

# 2026寒假牛津大学五大门类跨学科+AI时代下学术项目

## 2026 Winter Oxford Prospects Academic Programme:

## Navigating Interdisciplinary Frontiers in the Age of AI

### 一、学校简介

牛津大学是英语世界最古老、享誉全球的顶尖学府，自2016年起连续九年位居世界大学排名榜首。拥有包括83位皇家学会院士和125位英国科学院院士在内的卓越师资，九百年来培养了6位英国国王、31位首相及70余位诺贝尔奖得主。至今仍持续拓展人类知识边界，引领全球科研与人文领域的重大突破。

### 二、项目核心优势

- **学术官方：**该项目由牛津大学摄政学院全球发展研究院（OPGDI）官方组织，仅面向合作高校的优秀学生开放。
- **顶尖师资：**授课团队由牛津大学教授、英国国家院士等顶尖学者组成。
- **五大跨学科模块：**五大跨学科门类在人工智能时代背景下的前沿探索。
- **多元学习模式：**通过跨学科学习、企业/实验室考察、和个性化指导，提升科研创新能力和全球胜任力。
- **长期发展支持：**项目致力于为学生的学术和职业发展规划提供助力，为申请牛津大学访问生项目（VSP）或攻读牛津、剑桥等全球顶尖院校的硕博课程奠定坚实基础。

### 三、项目体系

项目由 1. 五大门类跨学科学术课程；2. 学术工作坊；3. 特邀嘉宾讲座；4. 企业/实验室参访；5. 学术研导；6. 综合结业课题；7. 全球胜任力与跨文化实践七部分组成。

#### 1、五大门类跨学科学术课程 Interdisciplinary Academic Lectures (5 Modules)

课程秉承牛津大学跨学科教学传统，聚焦于人工智能时代与可持续发展这两大核心课题，通过跨学科研究，探讨不同学科领域的理论与实践如何相互融合与演进。课程涵盖5大核心模块，涉及20个学科领域及90余种前沿议题。五大学术模块包括（五选一）：

**a) BFM 模块：金融-商科-管理**

该模块由牛津大学知名学者，大英帝国勋章获得者Mark Clark领衔，课程深度融合领导力、战略管理、金融科技与可持续发展等核心议题。聚焦于人工智能在财务分析、商业流程创新等领域的颠覆性应用。此外，课程将深入研究企业可持续性、社会影响以及品牌管理与估值等前沿领域。

**b) LLD 模块：文学、语言与数字传播**

该模块由牛津大学教授Diane Purkiss领衔，课程将审视人工智能如何影响语言、文化与信息传播，跨文化与全球化视角，生态批评与环境叙事，数字媒体生态系统，人工智能时代新闻的未来，以及数字叙事与内容创作等议题。

**c) STEM 模块：前沿科学-数学、物理、计算机、工程**

该模块由牛津大学教授，美国宇航局（NASA）前哈勃学者Martin Bureau 领衔，课程深度融合数学、物理、计算机科学与工程前沿，不仅涵盖高等数学理论和人工智能在机器人等领域的应用，还探讨天体物理学、粒子加速器等尖端物理议题。此外，课程聚焦于纳米技术与材料工程，以及可持续工程与环境创新。

**d) MS 模块：医学科学**

该模块由牛津大学教授，英国皇家学会、医学科学院院士 Walter Bodmer 爵士领衔，课程深度融合了人工智能、医疗科技与再生医学的前沿研究。学生将深入学习AI辅助诊断、药物研发、个性化医疗及医疗数据分析，同时系统了解英国国家医疗服务体系（NHS）等全球医疗系统的运作，旨在培养未来的医学创新者。

**e) PPEL 模块：政治、哲学、经济与法律**

该模块由牛津大学教授，英国社会科学院院士Michael Freeden领衔，课程融合政治、经济、哲学与法律视角，深度探讨人工智能时代下的全球性挑战。课程聚焦于AI伦理与监管、地缘政治与经济变革，旨在培养学生解决复杂社会与国际问题的跨学科思维能力。

**课程大纲请参考项目宣传册**

## 2、学术工作坊 Academic Workshops

通过学术工作坊，提升学生的跨文化沟通、批判性思维与公众表达能力。内容涵盖研究方法、思维训练、公众演讲技巧等，并安排牛津大学学生圆桌对话和留学申请指导。

## 3、特邀嘉宾讲座 Guest Lecture

项目特邀重量级嘉宾，与行业领袖直接对话，拓宽对多元行业的认知与视野。往期嘉宾包含《唐顿庄园》总制片人、英格兰央行高管、BBC导演、世界银行副行长、联合国委员等。

## 4、企业机构/实验室参访 Enterprise/Lab Visit

学生将实地考察英国知名企业与科研机构，贯通理论与实践。往期参访机构包括银石赛道、捷豹路虎、ACCA总部、英格兰央行、伦敦证券交易所及人造皮肤医学实验室等。

## 5、学术研导 Supervision Sessions

沿用牛津大学的传统教学模式，通过小班化导师辅导，为学生提供学术支持。学生在学术导师的指导下，以小组形式完成结业项目。辅导环节重点培养学生的批判性思维、创新性问题解决能力以及团队协作与时间管理等核心素养。

## 6、综合结业课题 Capstone Project

本核心环节旨在引导学生将理论知识应用于人工智能伦理、气候变化等重大现实议题，通过跨学科小组协作提出创新解决方案。学生需综合考量可行性、可持续性与伦理影响，在此过程中全面提升沟通协作与复杂问题解决能力，最终通过结业答辩展示成果，为学术与职业发展奠定坚实基础。

