5	HSOC5113	Biodiversity Monitoring	20	Compulsory	K6, S4
5	HSOF5102	Geographic Information Systems	20	Compulsory	K5, K6, S5
5	HSOC5100	Research Methods and Data Analysis	20	Compulsory	K6
5	HSOF5104	Forest Policy and Governance	20	Compulsory	K4, K5, S6
5	HSOF5105	Forest Health and Protection	20	Compulsory	K4, K5, K6, S4, S6
5	HSOF5108	Forests & People	20	Option	K4, S4
5	HSOR5010	Valuing the Environment	20	Option	K4, K5, S4
5	HSOR5011	Environmental Change	20	Option	K4, K5, K6, S4



5	HSOF5110	Work Placement	120	Compulsory	
6	HSOC6116	Applied Field Studies	20	Option	K7, K8, K9, S8, S9
6	HSOF6101	Forest Plan	20	Compulsory	K7, K8, K9, S7, S8, S9
6	HSOC6100	Dissertation	40	Compulsory	K7, K8, K9, S8, S9
6	HSOF6114	Advanced Silviculture	20	Option	K7, K8, K9, S9
6	HSOF6100	Business Skills	20	Option	S8, S9
6	HSOF6102	Woodland Conservation	20	Compulsory	K7, K8, K9, S7, S8, S9
6	HSOF6112	Advanced GIS and Remote Sensing	20	Option	K7, K8, K9, S9
6	HSOF6113	Climate Smart Forestry	20	Option	K7, K8, K9, S7, S8, S9
6	HSOC6115	Wildlife Management	20	Option	K8, K9, S8

## Notes

This programme operates in accordance with the University's Academic Regulations and Academic Procedures and Processes.

### Options

Optional modules may be subject to availability and viability. Options are chosen in the period March to May of the preceding year from when you wish to take them. Information is sent electronically to students via ICON for registration on modules for the forthcoming year. Around the same time, the programme leader will organise a seminar where module tutors will explain a little bit about the essential features and assessment of their module. Copies of the MDFs related to the modules will be available on the programme blackboard site for you to peruse.

In first year (level 4) all modules are compulsory

In second year (level 5) you will select one optional module (i.e. 20 credits) from those that are available. All options are compulsory on other programmes, so will run.

In your final year (level 6) you will select two optional modules (i.e. 40 credits) from those that are available. Most options are compulsory on other programmes, so will run.

**Pre-requisites**

Dissertation requires you have taken and successfully passed Research Methods and Data Analysis or an equivalent module.

Forest Plan and Advanced GIS requires you to have taken and passed HSOF5102 GIS or equivalent.

A failed student will not be permitted to re-register on the same programme

**\* Key to Module Status**

Core Modules	Must be taken and must be successfully passed
Compulsory Modules	Must be taken although it may possible to condone/compensate as a marginal fail (within the limits set out in the Academic Regulations and provided that all core or pass/fail elements of module assessment have been passed)
Optional Modules	Are a set of modules from which you will be required to choose a set number to study. Once chosen, it may possible to condone/compensate as a marginal fail (within the limits set out in the Academic Regulations and provided that all core or pass/fail elements of module assessment have been passed)
Qualificatory Units	These are non- credit-bearing pass/fail components that are used to satisfy relevant professional, statutory or regulatory body professional requirements that are associated with the programme

<b>Programme Delivery Structure: Full Time</b>				
<b>Current Module Code</b>	<b>Module Title</b>	<b>Delivery Pattern</b>	<b>Method(s) of Assessment</b>	<b>Approximate Assessment Deadline</b>
		<b>Autumn Semester (1) / Spring Semester (2) / Extended Spring Semester / Year-Long</b>		
HSOF4101	Introduction to Managing Trees, Woods and Forests	Autumn Semester	Report (50%) Practical Skills Assessment (50%)	Mid Semester End Semester
HSOF4102	Measuring Trees and Forests	Autumn Semester	Report (50%) Open Book Exam (50%)	End Semester End Semester
HSOF4103	Silviculture	Spring Semester	Report (70%) Report (30%)	Mid Semester End Semester
HSOF4110	Woodland Ecology	Spring Semester	Presentation (20%) Report (80%)	End Semester End Semester
HSOF4100	Forestry Fundamentals	Autumn Semester	Report (100%)	End Semester
HSOC4105	Biodiversity 1	Autumn Semester	Portfolio (70%) Written Assignment (30%)	End Semester End Semester
HSOC4106	Biodiversity 2	Spring Semester	Portfolio (70%) Presentation (30%)	End Semester End Semester
<b>Students exiting at this point with 120 credits will be awarded a Cert HE Woodland Ecology and Conservation</b>				

