

# Oxford Certificate Programmes at Worcester College

- Intensive Residential Study Abroad Programme for University Students -

# **Academic Programme Outline**

Open-enrollment programmes for university students

**Course Overview for Asian Universities** Summer 2024



# 1. Introduction

The Oxford Certificate Programme at Worcester College (University of Oxford) for university students is an academic study abroad programme that offers cutting-edge subjects designed to complement a student's existing studies, providing them with methodologies and case studies that will set them above their peers.

Students participate in academic courses on various subjects and experience teaching in an authentic Oxford college setting. This will be done according to the Oxford teaching model: small group interactive classes with individualised feedback and class participation. All academic teaching the courses will be tutors at the University of Oxford or the University of Cambridge.

Participants will live in Oxford college dormitories and dine in Oxford dining halls. All teaching will happen in small groups within Worcester college or Oxford university premises. All of this will offer participants an experience that will be as close as possible to attending Worcester College as a student of the University of Oxford.

In support of the academic content, the programme offers a wide range of activities. These include visits to the main university sites such as the Oxford Union and the Bodleian Library, in addition to other colleges and Oxford's world-renowned museums and galleries. Trips further afield, such as to Cambridge and Blenheim Palace, compliment an extensive array of evening speakers and further activities.

# 2. Worcester College (University of Oxford)

Worcester College is one of the historic colleges of the University of Oxford. It was founded in 1714, but is on the same site and in direct succession to Gloucester College, which was founded in the late 13<sup>th</sup> century.

Today, the college teaches almost every subject offered by Oxford, from Economics and Management to English Literature and Fine Art, from Medicine to Law, Artificial Intelligence to International Relations, and it enjoys multiple links with Oxford's Said Business School in particular.

This academic offering takes place in one of the most stunning of Oxford's colleges: medieval and 18<sup>th</sup> century buildings are set in Oxford's finest gardens and a lake, and all this is alongside state-of-the-art modern facilities, such as the recently built Nazrin Shah center. We are also the only college to have our sports fields and tennis courts within the college walls, together with a boat house on the river.

# 3. Programme Dates

- Session I 14 July 27 July 2024 (Business Law and Criminal Law)
- Session II 28 July 10 August 2024 (Economics, English and Cross Border Business



UNIVERSITY OF OXFORD

# Law and International Relations)

- Session III 11 August 24 August 2024 (Economics, Business Management, Artificial Intelligence)
- Session IV 25 August 7 September 2024 (AI, Global Health and Planetary Health)

# 4. Overview of all Courses

| Session I<br>(Week 1)                        | Session I<br>(Week 2)                        | Session II<br>(Week 1)   | Session II<br>(Week 2)  | Session III<br>(Week 1)                             | Session<br>III (Week<br>2)                                  | Session IV<br>(Week 1)                                | Session IV<br>(Week 2)                                       |
|--|--|--|---|---|---|---|--|
| Law /<br>Business Law<br>and Criminal<br>Law | Law /<br>Business Law<br>and Criminal<br>Law | Law / Law in<br>Action and IP<br>Rights  | Law /<br>Dispute<br>Settlement  | Business<br>Management<br>(Leadership)              | Business<br>Manageme<br>nt<br>(Strategic<br>Manageme<br>nt) | Marketing /<br>Operational<br>Marketing               | Marketing /<br>Online<br>Marketing                           |
|  |  | Economics /<br>Developmen<br>t Economics   | Economics /<br>Behavioural<br>Economics   | Artificial<br>Intelligence /<br>Machine<br>Learning | Artificial<br>Intelligence<br>/ Deep<br>Learning            | Artificial<br>Intelligence /<br>Knowledge<br>Based Al | AI /<br>Knowledge<br>Based AI                                |
|  |  | International<br>Relations /<br>Western<br>political<br>theory in the<br>face of the<br>future | International<br>Relations /<br>International<br>Organisation<br>s and the<br>Post-Brexit<br>EU | Economics /<br>Game Theory                          | Economics<br>/ Financial<br>Crises                          | Global<br>Health &<br>Planetary<br>Health             | Artificial<br>Intelligence<br>and the<br>Future of<br>Health |
|  |  |  |   | Economics /<br>Financial<br>Economics               |   |   |  |

# 5. Academic Course Offerings

### Session I: (Business Law and Criminal Law)

#### Law / Business Law Instructor: Dr Natalie Mrockova

This course provides a comprehensive overview of the rules and tools for doing business in England. It starts off with a lecture on Contract law and its doctrines (consideration, vitiating factors, interpretation and implication of terms). It then moves on to corporate form (LLP, Ltd, partnership, sole trader) and how



property is held and managed (directors' duties, shareholders' rights, corporate governance). It then examines how companies finance their operations, looking at both debt and shares. It concludes by considering how companies resolve financial distress (insolvency and pre-insolvency), what protections exist for creditors and investors, and how they can reach agreements with dissenting claim-holders.

