MSc Forestry by Distance Learning MSc Tropical Forestry by Distance Learning

Programme Information for Academic Year 2020/21



School of Natural Sciences

College of Environmental Sciences and Engineering

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Introduction

Forestry in the 21st Century is undergoing unprecedented changes. Rapid population growth, urbanisation, globalisation and climate change place increasing pressures on the world's forest resources and make forest management ever more challenging. At the same time, forests are increasingly valued for the diverse and essential ecosystem services they provide. Therefore, developing sustainable forest management systems that can deliver multiple ecological, socio-cultural and economic benefits is essential.

These part-time programmes provide a first-class forestry education without the need to relocate. They are intended for people who are unable to study full-time, who wish to develop their existing skills and knowledge in forestry or tropical forestry, and/or are looking for a career change. The modules cover a broad range of contemporary topics relevant to forestry and tropical forestry and will enable you to gain a broad and comprehensive understanding of the complex nature of forest ecosystems and their interrelationships with human systems at various scales. The programme is designed to allow students to undertake a MSc degree whilst working full time and/or managing other commitments. Postgraduate Certificate and Postgraduate Diploma qualifications are also available for individuals who have interests in specific topics but do not wish to undertake the full MSc.

Bangor University – teaching and research excellence

At Bangor University, we pride ourselves in excellence in teaching, learning and research and we have a high profile and strong reputation in forestry and tropical forestry in the UK and internationally. If you choose to study at Bangor, you will be studying at a university which is in the top ten for **student satisfaction** in the UK (equal with world famous institutions such as the Universities of Oxford and Cambridge) according to the 2019¹ National Student Survey – reflecting similar results in previous years^{2 3 4}. We were the only university in Wales to receive a gold award in the 2017 Teaching Excellence Framework⁵, the highest rating possible. We are top in the UK for Forestry Education according to the Complete University Guide League Tables 2019⁶.



Our School also has a **world-class reputation for research**; more than 80% of our research was rated as world leading or internationally excellent in the 2014

Research Excellence Framework assessment of research quality in UK universities⁷. We are also proud to be ranked amongst the top 100 most international universities in the world⁸.

https://www.bangor.ac.uk/studentlife/satisfaction

www.timeshighereducation.co.uk/news/national-student-survey-2014-results-show-record-levels-of-satisfaction/2015108.article

https://www.timeshighereducation.com/carousels/national-student-survey-2015-overall-satisfaction-results-full

⁴ https://www.bangor.ac.uk/courses/postgrad/why_bangor.php.en

https://www.bangor.ac.uk/courses/TEF/index.php.en

https://www.thecompleteuniversityguide.co.uk/league-tables/rankings?s=Agriculture%20%26%20Forestry

www.bangor.ac.uk/news/research/bangor-university-recognised-for-world-leading-research-21262

⁸ www.timeshighereducation.co.uk/news/the-100-most-international-universities-in-the-world-2015/2018125.fullarticle

Forestry@Bangor

We have been teaching forestry at Bangor University for over a century, since 1904. MSc Forestry and related degrees have been taught since 1978, during which time students from more than 100 countries have studied with us. In 2001, we started running MSc level part-time distance learning forestry degrees and these are now widely recognised as the most successful forestry postgraduate taught degrees in the UK. News and developments relating to the distance learning programmes have been published in various media and there are dozens of positive testimonials from current distance learning students and alumni on our website.

Bangor forestry alumni are part of the forestry heritage, capacity and expertise of a huge array of countries and organisations. If you study with us you will soon find that there are Bangor forestry alumni working in a huge range of roles in this diverse profession. We maintain links with many of them in order to enrich our teaching and research. If you become a Bangor 'forester' you have the unique opportunity to become part of this well respected and widely recognised tradition.

Forestry@Bangor by distance learning

As one of the most well-established distance learning programmes of its kind, our students and graduates have an increasingly high profile as the reputation of our programmes strengthen. We have been incredibly successful in helping our students either enter forestry and related professions, or gain promotion with their existing employers and / or deepen their areas of expertise. This is evidenced by the success many of our distance learning students and graduates have had in gaining exciting and challenging positions in forestry-related positions worldwide – just a few of these are highlighted on our website.

Our distance learning programmes are subject to exactly the same quality control procedures that apply to all degree programmes offered by Bangor University and a qualification obtained from our distance learning programme consequently has exactly the same status as one obtained from a full-time residential programme.

Both the MSc Forestry and MSc Tropical Forestry programmes have 'student representatives' who participate in a formal student: staff committee (via Skype), ensuring that our distance learning student cohort has a voice equal to full-time students.

We make continual updates and improvements and act upon constructive feedback from a range of sources. One focus of recent efforts is to integrate full-time and part-time provision, where possible. You will find evidence of this in our programme structures on pages 10-16 below.

Forestry is a long-term business, its history is scattered with examples of forest policy, management and species choice that have not produced the outcomes expected of previous generations of foresters who made those choices, nor the requirements of current or future generations. The nature of forestry means we have an obligation to serve future generations as best we can. On this programme, you can expect robust debate and engaging discussion about the future of forestry! Members of staff may share contrasting views with you, and you will be encouraged to debate and discuss such issues with fellow students, both online and in person.

Admission and entry to the programmes

Our distance learning programmes are specifically designed to allow people who may not have had any higher education in these subject areas the opportunity to undertake a masters' level course whilst remaining in full-time employment. Usually, an undergraduate degree in a relevant science or technology subject is required. In some circumstances, students may be enrolled if they have non-graduate qualifications which the University has deemed to be of a satisfactory standard for the purpose of postgraduate admission. In recognition of the value of work experience and the importance of widening participation to people currently in employment, traditional "academic" qualifications are not necessarily a requirement for acceptance onto our distance learning programmes, and non-graduates whose relative lack of formal qualifications is compensated for by his / her age and relevant work experience may also be admitted provided the candidate is aged 25 or more and has held, for a minimum of 2 years, a position of responsibility of relevance to the Degree.

