

For further information, and to receive an undergraduate prospectus, contact Course Enquiries on 0800 652 5592 or email enquiries@myerscough.ac.uk Alternatively, download a copy from our website.

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**HIGHER EDUCATION - UNIVERSITY LEVEL COURSES** 

# ARBORICULTURE AND URBAN FORESTRY

- FOUNDATION DEGREE
- HONOURS DEGREE
- MASTERS DEGREE













# INTRODUCTION

Arboriculture involves all aspects of the care and management of amenity trees, so that people and trees can co-exist in a sustainable environment. The arboriculture industry is rapidly expanding, fuelled by growing awareness of the need for correct tree management and increased current public interest in environmental issues. This has led to a significant growth in demand for arboriculture specialists who can work alongside allied professionals such as planners, landscape architects and environmental consultants.

Arboriculture degree courses at University Centre Myerscough have been fully accredited by the Institute of Chartered Foresters. They integrate arboricultural science and technology with the business skills required to work at a strategic level within arboriculture. We work closely with employers and industry organisations to ensure that our students have the necessary skills and expertise to meet the requirements of this growing industry and for those who wish to become Chartered Arboriculturists.

University Centre Myerscough is at the forefront of developments in arboriculture and is regarded by many as the leading UK establishment for higher education in the subject. More than 10 years ago Myerscough College provided the UK's first Foundation Degree and the first Honours Degree in Arboriculture. It went on to develop the first online degrees and, most recently, the first Masters Degree in Arboriculture and Urban Forestry. It continues to set the international standard for higher education in arboriculture, with many graduates going on to make significant contributions to the industry.

# **RESOURCES**

- Experienced and highly qualified staff in a range of specialist fields
- Unrivalled Higher Education Arboricultural library
- Virtual learning environment with unique online resources
- Arboretum and woodland including The National Collection of Aesculus
- Extensive scientific laboratories and research facilities
- Close links with industry and research programmes
- Computerised tree inventory equipment
- · Specialist decay equipment
- Comprehensive range of tree climbing equipment
- 50 chainsaws and associated equipment
- Mobile arboriculture unit for off-site practical work
- · Indoor climbing facility

# STAFF PROFILES



We have a highly experienced team of staff who are well regarded in the industry and who regularly contribute to arboricultural events and research conferences. As well as the core team of staff our close ties with industry professionals also leads to an inspiring series of guest lecturers throughout your course.

Dr Duncan Slater has a Bachelor of Science degree in Forestry, a Masters in Resource Management, a BA (Hons) in Philosophy, a PhD in Plant Sciences and is a Chartered Forester. He has assisted on an afforestation project in the expanding deserts of Southern Spain, surveyed and researched the tree plantings of historic parks in Britain and has worked as a Tree Officer for three UK Local Authorities. His research interests include natural bracing in trees, tree biomechanics and urban forest assessment. Duncan is the course tutor for the MSc Degree programme in Arboriculture and Urban Forestry.



Julie Smith has a BA (Hons) in Natural Sciences from the University of Cambridge, a Research MPhil in Agricultural Botany from the University of Nottingham and a Post Graduate Certificate in Education. She has experience working in a variety of environmental and plant related jobs. This included several years of biological survey work with the Derbyshire Wildlife Trust and a spell as the education officer for the Mersey Basin Trust, a North West based charity. Julie is a Course Tutor for online and on-campus BSc (Hons) Arboriculture and Urban Forestry and is a specialist Plant Science tutor to Arboriculture students.



Kelly Stewart has a BA (Hons) in Business Management, FdSc in Arboriculture and Post Graduate Certificate in Education. With a background in Business Management as well as Arboriculture her interests lie in helping arboriculture students develop their professional standards, as witnessed within other industries. Previous industry experience includes tree inventories and assessments, as well as research data collection with Bartlett Tree Expert Laboratories. Kelly is a lecturer across a range of Greenspace programmes and Course Tutor for the full time Foundation Degree in Arboriculture and Tree Management at Myerscough.