#### Law / Business Law and Criminal Law Instructors: Dr Natalie Mrockova and Prof Keith Hawkins

The first two days of this course will take students deeper into some of the difficult questions that the law has to deal with. We consider the issues surrounding floating charges, Equity (promissory and proprietary estoppel, trusts), and the difficulties with incentivising pre-insolvency restructuring. We will use doctrinal, comparative and law-and-economics methodologies, and discuss both theoretical and practical implications of the options and solutions that the law and commentators propose.

The last days of this course will focus on criminal law. Crime is a major social problem. Equally difficult is the question of how the legal system responds to it. This course analyses current ideas informing British thinking and practice with the added perspective of American experience. It explores the structure of the criminal justice system, emphasising the extensive and significant discretionary decisions that are made throughout in the process of creating a criminal case and its culmination in the sentencing and punishment of the convicted offender. Consideration is given to the 'effectiveness' of the system, covering ideas from rehabilitation to risk management and exclusionary social control. More practical problems, relating to imprisonment and community sanctions, are also addressed, since they currently pose real policy dilemmas for government and the legal system.

### Session II: Economics, International Law, International Relations

# Economics / Development Economics Instructor: Dr Donna Harris

This course will allow students to appreciate the range of influences that bear upon development economics, both at the individual and group level. International agencies, governments and the private sector all have a role to play in this field, which is one where economic theory and economic practice can often seem most at odds. This course will use real life case studies to show the strengths and weaknesses of economic strategies for the developing world.

# **Economics / Behavioral Economics**

# Instructor: Dr Ximeng Fang

Behavioural economics enriches standard economics with insights from psychology to build a more realistic understanding of how and why people behave the way they do in the real world. The objective of this course is to introduce students to principles, methods, and recent advances in behavioural economics. It will be structured around how people systematically deviate from neoclassical models in terms of (1) preferences (e.g., self-control problems, reference dependence), (2) beliefs (e.g., overconfidence), and (3) decision-making (e.g., limited attention), with an emphasis on real-world applications to topics such as household finance, job



search/workplace behaviour, and climate change.

#### International Law / IP Rights Management and Legal Theory

#### Instructors: Prof Keith Hawkins and Dr Robert Pitkethly

This course consists of two parts, combining two facets of the law.

The legal theory course will provide an in-depth knowledge of the functions of the rule of law in common law jurisdictions, as well as to consider law in a practical manner. These lectures analyses the nature and importance of rules in legal systems and examine some of the main difficulties associated with the implementation of laws, rules, and regulations.

The course in intellectual property law aims to give students a general overview of the three main regimes of IP, copyright, patents and trademarks. This will include discussions on the justifications of intellectual property; the requirements necessary to garner protection for literary or artistic works, inventions and brand logos; the infringement of these various rights; and the remedies available.

### International Law / International Dispute Resolution

#### Instructor: Dr Rudina Jasini

This course provides a comprehensive introduction to international dispute settlement. The course begins with an introduction to the obligation to settle peacefully international disputes and the basic concepts in the field, in particular the various methods of peaceful dispute settlement.

In this course we will study a number of institutions and processes that have been developing to deal with a variety of "international" issues, including some that will seem more "national" or domestic or "municipal" (such as in the aftermath of civil wars, genocides, or "internal" conflicts that may become international for a variety of reasons, including treaties, international customary law or just plain politics). We will look at issues that affect states (generally called "public international law") and those that affect private parties (commercial dealings, generally called "private international law"). International disputes are both civil (involving contracts, commercial relations, and various torts and injuries, as well as involving employment and family law) and criminal (human rights violations, international kidnapping, economic crime, terrorism), as well as "diplomatic," involving state to state relations.

The first part of the course addresses the role of international and regional organisations in dispute settlement. The course then explores the diplomatic or non-judicial means of dispute settlement: negotiation, mediation, inquiry, and conciliation.

The second part of the course concerns the advancement of international criminal justice and settlement of disputes through a range of international courts and tribunals, in particular the International Court of Justice, International Criminal Court, and various international criminal tribunals that have been established up to date.



### International Relations / Western political theory in the face of the future

#### Instructor: Prof John Dunn

This course will both introduce the structures by which western states and their politics operate by, whilst also interpreting current trends and comparison with other systems, especially in Asia. The course will begin with an overview analysis of the modern Western state and politics within it, and especially how these states are organised. From this foundation, students will comprehend the extent to which western states are accountable to their citizens and each other within supranational structures. The course will then compare this state organisation and context with the varying trends and political systems in Asia, including Japan, South Korea and the People's Republic of China.