## 7、全球胜任力与跨文化实践 Global Competence and Intercultural Activities

全球胜任力是个人在日益互联的世界中，理解并有效应对全球议题、与不同文化背景的人进行有效互动、并为共同福祉采取行动的综合能力。

**Formal Dinner 牛津传统高桌晚宴：**遵循正式着装规范，在历史悠久的学院环境中，亲身实践牛津大学的学术传承与社交规范，提升学生在跨文化背景下的沟通能力与适应性。

**Gala Ball 社交舞会：**作为牛津悠久传统的文化形式，社交舞会是实践跨文化沟通的场域。学生有机会与来自不同文化背景的小伙伴交流，提升社交场合中的人际交往与文化理解力。此外，项目还包括英式下午茶、温莎城堡、莎士比亚故居、伦敦等文化访问，以多维度、立体化的方式呈现英国历史与人文风貌，进一步拓展学生的国际视野。

#### 四、学生福利与支持

**全周期一站式支持：**涵盖行前指导、接送机、学业答疑与文化活动引导，以“亲历者”身份助力学生深度融入学术与跨文化环境。

**项目期间 24 小时支持：**依托课程系统以及助教团队，构建高效深度学习保障体系。专属课程 App 实现精准学术管理，整合本地餐饮资源，拓展多元文化体验。

#### 五、项目基本信息

##### 项目时间：

Term 1：2026年1月25日-2月7日（STEM前沿科学：数学-物理-计算机-工程模块，BFM商科-金融-管理模块，MS 医学科学模块）

Term 2：2026年2月8日-2月21日（PPEL政治-经济-哲学-法律模块，LLD文学-语言-传播学模块）

**报名截止：**项目名额有限，滚动录取至2025年10月31日，请尽早完成注册链接：

<https://jsj.top/f/CUojdr>；（注册完成后，牛津项目组会统一组织英语能力测试）

##### 项目费用：

学费：2100 GBP

其他费用：1850 GBP。其中包含：住宿费（酒店双人间），餐食（周一至周六提供早、中、晚三餐，周日仅早餐），结业晚宴&舞会，参访及交通，接送机等；

以上费用不包含：国际机票，签证及保险。

**申请条件：**合作高校在校本科生、硕士生（年龄 18-25 周岁），英语要求 IELTS 6.5 或 TOEFL 90（如无成绩，需按项目组要求完成英语能力测试），或将安排线上面试，项目学术处将对录取结果拥有最终决定权。

**考核评估：**由小组汇报展示，每周测验，考勤等综合评定。

**项目结项：**将获得Programme Certificate与Transcript Report。(该项目的学习量对应于6个ECTS学分，或3个US学分所需的工作量)

**报名咨询：**课程内容，具体时间、费用，咨询联系项目组 Jerry 老师: Wechat: yinmengdij;

Email: jerry.deng@oxford-prospects.com; Tel: +44 01865 517028.

\* **温馨提示：**护照和签证办理周期较长，请尽早准备。

### Proposed Agenda

|                | Sunday                                       | Monday                                                        | Tuesday          | Wednesday           | Thursday           | Friday                                        | Saturday       |
|----------------|----------------------------------------------|---------------------------------------------------------------|------------------|---------------------|--------------------|-----------------------------------------------|----------------|
| Morning        | Arrive in Oxford<br>(Accommodation Check in) | Breakfast                                                     | Breakfast        | Breakfast           | Breakfast          | Breakfast                                     | Breakfast      |
|                |                                              | Induction Ceremony                                            | Academic Lecture | Academic Lecture    | Academic Lecture   | Academic Lecture                              | Trip to London |
|                |                                              | Academic Lecture                                              | Academic Lecture | Academic Lecture    | Academic Lecture   | Academic Lecture                              |                |
| Afternoon      |                                              | College Lunch                                                 | College Lunch    | College Lunch       | College Lunch      | College Lunch                                 |                |
|                |                                              | Oxford Tour<br>(Bridge of Sigh, Bodleian Library, Sheldonian) | Academic Lecture | Workshop            | Cultural Excursion | Workshop                                      |                |
|                |                                              |                                                               | Workshop         | Supervision Session |                    | Guest Lecture                                 |                |
|                | Voucher Dinner                               | Voucher Dinner                                                | Voucher Dinner   | Voucher Dinner      | Voucher Dinner     | Voucher Dinner                                |                |
|                |                                              |                                                               |                  |                     |                    |                                               |                |
|                | Sunday                                       | Monday                                                        | Tuesday          | Wednesday           | Thursday           | Friday                                        | Saturday       |
| Morning        | Breakfast                                    | Breakfast                                                     | Breakfast        | Breakfast           | Breakfast          | Breakfast                                     | Breakfast      |
|                | Free Day                                     | Academic Lecture                                              | Academic Lecture | Academic Lecture    | Academic Lecture   | Presentation Groups and Formal Assessments    | Departure Day  |
|                |                                              | Academic Lecture                                              | Academic Lecture | Workshop            | Academic Lecture   |                                               |                |
| Afternoon      |                                              | College Lunch                                                 | College Lunch    | College Lunch       | College Lunch      | College Lunch                                 |                |
|                |                                              | Enterprise or Laboratory Visit                                | Workshop         | Workshop            | Cultural Excursion | Certificate Ceremony and Oxford Formal Dinner |                |
| Voucher Dinner | Voucher Dinner and Gala Ball                 |                                                               | Voucher Dinner   | Voucher Dinner      |                    |                                               |                |

*Proposed timetable subject to minor changes.*





Oxford Prospects and  
Global Development  
Institute



# Oxford Prospects Programmes

Navigating Interdisciplinary Frontiers in the Age of AI



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Programme Introduction  
&  
Basic Information  
&  
Programme Structure

• • • • • • • • • •

1

Interdisciplinary Academic Lectures

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2 ~ 3

Academic Workshops

• • • • • • • • • •

4

Supervision Sessions

• • • • • • • • • •

5

Guest Lecture  
&  
Enterprise / Lab Visits

• • • • • • • • • •

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Capstone Project

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7

Global Competence and  
Intercultural Activities

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Student Testimonials

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Politics - Philosophy -Economics - Law  
(PPEL) Module