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# STAFF PROFILES

**Dr Irene Weir** is a plant scientist who gained a BSc (Hons) in Molecular Plant Biology followed by her PhD at the University of Leeds investigating floral organ development in Antirrhinum (Snapdragon). With experience in retail horticulture, Irene is the Course Tutor for students on the horticultural programmes and is a specialist Soil Science and Plant Biotechnology tutor.

**Dr Andrew Hirons** is a Senior Lecturer in Arboriculture at University Centre Myerscough, UK. He began his career in arboriculture as a climbing arborist and plant health care technician, gaining experience in Australia, America and the UK before joining the arboriculture department at Myerscough College in 2004. He teaches on the full-time and online higher education courses, delivering modules relating to tree biology and tree management. His current research activity is motivated by the need to create resilience in our urban forests, and is focused on using plant traits to inform species selection for urban environments. He is the coauthor of Applied Tree Biology, published by Wiley Blackwell.

Alex McKelvie graduated from Myerscough College in 2010, with a Foundation Degree in Arboriculture. Prior to that, Alex spent more than ten years working in arboriculture for a Local Authority. His specific roles included that of a climbing arborist, a tree surveyor using GPS/GIS, undertaking tree inspections and urban forest management. His specialism includes an in-depth knowledge of arboricultural practices and health and safety legislation, in relation to safe working in the industry. He is currently studying a BA(Hons) in Education and is a qualified internal quality assurer. Alex is a much respected module tutor at Myerscough College, teaching across a range of higher education and further education programmes and he is Assistant Head for Further Education in Greenspace and Creative Design.

Lara Hurley has a BA in Landscape Studies from Heriot-Watt University, an MSc in Landscape Ecology, Design and Management from Wye College and a PGCE. She began teaching at Otley College in 1996, running the BSc in Environmental Landscape Management. After a spell of self-employment as a garden designer and writer, she now teaches all manner of landscape-related subjects at University Centre Myerscough as well as being the Assistant Head for HE in the Greenspace and Creative Design Department.









# STUDENT PROFILES

Increasingly employers are requiring graduate level qualifications as the professional standard in arboriculture is raised. University Centre Myerscough graduates are highly sought after in the industry and can be frequently found in leading roles. The national and international recognition of our courses provide diverse employment opportunities. A very high percentage of our graduates secure employment in their chosen field, offering a great return on the investment you make in your education.





Ruthe Davies I was unemployed for two years before moving into arboriculture. I started the BSc (Hons) in Arboriculture at Myerscough. I got my practical qualifications in the first year and then worked part-time as a tree surgeon alongside my studies. When I graduated and moved to Edinburgh to take up my current job as a tree officer for the Council. This role involves management of public trees, disease control and running a small tree nursery. The course at Myerscough gave me the knowledge and skills I needed for the career I wanted in public sector urban forestry.

Matthew Wells I am the Urban Forester for the City of Santa Monica in California. I decided to embark on a MSc Arboriculture & Urban Forestry degree to strengthen my knowledge and expertise. I found the course at Myerscough to be an excellent blend of research, theory and practical examples.

Since graduating from Myerscough I have found that I am far better equipped to deliver a systematic, planned and sustainable urban forestry program to the community I serve. Developing my knowledge and analytical research skills at Myerscough has also given me the confidence to present multiple papers at urban forestry conferences throughout the world. I am very grateful for the Myerscough learning experience.



Higher Education teaching centre at University Centre Myerscough.

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Tom Robinson I first got started with career in Arboriculture by embarking on a level 3 course at Myerscough before spending several years as an arborist, climbing and performing tree surgery from the Isle of Man to Australia. Returning to Myerscough in 2014 to complete an FdSc in Arboriculture, I rediscovered my passion for learning and thanks to the staff at Myerscough I was inspired to top up to BSc (hons). Now I am into my tenth month of a Graduate Arboricultural Consultant role at The Environmental Partnership (TEP) based in Warrington and will always look back at my days at Myerscough with fondness, gratitude and appreciation.