The programmes accept new intakes of students in September of each year. You can apply at any time but it is important to note that application and registration processing can, in some cases, take several months. We recommend you submit an application as soon as you can and no later than 31st July of the same year that you wish to enter the programme. Please contact us if you have any queries about this process. If you apply after this deadline, we cannot guarantee you will be registered in time for the start of the programme. It can take several weeks from your application submission to receipt of a formal offer.

Interview

Once we have received your application, we will then contact you to arrange a telephone or Skype interview before making a decision on your application. During this interview, we will have an honest discussion of various issues with you, such as the time commitment, the academic nature of the programme and the advantages and challenges of part-time distance learning study. This is to ensure you fully understand the commitment and to help you decide if this is the best programme for you. We **cannot** guarantee interviews for late applicants and this may jeopardise your chances of being accepted onto the programme.

If you are seriously considering applying, we encourage you to contact us in advance if you have any questions remaining after you have carefully read this document. Each and every application is judged on its own merits.

UK and worldwide provision

By its nature, our distance learning programmes offer worldwide provision and we are committed to providing a high-quality education to a global audience. As part of the programmes, we make it **compulsory**⁹ that students commit to a degree-specific study tour to enhance their learning and allow the opportunity to meet teaching staff and fellow students at least once in person. Further information can be found on pages 10 - 16 below.

⁹ Applicants accept full responsibility for ensuring they are informed of such requirements

Structure of our degree programmes

In common with all taught postgraduate degrees in the United Kingdom, our distance learning MSc Forestry and MSc Tropical Forestry degrees comprise two distinct parts, which make up a total of 180 credits.

Taught component (120 credits) comprises six modules that are each accompanied by a module handbook and complemented by a range of teaching and learning resources. These modules (unless they are residential in nature) typically run over a three-month period and may include both coursework and/or an examination(s). Many of our modules run in a format whereby you study at a distance alongside full-time postgraduate students, whilst some modules are only currently offered to distance learning students.

Dissertation component (60 credits) comprises a dissertation – an independent research project which is led by the student who works closely with an academic supervisor to conduct their own high quality postgraduate level research.

Applicants not wishing to study for the full MSc may apply to study just a single module, or a series of modules, to qualify for a Postgraduate Certificate (60 credits) or a Postgraduate Diploma (120 credits). Contact us for more information.

Professional accreditation



Both MSc Forestry and MSc Tropical Forestry (distance-learning) are accredited

by the Institute of Chartered Foresters (ICF) and worth **6 points**, important if your ambition is to become a Chartered Forester. All our students are strongly encouraged to join as student members (there is a significant reduction for registered students). For further information about ICF membership and working towards Chartered Forester status, please visit the relevant page on the ICF website: www.charteredforesters.org/education-careers-and-cpd/universities-and-colleges/. Please note that in order to meet the requirements of the forestry and forest industries professions and of academic audits, and to ensure that the programme remains effective and up-to-date, our programmes are subject to constant refinement. Strict adherence to the listed module contents cannot therefore be guaranteed.

Outside support for forestry students

Various organisations exist to support both part-time and full-time forestry students alike. Becoming a forestry student at Bangor will present you with a whole range of new opportunities, from additional scholarships and bursaries, UK and overseas study tours / conferences / seminars, student membership rates for a range of organisations, information about forestry and related job opportunities, and many other benefits. Details of some of the opportunities that recent students have taken advantage of can be found here.

Additional scholarships and bursaries are usually for students already enrolled and very rarely cover tuition fees. It is up to individual students to apply for these opportunities. Please note: Bangor University can help bring these to the attention of students but will not apply for them on behalf of a student.

Level of challenge

Before you apply, it is very important for you to understand that this is a postgraduate level programme of study; expectations and standards of the programme reflect this. Students are expected to demonstrate intellectual understanding and critical interpretation, extensive engagement with, and synthesis of, relevant literature, and ability to write and communicate to a high academic standard.

Some distance-learning students submit written assignments that are close to publishable standard, on occasion these are revised and published, for example:

Davreux, T., Godbold, D.L. and Walmsley, J.D. (2011) Climate change and tree species migration. *Quarterly Journal of Forestry* 105: 141-147.

Forster, E. (2015) Enchanting entrepreneurs in the Philippines, Agriculture for Development, No. 25: 35-37

Gray, J. and Curry, P. (2016) Ecodemocracy: helping wildlife's right to survive, ECOS 37:1, 19-26

Gray J, Brockington J, Hayward MW, Walmsley JD (2016) How the proposed reintroduction of Eurasian lynx to Britain illustrates competing values and contrasting views associated with humans and the natural world. Country-Side, 36(2): 19-25

Sanfilippo, M.; Akampulira, E.; Mohase, A.; Okonkwo, H.; Ouyoumb, P.; Tumber, R.; Walmsley, J.; Rayment, M. (2017). Reduced impact logging and silvicultural interventions in Ghana: the case of Bobiri Forest Reserve, International Forestry Review, 19(3): 369-380.

Agyapong, E. B., Ashiagor, G., Nsor, C and Leeuwen, L.M. (2018) Urban land transformations and its implications on tree abundance, distribution and richness in Kumasi, Ghana. Journal of Urban Ecology, 4(1)

Time and effort required

It is estimated that **approximately 200 hours of student effort** are required for each module. Exactly how much time is required is very much a 'how long is a piece of string' type question. We recommend committing yourself to *at least* 15 hours a week of **focused** study time. Applicants who have not had the opportunity to study at university previously will be considered for entry to the programme, but must bear in mind that they will very likely need to invest *considerable additional time and effort* beyond the estimated weekly study time to make up for this. There are support systems in place at Bangor University to help such students, for example with their academic research and writing skills (such as through our Study Skills Centre). Engagement with such services is strongly encouraged as and when it is required: distance learning students are expected to be able to identify when they need assistance and make full use of the wide range of support available.