• • • • •

10 ~ 11

Literature - Language- Digital Culture and  
Communication Studies  
(LLD) Module

• • • • •

12 ~ 13

Business - Finance -Management  
(BFM) Module

• • • • •

14 ~ 15

New Frontiers of Science: Math, Physics,  
Computer Science and Engineering  
(STEM) Module

• • • • •

16 ~ 17

Medical Science  
(MS) Module

• • • • • • • • • •

18 ~ 19

Partial List of Lecturers from Previous  
Programmes

• • • • •

20 ~ 21

Programme  
Introduction

The University of Oxford, a globally renowned institution, boasts a rich history dating back to the late 11th century. Notably, it was ranked as the world's top university for nine consecutive years, from 2016 to 2025. Oxford is home to a highly distinguished faculty, including 83 Fellows of the Royal Society and 125 Fellows of the British Academy. Over the past nine centuries, the university has nurtured many notable figures, including 6 Kings of England, 31 British Prime Ministers, numerous heads of government from around the world, more than 70 Nobel Laureates, and a wealth of esteemed writers and scholars who have pioneered research across various academic fields.

The Oxford Prospects Programme, organised by the Oxford Prospects and Global Development Institute (OPGDI), is committed to promoting international academic exchange, particularly between higher education institutions in China and the UK. The programme offers on-site interdisciplinary courses to students selected from top Chinese universities. Over the course of two weeks, participants will immerse themselves in Oxford's unique academic and cultural environment. This invaluable experience gives students the opportunity to study at a world-class university and may inspire further academic pursuits, such as the Visiting Student Programme (VSP), or Master's and PhD degrees at Oxford or other leading universities.



Basic  
Information

Entry requirements:

The programme is open exclusively to undergraduate and Master's students aged 18 to 25 from partner universities. An English proficiency assessment is a requisite for all applicants; however, this requirement is waived for those who can provide evidence of having attained a minimum IELTS score of 6.5 or a TOEFL score of 90.

Assessment:

The course assessment comprises: **a)** Academic tests; **b)** Academic presentations; **c)** Attendance and participation

Application Enquiry:

For enquiries regarding the syllabus, fees, and other related matters, please contact us at:

Wechat: oppadmin

Email: admin@oxford-prospects.com

Programme Achievements:

Participants will receive a Programme Certificate and an Academic Transcript.

Programme  
Structure

1

Interdisciplinary  
Academic Lectures

2

Academic  
Workshops

3

Supervision  
Sessions

4

Guest  
Lecture

5

Enterprise  
/Lab Visits

6

Capstone  
Project



# 01 | Interdisciplinary Academic Lectures

Rooted in Oxford's prestigious interdisciplinary tradition, this programme is designed to develop the skills required for success in both your academic life and your career beyond university. Through 5 core modules spanning 20 disciplines and 90+ topics, the programme focuses upon the two most pressing topics of our time - the impact of AI and the drive for sustainability. Led by some of Oxford's most senior faculty scholars presenting their groundbreaking research, it provides direct engagement with Fellows of the Royal Society, Professors and Senior Researchers at the University of Oxford and innovative entrepreneurial start-ups linked to the university and its enterprise hubs.



## Business - Finance Management

This module explores how globalisation impacts business management and the type of leadership and entrepreneurship needed for the future. Topics such as sustainability, digital transformation, quantitative economics, game theory, cryptocurrency, innovation, and the political economy of international business will encourage students to critically assess market mechanisms and policy decisions.

See Page 14 - 15 for the detailed syllabus.

## Politics - Philosophy Economics - Law

This course, originally pioneered at Oxford, remains a top discipline in the humanities and social sciences. It fosters an understanding of society through the complementary lenses of politics, philosophy, economics, and law, exploring themes like decision-making, market economies, and societal transformation.

See Page 10 - 11 for the detailed syllabus.



## New Frontiers of Science: Math, Physics, Computer Science and Engineering

Students will delve into cutting-edge topics like big data, smart cities, low-carbon energy, AI-driven manufacturing, and quantum computing. The module emphasises the integration of multiple disciplines to solve real-world problems, focusing on the practical application of scientific and technological advancements.

See Page 16 - 17 for the detailed syllabus.



## Literature - Language Digital Culture and Communication Studies

This forward-thinking module examines how media and digital culture shape perspectives and influence cross-cultural communication. Students will also explore literature's role in understanding the self and the broader cultural context.

See Page 12 - 13 for the detailed syllabus.



## Medical Science

Covering a wide range of medical topics such as cancer research, brain aging, stem cell therapies, and gene editing, this module offers a deep dive into medical and clinical research. It examines the latest technologies in tumour imaging and neurodegenerative diseases while also exploring the processes involved in clinical trials and drug development.

See Page 18 - 19 for the detailed syllabus.







## 02 | Academic Workshops

These workshops are designed to equip students with essential academic and professional skills. They cover scientific research methods, academic writing, and presentation design, including a dynamic visual media workshop and public speaking sessions to hone communication skills. Additional sessions will demonstrate the latest research methods, such as the ethical use of AI, online research, and digital databases. A key highlight is a roundtable discussion with current Oxford students, offering direct insight into life at one of the world's top universities.

- **Research Methods**
- **Academic Presentation**
- **Critical Reading and Thinking**
- **Public Speaking**
- **Visual and Digital Communication**
- **Guidance on University Application**
- **Oxford Student Roundtable**



## 03 | Supervision Sessions

Intensive small-group mentoring sessions are modeled on Oxford's centuries-old tutorial system, with the addition of 21st-century skills development. The sessions are facilitated by dedicated academic mentors who support students as they work in groups of approximately 4-5 on the Capstone Project. Through supportive supervisor and peer-to-peer feedback, the sessions focus on cultivating critical analysis and innovative solutions to a set problem. The group dynamics also help develop teamwork and time management skills.