Imogen Mole I started working at Norwich City Council having completed the Foundation Degree in Arboriculture at Myerscough. I have progressed from Arboricultural Technician to Arboricultural Officer and after two years at the Council I took overall responsibility of the management of the Council's tree stock, two technical officers and the arboricultural maintenance contract. I have helped to implement more robust and efficient ways of work, reviewed the tree strategy, co authored a tree safety policy and oversaw the re-let of our maintenance contract. The role is challenging but very rewarding. I feel very lucky to have the chance to be custodian of this historic and beautiful tree stock and I am confident that with every small step forward we take we can help to protect and enhance our arboreal heritage in the city.



# STUDY ONLINE

In addition to the full-time study option, Myerscough offers the FdSc, BSc (Hons) and MSc programmes as part-time online courses. This enables students from a wide geographic area (including many from overseas) to gain a HE qualification without having to live in close proximity to the College. These courses continue to grow in popularity and will commence with a new cohort of students in September. All our on-line courses follow a similar structure and curriculum to the full-time courses in this prospectus, using our web based learning environment Myerscough Bloom. More information about the online courses, and the Canvas web-based learning environment is available on the College website.



# FOUNDATION DEGREE ARBORICULTURE (FdSc) AND TREE MANAGEMENT

Available for full-time study and part-time online study

The Foundation Degree is ideal for anyone new to arboriculture who wants to work in this rewarding and exciting industry. It is also a popular option for those people currently working in the industry who want to progress to management positions. Employers look for a combination of management and technical skills in the science and technology of tree care. This course integrates both these aspects to ensure that you are fully equipped for work at management level.

Students learn how to survey and inspect trees, diagnose decay and integrate tree biology and soil science into tree care and management strategies. A focus is also given to tree production and establishment practices highlighting a range of current and innovative new practices to help meeting the challenge of planting trees in urban locations. The course will also introduce you to tree law, tree protection, safe working practices and the social, environmental, economic and aesthetic benefits of trees. A choice of option modules allows you to develop your skills in either research methods and data analysis or in business and entrepreneurship.

LIST OF MODULES (full-time route)

## Year 1

Arboricultural Practises will introduce you to method statements and work specifications, and the use of standards and best practice. Tree survey data will be collected and analysed using the most up to date methods including GIS/GPS technology.

Essential Plant and Soil Science will look at the biochemistry and physiology of plants and how these are affected by the plants environment. In particular it will consider the characteristics of the soil environment and how these impact on plant growth and land use. The mechanisms by which plants can express the genetic information coded in their DNA and pass this on to the next generation will also be explained.

Academic and Vocational Skills provides you with first-hand work related experience of a range of practical and technical skills as well as developing your ability to present information in a suitable style. You will be encouraged to evaluate your own personal development. The module will provide the foundation for further development of individual skills through independent study in the 'Industry Project' module.

Applied Tree Biology will develop fundamental biological knowledge of trees and examine how this relates to the management of tree crowns and root systems. This will be achieved by exploring the anatomy and morphology of trees as well as the relationship they have with their environment.

Dendrology provides students with the necessary botanical skills to be able to identify a mixture of trees, shrubs, herbaceous plants and fungi of significance in arboriculture. The history of plant taxonomy and current developments in this area, including the study of plant introductions, botanical gardens and arboreta will be explored. The qualities and character of particular tree species, including their ecology, form, function and cultural associations will be studied in detail.

Tree Production, Establishment and Biosecurity provides a comprehensive introduction to current industry standards in the production and planting of trees as well as solutions to the problems faced when planting and establishing trees in challenging locations. Pests and diseases will be discussed along with an overview of biosecurity issues including the nature of the threats posed by alien species, how to reduce infection and minimise the spread of tree pathogens.



# FOUNDATION DEGREE (FdSc) ARBORICULTURE AND TREE MANAGEMENT

# Year 2

Tree Management and the Law will introduce methodology for the assessment of tree condition and the interpretation of biological, structural, environmental and historical data. Techniques for preventing or mitigating arboricultural impacts will be evaluated and their merits debated. Emphasis will be placed on the development of reasoned argument to support tree management decisions. Current mapping technologies to accurately represent trees in relation to their local environment will also be used.