# International Relations / International Organisations and the Post-Brexit EU Instructor: David Garciandía Igal

This course will at once demonstrate the shortfalls and potential benefits of international organisations to the international community and its citizens. This course will use case studies to compare these organisations, allowing participants to receive practical lessons on how to improve institutional effectiveness and cooperation between policymakers, NGOs, businesses, and citizens. This course will specifically delve into the current state of the EU post Brexit and its relations with the wider world as a specific case study.

### Session III: Economics, Business Management, Artificial Intelligence

# Economics / Game Theory Instructor: Dr Charles Roddie

Participants will study the main concepts of game theory and in-depth applications. Simultaneous and dynamic games will be covered, including the theoretical study of Nash equilibria of various forms, and experimental findings. Auctions in theory and practice will demonstrate how economists use game theory to study market pressures and devise optimal strategies. Using these structures, we will analyze the options 'players' consider, and why they have the incentive to choose a particular option, and then we will assess how this methodology played out in real life case studies.

# Economics / Financial Economics Instructor: Dr Charles Roddie

This course will familiarise participants with current trends and look deeper at individual



practices, methods and financial instruments within the finance sector. Students will develop an understanding of today's markets and the forces influencing growth and recession. By looking at case studies, students will be able to identify market trends and analyse problems emerging in the economy as a whole.

# Economics / Financial Crisis and Beyond

### Instructor: Andrew Farlow

The objective of this course is to provide an overview of the causes and the events of the recent financial crisis, as well as of the policy response by governments and central banks. The first two lectures will discuss the critical aspects of the evolution of financial markets and institutions that have led to the crisis. The next two lectures will go over the events of the crisis and the actions undertaken by government and central banks around the world. The fifth lecture will recap before the multiple- choice test. The last two lectures will put the recent crisis in a historical perspective and compare alternative views on the causes of the crisis.

### **Business Management / Strategic Management**

### Instructor: Dr Eva Schlindwein

Various methods of strategic market analysis are presented in this course so as to allow students to evaluate risks and opportunities in global markets, highlighting intercultural aspects, by looking at organizations operating in different countries. Students learn to analyse and understand strengths and weaknesses of organizations from various disciplines (products, services, NGOs etc.) that face specific market situations. Supported by new developments in the field of market research, the process for identifying and analysing core competencies and competitive advantages in national and international environments is discussed at length. Students are supported to plan strategic alternatives and to implement and control these by taking on fictitious roles within various different organizations. Exercises and international case studies help students to identify with the role of management and participate in the strategic planning process as well as in operational management. This helps students understand the problems companies regularly face and comprehend how methods of modern management can be used in order to solve these.

# **Business Management / Leadership**

# Instructor: Dr Eva Schlindwein

In today's knowledge-based society, employees are a firm's most valuable resource. A key responsibility of leadership is to develop the knowledge, expertise, and skills of employees. Good leadership is crucial for the continued success of a firm in the face of increasingly competitive markets. This course presents the necessary competencies of the leader in a modern, knowledge- based organization. Central questions raised by modern leadership theory are presented and discussed. In doing so, the course focuses on requirements and instruments of professional leadership, aspects of situational leadership, and leadership communication and interactions, both in the context of strategic management and change processes. The



methodological and conceptual foundations of leadership are presented to students, along with empirical examples and best-practice principles, with the intent for students to master the challenges of enhancing the firm's most valuable asset—its employees—via professional and contemporary leadership practices.

# Artificial Intelligence / Machine Learning

### Instructor: Dr Vincent Harinam

Machine learning is a field of scientific study concerned with algorithmic techniques that enable machines to learn performance on a given task via the discovery of patterns or regularities in exemplary data. Consequently, its methods commonly draw upon a statistical basis in conjunction with the computational capabilities of modern computing hardware. This course aims to acquaint the student with the main branches of machine learning and provide a thorough introduction to the most widely used approaches and methods in this field.

Artificial Intelligence / Deep Learning Instructor: Dr Vincent Harinam Module Description

Neural networks and deep learning approaches have revolutionized the fields of data science and artificial intelligence in recent years, and applications built on these techniques have reached or surpassed human performance in many specialized applications. After a short review of the origins of neural networks and deep learning, this course will cover the most common neural network architectures and discuss in detail how neural networks are trained using dedicated data samples, avoiding common pitfalls such as overtraining. The course includes a detailed overview of alternative methods to train neural networks and further network architectures which are relevant in a wide range of specialized application scenarios.