## 04 | Guest Lecture

The programme features a distinguished guest speaker providing unique, sector-specific insights. Past luminaries have included: the Executive Producer of Downton Abbey, the Bank of England's Chief Data Officer, a BBC Director, a renowned British photographer, a World Bank Vice President, and a UN Commissioner. This exclusive opportunity allows students to connect with world-class leaders and gain an unparalleled understanding of various industries.



## 05 | Enterprise /Lab Visits

Visits to local enterprises and research facilities bridge the gap between the classroom and the workplace. Students will gain exposure to innovative research and emerging fields in areas such as biotechnology and materials science. Visits to globally recognised enterprises allow students to learn more about international standards, regulations, and business strategies. Past engagements include: Silverstone, Jaguar Land Rover, Mini Plant Oxford, the Bank of England, London Stock Exchange, and ACCA headquarters.



## 06 | Capstone Project

This capstone project is an integral component of the programme, designed to culminate a student's academic experience by applying theoretical knowledge to a substantive, real-world challenge. The projects are grounded in a forward-looking perspective, addressing critical contemporary issues and equipping students with the mindset and capabilities of future leaders and innovators.

### Key Project Components:

- **Contemporary Issues:** Projects address pressing challenges such as the ethical dimensions of innovative medical advancements, the geopolitical ramifications of social media, and the evolving implications of artificial intelligence on personal identity.
- **Interdisciplinary Collaboration:** Students work in diverse groups, synthesising knowledge from various disciplines to develop innovative solutions. This process cultivates a capacity for effective collaboration among peers from different academic backgrounds.
- **Practical Application:** Students must critically consider real-world constraints, including feasibility, sustainability, and ethical implications, bridging scholarly inquiry with practical application.
- **Skill Development:** The project promotes the development of key competencies in collaboration, communication, and complex problem-solving.
- **Formal Presentation:** The final solution is presented to a panel of academics, demonstrating a mastery of the skills cultivated throughout the programme.



*"The capstone project isn't just a classroom exercise; it's the heart of our curriculum. It's not just about remembering what you've learned and then passing a test. It's about using that knowledge to solve real – world problems."*

*Working as part of a team, you'll come up with innovative solutions to the most pressing issues of our time - from global sustainability to the ethical use of AI.*

*-- Dr Gayle Loneragan, Academic Lead*





## Global Competence and Intercultural Activities



### Gala Ball

Imagine a magical evening under the stars at an Oxford Ball, where tradition meets youthful exuberance. This highly anticipated event immerses students in the elegance and charm of a quintessential British social gathering.



### Formal Dinner

Savour the Oxford tradition of a Formal Hall: a scholarly finale dinner celebrating academic achievements and in the company of Fellows of the constituent colleges of the University of Oxford.



### Cultural Excursions & Enrichment

Beyond the classroom, there will be a series of cultural excursions including:

- *Traditional Afternoon Tea*
- *Windsor Castle*
- *Stratford-upon-Avon (Shakespeare's Birthplace)*
- *London*

## Student Testimonials

**I realise for the first time that doing academic work is something so pure and truly enjoyable.**

In my impression, those giants of academia always seemed out of reach. However, during this program, I was incredibly fortunate to engage in face-to-face discussions with professors from Oxford University, and I even met Fellows of the Royal Academy of Engineering! The humility and objectivity that the professors displayed in their lectures, along with their friendliness and patience in answering our questions, made me realise for the first time that doing academic work is something so pure and truly enjoyable.

-- Mr Huang, Beijing Normal University

**The magical chemistry resulting from the clash between classical and modern British culture, it left a lasting impression on me.**

This is the most fulfilling programme I have ever participated in. Whether it was the enlightenment from the academic courses, the awe of the ancient campuses, or the magical chemistry resulting from the clash between classical and modern British culture, it all left a lasting impression on me. On the final day, I reluctantly said goodbye to the teachers and fellow participants from all corners of the world. I'm deeply grateful for the thoughtful and enriching arrangements made by the staff of this programme. I wish all my fellow participants the best of luck, and with the long future ahead, I look forward to meeting again.

-- Ms Zhang, Fudan University

**The concept of interdisciplinary integration emphasized in the course brought me great inspiration.**

From Christ Church to Blackwell, from the British Museum to the Ashmolean Museum, we gained a lot from our packed daily courses and activities. We experienced different cultural traditions, teaching methods, and attitudes toward life. The concept of interdisciplinary integration emphasised in the course brought me great inspiration. Politics, economics, law... they are all fascinating and always intertwine with philosophy itself, giving me a deeper understanding of the richness and depth of various disciplines.

-- Mr Liao, Tsinghua University

**Those quintessentially British experiences, which I had only seen on screen, were now a reality for me.**

From balls, traditional British etiquette, to High Table dinners—these quintessentially British experiences, which I had only seen on screen, were now a reality for me. During the two weeks of studying and living at the college, I also visited the Jaguar Land Rover factory. The packed schedule taught me the Oxford spirit of 'Work Hard, Play Harder'. It felt less like I was participating in a short-term programme and more like I had begun my study abroad life ahead of time.

-- Ms Lin, Xiamen University



# Politics - Philosophy -Economics – Law (PPEL) Module

## 01 | MODULE DESCRIPTION

*How can we ethically regulate AI? What power does a nation hold in shaping global norms? How can societies manage the spread of misinformation? What characteristics should a leader have in times of crisis?*



“We hope that your time here will be both stimulating and engaging, as you examine the intersections of politics, philosophy, economics, and law, and immerse yourself in the rich intellectual and historic environment of this remarkable city.”

Welcome Notes

This interdisciplinary module introduces students to key global challenges through the combined lenses of politics, economics, philosophy and law. Students will explore international relations, geopolitical shifts, and the impact of digital diplomacy, with case studies such as Sino-UK relations. The module examines how economic theory informs sustainability, focusing on waste management, the circular economy, and the changing nature of work. Ethical and philosophical perspectives are integrated to address issues like belief systems, happiness, and practical decision-making. Students will also gain insight into modern British governance and the influence of liberal and neo-liberal ideologies on policy and society. Learning from and engaging with leading Oxford academics, this course will equip students with theoretical and methodological tools and expertise to engage systematically with political and economic questions in a broader international context.