Pests. Diseases and Weeds delivers the basic diagnostic skills, pathology knowledge and understanding of disease management expected of professional practitioners in the areas of arboriculture, horticulture or turf grass. The module will introduce the range of organisms that can damage plants and then explore the characteristics of each category of organism in some detail. Current theories in pathology and pest management will be explored and a range of case studies, where pathological theory can be related to specific pest and disease situations will be investigateds.

Industry Project uses the skills developed in earlier modules to identify a suitable industry related project. Through planning, executing and then reporting on the project outcomes, you will be encouraged to use the industry project to develop your own personal skills as well as professional working relationships with industry contacts. Theories and skills of project management will be developed through supporting lectures.

Environmental Plant Physiology builds upon the knowledge of plants gained in previous plant science modules to extend your understanding of how plants interact with their environment and relate this to the management practices employed in industry. It will also consider how plant physiology is influenced by changes in environmental conditions, such as those associated with climate change, and how changes



in a plant's environment lead to changes and adaptations to plant processes that allow them to survive in a range of different environments.

Woodland and Veteran Tree Management will give you an insight into how woodland management practices vary according to the objectives of management, and draw up your own woodland management plan to suit a defined set of management objectives. The veteran trees that enhance both our rural and urban landscapes also need to be managed appropriately. The module aims to give you an understanding of the value and appropriate management of these valuable

Research Methods (option module) enables you to develop a scientific approach to problem solving, which can act as a firm foundation for appraising research throughout your careers. You will gain an understanding of appropriate and inappropriate experimental design and this will enable a critical evaluation of investigational methodology and so enable you to both conduct, and evaluate the quality of investigations in your area of study.

Business and Entrepreneurism (option module) will encourage you to investigate the entrepreneurial process of developing a start-up venture. It will then consider key elements of business such as marketing, market analysis and finance to aid the production of a sustainable business plan.



differs slightly on the online programme

### Year 1

- · Arboricultural Practices
- · Essential Plant and Soil Science
- · Academic and Vocational Skills
- Applied Tree biology

# Year 2

- Dendrology
- Tree Production, Establishment and Biosecurity
- · Pests. Diseases and Weeds
- · Tree Management and the Law

# Year 3

- · Industry project
- · Environmental Plant Physiology
- · Woodland and Veteran Tree Management
- · Research Methods

· Business and Entrepreneurship

# APPLICATION INFORMATION

# Duration:

2 years full-time.

3 years part-time online.

# How To Apply:

Full-time students. UCAS Higher Education application service. See www.ucas.com/apply

Part-time students. Applications can be made online, directly from the factsheet page on the Myerscough website.

# UCAS Code: D518.

Not required for online applicants.

# Entry requirements:

A minimum of 48 UCAS tariff points.

For more information visit:

www.ucas.com/ucas/tariff-calculator

# Assessment:

Technical reports, portfolios, exams, individual presentations, laboratory/practical reports, research posters and extended project work to reflect industryrelated documentation and practices.

# Progression:

To the final year of BSc (Hons) Arboriculture.

# Career opportunities:

Climbing Arborists, Contract Managers, Local Authority Tree Officer, Planning and Development, Commercial Tree Care Manager, Arboretum Officer, Tree Surveyor, Arboricultural Research or Instructor.







# BSc (Hons) ARBORICULTURE AND URBAN FORESTRY

The BSc (Hons) Arboriculture and Urban Forestry programme is focused on delivering contemporary approaches to tree management, informed by research. The course has been designed to meet the needs of both our students and the arboricultural community we serve. As a result we have a high proportion of graduates who go on to make a meaningful contribution to tree management here and internationally.

Plant and soil science underpins many decisions on tree management. You will learn about tree biology and tree pathology, identify, survey and inspect individual trees as well as how to think strategically about the management of the urban forest. You will become familiar with current arboricultural research including work being carried out at University Centre Myerscough.

An integral and exciting part of this course is the opportunity to conduct your own piece of original research in an area of arboriculture that interests you. This not only allows a real area of expertise to be developed but gives further credibility as you seek employment.

If you want to develop your skills and expertise further, you can progress onto University Centre Myerscough's unique MSc in Arboriculture and Urban Forestry.

LIST OF MODULES (full-time route)

## Year 1

Arboricultural Practices will introduce you to method statements and work specifications, and the use of standards and best practice. Tree survey data will be collected and analysed using the most up to date methods including GIS/GPS technology.