As with all aspects of life, the more you put in, the more you get out and you should ask yourself the following questions before applying for this programme:

- How much study time is realistic for me, given my current commitments? If necessary, what will I give up?
- Is there somewhere I can study and concentrate, with peace and quiet?
- Can I ensure I will have sufficiently reliable internet connectivity?
- What days of the week / times of the day will I study?

Employability

Our distance learning programmes have helped many people fulfil their ambitions. Around 60% of the students are already in the forestry or closely related professions and use our programmes to develop their career further, whilst the remainder use it to change career and/or simply find out more about the fascinating subject of forestry. To date, approximately 50% of the students who study with us with a view to changing to a forestry career succeed in doing so. Some achieve this well before they have graduated, owing to the part-time nature of the programme.

There are an enormous array of opportunities to increase your employability during your studies. Some examples of what distance learning students get up to during their studies with us can be found here on our Publication and News webpage.

Profiles of some of our graduates can be found here:

Examples below are of recent distance learning students / alumni that have successfully changed careers through their studies (some names changed to maintain anonymity):

Example #1:

Marcus registered in 2011 as a 'career changer' from the IT profession. He made a few calls to relevant organisations shortly after he registered with us and got some forest inventory work (voluntary) with a local forestry company (unpaid). This led to work as a forest surveyor working on the National Forest Inventory (NFI) (paid) through a sub-contractor. Subsequently, this led on to an assistant forest manager position with a private forestry company just two years after registering with us.

Example #2:

Nick registered in 2014, as a 'career changer' from the Building Services profession. Within a few months he had a voluntary position with a wildlife trust working on a range of woodland management projects, then secured two days a week (paid) working as an assistant with a private forest management company. He then secured a paid position with the same wildlife trust. This led on to another role, and he was employed as a Countryside Ranger by the National Trust in late 2016. In 2018 he moved a more senior role with the same organisation.

Example #3:

Jo registered with us in 2013, as a 'career changer' from the charity / development sector. She had already been doing various voluntary work relating to forestry. Within six months she had secured a job as a contractor on the NFI, and then got a job with a forest certification organisation. She successfully secured external funding to enable her to travel to Uganda to conduct her dissertation field work in 2017. She won the 'best poster' prize at the World Agroforestry Congress which took place in Montpellier, 2019.

Example #4:

David registered with us in 2014, as an assistant forest surveyor. He worked with a leading forest nursery on his dissertation, setting up and managing a complex trial with over 7,000 seedlings. His dissertation also included a financial evaluation. He secured a position as a forestry invessment specialist with a leading forestry business before he graduated.

Example #5:

Kwadwo (from West Africa) registered with us in 2012, as a CSC scholar. He has recently secured his first academic position as a lecturer in one of the top 100 universities in Africa.

Example #6:

Daniel (from Central Africa) registered with us in 2013, as a CSC scholar. He secured various research assistant roles during his registration, partly through links made through Bangor University. He commenced a PhD shortly after his graduation in 2016.

Basically, each and every student makes their own path. Destiny and luck have a bit to do with it, but a commitment to high quality study combined with other characteristics such as taking the initiative, having the ability to adapt and make use of professional networks, being prepared to relocate and being open-minded about opportunities as they arise, all greatly increase the chances of switching career. As to whether it's well paid, or not, well, forestry is definitely not investment banking – but according to many working in the profession, this shortfall is more than made up for by the quality of life, amazing landscapes, passionate colleagues and the huge satisfaction that such a career brings.

MSc Forestry¹⁰

This degree programme is designed to provide students with training in the management of forest resources, understanding of the scientific, academic and practical principles that underpin forest management and forest ecosystem function, and interrelationships between different stakeholders (users/beneficiaries of forested land) and associated land uses.

The aims of the programme are:

- to provide distance learning opportunities for those who have not previously had the chance to undertake higher education in forestry;
- to develop students' intellectual skills, study skills and professional development skills, in a forestry-specific context;
- to provide opportunities for career development for those already working in the forestry related professions, and to increase career opportunities for those not in such professions.

The programme is designed to be of specific interest to the following:

- Individuals seeking an academically-based education in forestry;
- Individuals seeking a career in the management of trees and forests;
- Individuals wishing to undertake further study while employed in a forestry related profession, with a view to professional development and / or promotion and / or a change of occupation.

Students benefit from being part of a diverse, inquisitive and motivated cohort and form new friendships as well as professional relationships. We have students who are professionals already employed in forestry related professions (public agencies, private forest management companies, third sector organisations and self-employed consultants), as well as career changers from a wide range of backgrounds (including finance, law, technical sales, graphic design, architecture, healthcare, etc). We also have some students who have retired and wish to study forestry simply out of curiosity and/or their need for a rigorous academic challenge.

We also now offer a level of choice to those interested in applying for MSc Forestry. Once accepted onto the programme, you need to complete two core and compulsory modules, and you then have choice of four further modules, allowing you to develop your own specialisms.

On pages 11 to 16 below you can find short summaries of the modules and structure of the programme. More details about individual modules, including overall aims, learning outcomes, assessments and the name of the module organiser can be found here. Contact details for all our staff can be found on page 25 below.

¹⁰

MSc Forestry – CORE and COMPULSORY modules

DDL-4202 Silviculture [CORE MODULE] considers the principles of silviculture, including species selection according to site conditions, artificial and natural regeneration of woodlands and interventions. The management of mixed forest stands and the silviculture of forests in transition is also explored.