### Session IV: Artificial Intelligence, Global Health & Planetary Health

# Artificial Intelligence / Knowledge-based Artificial Intelligence I Instructor: Prof Bernardo Grau & Dr David Cucala

This course has a particular focus on search as the fundamental technique for solving AI problems. It will introduce AI search techniques, such as depth-first, breadth-first, and iterative deepening search, and it will discuss heuristic techniques such as A\* search that improves efficiency by pruning the search space. This course also deals with optimization problems, and will introduce a standardized language called STRIPS for modeling planning problems, before discussing how to solve planning problems using search techniques such as forward chaining, backward chaining, and partial order planning. Constraint satisfaction problems (CSPs) constitute



another important class of AI problems, and so this course will also introduce search techniques such as backtracking and constraint propagation that can efficiently solve many CSP problems in practice.

# Artificial Intelligence / Knowledge-based Artificial Intelligence II Instructor: Prof Bernardo Grau & Dr David Cucala

This course will initially introduce basic game-playing techniques such as minimax search and alpha-beta pruning, building on the previous week. Dealing with unknown or incompletely specified environments is a form of intelligent behaviour that is critical in many intelligent systems. For example, consider a robot in maze that has no prior knowledge about the maze layout. To solve the problem, the robot needs to represent and update its knowledge about the maze as it moves through the maze. This course will show how to solve such problems via search in the belief space – the space of all possible beliefs the robot may have about the maze layout. The course will then cover knowledge representation and reasoning as well as modern topics involving knowledge graphs, before the students move on to assessment.

# Marketing / Operational Marketing

# Instructor: Dr Alex Connock

The objective of this course is to provide students with the basic concepts and terminology of operational Marketing. They will gain insight into the different approaches to company marketing, and will become familiar with the management of products and brands, as well as with the concept of positioning in the market.

The course will teach students the basic tools of marketing by means of the four elements of the marketing mix: the product, communication, price, and distribution policy. The interrelationships and the interaction of the individual elements will be illustrated by real-life examples. The students will learn that the success of a product depends on a consistent and consequent implementation of the individual elements in operational marketing.

# Marketing / Online Marketing

# Instructor: Dr Alex Connock

This course utilises interdisciplinary principles that enable students to engage in operational and strategic engagement with the topic of online marketing. These includes the principles of business and economics, as well as communicative multimedia fundamentals, or the consideration of the fundamental tonality of online marketing channels.

This holistic view is essential for strategic planning. In addition to consideration of the



positioning of companies on the World Wide Web, the course also looks at how to optimise online marketing presence. The measurement and evaluation of relevant key figures round off the uniform basis for this higher-level module.

This Online Marketing course teaches basic technical terms and concepts. These include the online communication process, the added value of online marketing, electronic value creation and business models. Building on this fundamental understanding, this course addresses questions of product suitability, pricing policy, distribution policy, and the various forms of marketing and distribution on the Internet.

This course will then extend a student's understanding of online marketing with elements of strategic and, above all, operational marketing, in particular the planning and realisation of advertising campaigns through different sales channels. In addition, the increasing development towards mobile communication is taken into account, and attention is paid to mobile marketing as part of the online marketing mix.

For an understanding of the behaviour of online customers, the course deals with advanced, online marketing-specific advertising effectiveness approaches. Based on the principles of customer acquisition, retention, and customer loyalty in online marketing, strategies and tactics for increasing customer numbers and campaigns via the Internet, together with the importance of online relationships are discussed.

Students work their way through legal aspects and learn the principles of the General Data Protection Regulation (GDPR) relevant to online marketing in order to advertise and contact customers on a legally correct basis. This course offers students the opportunity to learn about and implement various aspects of online marketing management in practice. They learn how to assess online media planning through web analytics and targeted monitoring. For this purpose, they will learn about the relevant key performance indicators (KPIs) of online marketing, which are an essential prerequisite for optimizing online strategies.

### **Global Health & Planetary Health**

### Instructor: Andrew Farlowe

This week-long programme is offered by Worcester College, one of the constituent colleges of the University of Oxford, in partnership with Global Health Policy Partnership. It will offer participants a comprehensive analysis of the changing state of the world's health and look into future trends and developments deep into the 21st century. It will explore what has been achieved, and what remains to be achieved, in tackling big health challenges such as health inequalities, epidemics and pandemics, disease eradication, antimicrobial resistance, and the growing burden of non-communicable diseases especially those associated with lifestyle and the environment. It will explore human impact on the health of the planet – including climate change, pollution, urban living, food systems, and ecosystem health – and the impact of that on



human health. It will give an overview of the research and development of new interventions, deploy numerous case studies, review how policy is made, and help participants identify ways to improve their own health and that of the planet and their fellow human beings.