### The course is for students of:

Social Sciences and, in particular, fields related to: Politics and Administration, International Relations, Philosophy, Sociology, Economics and Trade, Law, Journalism, etc.

### Module Lead: Professor Michael Freeden

Prof Freeden is Emeritus Professor of Politics, University of Oxford. He is a Fellow of the Academy of Social Sciences and has been awarded the Sir Isaiah Berlin Prize for Lifetime Contribution by the UK Political Studies Association.

## 02 | LEARNING OUTCOMES

Upon completing this module, students will understand the complex interplay of global politics, international economics, and philosophical theories on international relations and social development. They will also gain insight into the influence of international organisations and legal systems, as well as the link between social science theory and practice.

## 03 | MODULE OVERVIEW

### Unit 1: International Relations and Geopolitics

- Foundational International Relations
- Sino-UK Relations Analysis
- Climate Change & News Media
- Russian Foreign Policy Evolution

### Unit 2: Economics and Social Impact

- Foundational Concepts of Economics
- The British Economy: Past, Present, Future
- Hidden Human Labor Powering AI
- The Changing Nature of Work
- Social Media: Identity and Identification

### Unit 3: Advanced Studies in Philosophy, Ethics, and Cognitive Theory

- Practical Ethics: Ethics in the Real World
- Happiness First: Normative Dimensions
- Artificial Intelligence: Ethics and the Future
- The Philosophy and Cognitive Science of Delusional Thinking
- Modern Feminist Theory

### Unit 4: Political Science and Law

- Modern British Government
- Government Capacity to Regulate AI
- Foundational Political Philosophy
- Liberalism and Neo-Liberalism

*(This syllabus is a proposed framework. The curriculum is subject to annual review and will be updated to incorporate frontier academic topics and emerging advancements in the field.)*

## Proposed Reading List

- Wolff, J. (2006). An Introduction to Political Philosophy. Oxford University Press.
- Acemoglu, D. and Robinson, J.A. (2012). Why Nations Fail: the Origins of Power, Prosperity and Poverty. New York: Crown Publishers.
- Waltz, K. (1979). Theory of International Politics. Boston: Addison-Wesley Publishing Company.
- Norris, P. and Inglehart, R.F. (2019). Cultural Backlash: Trump, Brexit, and Authoritarian Populism. Cambridge University Press.
- Allen, R.C. (2011). Global Economic History: A Very Short Introduction. Oxford University Press.

*More readings and resources will be given prior to the start of the programme.*



# Literature - Language- Digital Culture and Communication Studies (LLD) Module

## 01 | MODULE DESCRIPTION

*How has the rise of digital media transformed journalism? Can we truly deconstruct a text when its words were generated by an AI without consciousness or intent? Ever wondered what happens behind the scenes of the most successful British show worldwide of all time - Downton Abbey?*



“This is a place where questions are welcomed, discoveries are made, and ideas take flight. Though Oxford may appear steeped in formality, it remains open to all who seek to learn, offering both challenge and inspiration. You, too, are now part of this tradition - you belong here.”

*Welcome Notes*

When we read, we are making sense not just of the words on the page, but of the ideas being communicated to us. In this forward-thinking course, students will have the opportunity to consider the underlying messaging of written medias – from classical literature to online journalism – across cultures. Students will consider representations of different groups of people in classical literature such as Shakespeare and Austen, developing their critical thinking and analysis skills. Students will explore the modern age of digital communications, such as journalism and film, and its implications on society. Throughout this unit, students will engage with the latest research in literature, language and intercultural communication.

### The course is for students of:

English Language and Literature, Foreign Languages, Linguistics, Journalism, Translation, Chinese Language and Literature, Sociology, Anthropology, History, Drama, Film and Television, Media Studies, Arts, Cross-cultural Communication, Library Studies, Humanities and Education, etc.

### Module Lead: Professor Diane Purkiss

Professor Diane Purkiss is Fellow and Tutor of English at Keble College, University of Oxford. She specialises in Renaissance and women's literature, witchcraft and the English Civil War. Purkiss was born in Sydney, Australia, and gained her D.Phil. from Merton College, University of Oxford.

## 02 | LEARNING OUTCOMES

Upon completion of this module, students will be able to analyse Western literature and visual arts using various theoretical approaches. They will gain insight into cultural representations and intercultural communication by exploring classic and modern texts. Additionally, the module will familiarise students with major trends in digital cultures and their impact on society.

## 03 | MODULE OVERVIEW

### Unit 1: Advanced Literary Theory and Cultural Texts

- Deconstruction of Language in the age of AI
- Gothic Literature: Evolution and Influence
- Femininity in Victorian Literature
- Cultural Diplomacy in Shakespeare and China

### Unit 2: Ecocritical Perspectives and Environmental Narratives in Literature

- Theoretical Frameworks and Literary Analysis
- Environmental Justice in Contemporary Literature
- Case studies: Ecocritical Approaches to Latin Literature
- The Ecology of Writing: Interconnected Systems
- Environmental Philosophy and Literature

### Unit 3: Global Linguistic Transformations and AI Communication

- Intercultural Communication: Theory, Practice and AI Translation
- Globalisation on Language: Progression and AI Impact
- Endangered Languages: Documentation and Preservation
- Language and Cultural Identity: Behind Communication

### Unit 4: Digital Culture, Media Dynamics and Critical Analysis

- Digital Media Ecologies: Interactions and Influences
- The Future of News: Audience inside the Story
- Critical Theories of Digital Media and Communication
- Digital Storytelling and Content Creation

*(This syllabus is a proposed framework. The curriculum is subject to annual review and will be updated to incorporate frontier academic topics and emerging advancements in the field.)*

## Proposed Reading List

- Pinker, S. (1994). *The Language Instinct: The New Science of Language and Mind*. London: Penguin Books.
- Zimmermann, T. and Sternefeld, W. (2013). *Introduction to Semantics: An Essential Guide to the Composition of Meaning*. De Gruyter.
- Stark, W. (2023). *Introduction to Digital Communications*. Cambridge University Press.
- Culler, J.D. (2011). *Literary Theory: A Very Short Introduction*. Oxford University Press.
- Austen, J. (2005). *Pride and Prejudice*. Oxford: Macmillan.