HSOC5113	Biodiversity Monitoring	Autumn Semester	Report (50%) Report (50%)	End Semester End Semester
HSOC5100	Research Methods and Data Analysis	Spring Semester	Practical Skills Assessment (30%) Written Assignment (70%)	Mid Semester End Semester
HSOF5102	Geographical Information Systems GIS	Autumn Semester	Report (60%) Exam (40%)	Mid Semester End Semester
HSOF5104	Forest Policy and Governance	Year long	Written assignment (75%) Written assignment (25%)	End semester 1 End Semester 2
HSOF5105	Forest Health and Protection	Spring Semester	Report (70%) Oral presentation (30%)	End semester End Semester
HSOF5108	People & Forests	Spring Semester	Written assignment (80%) Oral presentation (20%)	End Semester End Semester
HSOR5010	Valuing the Environment	Autumn Semester	Written Assignment (40%) Set Exercise (60%)	Mid Semester End Semester
HSOR5011	Environmental Change: Past Present Future	Spring Semester	Project Work (50%) Set Exercise (50%)	Mid Semester End Semester
<b>Students exiting at this point with 240 credits will be awarded a Dip HE Woodland Ecology and Conservation</b>				
HSOF5110	Work Placement	Between second and third year	Report (Qual) Oral presentation (Qual) Work Placement Record (Qual)	End Semester

Students exiting at this point with 360 credits will be awarded a Dip HE Woodland Ecology and Conservation with Sandwich Placement				
HSOF6101	Forest Plan	Autumn Semester	Report (80%) Oral presentation (20%)	End Semester End Semester
HSOF6102	Woodland Conservation	Autumn Semester	Report (80%) Oral presentation (20%)	End Semester End Semester
HSOC6100	Dissertation	Year-Long	Dissertation (80%) Oral presentation (20%)	End Semester 2 End Semester 1
HSOF6100	Business Skills	Spring Semester	Written assignment (80%) Oral presentation (20%)	End Semester Mid Semester
HSOF6114	Advanced Silviculture	Autumn Semester	Written Assignment (70%) Set Exercise (30%)	End Semester Mid Semester
HSOF6112	Advanced GIS and Remote Sensing	Autumn Semester	Project work (70%) Written assignment (30%)	End Semester End Semester
HSOF6113	Climate Smart Forestry	Spring Semester	Journal Article (60%) Report (40%)	Mid Semester End Semester
HSOC6115	Wildlife Management	Autumn Semester	Presentation (30%) Written assignment (70%)	Mid Semester End Semester
HSOC6116	Applied Field Studies	Autumn Semester	Oral Presentation (20%) Written Assignment (80%)	End Semester End Semester

**Students exiting at this point with 420 credits would receive an Ordinary BSc Woodland Ecology and Conservation with Sandwich Placement**

**Students exiting at this point with 480 credits would receive a BSc (Hons) Woodland Ecology and Conservation with Sandwich Placement**

<b>Methods for Evaluating and Improving the Quality and Standards of Learning</b>	
<b>Mechanisms used for the Review and Evaluation of the Curriculum and Learning, Teaching and Assessment Methods</b>	<ul style="list-style-type: none"> <li>• Module Evaluation</li> <li>• Programme Validation and Periodic Review</li> <li>• Annual Monitoring</li> <li>• Peer Review of Teaching</li> <li>• External Examiner Reports</li> </ul>
<b>Mechanisms used for gaining and responding to feedback on the quality of teaching and the learning experience – gained from: Students, graduates, employers, placement and work-based learning providers, other stakeholders, etc.</b>	<ul style="list-style-type: none"> <li>• Staff Student Forum</li> <li>• Module Evaluation Forms</li> <li>• Programme Evaluation: National Student Survey, UK Engagement Survey</li> <li>• Module/Programme/Personal tutorials</li> <li>• Meetings with External Examiners</li> </ul>

<b>Date of Programme Specification Production:</b>	1 <sup>st</sup> February 2019
<b>Date Programme Specification was last updated:</b>	June 2023
<p><b>For further information about this programme, refer to the programme page on the University website:-</b></p> <p><a href="https://www.cumbria.ac.uk/study/courses/undergraduate/woodland-ecology-and-conservation-with-sandwich-year">https://www.cumbria.ac.uk/study/courses/undergraduate/woodland-ecology-and-conservation-with-sandwich-year</a></p>	

<b>The following information has implications for potential international applicants who require a Tier 4 visa to study in the UK</b>	
<b>Is the placement requirement more than 50% of the programme?</b>	No
<b>If yes, what % of the programme is the placement requirement?</b>	
<b>If yes, is the amount of placement a statutory requirement to meet Professional, Statutory or Regulatory Body (PSRB) or Department of Education requirements?</b>	