DXX-4532 Forestry Study Tour¹¹ [COMPULSORY MODULE].

This module is a week-long study tour of a wide range of relevant field sites in Scotland / England and/or Wales. Each year the tour focusses on an issue of contemporary relevance. Meet, discuss and learn from practitioners and professionals working in a range of different organisations. The residential, hands-on nature of the study tour is a vital means of bringing the subject (and your studies) to life!

DDL-4999 Dissertation [CORE MODULE] – see page 19 below for details.

CORE MODULE:

must be completed in order to qualify for PG Cert / PG Dip / MSc Forestry

COMPULSORY MODULE:

must be completed and passed with a score of at least 50% in order to qualify for PG Cert / PG Dip / MSc Forestry

The module fee includes B&B and travel for the duration of the study tour. It does not cover the costs of return travel from your home to and from Bangor, nor does it include lunches or evening meals.

MSc Forestry – optional modules

Below you will find summary information of all the optional modules currently available on the MSc Forestry programme. Some of the modules on MSc Forestry run every year and are available in both full-time and part-time mode, whilst other modules are only available in part-time distance learning format and run once every other year. Use this information in conjunction with the suggested module sequences (tables 1, 2 and 3) for the different streams on page 14 below. Please note that you do not need to decide at the application stage which of the three module sequences you wish to follow.

DDL-4204 Forest Ecosystems explores the occurrence and ecology of different forest types. Emphasis is placed on forest biota and soils, nutrient cycling, hydrology, pollution, climate change and forest health.





DXX-4505 Natural Resource Management provides students with a theoretical understanding of how the systems approach can be used for the management of natural resources, as well as a practical grounding in the ways in which natural resource managers can draw on different kinds of knowledge sources.

DDL-4205 Forest Inventory, Assessment and Monitoring explores how forest resources can be assessed and their development monitored. It provides students with knowledge and understanding of the specialist areas of mensuration, forest inventory and forest resource monitoring. Students learn about the benefits of using modern technologies in forest inventory and monitoring, including how to use remote sensing, GIS and LiDAR data.





DXX-4530 Forest Management Planning¹² covers the entire forest management planning process. You will have the chance to create a professional management plan using best practice guidelines, standards and in compliance with forestry regulations. You decide whether the emphasis of your plan is commercial, conservation, or designed to meet multiple objectives. Includes training in GIS, forest yield modelling, economics, landscape design and more.

DDL-4201 Social Issues in Forest Management considers the ways in which social, cultural, political and economic factors influence the form and scope of forest management and governance systems and how these impact on the livelihoods and wellbeing of people around the world.



The student is responsible for arranging and financing accommodation and subsistence incurred during this residential, as well as the costs of travel to and from Bangor.



DDL-4004 Agroforestry Systems and Practice is designed to give students an in-depth understanding of the fascinating interface between trees and agriculture. The module is global in scope and considers the scientific principles and practice of agroforestry in both temperate and tropical regions.

DDL-4206 Sustainable Use of Non-Timber Forest Products gives students an understanding of the ways in which forests may be managed to recognise the value and enterprise development potential of non-timber forest products (NTFP's). Due consideration is given to both production systems for 'wild' products, which arise without human intervention, and products derived from the cultivation of products in forests and from trees outside forests.





DXX-4536 Urban Forestry helps students to develop an understanding of the principles and practice of urban forestry around the world. It provides an historical overview of the relationships between trees and cities and its importance as an emerging field of study. It further covers how different disciplines relate to urban forestry and looks at future scenarios of retrofitting the old as well as designing future cities.

DDL-4003 Forest History, Policy and Management explores how the needs and values of society in relation to woodlands and forests change over time and how these changes influence their structure, management and composition. This module questions many common misconceptions about forestry and will provide students with a much broader and deeper understanding of this vast subject.



More details about individual modules, including overall aims, learning outcomes, assessments and the name of the module organiser can be found here. Below is a full list of module codes and module titles, with hyperlinks:

Module code	Full name	Short name ¹³
DDL-4202	Silviculture Core	Silviculture
DDL-4999	Distance learning Dissertation Core	Dissertation
DXX-4532	Forestry Field Course Compulsory	Study Tour
DDL-4004:	Agroforestry Systems & Practice	Agroforestry
DDL-4204	Forest Ecosystems	Ecosystems
DDL-4205	Inventory, Assessment & Monitoring	Inventory
DXX-4505	Natural Resource Management	NRM
DXX-4530	Forest Management Planning	Management Plan
DXX-4536	Urban Forestry	Urban
DDL-4003	Forest History, Policy and Management	Forest History
DDL-4201	Social Issues in Forest Management	Social Issues
DDL-4206	Sustainable use of Non-Timber Forest Products	NTFPs

¹³ Use these to aid interpretation of table 1 and table 2 on page 14

Table 1: MSc Forestry: September 2020 entry.

YEAR 1 - Academic year 2020-21:				
Semester 1 (Autumn)	Semester 2 (Spring)	Semester 3 (Summer)		
Silviculture	Study Tour or	Forest History		
	Social Issues ⁺			
YEAR 2 - Acad	demic year 2021-22 <i>(Cho</i> o	ose 3 modules):		
Semester 1 (Autumn)	Semester 2 (Spring)	Semester 3 (Summer)		
Agroforestry <i>or</i> Urban	NRM or Inventory or Management Plan *	Ecosystems <i>or</i> NTFP's		
YEAR 3 - Academic year 2022-23:				
Semester 1 (Autumn)	Semester 2 (Spring)	Semester 3 (Summer)		
Dissertation				

^{*} University regulations do not allow part-time students to register for more than 90 credits in a single academic year. Optimum for virtually all part-time students is to study one module per semester, allowing for study at a regular and manageable pace. We advise strongly against part-time students attempting more than one module in a single semester. If you have queries about this please contact us.