*More readings and resources will be given prior to the start of the programme.*



# Business – Finance -Management (BFM) Module

## 01 | MODULE DESCRIPTION

*How do financial systems work? How can AI-driven innovation fundamentally reshape business processes? What is the 'hidden human labor' that powers AI? What is the true cost of unethical leadership in a global marketplace? What are the long-term strategic and social implications for the future of work and business?*



“As you join us, you will have the opportunity not only to engage with a rigorous programme in Business, Finance, and Management, but also to situate your studies within the unique scholarly and cultural heritage of the University, reflected in its historic architecture and traditions.”

*Welcome Notes*

This interdisciplinary module tackles these questions by bridging innovation, leadership, sustainability, and finance. It is designed to prepare students for the complexities of contemporary business by integrating topics like AI-driven transformation, strategic leadership, and wealth management. Students will explore how to lead responsibly and innovate effectively across diverse organisational contexts.

Drawing from fields as varied as extreme sports, banking, and sustainability, the course fosters a system-level understanding of how to navigate and shape the future of business. Through this approach, students will gain a comprehensive view of how different elements of a company interact to create value and drive change. Ultimately, this will equip students with the skills needed to make a significant impact in the world of finance and business.

### The course is for students of:

Business, Economy, Finance, Accounting, Business and Public Administration, International Trade, Management, Marketing, other related fields and for students with strong interest in business matters.

### Module Lead: Mr Mark Clark, MBE

Mark Clark's distinguished career spans over 30 years and multiple sectors. He served with both the British Army and the Foreign & Commonwealth Office, gaining extensive international experience in the UK, India, Iraq, Democratic Republic of Congo, Papua New Guinea, and Jordan.

## 02 | LEARNING OUTCOMES

Upon completion of this module, students will understand key macro- and microeconomic processes, as well as financial policy. They will be able to apply cutting-edge fintech tools, develop leadership skills, and discuss modern innovation practices. The module also provides insights into game theory strategies and executive compensation, preparing students to tackle complex business challenges.

## 03 | MODULE OVERVIEW

### Unit 1: Leadership and Organisational Management: Theory and Practice

- Leadership: A Sporting Reflection
- Ultra Marathons: Strategic Management
- Responsible Leadership, Dynamic Strategies
- Workplace Motivation: Theory & Practice

### Unit 2: Strategic Financial Management and Banking Systems

- Fintech: Examples, Uses, Benefits
- Financial Analysis and AI
- Sustainable Finance: Make Wise Decision
- Fundamental and Current Issues in Banking

### Unit 3: AI and Technology: Transforming the Way we Work

- AI Driven Innovation: Shaping the Future
- Implementing AI in Business Processes
- AI for Circular Economies
- The Hidden Human Labour powering AI

### Unit 4: Business and Sustainability: Transforming the World of Work

- Business and Social Impact
- Corporate Sustainability: Foundations
- Corporate Sustainability: Leadership
- Brand Management and Valuation

*(This syllabus is a proposed framework. The curriculum is subject to annual review and will be updated to incorporate frontier academic topics and emerging advancements in the field.)*

## Proposed Reading List

- McLaney, E.J. and Atrill, P. (2014). Accounting and Finance: An Introduction. New York: Pearson.
- Watson, T.J. (2006). Organising and Managing Work: Organisational, Managerial and Strategic Behaviour in Theory and Practice. Harlow: Pearson/Longman.
- Mazzucato, M. (2018). Value of Everything: Making and Taking in the Global Economy. S.L.: Public Affairs.
- Kay, J.A. (2011). Foundations of Corporate Success: How Business Strategies Add Value. Oxford: Oxford University Press.
- Hatch, M.J. and Cunliffe, A.L. (2006). Organization Theory: Modern, Symbolic, and Postmodern Perspectives. Oxford: Oxford University Press.
- Geroski, P. (2003). The Evolution of New Markets. Oxford: Oxford University Press.

*More readings and resources will be given prior to the start of the programme.*



# New Frontiers of Science: Math, Physics, Computer Science and Engineering (STEM) Module

## 01 | MODULE DESCRIPTION

*How will big data drive smart city innovation? How can AI enable stable, intelligent manufacturing of personalised products? What specific applications do Newtonian mechanics and fluid dynamics have for offshore renewable energy systems? In what ways will quantum computing change our understanding of astrophysics?*



*You will engage with a rigorous and intellectually stimulating programme that explores the frontiers of science, AI, engineering, and mathematics. This will be a distinctive opportunity to challenge yourself, broaden your perspectives across disciplines, and contribute meaningfully to addressing some of the most significant challenges of our time.*

*Welcome Notes*

This module offers students an integrated introduction to key themes and innovations across the physical sciences, engineering, computing, and mathematics. Bridging theoretical principles with real-world applications, the module explores how interdisciplinary approaches help us understand complex systems, develop sustainable technologies, and harness computational power for innovation.

Students will explore foundational and advanced topics, including classical and fluid mechanics, network science, and climate modelling, alongside frontier areas such as AI-driven innovation, machine learning, and particle accelerator applications. Case studies such as supermassive black hole measurement, offshore renewable energy, and energy system transformation provide concrete insight into how STEM disciplines address contemporary global challenges.