These lectures and discussions will be coupled with an accompanying cultural enrichment programme and social calendar to facilitate further discussion. Evening guest speakers and visits to museums and galleries related to these lectures will ensure that this programme is truly holistic in its outlook, and that it will maximise the potential benefits for its participants.

### Artificial Intelligence and the Future of Health

### Instructor: Andrew Farlowe

It seems that AI is everywhere, and human health has become a hotspot for the development and scale up of AI. This week-long programme offered by Worcester College, one of the constituent colleges of the University of Oxford, in partnership with Global Health Policy Partnership will separate reality from hype. It will review where we are with the application of AI to health, the opportunities as well as the many challenges. It will review the critical ethical frameworks needed to support AI for health, data and AI solutions handling and assessment, benchmarking tools, regulatory frameworks, tools for the clinical evaluation of AI applications for health, the use of open code to enable broad and fair development, IPR (intellectual property rights), health technology assessment and economics, and innovation in AI for health.

These lectures and discussions will be coupled with an accompanying cultural enrichment programme and social calendar to facilitate further discussion. Evening guest speakers and visits to museums and galleries related to these lectures will ensure that this programme is truly holistic in its outlook, and that it will maximise the potential benefits for its participants.

### **Evening Talks Series**

### Instructors: Prof Nir Vulkan, Dr Simon Cowan, Edward Hadas

Alongside these courses are a range of evening talks, providing more focused explorations of specific subjects complimentary to the main academic content. These talks are conversations with plenty of question time, allowing students to interact with top people in these fields in an informal setting, whilst also learning aspects of a subject at the cutting edge of these fields. Specific talks in recent courses have included *AI and Finance*, Ethics, *Finance and the Next Crash* and *Pricing and Market Power*.

# 6. Teaching Academics



All instructors are leading academics, including professors, academic tutors and lecturers, senior post-doctoral researchers and PhD students from the University of Oxford and/or the University of Cambridge.

• Dr Alex Connock Senior Fellow in Management Practice Said Business School Lecturer, St Hugh's College University of Oxford

Dr Connock is a Senior Fellow in Management Practice at the Saïd Business School, and co-director of the Oxford Diploma in Artificial Intelligence for Business, teaching marketing at undergraduate, graduate and executive education levels, plus the MBA elective on Media, Arts and Entertainment. He is the author of the textbook 'The Media Business and Artificial Intelligence' concerning Media Business Models and AI. He is also Head of Department in Creative Business at the National Film and Television School, and Professor at Exeter University. He has degrees from Oxford, Columbia, INSEAD and a PhD from Salford on video optimisation for e-commerce.

Commercially, Alex has created and grown several media companies and has been shortlisted six times as Entrepreneur of the Year. Between 1998 and 2011 he co-founded, and ran as CEO, the media group Ten Alps (now Zinc Media) with Bob Geldof – producing hundreds of programmes for UK and international broadcasters, as well as substantial digital, published and branded content output, including the UK government's Teachers TV project. From 2012-17 he was Managing Director of TV and digital production business Endemol Shine North (now Workerbee). He has worked directly for BBC, ITV, Channel 4 and PEOPLE Magazine, and for hundreds of commercial clients and broadcasters via his production companies. He is a voting member at BAFTA. He is also the Vice-Chair of UNICEF UK, and director at The Halle Orchestra.

• Dr David Cucala Research Associate Department of Computer Science

University of Oxford

Dr Cucala applied for the MSt in Philosophy of Physics at University of Oxford in 2013, and then spent another year doing the BPhil in Philosophy at the same university, studying Ethics and Philosophy of Science. His focus then shifted towards the question of how existing sources of knowledge can be aggregated to answer complex questions, like those of Philosophy. In 2015, he went on to study the MSc in Computer Science at the University of Oxford, with a focus on Knowledge Representation and Automated Reasoning. In 2016, he started a DPhil in Computer Science in the same area and research group, which I finished in 2020. He works in the area of knowledge representation and reasoning in the field of artificial intelligence (AI), and his recent research concerns graph neural networks and the design of reasoning algorithms for expressive Description Logics.



#### • Dr Simon Cowan

Associate Professor of Economics Wigmore Clarendon Fellow and Tutor in Economics

Prof Cowan's research is on theoretical models of pricing in imperfect competition, with a recent focus on price discrimination and its welfare effects. He has also worked on the regulation of privately-owned utilities. Regulatory Reform: Economic Analysis and British Experience (MIT Press), written with co-authors Mark Armstrong and John Vickers, was published in 1994. He has papers in the American Economic Review, The Economic Journal and the Rand Journal of Economics, and he is a former editor of Oxford Economic Papers. He teaches undergraduate courses in Introductory Economics, Microeconomics, Macroeconomics, the Economics of Industry and International Economics. He also teaches environmental economics, and Industrial Organization to graduate students. He was Head of Department between October 2019 and September 2020.