^{*}Students who want to study Social Issues will need to take the study tour module in year 2 (as Social Issues only runs in alternate years: 2021, 2023, 2025 etc.)

KEY:	CORE MODULE	Module must be completed by all students in order to qualify for PG Cert / PG Dip / MSc
	COMPULSORY MODULE	Module must be completed and passed with a score of at least 50% in order to qualify for PG Cert / PG Dip / MSc
	DISSERTATION CORE MODULE	Module must be completed by all students in order to qualify for MSc

Feel free to contact us if you have any questions about these various options. We are continually revising and updating our programmes to improve the learning experience for our students. The table above reflects an increasing desire from some of our current students and applicants for greater flexibility in terms of module choices.

^{*} Residential part of Management Plan runs in Semester 2; however students can submit their plan in semester 3 if they are studying another module in Semester 2 (to spread out the workload).

MSc Tropical Forestry

We launched MSc Tropical Forestry in 2012, since then over 120 students from over 25 different countries have registered and more than 50 have graduated. The programme represents a natural addition to our MSc Forestry, MSc Environmental Forestry and MSc Agroforestry degrees. MSc Tropical Forestry also builds on the existing links and strengths of our highly successful forestry masters programmes: MSc Sustainable Forest Management (SUFONAMA), MSc Sustainable Tropical Forestry (SUTROFOR) and PhD Forest and Nature for Society (FONASO). These programmes were developed by European Masters consortiums and funded by the EU Erasmus Mundus programme.

This degree programme is designed to provide students with training in the subject of tropical forestry, understanding of the scientific, academic and practical principles that underpin forest conservation, protection and management and forest ecosystem function, and interrelationships between different stakeholders (users/beneficiaries of forested land) and associated land uses. Suitable applicants include individuals working in forestry-related professions, particularly in the fields of planning, regulation, policy, monitoring and environmental protection. The programme is also suited to individuals working in forestry education who wish to further their knowledge and expertise in order to improve their teaching.

The learning experience of this truly international degree is enhanced through the sharing of ideas and insights from students living in a wide variety of tropical forested areas of the world. The Tropical Forestry Study Tour¹⁴ represents the high point of the degree for many; it is where many of the topics covered during the modules are truly 'brought to life'. It also represents a unique opportunity to meet with fellow students and staff alike, to form new friendships, learn about new cultures, and be able to fully appreciate the global context of tropical forestry. This takes the form of a two-week residential programme typically in June/July/August.

More details about individual modules, including overall aims, learning outcomes, assessments and the name of the module organiser can be found here.

2017 study tour

https://www.bangor.ac.uk/natural-sciences/news/2017-tropical-forestry-study-tour-in-ghana-33454 https://www.youtube.com/watch?v=vj5zfHoH6Ao&feature=youtu.be

https://www.bangor.ac.uk/natural-sciences/news/msc-tropical-forestry-students-publish-findings-from-their-research-in-ghana-34113

2015 study tour

https://www.bangor.ac.uk/natural-sciences/news/turning-literature-into-reality-tales-from-a-bangor-university-msc-tropical-forestry-summer-school-in-ghana-24669

2013 study tour

https://www.bangor.ac.uk/natural-sciences/news/natural-sciences-s-msc-forestry-students-head-to-uganda-15725

2012 study tour

https://www.bangor.ac.uk/natural-sciences/news/natural-sciences-s-msc-forestry-students-head-to-tanzania-9923

You can find out more about previous Tropical Forestry Study Tours on the links below:

MSc Tropical Forestry - CORE and COMPULSORY modules

DDL-4202 Silviculture [COMPULSORY MODULE] considers the principles of silviculture, including species selection according to site conditions, artificial and natural regeneration of woodlands and interventions. The module also includes the management of mixed forest stands and the silviculture of forests in transition (transformation, conversion).





DDL-4545 Tropical Forestry Study Tour¹⁵ [CORE MODULE] This module is a two-week residential study tour to a country with notable tropical forest resources. You will meet and discuss with research scientists, forestry practitioners and land managers in conservation organisations, research institutes and public agencies. Previous tours have been to Ghana (2019, 2017 and 2015), Tanzania (2012), and Uganda (2013).

DDL-4999 Dissertation [CORE MODULE] – see page 19 below for details.

CORE MODULE:

must be completed in order to qualify for PG Cert / PG Dip / MSc Tropical Forestry

COMPULSORY MODULE:

must be completed and passed with a score of at least 50% in order to qualify for PG Cert / PG Dip / MSc Tropical Forestry

MSc Tropical Forestry – other modules



DDL-4201 Social Issues in Forest Management considers the ways in which social, cultural, political and economic factors influence the form and scope of forest management and governance systems and how these impact on the livelihoods and wellbeing of people around the world.

DDL-4206 Sustainable Use of Non-Timber Forest Products gives students an understanding of the ways in which forests may be managed to recognise the value and enterprise development potential of non-timber forest products (NTFP's). Due consideration is given to both production systems for 'wild' products which arise without human intervention and products derived from the cultivation of products in forests and from trees outside forests.



¹⁵



DDL-4004 Agroforestry Systems and Practice is designed to give students an in-depth understanding of the fascinating interface between trees and agriculture. The module is global in scope and considers the scientific principles and practice of agroforestry in both temperate and tropical regions.

DDL-4205 Forest Inventory, Assessment and Monitoring explores how forest resources can be assessed and their development monitored. It provides students with knowledge and understanding of the specialist areas of mensuration, forest inventory and forest resource monitoring. Students learn how to demonstrate the benefits of using modern technologies, such as remote sensing, in forest inventories





DXX-4536 Urban Forestry helps students to develop an understanding of the principles and practice of urban forestry around the world. It provides an historical overview of the relationships between trees and cities and its importance as an emerging field of study. It further covers how different disciplines relate to urban forestry and looks at future scenarios of retrofitting the old as well as designing future cities.

