

FORESTRY@BANGOR

by Distance Learning




MSc Agroforestry & Food Security
MSc Forestry
MSc Tropical Forestry

Programme information 2022/23

CONTENTS

(These are clickable links that take you straight to the information you seek)

	Forestry@Bangor MSc programmes
	Programme aims
	Programme structure
	Programme contents
	Online learning
	Entry requirements
	Fees & costs
	Scholarships & funding
	Professional accreditation
	Career opportunities
	How to apply

FORESTRY@BANGOR MSc PROGRAMMES

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.

Our part-time, distance learning programmes provide a first-class forestry / agroforestry 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 agroforestry, forestry or tropical forestry, and/or are looking for a career change. The modules cover a broad range of contemporary topics 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 agroforestry, 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): our students reported 100% 'overall satisfaction' with their degree programmes the 2021 National Student Survey, the opposite of what has been reported nationwide in terms of student experience¹. We are top in the UK for Agriculture and Forestry in terms of teaching quality and student experience, according to The Times/Sunday Times Good University Guide 2021².

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 universities³. We are also proud to be ranked amongst the top 100 most international universities in the world⁴.

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

¹ www.officeforstudents.org.uk/news-blog-and-events/press-and-media/fewer-students-positive-about-their-course-amid-pandemic/

² <https://www.bangor.ac.uk/natural-sciences/subject-areas/forestry/>

³ www.bangor.ac.uk/news/research/bangor-university-recognised-for-world-leading-research-21262

⁴ www.timeshighereducation.co.uk/news/the-100-most-international-universities-in-the-world-2015/2018125.fullarticle

forestry postgraduate taught degrees in the UK. In 2020 we added our Agroforestry and Food Security programme to our Forestry@Bangor distance learning provision. 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 wide 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.

You can find the forestry@bangor newsletters [here](#). They provide applicants with some insights about what it's like to be a part of the forestry@bangor community.

Full-time study with Forestry@Bangor

For those applicants wishing to study full-time and / or part-time 'in person' by relocating to Bangor, there are residential MSc programmes available. Please see our [website](#) for more details or [contact us](#). Note that the full-time programmes share the same modules as the part-time / distance programmes, reflecting the Forestry@Bangor 'blended learning' approach.

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.

All our distance learning programmes have 'student representatives' who actively participate (via Teams) in formal University Student: Staff committees, ensuring that our distance learning student cohort has a voice equal to full-time 'residential' 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 7-16 below.

Forestry is a long-term business, its history is scattered with examples of forest policy, management and species choices 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 and related land management 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 and agroforestry! 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.

Core teaching team



Dr James Walmsley
MICFor
Course Director
(Forestry, Tropical
Forestry)
Personal Tutor MSc
Forestry



Dr Mark Rayment
Course Director
(Agroforestry and
Food Security)
Personal Tutor
MSc Agroforestry
& Food Security



Dr Eefke Mollee
Deputy Course
Director (Forestry,
Tropical Forestry,
Agroforestry and
Food Security)



Dr Bid Webb
Personal Tutor
MSc Tropical
Forestry



Cherelle Jarvis
Course
Administrator



Dr Alec Dauncey
MICFor



Professor John
Healey MICFor



Mr Andrew
Packwood



Dr Tim Pagella

Many other staff in the School of Natural Sciences also contribute 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



@BUForestry



[/BangorUniversity.NaturalSciences/](https://www.facebook.com/BangorUniversity.NaturalSciences/)

PROGRAMME AIMS

MSc Forestry⁵

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.

You can find short summaries of the modules and structure of the programme below. More details about individual modules, including overall aims, learning outcomes, assessments and the name of the module organiser can be found [here](#).

⁵ Click [here](#) and [here](#) to view a few short 'youtube' films highlighting the MSc Forestry programme

MSc Tropical Forestry

We launched our MSc Tropical Forestry programme in 2012, from which more than 90 students have now graduated. The programme perfectly compliments our MSc Forestry, MSc Environmental Forestry and MSc Agroforestry & Food Security degrees. MSc Tropical Forestry also built on the existing links and strengths of our highly successful Erasmus Mundus forestry masters programmes: MSc Sustainable Forest Management ([SUFONAMA](#)) and MSc Sustainable Tropical Forestry ([SUTROFOR](#)). 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 Tour⁶ 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.

You can find short summaries of the modules and structure of the programme below. More details about individual modules, including overall aims, learning outcomes, assessments and the name of the module organiser can be found [here](#).