### • Prof John Dunne

Emeritus Professor of Political Theory Department of Politics and International Studies (POLIS) University of Cambridge Visiting Professor Graduate School of Social Sciences and Humanities Chiba University, Japan

Raised in England, Germany, Iran and India, John Dunn has been a scholar of Winchester and King's, a Harkness Fellow at Harvard, and Fellow successively of Jesus (1965-66) and King's Colleges (1966- ) in Cambridge. He was Professor of Political Theory in Cambridge for twenty years and is now Emeritus. He has done research on the history of political ideas, Revolutions, the politics of West Africa, the economic limits to modern politics, the limitations of socialist and liberal political theories, and the implications of the diffusion of democracy as term, array of political ideas, and supposedly associated institutions across the world over last century. Outside Britain he has taught in Ghana, India, the United States and Japan and been especially interested in the politics of East and South Asia. He is best known for his work on John Locke (1969, 1984), modern revolutions (1972), the globalization of political thinking (1979), the history of political theory (1980, 1985, 1990, 1996), political realism (2000), and the dynamic and erratic impact of democracy as an idea and form of government(1979, 1984, 1992, 2000, 2005 & 2014).

### • Dr Ximeng Fang Postdoctoral Research Fellow Said Business School University of Oxford

*Ximeng completed his PhD in Economics at the University of Bonn. His research interests lie in behavioural economics, environmental economics and applied microeconomics. His* 



methodological portfolio includes the design of randomised field experiments as well as the use of quasi-experimental methods and other microeconometric techniques. In some of his previous work, he has studied the role of non-monetary interventions in encouraging household energy and water conservation behaviour when implemented through smart metering and digital technology. Ximeng is now a Postdoctoral Research Fellow at the Oxford University Centre for Corporate Reputation. He is working with Stefania Innocenti, Departmental Research Lecturer at the Smith School of Enterprise and the Environment, and Alan Morrison, Professor of Law and Finance at Saïd Business School, on a project that evaluates the potential of edutainment and virtual reality for fostering pro-environmental behaviour.

• Andrew Farlow Senior Research Fellow Oxford Martin School University of Oxford

Andrew Farlow is head of global public health initiatives, Oxford in Berlin, where he convenes the COVID-19 Science and Policy Forum. With nearly 20 years' experience researching and advising on the development, deployment, and financing of vaccines and medicines, he has advised a wide range of public- and private-sector organizations. He is Teaching Fellow of the Nuffield Department of Medicine, University of Oxford, for its MSc in International Health & Tropical Medicine, and a Senior Fellow, Oxford Martin School, where he was Co-PI on its Vaccine Design Institute.

### • Prof Bernardo Grau

Professor of Computer Science Admissions Coordinator Tutorial Fellow, Keble College University of Oxford

Until October 2017, Prof Grau held a prestigious University Research Fellowship awarded by the British Royal Society. He is co-founder of Oxford Semantic Technologies, a start-up company from the University of Oxford focusing on high-performance reasoning and query evaluation over large-scale knowledge graphs.

His research is in the broad field of artificial intelligence. In particular, his work revolves around the areas of knowledge representation and reasoning, knowledge graphs, computational logic, semantic technologies, and graph representation learning. His activities within these areas cover a wide spectrum, including theory and foundations, algorithm design, software and systems, technology standards, and engagement with industry.

# • Edward Hadas

Research Fellow Blackfriars Hall University of Oxford



Edward Hadas has worked for 45 years in Finance and Finance journalism, and has now put that experience to work in multiple research fields, from social sciences research to the philosophy of economics, and he is currently writing a new book on narratives of modernity.

Dr Vincent Harinam
 Fellow of the Cambridge Centre for Evidence Based Policing
 Law Enforcement Consultant
 Supervisor, Applied Criminology and Police Management
 University of Cambridge

Dr Harinam is a researcher and law enforcement consultant with a wide expertise in data science and an expert on the Dark Web. He is a Supervisor at the Applied Criminology and Police Management Programme of the University of Cambridge and a fellow in Crime Data Science at the Cambridge Centre for Evidence-Based Policing.