More details about individual modules, including overall aims, learning outcomes, assessments and the name of the module organiser can be found here.

Below is a full list of module codes and module titles, with hyperlinks:

Module code	Full name	Short name ¹⁶
DDL-4004	Agroforestry Systems & Practice	Agroforestry
DDL-4202	Silviculture Compulsory	Silviculture
DDL-4999:	Distance learning Dissertation Core	Dissertation
DDL-4545	Tropical Forestry Study Tour Core	Tropical Tour
DDL-4201	Social Issues in Forest Management	Social
DDL-4205	Inventory, Assessment & Monitoring	Inventory
DDL-4206:	Sustainable use of Non-Timber Forest Products	NTFPs
DXX-4536:	Urban Forestry	Urban

 $^{^{16}}$ Use these to aid interpretation of table 1, table 2 and table 3 on page 14

Table 4: MSc Tropical Forestry September 2020 entry

Acade	emic year 202	20-21	Academic year 2021-22		Academic year 2022-23	
Semester 1	Semester 2	Semester 3	Semester 1	Semester 2	Semester 3	
Silviculture	Social	Tropical Tour	Agroforestry	Inventory	NTFPs	Dissertation
			<i>OR</i> Urban			

KEY:	CORE MODULE	Module must be completed by all students in order to qualify for PG Cert Tropical Forestry
	COMPULSORY MODULE	Module must be completed and passed with a score of at least 50% in order to qualify for PG Cert / PG Dip / MSc Tropical Forestry
	DISSERTATION CORE MODULE	Module must be completed by all students in order to qualify for MSc

The dissertation

Undoubtedly one of the most challenging parts of any Masters programme, for the vast majority of students the 'dissertation' is also the most exciting and rewarding aspect. For this component of the MSc degree programme, students undertake a piece of work culminating in the production of a "project dissertation". The results of this study must be judged to constitute a critical evaluation and analysis of knowledge or information obtained, or to be an original contribution to knowledge. A student may choose an area of research which is of particular interest to them, with the approval of the project supervisor, and/or which is associated with their employer's activities. In common with all UK Master of Science degree programmes, the final dissertation submission is evaluated by two independent internal markers with relevant expertise, as well as an external examiner from another University. The fee for this examination is included in the tuition fee. However, travel and subsistence expenses incurred during the project, as well as the costs of printing and binding the thesis, are additional costs that must be borne by the student. There are a variety of charitable and professional organisations that may be willing to support student dissertations, but these depend very much on the topic, are generally country-specific, and it is the responsibility of the student to follow up such opportunities, with advice from staff where appropriate.

Teaching, learning and assessment methods

Regular and effective use of Blackboard – a widely used virtual learning environment (VLE) – is fundamental to the forestry-related distance learning degree programmes. Developments in learning technologies mean that part-time, distance learning students increasingly study modules alongside full-time students. This can help improve the learning experience because part-time students from across the world can view and participate in live lectures and seminars delivered in Bangor (as well as view them afterwards); contribute to student-led seminars; ask questions and receive immediate feedback. At the same time, part-time students can study at a realistic pace and benefit from a wealth of resources, including module handbooks, study guides, e-books, discussion forums, self-assessment tools and more.

We do not provide hard-copies of materials, everything is available electronically

Most modules are divided into units, helping students break down large topics into more manageable components. A module handbook sets out week-by-week learning activities and other key information about assessments and examinations to help you plan your work. Some modules feature on-line self-assessments which you can use to gauge your progress whilst others feature facilitated discussion forums based on module topics.

Your academic performance is assessed using a wide variety of approaches, including open-book exams, reports, essays, presentations, management plans, mapping exercises, critical reviews and group activities. By exploring the hyperlinks for the modules listed above you can find out how each modules is assessed.

Staying in touch

At Bangor University, we pride ourselves not only on our teaching and research excellence but also for our friendly and approachable manner. We therefore actively encourage distance learning students to contact staff directly when they need to, just as they would if they were a full-time student.

Monitoring of student progress

The staff organising the forestry-related MSc degree programmes believe that an important part of a distance learning programme is the provision of support for students. Various 'feedback exercises' will be provided within modules in order to monitor student progress, identify problems and provide guidance where needed. Assessments are set at intervals during each module. Such assessments may or may not form part of the summative assessment for the overall degree, but regardless, the idea is to encourage regular engagement, participation and structure to the learning experience. This approach enables us to identify early indicators of a potential problem, which can then be addressed before it's too late.

Student support

As well as the Study Skills Centre where you will can get support with all aspects of your studies, Bangor University is recognised as a leading centre for students with learning differences such as dyslexia. You can contact the Dyslexia Team prior to applying to Bangor University. In any case, the Dyslexia Team will be notified of any specific requirements you may have as a result of any relevant information you divulge on your application form.

Examinations

Examinations are conducted online via the Blackboard virtual learning environment. Details of the dates, timings and details of examinations are made available well in advance to students, once registered.

There is no requirement for any student to travel to an examination centre to complete their exams on these programmes.

Fees

Details regarding fees were correct at the time of publication of this document; the University academic registry website https://www.bangor.ac.uk/ar/main/fees/index.php.en should always provide the most up-to-date information regarding fees.

For residents of the UK and EU member state countries (2020/21)

£962 per 20 credit module £2,884 for the 60 credit dissertation

For the Full Master of Science Programme (part time over 3 years) the total fee will be approximately £8,650

All other countries (2020/21)

£1,889 per 20 credit module £6,167 for the 60 credit dissertation

For the Full Master of Science Programme (part time over 3 years) the total fee will be approximately £17,500.