### The course is for students of:

Engineering related degrees, Material Science and Technology, Physics, Mathematics, Transportation, Space Science and Technology, Computer Science, Artificial Intelligence, etc.

### Module Lead: Professor Martin Bureau

Professor Martin Bureau is a Lindemann Fellow and Tutor in Physics at Wadham College, as well as a Professor in Astrophysics at the University of Oxford's Department of Physics. Before joining Oxford, he was a NASA Hubble Fellow within the Department of Astronomy at Columbia University in New York City.

## 02 | LEARNING OUTCOMES

Upon completion of this module, students will be able to make critical scientific assessments of current issues and apply creative, solution-focused thinking to research. They will gain an understanding of our place in the universe, the future of quantum computing, and the principles of intelligent manufacturing. The module also covers the application of Newtonian mechanics in contemporary science and the process behind high-entropy materials.

## 03 | MODULE OVERVIEW

### Unit 1: Advanced Mathematical Theories and Applications

- Advanced Probability Theory
- Combinatorics in Problem Solving
- Mathematical Modeling: Frontiers and its Applications
- Applications in Computer Science

### Unit 2: Artificial Intelligence and Machine Learning

- AI and Machine Learning for Robotics
- Data, AI and the Future of Learning
- AI for Healthcare: Opportunities and Limitations
- Make Ethical Decisions: Ethics and AI

### Unit 3: Theoretical and Experimental Physics

- Weighing Invisible Supermassive Black Holes
- Accelerators: Higgs Boson to Cancer Cure
- Nanotechnology: Engineering at Atomic Scale
- Tissue Engineering: Building Future Medicine
- Accelerators: Beyond Science, Diverse Applications

### Unit 4: Sustainable Engineering Practices and Environmental Innovations

- Computational Fluid Mechanics: Offshore Energy
- Climate as a Mechanistic System
- Sustainable Energy Transport
- Shaping Future Energy Systems

*(This syllabus is a proposed framework. The curriculum is subject to annual review and will be updated to incorporate frontier academic topics and emerging advancements in the field.)*

## Proposed Reading List

- Ashby, M.F. and Jones, D.R.H. (2012). Engineering Materials. 4th ed. Amsterdam: Elsevier Butterworth-Heinemann.
- Boas, M.L. (2015). Mathematical Methods in the Physical Sciences. New Delhi: Wiley. Chapters 1-2
- Stirzaker, D. (1999). Probability and Random Variables. Cambridge University Press.
- Borgnakke, Moran, M.J., Shapiro, H.N., Boettner, D.D. and Bailey, M. (2010). Fundamentals of Engineering Thermodynamics. John Wiley & Sons Canada, Limited.

*More readings and resources will be given prior to the start of the programme.*



# Medical Science (MS) Module

## 01 | MODULE DESCRIPTION

*What happens to the brain when we get older? Can stem cells be used to cure any disease? Is ultrasound useful for administering drugs? How can we ethically and effectively use advanced biomaterials? Can AI-driven drug design fully replace traditional methods? How can healthcare systems like the NHS or the US model adapt to new technologies?*



*"We hope that the lectures and activities ahead will challenge you to think critically, inspire you to explore new perspectives, and strengthen your understanding of the medical sciences. This is also a chance to engage with your peers, share ideas, and appreciate the collaborative spirit that lies at the heart of medicine."*

*Welcome Notes*

This module provides an insight into the latest topics in medicine and health-related subjects. Leading experts and researchers in the medical sciences will guide students through the intricacies of medical and clinical research, paying particular attention to cutting-edge technologies in a variety of medical areas.

Students will investigate process involved in the likes of neuroscience, oncology, surgery and immunology. Focus is also placed on advanced drug development and biomedicine, and how these are changing into the future. This course offers insight into the importance of interdisciplinary teamwork, to improve our medical knowledge and practice, as well as developing a comprehensive knowledge of framework and ethics in clinical practice, to develop as well-rounded physicians in the future.

### The course is for students of:

Medicine, Genetics, Psychology, Public Health, Pharmacology and other related fields.

### Module Lead: Professor Sir Walter Bodmer

Professor Sir Walter Bodmer is a renowned geneticist with a wide field of study. He is a Fellow of the Royal Society (FRS), an Honorary Fellow of the Royal Society of Edinburgh (HonFRSE), and a Fellow of the Academy of Medical Sciences (FMedSci).

## 02 | LEARNING OUTCOMES

Upon completion of this module, students will understand state-of-the-art tools and techniques in biomedical research, including nanotechnology and biomaterial manufacturing. They will explore ethical and regulatory issues and the importance of interdisciplinary teamwork. The module covers human health complexities in areas like oncology and neuropsychology.

## 03 | MODULE OVERVIEW

### Unit 1: Medical Technology & AI

- AI and Medical Imaging
- Computer-Aided Drug Design
- Technology-Enhanced Drug Delivery
- Advanced Biomaterials & Therapeutic Technologies
- Integration of Proteomics and Genomics

### Unit 2: Neuroscience & Disease Mechanisms

- Neurodegenerative Diseases (e.g., Parkinson's)
- Cognitive and Behavioral Neuroscience
- Psychology for Medicine
- Stem Cell Therapy

### Unit 3: Oncogenesis & Regenerative Medicine

- Evolutionary Perspectives on Cancer and Aging
- Mechanisms Controlling Epigenetic Patterning
- Challenges in Cancer Therapy
- Using Biomarkers to Optimize Cancer Treatment
- Biomaterials for Tissue Engineering

### Unit 4: Healthcare Systems & Medical Ethics

- Medical Research Ethics
- Healthcare System in the US
- NHS in the UK and The Impact of Covid-19

*(This syllabus is a proposed framework. The curriculum is subject to annual review and will be updated to incorporate frontier academic topics and emerging advancements in the field.)*

## Proposed Reading List

- Siddhartha Mukherjee (2009). A Biography of Cancer. London: Fourth Estate Ltd. Part 1, 4 and 6
- Jones, S. (2012). The Language of the Genes. HarperCollins UK.
- Stryer, L., Berg, J., Tymoczko, J. and Gatto, G. (2023). Biochemistry. 10th ed. New York Macmillan Learning WH Freeman.
- Alberts, B. (2002). Molecular Biology of the Cell. 4th ed. New York: Garland Science Taylor & Francis. Chapter 9
- Bodmer, W.F. and Mckie, R. (1997). The Book of Man: The Human Genome Project and The Quest to Discover our Genetic Heritage. New York: Oxford University Press.