Dr Donna Harris
 Research Fellow
 Centre for the Study of African Economies
 Director of Studies in Political Economy
 Department for Continuing Education
 University of Oxford

Donna is a Behavioural and Experimental Economist who uses interdisciplinary methods that combine psychology, economics, and neuroscience to study individual and group behaviours with policy applications in developing countries. Donna holds a PhD and MPhil in Economics from the University of Cambridge, an MSc in Economic History from the London School of Economics and Political Science, and a BA in Economics from Chulalongkorn University in Thailand. She has been awarded research grants from the British Academy and a joint Post-Doctoral Fellowship from the Economic and Social Research Council (ESRC) and the Medical Research Council (MRC), UK. She is also a consultant in the Climate Change and Disaster Risks team at Oxford Policy Management which is an international development consulting firm, working to help low- and middle-income countries achieve growth and reduce poverty and disadvantage through public policy reforms.

• **Prof Keith Hawkins** Emeritus Professor of Law and Society Oriel College University of Oxford

*Keith Hawkins (LL.B Birm., Dipl Criminol., MA, PhD Cantab.) retired from active teaching in October 2006. His research interests are in the sociology of legal processes, and are concerned* 



with legal decision making and the workings of governmental regulation in such areas as environmental control, and occupational health and safety regulations.

• David Garciandía Igal Tutor in Law Hertford and Oriel College University of Oxford

David's main research interests cover EU law, international law and comparative law, with a special focus on human rights. He has published several papers in peer-reviewed journals and a book with Brazilian Judge Aloisio C. dos Santos Jr. on the corporate duty of reasonable accommodation of religious beliefs in the workplace. He has taught EU law at SOAS University of London and has been a visiting lecturer at the University of Manchester, whilst he has also spent six months at Shijiazhuang Tiedao University, China.

He is a convenor of the Oxford EU Law Discussion Group and a founder and former president of the Oxford University Spanish Society. Additionally, he has worked for the Permanent Mission of Spain to the United Nations in Vienna, as well as for different private companies (Siemens Gamesa) and law firms (Garrigues).

• **Dr Rudina Jasini** Attorney and Researcher in Law Green Templeton College University of Oxford

Rudina Jasini is an attorney and researcher specialising in international criminal law and human rights law. As an Economic Social Research Council (ESRC) researcher at the Faculty of Law, she is currently leading with Prof Carolyn Hoyle the ESRC Impact Acceleration Award (IAA) project "Advancing the Impact of Victim Participation at the International Criminal Court: Developing Avenues for Collaboration" in cooperation with the International Criminal Court Bar Association. This project builds upon her research at the University of Oxford. It focuses on co-designing resources for the education and training of legal representatives for victims at the ICC.

• **Dr Natalie Mrockova** Supernumerary Teaching Fellow Career Development Researcher Merton College China Centre and Law Faculty University of Oxford

Prior to academia, Natalie worked for several years as a commercial translator and negotiator and later also as a senior manager in two European industrial companies. Her practical experience still informs much of her research and her interests.



Natalie has worked with a number of international bodies, including the European Bank of Reconstruction and Development, the World Bank, and more recently also the Dubai International Financial Centre (and in particular its subsidiary, the Courts of the Future). Natalie also acts as a consultant in transnational and China-related commercial disputes and cooperates as an external expert with governments as well as national and international bodies and private clients. Her research interests are in the area of private law, with a particular focus on commercial property (land, trusts, insolvency, commercial). She is especially interested in the interaction of law, finance, and economics; the problems facing property law rules in weak enforcement environment; the content of property rights and the rules that govern the overlap of proprietary and personal rights; and doctrinal issues.

### • Dr Robert Pitkethly Official Fellow and Tutor of Management

St Peter's College University of Oxford

Dr Robert Pitkethly, MBA INSEAD, MA DPhil Oxf, MSc Stirling, has taught in Oxford on Introduction to Management courses as well as Strategic Management and Management of Intellectual Property. He has been a visiting fellow at the Institute of Intellectual Property and the National Institute of Science and Technology Policy in Tokyo, a research fellow of Cambridge University's Judge Institute of Management Studies, a member of the University of Oxford's Intellectual Property Advisory Group as well as tutor in management at St Peter's College, Oxford. He has also worked both as a Patent Attorney and as a Management Consultant with a wide range of industries. He is a Fellow of the Chartered Institute of Patent Attorneys, His current research interests bridge the fields of strategic management and intellectual property and include managerial and historical aspects of intellectual property policy.

• Dr Charles Roddie Director of Studies Governing Body Fellow Sidney Sussex College University of Cambridge

Charles Roddie received a BA in mathematics from Cambridge and a PhD in economics from Princeton. He has lectured on microeconomics, industry and mathematics at the faculty of economics in Cambridge and the Saïd Business School in Oxford. He has worked on game theoretic models of reputation and evolutionary analysis of social preferences.