Essential Plant and Soil Science will look at the biochemistry and physiology of plants and how these are affected by the plants environment. In particular it will consider the characteristics of the soil environment and how these impact on plant growth and land use. The mechanisms by which plants can express the genetic information coded in their DNA and pass this on to the next generation will also be explained.

Ecology This module provides an introduction to a range of key concepts in ecology, enabling you to gain an understanding of ecological issues that vou can then relate to the study of trees. woodlands and urban forestry. You will study the concepts of ecology at a range of scales from ecosystems to individuals and look at issues of biodiversity and conservation.

Applied Tree Biology will develop fundamental biological knowledge of trees and examine how this relates to the management of tree crowns and root systems. This will be achieved by exploring the anatomy and morphology of trees as well as the relationship they have with their environment.

**Dendrology** provides students with the necessary botanical skills to be able to identify a mixture of trees, shrubs, herbaceous plants and fungi of significance in arboriculture. The history of plant taxonomy and current developments in this area, including the study of plant introductions, botanical gardens and arboreta will be explored. The qualities and character of particular tree species, including their ecology, form, function and cultural associations will be studied in detail.

Tree Production, Establishment and Biosecurity provides a comprehensive introduction to current industry standards in the production and planting of trees as well as solutions to the problems faced when planting and establishing trees in challenging locations. Pests and diseases will be discussed along with an overview of biosecurity issues including the nature of the threats posed by alien species, how to reduce infection and minimise the spread of tree pathogens.

# Year 2

Tree Management and the Law will introduce methodology for the assessment of tree condition and the interpretation of biological, structural, environmental and historical data. Techniques for preventing or mitigating arboricultural impacts will be evaluated and their merits debated. Emphasis will be placed on the development of reasoned argument to support tree management decisions. Current mapping technologies to accurately represent trees in relation to their local environment will also be used.

Pests. Diseases and Weeds delivers the basic diagnostic skills, pathology knowledge and understanding of disease management expected of professional practitioners in the areas of arboriculture, horticulture or turf grass. The module will introduce the range of organisms that can damage plants and then explore the characteristics of each category of organism in some detail. Current theories in pathology and pest management will be explored and a range of case studies, where pathological theory can be related to specific pest and disease situations will be investigated.

Trees in the Landscape Trees are important culturally and environmentally. The history of trees in landscape and how they relate to our landscape character will be discussed in this module. You will also evaluate the design of landscapes from forestry plantations to urban infrastructure. Landscape planning policy will be appraised and vou will develop your site planning, design and interpretation skills by synthesising tree planting schemes in a range of situations.

Environmental Plant Physiology builds upon the knowledge of plants gained in previous plant science modules to extend your understanding of how plants interact with their environment and relate this to the management practices employed in industry. It will also consider how plant physiology is influenced by changes in environmental conditions, such as those associated with climate change, and how changes in a plant's environment lead to changes and adaptations to plant processes that allow them to survive in a range of different environments.



Woodland and Veteran Tree Management will give you an insight into how woodland management practices vary according to the objectives of management, and draw up your own woodland management plan to suit a defined set of management objectives. The veteran trees that enhance both our rural and urban landscapes also need to be managed appropriately. The module aims to give you an understanding of the value and appropriate management of these valuable

Research Methods (option module) enables you to develop a scientific approach to problem solving, which can act as a firm foundation for appraising research throughout your careers. You will gain an understanding of appropriate and inappropriate experimental design and this will enable a critical evaluation of investigational methodology and so enable you to both conduct, and evaluate the quality of investigations in your area of study.

> Available for full-time study and part-time final year online study



# BSc (Hons) ARBORICULTURE AND URBAN FORESTRY

# Year 3

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Research Project (double module) will provide you with an opportunity to carry out a piece of independent research into a topic that interests you. You will start by clearly defining a problem to be solved, and then design and undertake an original investigation, developing skills in project management. The reporting of your study will develop skills in critical analysis and communication in a coherent and critical style.