The fees above apply to applications made for the academic year 2020/21 and slight increases may apply annually

Additional costs for MSc Tropical Forestry Study Tour

Students registered on the Tropical Forestry programme must also fund their travel to the country where the tour is taking place, cover their visa, immunisations and other related costs as well as their essential in-country costs (in-country costs are typically €1,000 for two weeks, which covers all in-country travel, meals, non-alcoholic refreshments, and accommodation).

Fee payment

There are various options available for payment of fees, for example, instalments or lump sum. You will be asked to set up your fee payment schedule as part of the online registration process that you complete when the course commences. You can contact feepayment@bangor.ac.uk to discuss options for fee payment to suit your needs. It is your responsibility to set up a fee payment schedule that suits your circumstances.

Funding sources

We are aware that funding for a Master's programme may be a problem and we shall do all we can to assist and advise you. The University cannot provide funding but you might find financial support from a number of national and/or international organisations.

UK organisations (list not exhaustive)

Postgraduate Funding Guide www.postgraduate-funding.com/gateway

Scottish Forestry Trust www.scottishforestrytrust.org.uk

Royal Forestry Society www.rfs.org.uk
Confederation of Forest Industries www.confor.org.uk/

Further note about Confor: upon joining the programme, you can register for student membership of Confor for a reduced fee. After you have been a member for one year, you may be able to apply to their Education and Provident Fund, which could be used to partially fund your studies. Contact Confor directly to discuss if this is of interest.

Postgraduate Loans (UK students)

https://www.gov.uk/postgraduate-loan

International organisations (list not exhaustive)

Although we are not aware of any current scholarships provided by international organisations, in the past our students have been supported by:

ADB: African Development Bank, Abijan, Cote d'Ivoire www.afdb.org
ADB: Asian Development Bank, Manila, Philippines www.adb.org

CIFOR: Centre for International Forestry Research, Indonesia

www.cifor.cgiar.org

FAO: Food & Agriculture Organisation of the United Nations, Italy www.fao.org
ITTO: International Tropical Timber Organisation, Yokohama, Japan www.itto.int
IUFRO: International Union of Forestry Research Organisations, Vienna, Austria

www.iufro.org

WB: World Bank, Washington D.C., U.S.A. www.worldbank.org

UK Government Development Organisations

DFID: Department for International Development, UK www.dfid.gov.uk CSC: Commonwealth Scholarship Commission, UK www.cscuk.org.uk

The British Council

The British Council has offices in nearly every country and is mainly concerned with the administration of students funded by other agencies, however, they are also an excellent source of information regarding possible sources of funding for international students. They may also have details of Charitable Foundations and any grants available for postgraduate study in a particular country.

Making an application

Applications should be made online, by following the link below: http://www.bangor.ac.uk/courses/postgrad/taught/apply_taught.php.en

Prospective applicants from outside the European Union (EU) may use the University's on-line admissions service at:

http://www.bangor.ac.uk/international/applying/postgrad.php

Once we have received your application form, we will process your application. In some cases, we may need to ask for further details from you. Until you have been made an offer and accepted it, you are under no obligation to take up a place.

Progression through the programme

Once registration is complete, you will be able to start on the programme. There is only one entry point per year (September) and the first module for all students on the MSc Forestry and MSc Tropical Forestry programmes is Silviculture.

In the past, we allowed students to join the programme at three entry points per year. Following discussions with existing students as well as the recommendation of the External Examiner, we now only accept one intake per year. This has greatly improved the quality of the learning experience of our students.

The university regulations do not require that you must 'pass' any particular part of the programme before you can commence the next module / to the dissertation. We monitor student progress carefully and where there students are experiencing problems we manage these on a case by case basis.

Both the Forestry and Tropical Forestry programmes contain 'CORE' modules, which university regulations state you MUST pass before you can gain the award you are studying for:

PG Certificate / PG Diploma / MSc:	CORE Module:
Forestry	DDL-4202 Silviculture DDL-4999 Dissertation (if studying towards an MSc)
Tropical Forestry	DDL-4545 Tropical Forestry Study Tour DDL-4999 Dissertation (if studying towards an MSc)

Early withdrawal

You have up to two weeks at the start of the programme to decide whether you wish to continue, or withdraw, without tuition fees being charged.

After your first module you have up to two weeks of a module starting to decide whether you wish to continue, or withdraw, without tuition fees being charged.

If you are having any difficulties with your studies, you must contact distance- learning staff as soon as possible. Bangor University has excellent student support facilities in place and there is lots of support available for all students. If, for any reason you decide to withdraw from the programme early, you MUST contact us and complete a withdrawal form. Failure to do so will mean you will be charged tuition fees.

The implications of early withdrawal are as follows:

Withdrawal Scenario:	Charge
Withdrawal date <u>within two weeks of the programme starting / of any subsequent module starting</u> :	No charge
Withdrawal date <u>after two weeks of a module starting but</u> <u>before the end of the module</u> (defined as the last date on which any module activity takes place):	33% of module fee
Withdrawal date <u>after a module has ended</u> (defined as the last date on which any module activity takes place):	Full module fee

Your withdrawal date is defined as the date upon which receipt of your submitted withdrawal form is confirmed by Bangor University. This can be done via email. One of the benefits of part-time study is that you study one module at a time, so, if for any reason you decide to withdraw, you are only liable for the fees associated with that module.

Staffing

Key staff are listed below:

Course Director Course Deputy Director

Dr James Walmsley Dr Eefke Mollee

Course administrator

Ms Cherelle Jarvis

Personal tutor (MSc Forestry)

Personal tutor (MSc Tropical Forestry)

Dr James Walmsley Mrs Bid Webb

Other key staff

Dr Mark Rayment Dr Tim Pagella
Dr Alec Dauncey Dr Ruben Valbuena
Prof John Healey Mr Andrew Packwood

Many other staff in the School of Natural Sciences also make invaluable contributions to the programmes, for example, with the supervision of dissertations or the provision of specific expertise.