• Dr Eva Schlindwein Postdoc Research Fellow SAID Business School University of Oxford



Dr Eva Schlindwein's research interests include the application of organisation and management theories to diverse challenges for corporations, public and non-profit organisations. Eva works closely and co-teaches on many programmes with Tom Lawrence, Professor of Strategic Management at Saïd Business School.

• **Prof Nir Vulkan** Associate Professor of Business Economics Said Business School University of Oxford

Nir is a leading authority on fin tech, e-commerce and market design, and on applied research and teaching on hedge funds. Alongside his role at Saïd Business School, Nir is also a Fellow of Worcester College and a member of the Oxford Man Institute for Quantitative Finance. In 2003 Nir wrote one of the leading texts on the microeconomics of e-commerce The Economics of E-Commerce: A Strategic Guide to Understanding and Designing the Online Marketplace. In 2013, Nir edited, with Al Roth and Zvika Neeman, The Handbook of Market Design. The handbook contains a selection of the latest research in the growing field of market design, and draws on Vulkan's interest and expertise in markets, both virtual and those confined to particular geographical locations. He is particularly interested in how lessons from successful and unsuccessful markets can be learned and transferred to different environments. Part of the book examines issues raised by the fact that the internet is now the preferred platform for most markets, and the wide choice this gives consumers. He also examines markets linked to geography where participants have little choice.

More recently in 2020 Nir Chaired the Banking and Finance Committee on Ethical AI, which made recommendations to the European President and Parliament. Nir was also a member of the Insurance Committee on Ethical AI.

Nir has a BSc in Mathematics and Computer Science from Tel Aviv University and gained a doctorate in Economics at University College, London, where he was awarded the Dean Scholarship for excellence in PhD studies. He became a Lecturer at Bristol University in 1997, and in 2001 moved to Saïd Business School. He was the Executive Director of the Oxford Centre for Entrepreneurship between 2009 and 2011 and the co-founder and Director of OxLab, a laboratory for social science experiments, both at Saïd Business School.

# 7. Academic Workload

Academic workload per week (in total 60 academic hours):

- 16 academic hours: 4 hours of teaching on Monday, Tuesday, Wednesday and Thursday of each week
- 4 academic hours: review, assessment preparation and assessment on Friday of each week
- 14 academic hours: independent study, including assessment preparation
- 2 academic hours: assessment on Friday of each week
- 6 academic hours: 3 evening seminars and workshops per week
- 18 academic hours: cultural immersion activities



Total: the workload of each week is equivalent to 3 ECTS credits

# 8. Extracurricular Activities and Farewell Dinner

### Extracurricular activities

The tuition fee for each two-week programme includes the following Oxford and English cultural activities:

- Oxford City walking tour
- Visit to college library
- Visit to the Oxford University Bodleian Library
- Visit to one or more of the three historic towers (St Mary's Church Tower, Saxon Tower, Carfax Tower)
- Visit to Oxford Museums (Ashmolean Museum, Museum of Natural History or Museum of History of Science)
- A one day-excursion to Cambridge
- Visit to the Oxford Botanic Garden
- Visit to the Oxford Castle
- Evensong in Christ Church College
- More activities tbc

### **Farewell dinner**

The tuition fee includes a farewell dinner or lunch.

# 9. Assessment

As part of each course, an assessment will be offered by the teaching academic.

# 10. Certification

### **Certificate of Attendance and Achievement**

Students will receive a Certificate of Attendance and Achievement issued by Worcester College (University of Oxford).

### Academic transcript

Students who successfully finish the programme will receive an academic transcript with a summary of the programme content and academic performance issued by Worcester College (University of Oxford).

# 11. Participants

Worcester College invites undergraduate and postgraduate students interested in the offered courses to apply for participation in the *Oxford Certificate Programme at Worcester College* 



(University of Oxford).

Target Participants: Maximum number of students per course: university students aged 18+ 30-40

# 12. Financials

The Tuition Fees are calculated per student, per session (each student would be charged for each subscribed course).

- Tuition, Room & Breakfast: Twin room occupancy (14 nights): 4,180 GBP
- Tuition, Room & Breakfast: Single room occupancy (14 nights): 4,280 GBP

Worcester College is offering students from partner universities a scholarship in the amount of 500 GBP.

# 13. How to Apply

To apply, simply follow these steps:

1.Submit application to International Office of the sending university and the sending university email all applications to Worcester College.

2. The Certificate Programmes team of Worcester College will respond with any further details we need from you

3. After your application has been fully added to the system of Worcester College, you can arrange payment, and then we will keep you fully updated on everything you need to know with a series of onboarding emails as the programme approaches