⁶ You can find out more about previous Tropical Forestry Study Tours on the links below:

2019 study tour: <https://www.bangor.ac.uk/natural-sciences/courses/distancelearning/documents/PagesfromCFANewsletterJune2020.pdf>

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

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

2015 study tour: 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: www.bangor.ac.uk/natural-sciences/news/natural-sciences-s-msc-forestry-students-head-to-uganda-15725

2012 study tour: www.bangor.ac.uk/natural-sciences/news/natural-sciences-s-msc-forestry-students-head-to-tanzania-9923

MSc Agroforestry & Food Security

In 2020, MSc Agroforestry & Food Security became the latest programme to join our distance learning provision. Although we have been running an Agroforestry MSc programme for full-time students for over 25 years, we are now in a position to offer this programme to students anywhere in the world.

Our agroforestry approach to food security aims to help meet human food needs from farming systems by taking an integrated view of the ecological, economic and social complexities of these systems. This course will help you gain the specialised education and interdisciplinary training required for a deep and practical understanding of agroforestry systems and their role in local and global food security.

Over the last 25 years, the course has attracted students from more than 30 countries and through our alumni and partners we have strong links with a wide variety of international, regional and national organisations in Africa, Asia, Europe and the Americas. Now with our distance learning provision, we hope to further build our international network and we look forward to you joining our graduates and helping us in our mission of improving natural resource management and food security throughout the world.

As with all our programmes, we hope that students will be able to join one of our study tours. For the MSc Agroforestry & Food Security programme most people will join either our Ireland Study Tour, or our Tropical Forestry Study Tour, depending on the nature of their funding and access to travel. The tours provide an opportunity to build on the friendships with fellow students and staff, to learn about new cultures, and to see the contribution of agroforestry systems and practices to people's livelihoods and food security.

You can find short summaries of the modules and structure of the programme below. More details about individual modules, including overall aims, learning outcomes, assessments and the name of the module organiser can be found [here](#).

PROGRAMME STRUCTURE

In common with all taught postgraduate degrees in the United Kingdom, our distance learning Forestry@Bangor MSc degree programmes 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.

MSc Forestry: September 2022 entry

Year	Semester 1 (Autumn)	Semester 2 (Spring)	Semester 3 (Summer)
2022-23	Silviculture	NRM <i>or</i> Social <i>or</i> Inventory <i>or</i> UK Study Tour	History
2023-24	Agroforestry <i>or</i> Urban	NRM <i>or</i> Inventory <i>or</i> Management Plan	Ecosystems <i>or</i> * NTFPs
2024-25	Dissertation		

**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.*

MSc Tropical Forestry: September 2022 entry

Year	Semester 1 (Autumn)	Semester 2 (Spring)	Semester 3 (Summer)
2022-23	Silviculture	Social	Tropical Study Tour
2023-24	Agroforestry <i>or</i> Urban	Inventory	NTFPs
2024-25	Dissertation		

MSc Agroforestry & Food Security: September 2022 entry

Year	Semester 1 (Autumn)	Semester 2 (Spring)	Semester 3 (Summer)
2022-23	Agroforestry	NRM <i>or</i> Social <i>Or</i> Ireland Study Tour ⁷	Tropical Study Tour ⁷
2023-24	Global Food Security	Ireland Study Tour ⁷ <i>or</i> NRM <i>or</i> Dissertation	NTFPs <i>or</i> Dissertation
2024-25	Agriculture <i>or</i> Silviculture <i>or</i> Urban <i>or</i> Social <i>or</i> Management Plan <i>and</i> Dissertation		

**We advise strongly against part-time students attempting more than one module in a single semester. If you have queries about this or are interested in a 2-year program, please contact us.*

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.

⁷ Note that students will attend a maximum of one study tour

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), therefore the first module for all students on the MSc Forestry and MSc Tropical Forestry programmes is Silviculture and the first module for students on the MSc Agroforestry & Food Security programme is Agroforestry Systems and Practices.

We monitor student progress carefully. When students experience problems, we manage these on a case by case basis. Effective communication between staff and students means problems can be solved.

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

Programme	CORE Modules	COMPULSORY Modules
Forestry	DDL-4202 Silviculture DDL-4999 Dissertation (MSc only)	
Tropical Forestry	DDL-4545 Tropical Study Tour DDL-4999 Dissertation (MSc only)	DDL-4202 Silviculture
Agroforestry & Food Security	DDL-4004 Agroforestry Systems DDL-4207 Global Food Security DDL-4999 Dissertation (MSc only)	

PROGRAMME CONTENTS

MSc Forestry

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

Module code	Full name	Short name
DDL-4202	Silviculture	Silviculture
DDL-4999	Distance learning Dissertation	Dissertation
DXX-4532	Forestry Field Course	Study Tour
DDL-4004:	Agroforestry Systems & Practices	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
DDL-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

CORE and COMPULSORY modules

DDL-4202 Silviculture [CORE] 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.



