



MSc in Sustainability, Enterprise and the Environment

Smith School of Enterprise and the Environment, University of Oxford

“MSc SEE equips current and future thought-leaders and decision-makers with the rigorous academic knowledge and applied skills to lead impactful change within enterprise towards net-zero and sustainable development for all.”

Dr Laurence Wainwright, Course Director MSc SEE



MSc SEE

One of the newest courses in the world's top university, the MSc in Sustainability, Enterprise and the Environment (SEE) addresses two fundamental challenges of our time: making the transition to a zero-carbon and environmentally sustainable economic model, while simultaneously enabling sustainable development for everyone, poor and rich alike.

The course views these challenges through the lenses of finance, economics, enterprise and the law – the Smith School's core strengths.

This full time 12-month course is designed for current and future decision-makers who want to:

- Deepen expertise in economics, finance and business
- Broaden understanding of the scientific, technological and cultural aspects of climate change and sustainable development and
- Learn how to lead impactful change within enterprise.

The course is suitable for both recently completed undergraduates and graduates, as well as early- to mid-career professionals.



“We are at a pivotal moment in history when fundamental questions are being asked about the interactions between societies, economies and the natural environment, and the value structures underpinning these interactions. Through MSc SEE, we will equip you to understand and accelerate the transition to a zero-carbon, environmentally sustainable economic model.”

Professor Cameron Hepburn, Academic Director MSc SEE and Director of the Smith School

Leadership

Leadership, grounded in learning, curiosity and entrepreneurship, will be more important than ever in rebuilding the post-Covid-19 world. Leaders of enterprise will need to be increasingly resilient and able to cope with previously unseen levels of complexity and uncertainty. You will also need to lead with empathy and emotional intelligence, and foster diversity and inclusion through deeper levels of socio-cultural awareness.

Equipping the next generation with the cutting-edge research and training needed to drive change has always been central to the Smith School's mission. But now it takes on an even greater meaning as the cement of societal structures is temporarily pliable, and there is a genuine opportunity to change things for the better.

The course provides you with both the academic knowledge and practical skills needed to thrive in the post-pandemic landscape and to play a leading role in reorienting the relationship between enterprise, society and the natural environment.

It is taught by world-leading experts at the top-ranked School of Geography and the Environment, experts at the forefront of research and practice across multiple disciplinary domains. It draws on expertise from across the University of Oxford, including the Saïd Business School, the Blavatnik School of Government, the Oxford Department of International Development, and the Department of Economics.

We define leadership as the science and art of motivating, organising, encouraging and inspiring a group of people toward a unified, compelling purpose. It is the ability to apply refined judgement in uncertain situations, and to influence others to follow.

The shift to net-zero, sustainable development (NZSD) will require bold decisions and genuine leadership in reformulating the relationship between enterprise, society and nature – business is both a cause of, but also a solution to, many of the interconnected problems we face. While we acknowledge the seriousness of the current situation, NZSD presents huge opportunities for enterprise: creation of new markets and wealth; shared values which reward entrepreneurship and initiative whilst benefiting the planet; and opportunities for businesses to evolve sustainably.

Our course will present you with challenging information and viewpoints that may take you out of your comfort zone. We certainly won't provide all the answers to the profound issues that the world faces in getting to NZSD. We will, however, equip you with the skills and expertise to become the future leaders of change. And hopefully you will learn to welcome the friction between different stakeholders as a critical opportunity to enable rapid global transformation.

We can prepare you for leadership: ultimately, it is up to you to make it happen.

Getting involved

An **Enterprise Forum**, involving expert practitioners, aimed at equipping students with the skills and applied knowledge to lead change in organisations, or to start their own enterprise

Workshops and simulations such as innovation workshops, hackathons, and live case studies with enterprise partners as part of the core modules

Field trips to companies, including an induction field trip introducing key issues, several shorter trips throughout each term and a week-long capstone at the end of the second term

Engagement with enterprise partners on dissertation projects

One-on-one career mentoring with the Oxford network, based on students' interests and backgrounds.

Enterprise

A focus on enterprise – public and private – and on practical application are defining features which run through the course.

The Enterprise Forum

We know that enterprise will play a pivotal – perhaps decisive – role in achieving the transition to a zero-carbon and environmentally sustainable economic model. The Enterprise Forum is a bold approach to reimagine how the enterprise-university course relationship works by seeking to create genuine working partnerships that produce value for both enterprise and students.