*More readings and resources will be given prior to the start of the programme.*



## Partial List of Lecturers from Previous Programmes



*Prof Jonathan Wolff*

Blavatnik Chair in Public Policy and Governing Body Fellow at Wolfson College, University of Oxford. He has been an external member of the Board of Science of the British Medical Association. His recent work has largely concerned equality, disadvantage, social justice and poverty.



*Alan Giles OBE*

Associate Fellow at the Saïd Business School, University of Oxford, Chairman of the Advisory Board of the Oxford Institute for Retail Management, Non-executive director of the Competition and Markets Authority, Chairman of Fat Face, Chief Executive of HMV Group. Alan has taught on the Oxford MBA programme at Saïd Business School.



*Prof Harish Bhaskaran*

Professor of Applied Nanomaterials in the Department of Materials, EPSRC Fellow in Manufacturing. He is an inventor of phase change photonic computing and continues work in establishing the field. His work has been featured widely over the last several years in Science, Nature, The Economist, MIT Technology Review, Fortune, Wired, BBC etc.



*Prof Robert Lambourne*

Professor Emeritus in the Faculty of Science, Technology, Engineering and Mathematics at the Open University. Senior Vice-President at the Institute of Physics, Chair of the Physics Education Division of the European Physical Society and Chair of the International Commission on Physics Education.



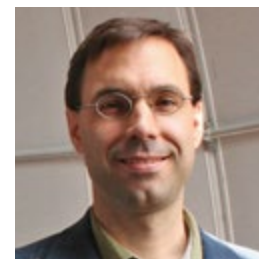
*Prof Ros Ballaster*

Professor of 18th Century Studies and Lecturer in the Faculty of English and Tutorial Fellow at Mansfield College. Professor Ballaster was a Visiting Fellow to the Department of English and American Literature at Harvard University. Her main research areas encompass seventeenth-and eighteenth-century culture; oriental fiction; ideas of cognition and character in literary and theatrical representation.



*Prof Harish Bhaskaran*

Professor of Applied Nanomaterials in the Department of Materials, EPSRC Fellow in Manufacturing. He is an inventor of phase change photonic computing and continues work in establishing the field. His work has been featured widely over the last several years in Science, Nature, The Economist, MIT Technology Review, Fortune, Wired, BBC etc.



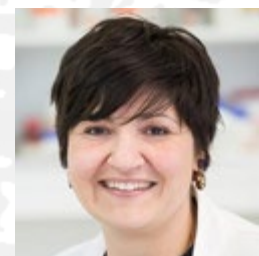
*Prof Martin Bureau*

Lindemann Fellow and Tutor in Physics at Wadham College, University of Oxford, and Professor in Astrophysics within the Department of Physics, University of Oxford. He is particularly interested in using observations and theoretical studies of the gas, stars, and dark matter that make up galaxies to constrain their formation and evolution.



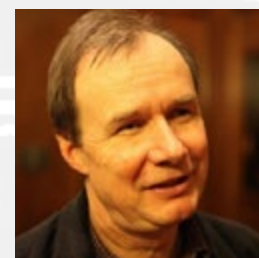
*Dr Tom Crawford*

Fellow and Tutor at St John's College, Early Career Teaching and Outreach Fellow at St Edmund Hall, University of Oxford. Dr Crawford runs the award-winning website [www.tomrocksmaths.com](http://www.tomrocksmaths.com) and has had partnerships with the European Mathematical Society. He can also be found on Numberphile - the largest maths education channel on YouTube with over 3 million subscribers.



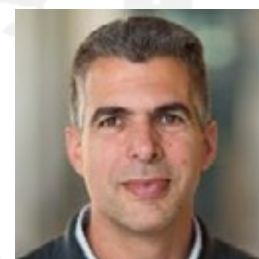
*Prof Sonia Antoranz Contera*

Professorial Fellow of Green Templeton College, and a Professor of Biological Physics at the University of Oxford Physics Department. Her work lies at the interface of physics, biology, and nanotechnology. She was the founder, director and co-director of the Oxford Martin Institute of Nanoscience for Medicine at the Oxford Martin School.



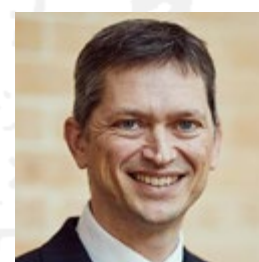
*Dr James Painter*

Director of Journalism Programme at Reuters Institute, University of Oxford. He has carried out several consultancies for the IPCC, IPBES, Oxfam, UNDP, Conservation International and other organisations. James joined the BBC World Service in 1992, and worked as head of the Spanish American Service, head of the BBC Miami office, and Executive Editor Americas.



*Prof Nir Vulkan*

Fellow of Worcester College, Director of the Oxford Programmes on Fintech; Blockchain Strategy; and Algorithmic Trading, Chair of the Committee set up to advise the European Commission on AI in Banking and Finance. Professor Vulkan is a leading authority on e-commerce and market design, and on applied research and teaching on hedge funds.



*Prof Richard Barker*

Professor of Accounting at the Saïd Business School. He has education from both the University of Oxford and University of Cambridge, and he qualified as a chartered management accountant while working for AstraZeneca. He is the academic member of the Corporate Reporting Council, which sets UK accounting standards.