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

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. Please note that you do not need to decide at the application stage which modules sequences you wish to complete.



DXX-4532 Forestry Study Tour^{8*}. 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!

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 Management Planning covers the entire 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. Learn how to use GIS and how to characterise and accurately describe forests, woodlands and other habitats. Also find out about forest yield modelling, landscape design, woodland restoration, work programming, production forecasting, developing a cash flow forecast and more

⁸ 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.

**Prior to the global pandemic, this module was a compulsory requirement. It is now highly recommended, but no longer compulsory, giving students the flexibility to choose.*

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.

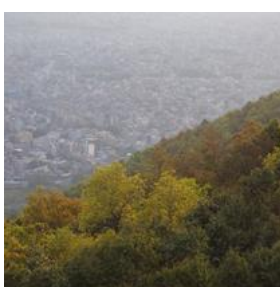


DDL-4201 Social Issues in Forest Management considers the ways in which social, cultural, political and economic factors influence the form and scope of forest management and governance systems and how these impact on the livelihoods and wellbeing of people around the world.



DDL-4004 Agroforestry Systems and Practices 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 practices 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.



DDL-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](#).

MSc Tropical Forestry

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

Module code	Full name	Short name
DDL-4004	Agroforestry Systems & Practices	Agroforestry
DDL-4202	Silviculture	Silviculture
DDL-4999	Distance learning Dissertation	Dissertation
DDL-4545	Tropical Forestry Study Tour	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
DDL-4536	Urban Forestry	Urban

CORE and COMPULSORY modules

DDL-4202 Silviculture [COMPULSORY] 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 Tour⁹ [CORE] 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, Tanzania and Uganda.

DDL-4999 Dissertation [CORE] - see below for details.

Optional 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.

⁹ See [here](#) for details of additional non-tuition fee costs associated with this module

DDL-4206 Sustainable Use of Non-Timber Forest Products

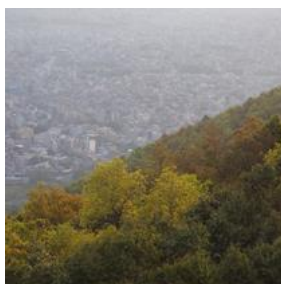
gives students an understanding of the ways in which forests may be managed to recognise the value and enterprise development potential of non-timber forest products (NTFP's). Due consideration is given to both production systems for 'wild' products which arise without human intervention and products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



DDL-4004 Agroforestry Systems and Practices 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 practices 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



DDL-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](#).

MSc Agroforestry & Food Security

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

Module code	Full name	Short name
DDL-4004	Agroforestry Systems & Practices	Agroforestry
DDL-4207	Global Food Security	GFS
DDL-4999	Distance learning Dissertation	Dissertation
DXX-4505	Natural Resource Management	NRM
DDL-4545	Tropical Forestry Study Tour	Tropical Tour
DXX-4532	Forestry Field Course	Study Tour
DDL-4206	Sustainable use of Non-Timber Forest Products	NTFPs
DDL-4202	Silviculture	Silviculture
DDL-4536	Urban Forestry	Urban
DXX-4530	Forest Management Planning	Management Plan
DXX-4042	Agriculture and Environment	Agriculture

CORE modules

DDL-4004 Agroforestry Systems and Practice [CORE] 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-4207 Global Food Security [CORE] takes a global perspective on food systems and food security and is core for the MSc Agroforestry and Food Security. The module aims to equip students with the ability to fully understand global food systems and their role in providing food security, and to be able to critically assess existing and future pressures and solutions. In this module we study a range of diverse factors that affect the global food system, such as its definition, key drivers of change, sustainably balancing supply & demand, governance & price volatility, hunger and nutrition.

DDL-4999 Dissertation [CORE] - see below for details.

Optional modules



DXX-4042 Agriculture & Environment reviews mainly UK and EU agricultural systems and practices, the scientific principles underlying them and their impact on the environment. It then considers the scope of relevant EU and UK government legislation and codes of practice aimed at minimising negative effects, including the role of agri-environment schemes and discusses their impact at the farm level. The role of different agencies involved is also explored.

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.