The defining features of the model are three-fold:

- Purpose and impact driven, guided by clearly defined challenges associated with net-zero and sustainable development
- Demand driven, based on co-production, sustained and strategic dialogue with enterprise partners about the major challenges and needs they face, as well as the 'demand' for innovation, knowledge, and skills
- Practical and realistic in terms of small, targeted actions and inputs – by both students and enterprise partners – that can produce outputs.

The Enterprise Forum provides students with the opportunity to put their academic knowledge and skills into context and practice by working on meaningful environmental and social change through enterprise. The forum includes activities such as development of leadership skills, mentorship with business fellows, case-based learning, guest lectures and seminars on personal effectiveness. It acts as an incubator for dissertation topics. At the same time, the forum enables enterprise to tap into the ideas and innovations of the next generation.

The forum consists of weekly sessions, led by expert practitioners discussing different topics related directly to achieving the net-zero and sustainable development (NZSD) challenges.



Course design

The course objectives are:

- To develop a critical understanding of the nature, drivers and trajectories of climate change and economic development.
- To examine the role of enterprise and its relationship to environmental and development challenges across a range of risks, technological innovations, investment opportunities and policy responses.
- To enable students to integrate and apply their interdisciplinary knowledge, advanced methodological skills and science-policy-enterprise network to foster innovation and scalable progress toward net-zero and sustainable development.

The programme learning outcomes will equip students with knowledge, skills and networks to understand:

- The nature, science and trajectories of the net-zero and sustainable development challenge (NZSD).
- The scope and limits of innovation and the different roles of enterprise – public and private – in effective responses to NZSD.
- The data and methods required to measure progress to NZSD and attribute impact, and a critical appreciation of data.
- The economic frameworks, methods and tools to apply to measure the NZSD problem and accelerate progress towards it.



- The broad range of socio-technical drivers that can accelerate progress to NZSD.
- The theory and practice of sustainable finance and investment, and how to engage with sector stakeholders.
- The drivers reshaping economical social and environmental relationships.
- The scope for markets to spur conservation and investment.

In addition, the course aims to equip graduates with a range of personal and professional skills, and in particular with leadership competencies.

The course combines directed teaching, self-regulated learning, structured engagement, formal assessment, and regular interaction with practitioners.



The course objectives are addressed through:

8 core modules

2 electives

1 dissertation

Course structure

Module 1: Systems change, enterprise, and innovation

- Demonstrate a comprehensive understanding of the role of private enterprise (business) as a cause of – but also solution to – social and environmental wicked problems such as climate change.
- Determine opportunities and challenges for new forms of collaboration and innovation between public, private and non-governmental organisations.
- Critically analyse the past, present and future of business models and value chains and the implications of models for getting to net-zero, sustainable development.
- Account for the multiple and often conflicting interests between private enterprise and their stakeholders; appreciate the role of incentive and disincentive structures as a medium for changing the behaviour of enterprise.
- Critically situate the place of private enterprise within broader systems and explain the interdependencies between private enterprise, society and nature.

Module 2: Methods and data: measuring progress and attributing impact

- Critically analyse the role of the scientific method of inquiry in the production of knowledge and evaluate how and why scientific data is used by different actors within society.
- Understand and apply qualitative and quantitative methods to measure progress and attribute impact pertaining to NZSD.
- Comprehend the strengths, weaknesses and limitations of different methodological approaches and demonstrate sound judgement in selecting and applying the optimal approach to the given context.
- Apply a critical lens to data and data-driven methods – including biases – and analyse how data is used in decision-making pertaining to NZSD.
- Understand, and apply in the context of NZSD, advanced techniques in data science, complexity science and A.I.

Module 3: New environmental economic thinking

- Identify the limitations of conventional economic models for addressing NZSD.
- Integrate new thinking “outside” of conventional economics (e.g. complexity theory, climate science) into economic and policy analysis.
- Become comfortable using analytical frameworks that capture multiple equilibria, coordination, complementarities, lock-in, path dependence, and tipping points.
- Draw insights from complex datasets such as patent, social, and export networks.
- Acquire the ability to go from real-world problems with these features to possible solutions.

Module 4: Spaces, infrastructure and technology for net-zero, sustainable development

- Understand and contextualise disruptive drivers that are re-shaping economic, social and environmental relationships.
- Engage critically with these issues through the lens of infrastructure and technology and debate the implications of globalisation and urbanisation for NZSD.
- Develop an applied understanding of constructive responses to these disruptive drivers.