**Urban Forest and Greenspace Management** will consider the development of our current urban forests and consider ways that they can be further developed to increase the benefits supplied to future generations. The involvement of all stakeholders in the urban forest will be considered from the role of central and local government in strategic planning, to the importance of community involvement and the role of private and voluntary sectors in partnership working.

Applied Plant Science and Biotechnology will review recent advances in plant breeding, including plant tissue culture and molecular techniques, and allow you to consider their application within your specialist field of study.

Management of Tree Risk will give you the skills necessary to manage risk from storm damage or structural failure in populations of trees. You will learn how to apply the principles of tree biomechanics, zoning and hazard abatement to aid management decisions. Emphasis will be placed on the development of reasoned argument to support a tree management decisions.

Greenspace Professional Practice will enable you to build upon the principals of strategic planning and corporate social responsibilities to address business auditing tasks, such as re-branding and remodelling, incorporating company policies; planning; project management; communication and negotiation with clients. You will also critically analyse a range of contemporary issues within arboriculture and associated green industries.





Students on the two-year part-time final year entry programme follow this profile of module delivery:

# Year 1

- Applied Plant Science and Biotechnology
- · Management of Tree Risk

## Year 2

- Urban Forest and Greenspace Management
- · Research Project
- Greenspace Professional Practice

Applicants wishing to top-up from a Foundation Degree or HND to the final year of the BSc (Hons) programme will need to demonstrate relevant knowledge to enable them to progress smoothly onto the programme. Those applicants whose previous programme of study has not covered research skills and/or plant biology at the appropriate level will be asked to complete the bridging modules, 'Research Methods' and/or 'Environmental Plant Physiology' which may be taken during the summer prior to entry onto the course. The modules can be studied on-line.

# APPLICATION INFORMATION

### **Duration:**

3 years full-time.

# How To Apply:

Full-time students. UCAS Higher Education application service. See www.ucas.com/apply

Part-time students. Applications can be made online, directly from the factsheet page on the Myerscough website.

# UCAS Code: D514.

Not required for online final year entry applicants.

# Entry requirements:

A minimum of 104 UCAS tariff points for entry to the full-time programme. For more information visit: www.ucas.com/ucas/tariff-calculator

# Assessment:

Technical reports, portfolios, exams, individual presentations, laboratory/practical reports, research posters and extended project work to reflect industry-related documentation and practices.

# Progression:

MSc/PGDip Arboriculture and Urban Forestry.

# Career opportunities:

Local Authority Tree Officer, Central Government Departments and Agencies, Planning and Development, Commercial Tree Care Manager, Arboretum Curator, Tree Surveyor, Consultancy Practice, Expert Witness, Arboricultural Research or Lecturer.

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modules can be studied on-line.



# MSc/POSTGRADUATE DIPLOMA ARBORICULTURE AND URBAN FORESTRY

This ground-breaking course will extend students' existing expertise to the full range of skills and knowledge of social, technical and strategic tree management issues now required by senior positions in the industry.

Arboriculture is the science and practice of tree care and management. Urban forestry involves greening our towns and cities to create a healthy and sustainable urban environment.

Together, these two closely related disciplines have a vital role to play in creating a liveable environment for citizens around the world. The numerous environmental, economic and social benefits of urban trees and woodlands can dramatically improve the quality of urban life. The need to establish, manage and regenerate the urban forest resource is therefore being addressed by policymakers and practitioners in many countries worldwide.

Although the benefits of urban trees and green infrastructure are now widely recognised, there are few specialist qualifications in urban forestry. This taught MSc in Arboriculture and Urban Forestry takes a multidisciplinary approach to equip students with the full range of skills and knowledge now required by the industry. The full-time course starts in September for one calendar year, the part-time/online route will usually take three years.

The course structures are designed to investigate a wide range of tree management and urban greening issues. The philosophy will emphasise the need to promote a strategic approach to tree management and urban greening and the significant contribution trees can make to urban life. Related disciplines such as landscape management, urban planning and social issues will be studied within the context of Arboriculture and Urban Forestry to develop a truly multi-disciplined approach to urban tree management and urban greening. Site visits and seminars led by practitioners are integral to the course. The teaching is delivered by leading experts in their field.