DXX-4532/ DXX-4538 Study Tour¹⁰. This module is a week-long study tour of a wide range of relevant field sites in Scotland / England / Wales / Ireland. 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-4545 Tropical Forestry Study Tour¹¹ 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, Tanzania and Uganda.



¹⁰ 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.

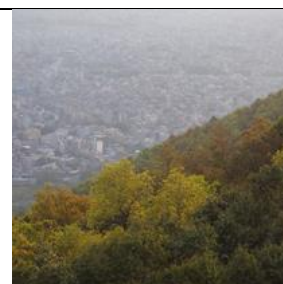
¹¹ See [here](#) for details of additional non-tuition fee costs associated with this module

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.



DDL-4202 Silviculture 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-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.



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. Learn about GIS, forest yield modelling, economics, landscape design and more.

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

¹² Prior to Covid-19, we offered an intensive residential week (site visits, seminars, lectures, workshops). We hope to do so again in future. Note that travel and subsistence are **not** included in the tuition fees.

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 neither a realistic nor 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 its own webpage. You are free to browse the reading lists for any module by exploring the hyperlinks above: reading lists are located by selecting the 'Resources' tab.

The dissertation

Undoubtedly one of the most challenging parts of any Masters programme, the 'dissertation' is also the most exciting and rewarding aspect for the vast majority of students. 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 (not compulsory), 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. 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.

ONLINE LEARNING

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. Despite the fact that these are 'distance learning' programmes, we offer students the chance to attend 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. We believe this is a very important element of a postgraduate forestry education and it is also partly why these programmes are professionally accredited by the ICF ([see below](#)).

Level of challenge

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

The list below includes examples of publications that our distance learning students have contributed to – many of these are a direct result of their studies at Bangor University.

[Maxwell, S.L., Cazalis, V., Dudley, N. et al. \(2020\) Area-based conservation in the twenty-first century. Nature 586, 217–227.](#)

[Gyamfi-Ampadu, E., Gebreslasie, M and Mendoza-Ponce, A. \(2020\) Mapping natural forest cover using satellite imagery of Nkandla forest reserve, KwaZulu-Natal, South Africa, Remote Sensing Applications: Society and Environment, 18, 100302.](#)

[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\(1\)](#)

[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.](#)

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

[Gray J, Brockington J, Hayward M.W, Walmsley J.D \(2016\) 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](#)

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

Time and effort required

We estimate 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** 15-20 hours a week of **focused** study time. There are support systems in place at Bangor University to help 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?
- How much of a perfectionist am I? Studying part-time whilst having other responsibilities (e.g. full-time work / family / other interests) means that applicants must be realistic about what they can expect of themselves.

Teaching, learning, assessment and support

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 and we make extensive use of MS Teams to enable this. 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, as well as view and listen to any ‘live’ events that they have missed.

****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 module is assessed.

Examinations

Some modules include exams. These are all 'open book' and take place during a 24-hour window, to allow for different time zones, to allow you to fulfil all your other commitments during a normal day (such as full-time employment, childcare, exercise, etc). These are all conducted online via the Blackboard virtual learning environment and submissions are subject to plagiarism detection software that ensures each and every submission is unique. 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.

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.

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 activities are organised within modules in order to monitor student progress, identify problems and provide guidance where needed, such as 'drop-in' sessions, seminars, discussion forums and more. 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 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.

Three Fundamental Policies for Success

Beyond the regulations, codes of practice, guidelines and procedures that govern all activities at Bangor University, we have three fundamental policies for students on these programmes:

1. ***Open door policy.*** Staff directly involved with these programmes are friendly and approachable and are always pleased to hear from students: you should feel free to contact relevant staff member(s) if you have questions, queries or concerns.
2. ***No news is good news policy.*** We view students on these programmes as equals: mature, capable individuals who are capable of studying at their own pace, on their own terms, following the teaching and learning that we provide and asking for help as and when required. If we don't hear from you, we assume all is well: this is why we have an 'open

door' policy, so you feel welcome to get in touch if and when you need to.

3. ***No hard feelings policy.*** If, for any reason, your studies are not going as well as you'd hoped or expected, please get in touch. We are 100% aware of the myriad of challenges that part-time students face and we are here to help, hence our 'open door' policy.

External 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 it will not apply for them on their behalf.

ENTRY REQUIREMENTS

Generally a 2(i) undergraduate Honours degree in a relevant science or technology subject is required, such as biology, horticulture, agriculture, law, economics, engineering, environmental science.

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. Such applicants *may* be considered for entry, if they can demonstrate to the University that their professional experience is equivalent to the completion of an academic degree. Applicants who are in this situation must also bear in mind that in order to succeed at postgraduate level, the investment of ***considerable additional time and effort*** (beyond our recommendations [above](#)) will be required to make up for this.