Further information (including contact details) about our staff can be found here: https://www.bangor.ac.uk/natural-sciences/staff/en

How to contact us

For more information about Bangor University and the School of Natural Sciences, you can visit our websites at

www.bangor.ac.uk/

https://www.bangor.ac.uk/natural-sciences/

Alternatively, for more information please contact us via any of the following:

Bangor University,

Bangor

Gwynedd LL57 2UW United Kingdom

Telephone: (+44) (0)1248 382351 (Cherelle Jarvis)

(+44) (0)1248 382448 (James Walmsley)

(+44) (0)1248 382357

E-mail: distance@bangor.ac.uk / c.jarvis@bangor.ac.uk





Reading lists, background reading and forestry organisations

Reading lists and background reading

We are frequently asked 'Can I have the reading list before the programme starts so I can make an early start?'

Answer:

No, for the following reason: In terms of a list of 'recommended texts' for either programme, there is not a straightforward list. Each module has an extensive reading list - typically upwards of 80 different articles / chapters / documents / reports, lectures, etc. We also continually update reading lists each time a module runs. If we were to attempt to create a definitive 'reading list' for each programme it would be around 400 - 500 entries in length and would change every 3-4 months, so it is not a realistic or helpful task. Further, many of these resources can only be accessed with a Bangor University username — which comes when you register as a student. Accessing the materials as a private individual might cost ~\$40 per article or upwards of £100 per book!

Each module has it's own webpage. You are free to browse the reading lists for any module by exploring the hyperlinks on pages 13 and 17: reading lists are located by selecting the 'Resources' tab.

The section below is intended to give enquirers to our forestry programmes ideas for some *very general* background reading. Forestry is a huge and continually evolving subject and as such there is no single book or report that is recommended for either programme. Forestry text books and research articles can be expensive and hard to track down, so freely available, online resources only are referred to here. The exception has to be a decent tree guide, which all students of forestry should own.

Background reading: MSc Forestry

- Committee on Climate Change (2020) Land use: Policies for a Net Zero UK
- Europe Economics (2017) The economic benefits of woodland: A report prepared for the Woodland Trust.
- Food and Agricultural Organisation of the United Nations (2020) <u>Global Forest Resources</u> <u>Assessment 2020</u>. FAO, Rome.
- Quine, C., Cahalan, C.M., Hester, A., Humphrey, J., Kirby, K., Moffat, A., and Valatin, G. (2011) chapter 8: Woodlands in the UK National Ecosystem Assessment
- Plantlife (2011) <u>Forestry Recommissioned: Bringing England's woodlands back to life</u>, Plantlife, Salisbury.
- San-Miguel-Ayanz, J., de Rigo, D., Caudullo, G., Houston Durrant, T., Mauri, A. (eds) <u>European</u>
 <u>Atlas of Forest Tree Species</u>, European Commission. Download full PDF <u>here</u> (150 MB)
- Stern, N. (2006) Stern Review on the economics of climate change. HM Treasury and the Cabinet Office

Background reading: MSc Tropical Forestry

- Aguilar, L. et al. (eds) (2011). <u>Forests and Gender</u>. IUCN, Gland, Switzerland & WEDO, New York, USA.
- Angelsen, A. et al. (2012). Analysing REDD+: Challenges and Choices. Centre for International Forestry Research (CIFOR), Bogor, Indonesia.
- Food and Agricultural Organisation of the United Nations (2020) <u>Global Forest Resources</u> Assessment 2020. FAO, Rome.
- Guariguata, M.R. et al. (2012). Adapting tropical production forests to global climate change. *International Forestry Review*, Vol. 14, No. 1, pp. 27-38.
- New Generation Plantations Platform (2020). Browse their extensive website here.
- Sayer, J. and Maginnis, S. (eds) (2005). Forests in landscapes: ecosystems approaches to sustainability. IUCN / Earthscan, London.
- IUFRO (2020) <u>Special Project on World Forests, Society and Environment</u>. International Union of Forest Research Organisations (IUFRO), Vienna.
- World Agroforestry (2020). Browse extensive publications <u>here</u>.

International Organisations Involved in Forest Research (not exhaustive)

Centre for International Forestry Research (CIFOR)

Commonwealth Forestry Association

European Forest Institute

International Institute for Environment and Development (IIED) – Forests Group

International Tropical Timber Organisation (ITTO)

International Union for Conservation of Nature (IUCN) – Forest Conservation

International Union of Forest Research Organisations (IUFRO)

The World Bank – Forests

United Nations Food and Agricultural Organisation (FAO) - Forestry Department

World Agroforestry Centre (ICRAF)

World Resources Institute (WRI): Forest Landscapes Initiative

ProSilva (international organisation promoting 'close to nature' forest management)

Forests Europe

UK Forestry Organisations (not exhaustive)

Forestry Commission

Forest Research

Cyfoeth Naturiol Cymru / Natural Resources Wales

Institute of Chartered Foresters (distance learning students strongly encouraged to join)

Royal Forestry Society (distance learning students strongly encouraged to join)

Royal Scottish Forestry Society

Woodland Trust

Woodland Heritage (distance learning students strongly encouraged to join)

National Trust

Small Woods Association

Confederation of Forest Industries (Confor) (distance learning students encouraged to join: there is a considerable discount for registered students)

Continuous Cover Forestry Group (distance learning students with an interest in 'continuous cover forestry' / 'close-to-nature forest management principles' are strongly encouraged to apply: membership is free for registered students)