The dissertation is a student initiated research project that is classed as a triple module. All other modules are single modules. A Postgraduate Diploma will be awarded to students who successfully complete all modules apart from the Research Methodology & Dissertation modules.

The MSc course is accredited by the Institute of Chartered Foresters and gains the maximum 6 points towards Chartered Arboriculturist or Chartered Forester status. The Postgraduate Diploma gains 5 points.

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Available for full-time study and part-time online study

**Urban Forestry and Green Infrastructure** The critical importance of green infrastructure (GI), and urban trees as a subset of GI, is emphasised in this module that investigates the history of urban forestry, considers the component parts of urban forests, evaluates tree and urban forest strategies and debates current trends and innovations in urban greening and urban forest assessment.

The Science of Tree Production and Establishment One cannot have a sustainable urban forest without establishing a new generation of trees. In the light of scientific advances in the areas of tree production and establishment, this module casts a critical eye not just over current practice but also the bigger issues that may affect provision of new tree planting, particularly focussing on biosecurity and climate change as threats to our next generation of urban trees.

Trees and Urban Planning The balance between the competing needs for urban development and for the creation or preservation of urban greenery is a key area of study in this module focussed on planning policy and legislation in relation to urban forestry. Students will develop their professional opinions on tree protection legislation, current planning policy and how urban areas can be designed to incorporate sufficient green infrastructure.

Tree Physiology under Abiotic and Biotic Stresses Many cities have recently undertaken basic assessments of the benefits of their urban forests. The science behind these assessments is scrutinised in this module, with study of the causes of stress to urban trees, from pests and pathogens to storms and climate change. Stressed trees give far fewer benefits to urban areas, so a practitioner's recognition of stress symptoms and ability to prescribe solutions to improve a tree's physiological performance are emphasised in this module.

Research Methodology and Design This module engages students with the essential personal, organisational, management, theoretical and statistical skills needed to carry out research work at the Postgraduate Level. Students explore research philosophies, the research process and experimental design, and then look to apply these in a professional context. Students will also develop their skills in advanced data organisation, presentation, dissemination of research and problem solving.

Tree Risk Management Having mature trees in urban areas necessarily comes with some risks to person and property which practitioners have a duty to manage. This module engages students with the latest scientific research relating to assessing the structure of trees, the risks from trees and methods of risk mitigation. Students evaluate current practices and identify potential innovations in this strongly debated area of urban forest practice.

Masters Research Project This research project is a triple module and students, working with their appointed supervisors, design and conduct a substantial piece of independent research relating to trees. Undertaking this research refines students' skills in project planning, project management, critical thinking and the communication of science.

Students can choose to write either a traditional thesis or submit an academic paper and associated article. Students of this MSc course are strongly encouraged to undertake research that addresses a significant issue in arboriculture and urban forestry and to produce work to the standard needed to be published in an academic journal.

# APPLICATION INFORMATION

### Duration

- MSc 1 calendar year full-time.
- · MSc 3 years part-time.
- PGDip 1 academic year full-time.
- PGDip 2 years part-time.

## How to Apply:

Full-time and part-time students. Applications can be made directly to College. Application forms can be downloaded from the College website.

Part-time students. Applications can be made online, directly from the factsheet page on the Myerscough website.

Entry requirements: Successful completion of a BSc/BA (Hons) degree in a related subject such as Forestry, Arboriculture, Landscape, Horticulture, Ecology and Conservation, Environmental Management or Planning. A wide range of other subjects in the social & biological

sciences will also be considered. Prospective students should have attained a minimum of a 2:2 degree classification.

Alternatively, a relevant degree level qualification, such as the UK's Professional Diploma in Arboriculture. Other degrees and professional qualifications may be considered on an individual basis, particularly where these are reinforced with appropriate industrial experience. Applications from non-UK students will be welcomed.

**Assessment:** Assignments, dissertation, examinations, essays and reports.

Progression: PhD

Career opportunities: Local Authority Tree Officer, senior positions in Central Government departments, Commercial Tree Care Companies, Consultancy Practices, Planning and Development, Expert Witness, Lecturer or Researcher.