FEES & COSTS

Fees

Details regarding fees were correct at the time of publication of this document; [Tuition fees | Student Administration | Bangor University](#) should always provide the most up-to-date information regarding fees.

For UK residents (2022 entry)

£1,028 per 20 credit module

£3,084 for the 60-credit dissertation

Thus, for the Full Master of Science Programme (part time over 3 years) the total fee will be £9,250.

All other countries (2022 entry)

£2,006 per 20 credit module

£6,018 for the 60-credit dissertation

Thus, for the Full Master of Science Programme (part time over 3 years) the total fee will be £18,054.

The fees above apply to applications made for the academic year 2022/23 and slight increases may apply annually.

Bangor University currently offers fee-discount scholarships for EU students. Information can be found [here](#).

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.

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

SCHOLARSHIPS & FUNDING

We are aware that funding for a Master's programme may be a problem and we will do all we can to assist and advise you. Information from Bangor University is available [here](#). Although the University itself provides only limited 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 ¹³	www.confor.org.uk/
Postgraduate Loans (UK students)	https://www.gov.uk/postgraduate-loan
Department for International Development (DFID), UK	www.dfid.gov.uk
Commonwealth Scholarship Commission (CSC), UK	www.cscuk.org.uk

International organisations (list not exhaustive)

Although we don't maintain a database of scholarships provided by international organisations, in the past our students have been supported by:

African Development Bank, Abijan, Cote d'Ivoire	www.afdb.org
Asian Development Bank, Manila, Philippines	www.adb.org
Centre for International Forestry Research (CIFOR), Indonesia	www.cifor.cgiar.org
Food & Agriculture Organisation of the United Nations (FAO), Italy	www.fao.org
International Tropical Timber Organisation (ITTO), Yokohama, Japan	www.itto.int
International Union of Forestry Research Organisations (IUFRO), Austria	www.iufro.org
World Bank, Washington D.C., U.S.A.	www.worldbank.org

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.

¹³ Students 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.

PROFESSIONAL ACCREDITATION

Both MSc Forestry and MSc Tropical Forestry are accredited by the [Institute of Chartered Foresters](http://www.charteredforesters.org) (ICF) and worth [5 or 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 profession 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.



CAREER OPPORTUNITIES

Employability and changing career

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. Approximately 50% of the students who study with us with a view to changing to a forestry career succeed in doing so. Thanks to the part-time nature of the programme, some achieve this well before they have graduated.

There are an enormous range of opportunities to enhance 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):

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.

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.

Joanna 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.

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 investment specialist](#) with a leading forestry business before he graduated.

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.

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.

Jim (from England) registered with us in 2018, whilst working in hospitality, with no previous experience of forestry. During his first year on the programme, he successfully applied for a [12 month student placement](#) with [Pryor and Rickett Silviculture](#), which has since developed into a permanent Forest Manager position.

We see every student on our programmes as an individual and each makes their own path. Destiny and luck may play a small role, but a commitment to high quality study combined with characteristics such as being willing to take 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, it's fair to say that forestry is not investment banking – but according to many working in the profession, any shortfall is more than made up for by the quality of life and the huge satisfaction that such a career brings.

HOW TO APPLY

The programmes commence in mid-September 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**. If you apply after this deadline, we cannot guarantee you will be registered in time for the start. It can take several weeks from your application submission to receipt of a formal offer.

It should go without saying that the quality of your application, including appropriate reference(s), evidence of previous qualifications, information about your career and experience, clear personal statement devoid of grammatical, punctuation and spelling errors, goes a very long way towards increasing the likelihood of you receiving an offer.

We judge each and every application on its individual merits and if we have any concerns or questions regarding your suitability for the programme, you may be invited to interview (usually via MS Teams) before an offer decision is made.

We do not hold interviews for late applicants.

Making an application

Applications should be made online, by following the link below:

http://www.bangor.ac.uk/courses/postgrad/taught/apply_tought.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.

Start Date

There is one starting point each year (mid-September). Make sure if you wish to join us that you submit your well-prepared application no later than 31st July of that same year. Late applications may be considered but we cannot guarantee you will be registered in time for the start of your programme. This is because the peak application season is August, meaning that it can take several weeks for each and every application to be given the scrutiny required when considering suitability for MSc level study.

Any further questions?

Thank you for taking the time to look further into our distance learning programmes. If you are considering applying and have any questions remaining after you have read this document, we welcome you to [contact us](#).