Module 5: Sustainable finance

- Develop sufficient understanding to navigate and critically analyse the key aspects and developments in sustainable finance and investment.
- Engage critically with systems and theories in sustainable finance and investment.
- Consider how to translate knowledge into strategies for effective engagement with the financial sector.



Module 6: Socio-technical interventions and sustainable law

- Compare and critique frameworks for contextualising, understanding and applying the dynamics of socio-technical transitions and interventions that might drive and accelerate change towards NZSD.
- Engage critically with this goal through the lens of understanding the speed of transition possible in each of the socio-technical frontiers of policymaking, finance, law, behaviours and norms, and technologies, and understand their potential for cascading interaction.
- Identify and constructively stimulate interventions in each of these socio-technical frontiers to drive sustainable decarbonisation, and critically analyse the strengths, weaknesses and trade-offs of different approaches.
- Engage in benchmarking and comparative exercises, through case studies, to critically analyse both successful and less successful transitions and interventions and derive takeaways from these examples.

Module 7: Natural capital, markets and society

- Identify the causes and consequences of institutional and market failures to value and manage natural capital.
- Understand and compare different models of governing natural capital and identify strengths and weaknesses of different types across a range of contexts.
- Learn and apply methods for designing and evaluating natural capital markets and institutions, whilst leveraging and integrating relevant natural science and technical knowledge.
- Examine and debate case studies of valuing and managing natural capital across climate, energy, water, food and biodiversity.

Module 8: Water, Inequalities and social enterprise

- Introduce social theory and methods related to social inequalities and water risks.
- Examine and evaluate methods, concepts and frameworks in the context of water-related enterprise.
- Explore processes shaping global and national discourse and debates related to sustainable development goals.
- Apply methods, concepts and frameworks to case study material on how water inequalities interact with natural science perspectives and water management practices.

Combined programmes

MSc SEE can be coupled with an MBA, as part of the Oxford 1+1 MBA programme.

Find out more on the Saïd Business School website:

 www.sbs.ox.ac.uk

Course format

Teaching takes place through lectures, seminars, workshops and field trips, which provide in-depth exploration of key issues. The elective modules offer a tutorial-style teaching and discussion environment in smaller groups.

Teaching is delivered by core faculty from the Smith School and School of Geography and the Environment – as well as from other departments across the University – and guest lecturers from enterprise, including some of the Smith School's Business Fellows.

The course is structured across three terms, following a progression from broad-based concepts and skills to increasing application and engagement.

- Nature and sources of climate emergency and development challenges, including scientific underpinnings and conceptual building blocks aimed at framing and understanding the problems and trade-offs posed by NZSD: Michaelmas Term
- Integrated assessment of potential solutions and pathways, offering applications and solutions: Hilary Term
- Implementation of knowledge and solutions through the enterprise forum and dissertation preparation: Trinity Term.

Field trips

Field trips explore the role of enterprise in tackling the NZSD challenges:

- An induction field trip in the week before the start of term.
- Two one-day trips in each of Michaelmas and Hilary Terms.
- A week-long capstone trip at the end of Hilary Term. Students visit a selected region to connect individual companies and their supply chains in order to bring to life key concepts and enable students to apply their learning, e.g. on supply chains and sectors contributing to NZSD.

Field trip costs are included in the course fee, and any individual accessibility issues are taken into account when planning the visits.

Assessment and evaluation

Written examinations

The core modules are examined via 3 three-hour unseen written examinations in Trinity Term. These determine your critical understanding and knowledge of the range of issues covered, provide opportunities to display the results of your individual study, and to use information gained from field trips and seminars.

Electives

You will be expected to show advanced knowledge of two of the elective courses available. Candidates will submit written essays (of no more than 4,000 words plus a 150-word abstract) on two elective courses.

Dissertation

An independent and original dissertation is an integral component of the course. Training is provided in order to equip you with the – highly-transferable – skills to undertake high quality, independent and original research, and to enable you to gain experience of the applied research methods used widely in academic and professional research.

Employability, jobs and graduate destinations

Employability and post-MSc life is a major focus of the course. The Course Director and University Careers Service will work closely with each student to understand their individual aims and where they wish to go after the course concludes. A degree from the University of Oxford – in particular, an innovative and novel MSc with a topical focus from the world's top-ranked School of Geography and the Environment – is highly sought after by employers. Graduates from MScs within the School frequently land prominent positions within government departments, non-governmental organisations, business organisations and international agencies. Many also use their degree as a means to pivot their career trajectory towards a more specific aim (e.g. sustainability). The course will also equip students with many of the skills and knowledge bases necessary to pursue other pathways, such as an entrepreneurial career, or further study (e.g. a DPhil/PhD).

Equality, diversity and inclusion

The University of Oxford, the School of Geography and the Environment, and the Smith School of Enterprise and the Environment are committed to fostering an inclusive culture which promotes equality, values diversity and maintains a working, learning and social environment in which the rights and dignity of all its staff and students are respected.

We recognise that the broad range of experiences a diverse staff and student body brings strengthens our research and enhances our teaching, and that in order for Oxford to remain a world-leading institution we must continue to provide a diverse, inclusive, fair and open environment that allows everyone to grow and flourish.

Annual fees 2022–23

Home	£19,970
Overseas	£26,940

Living costs

For the 2022–23 academic year, the range of likely living costs for full-time study is between c. £1,215 and £1,755 for each month spent in Oxford.

Application deadlines

12:00 midday UK time on:

Friday 12 November 2021

Applications more likely to receive earlier decisions

Friday 21 January 2022

Latest deadline for most Oxford scholarships

Final application deadline for entry in 2022–23

How to apply

Please apply via the central graduate admissions website of the University of Oxford.

 www.ox.ac.uk/admissions/

Selection criteria

The selection criteria for the MSc SEE are as follows:

- Proven and potential academic excellence: Degree-level qualifications: As a minimum, applicants should hold or be predicted to achieve the equivalent of a first-class or strong upper second-class undergraduate degree with Honours in any discipline.
- Other qualifications, evidence of excellence and relevant experience: Applicants should demonstrate an interest in sustainable development and net-zero, and intersections with enterprise. Evidence of any relevant practice experience should be outlined, but is not required.
- English language requirement: proficiency in English at the University's higher level.

Applications should be supported by three written references, at least two of which should be academic, giving evidence of intellectual ability, academic achievement and motivation.

Candidates will be asked to provide:

- Official transcripts.
- A CV.
- A personal statement of up to two pages.
- Written work: an essay of up to 2,000 words.
- Three references, as outlined above.

References are an important part of your application. They will support your application to the MSc SEE by speaking to your intellectual ability, academic achievement, motivation and suitability to the course, and ability to work effectively both independently and with others. Therefore, academic references are preferred – for at least two of your three references.

We understand that in a few select cases it may be difficult, and very occasionally, impossible, to get 1–2 letters from your former higher education institution, especially for those who have been out of university for 10+ years. In these instances, we can accept a minimum of one academic reference, with the other two being either academic or professional, so long as they can speak closely and accurately to the above-mentioned points (i.e. intellectual ability; academic achievement; motivation and suitability to the course; ability to work effectively both independently and with others).

University-wide scholarships

Scholarships are usually awarded on the basis of academic excellence and potential. There are over 1,100 full or partial graduate scholarships available across the University.

You will be automatically considered for over two-thirds of Oxford scholarships, if you fulfil the eligibility criteria and submit your graduate application by the January deadline. More detail can be found on the University website.

University-wide scholarships relevant to MSc SEE are:

- The **Rhodes Scholarship**, arguably the world's most prestigious academic scholarship, the Rhodes Scholarship covers all tuition fees and provides a stipend for living expenses. The Oxford 1+1 option can also be taken as part of a Rhodes scholar's study plan. There is a separate application process for the Rhodes Scholarship.
- The **Weidenfeld-Hoffmann Scholarships and Leadership Programme**
- The **Oxford-Indira Gandhi Graduate Scholarship**, tenable at Somerville and for Indian nationals and graduates of Indian universities.

MSc SEE-specific scholarships

We offer a number of scholarships specifically for MSc SEE. Details of the scholarships currently available for entry in 2022–23 are set out below. We constantly add to these as we continue to receive support from generous benefactors. Full details are available on the course pages of our website.

Applicants for MSc SEE are automatically considered for scholarships. We may ask you to complete a short statement to assist us in making decisions on awards.

Currently the following scholarships are available:

The Aurora Energy Research Scholarships

Aurora Energy Research Ltd has donated £500,000 for nine scholarships to be awarded between 2021–2026, as well as a founding gift to the Smith School's Director's Fund. Two scholarships will be awarded to students starting MSc SEE in October 2022. The scholarships cover tuition fees and an allowance for living costs.

St Cross MSc Scholarship in Sustainability, Enterprise and the Environment

St Cross College is delighted to offer two one-year scholarships for students starting MSc SEE in October 2022. The scholarship has a value of £10,000.

“Finances should not be a barrier to success. Our target is for at least half of every MSc cohort to receive scholarships. That's one of the best ways to ensure that we continue to attract the top students to Oxford.”

Dr Laurence Wainwright,
Course Director

MSc SEE teaching team



Professor Cameron Hepburn

Director of the Smith School

Cameron is Professor of Environmental Economics at the Smith School and at the Institute for New Economic Thinking at the Oxford Martin School. He is an expert in environmental, resource and energy economics. He has advised governments around the world and has had an entrepreneurial career, having co-founded three businesses and invested in several start-ups.



Dr Alex Money

Director, Innovative Infrastructure Investment Programme

A former fund manager, Alex has over 20 years of practitioner experience in investment and industry. His research interests include water, energy, infrastructure, investment, and development. Alex focuses on the opportunities for empirical research to bridge knowledge gaps between academia and industry.



Dr Aoife Brophy

Departmental Research Lecturer in Innovation and Enterprise

Aoife holds a joint appointment with the Smith School and the Saïd Business School. Her research focuses on the connections between technological, organisational and institutional change related to sustainability. The main focus of Aoife's recent work has been the energy industry, and particularly the intersection between energy and buildings.

Dr Ben Caldecott

Director, Oxford Sustainable Finance Programme and Lombard Odier Associate Professor and Senior Research Fellow

Ben is also Senior Advisor to the Chair and CEO of the UK Green Finance Institute and COP26 Strategy Advisor for Finance based in the Cabinet Office. His initiatives include the Global Research Alliance for Sustainable Finance and Investment (GRASFI), the Sustainable Finance Theme at The Alan Turing Institute, the Spatial Finance Initiative, and the Commonwealth Climate and Law Initiative (CCLI).



Dr Caitlin McElroy

Departmental Research Lecturer

Caitlin holds a joint appointment with the Smith School and the School of Geography and the Environment. Her research focuses on interactions between the mining industry, the environment, and development. Caitlin is also Director of the Smith School's Executive Education programme.



Dr Matthew Ives

Senior Research Associate

An economist and complex systems modeller, Matt is currently working on the Oxford Martin Programme on the Post-Carbon Transition, which is developing solutions to climate change through an understanding of sensitive intervention points in our socioeconomic systems that can enable rapid reductions in emissions.





Dr Radhika Khosla

Associate Professor; Research Director of the Oxford India Centre for Sustainable Development at Somerville College

Radhika is an expert in the tensions between urban transitions, energy services consumption and climate change, with a focus on developing country cities. Radhika is the Principal Investigator of the Oxford Martin School's interdisciplinary and multi-country programme on the Future of Cooling. She is a contributing author to the sixth assessment report of the Intergovernmental Panel on Climate Change (IPCC).



Professor Rob Hope

Professor of Water Policy and Director of the Water Programme

Rob's research focuses on water policy, poverty and economics, largely in Africa and Asia. He was a winner as part of the Smart Water Systems group of the inaugural Vice Chancellor's Innovation Award for the 'smart handpumps' project.



Dr Laurence Wainwright

Course Director MSc SEE and Departmental Lecturer

A teaching and learning oriented academic, Laurence has a decade of experience in lecturing, facilitation and supervision across universities in Australia, Sweden and the United States. Laurence is passionate about the holistic development of the students he teaches and helping them to develop into well-rounded individuals with a mindset of intellectual curiosity and courage, continuous self-improvement and service to a mission beyond themselves.



Smith School of Enterprise and the Environment

About the Smith School

Our vision is a net-zero emissions future supported by a sustainable global economic and financial system – a healthy planet and a more prosperous, fairer world. We help to achieve that vision through our world-leading research, teaching and partnerships.

Further information

Please contact the Course Director MSc SEE, Dr Laurence Wainwright, with any specific questions:

✉ laurence.wainwright@smithschool.ox.ac.uk

Contact us

🌐 www.smithschool.ox.ac.uk

🐦 @TheSmithSchool

in Smith School of Enterprise and the Environment

