DISCOVER | ECONOMICS, CLIMATE CHANGE & BIG DATA

Oxford University's Department of Economics and Oxford Summer Courses have come together to offer a unique two-week programme that combines rigorous academic study with an engaging extracurricular experience.

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27 JULY - 9 AUGUST

Drawing on the Department's world-renowned expertise and Oxford Summer Courses' commitment to immersive learning, this programme provides students with the opportunity to explore critical global challenges while experiencing life in one of the world's most prestigious academic settings.

Personalised and Immersive Learning

What sets this programme apart is its tailored approach to student learning. Whether engaging with academic material or participating in extracurricular activities, each student's experience is thoughtfully designed to maximise their growth and enjoyment.

Drawing on the Department's world-renowned expertise and Oxford Summer Courses' commitment to customised education, this programme provides students with the opportunity to explore critical global challenges while experiencing life in one of the world's most prestigious academic setting

TARGET AUDIENCE: 15 - 17 YEAR OLDS

This programme is open to students eager to deepen their understanding of economics and data analysis in relation to global challenges. While no prior knowledge of these fields is required, an interest in economics, climate change, or data-driven decision-making is recommended to make the most of the experience.

TANGIBLE BENEFITS:

- <u>Advanced Skills</u>: Gain practical knowledge of econometric models, big data tools, and the economics of climate change.
- <u>Networking Opportunities</u>: Build meaningful connections with peers and leading academics in economics.
- <u>Future Pathways</u>: Prepare for further education or careers in economics, public policy, data analysis, and sustainable development.

Our Teaching Approach:

Our programme is delivered through a blend of interactive seminars, hands-on workshops, and case studies, ensuring a dynamic and engaging learning environment. With small class sizes, participants benefit from close interaction with instructors and peers, fostering a collaborative atmosphere ideal for personal and intellectual growth.

Course Outline:

Week 1: Economics of Climate Change and Sustainable Development

Explore the economic aspects of climate change, focusing on policies and innovations for a sustainable future.

Introduction to Climate Change and Economics
- What is Climate Change?
- Externalities, market failures, and public goods.
- Real-world climate challenges discussion.

Economics of Climate Policies
- Tools for action: Carbon taxes, cap-and-trade, subsidies.
- Policy intervention case studies.
- Role-playing as policymakers.

Sustainable Development
- SDGs: Energy, poverty, and inequality.
- Responsibilities of developed vs. developing nations.

Innovation and Technology
- Green energy, sustainable agriculture, and carbon capture.

Week 2: Applied Econometrics and Big Data

Learn to apply econometrics and big data tools to analyze and solve economic challenges, with a focus on hands-on activities.

Introduction to Econometrics and Big Data
- Fundamentals of economic analysis and the role of data.
- Applications of big data in economics, business, and policy.

Basics of Data Analysis
- Data types, visualization, and creating charts.
- Understanding correlation vs. causation.

Introduction to Econometric Models
- Regression analysis fundamentals and their applications.

Big Data Tools and Techniques
- Introduction to machine learning and predictive analytics.

Each topic includes practical, hands-on exercises to reinforce learning.

More than Academics

This partnership blends academic excellence with an immersive extracurricular programme, designed to make the most of Oxford's inspiring environment. Outside the classroom, participants will enjoy activities such as college tours, punting on the River Thames, guest lectures, and opportunities to engage with peers from around the world.

In partnership with Oxford University's Department of Economics

Programme Price
£7,295 per student

What's Included
This comprehensive programme ensures students receive exceptional academic and extracurricular value.
The following elements are included:

- **Teaching**
  - One-on-one or small group tutorials (1–2 students per tutor).
  - Small group seminars (up to 8 students) led by experts.
  - Skills development workshops to enhance learning.
- **Meals**
  - Half-board meals (breakfast and dinner), either at the accommodation or local restaurants.
- **Accommodation**
  - Comfortable single or twin rooms for the duration of the programme.
- **Certification**
  - A certificate of completion and a personalised letter of recommendation upon finishing the course.
- **Customer Service**
  - Dedicated support to assist with any needs throughout your stay.
- **Merchandise**
  - Complimentary notepad and pen.
- **Airport Transfers**
  - Inclusive transfers during standard hours for a stress-free arrival and departure.
- **Insurance**
  - Standard coverage including cancellation, medical, and baggage insurance.

ABOUT THE PROGRAMME DIRECTOR: BANU DEMIR-PAKEL

Dr. Banu Demir-Pakel, Associate Professor of Economics at the University of Oxford, has thoughtfully crafted this programme. With expertise in international trade, development economics, and economic policy, Dr. Demir-Pakel has designed a curriculum that combines rigorous academic study with real-world applications, ensuring students gain both theoretical knowledge and practical skills.

Why Choose this programme?
This two-week immersive experience brings together the academic excellence of Oxford University's Department of Economics and the personalised approach of Oxford Summer Courses. Students will:

- Benefit from a programme crafted in collaboration with Oxford University's Department of Economics, offering exclusive insight into world-class academic resources, teaching methodologies, and intellectual culture.
- Explore pressing global challenges, from the economics of climate change to big data analysis.
- Gain advanced skills in econometrics and policy-making through interactive, hands-on sessions.
- Enjoy the rich history and vibrant culture of Oxford, with extracurricular activities like college tours and punting on the River Thames.

LEARNING ENVIRONMENT & ACCOMMODATION

The Department of Economics - Manor Road Building, Manor Road, Oxford, OX1
Join us at the University of Oxford's Department of Economics, consistently ranked among the UK's top economics departments. Your classes will take place in the Manor Road Building, designed by Norman Foster in 1999. This modern facility features state-of-the-art lecture theatres and seminar rooms, creating the ideal space for learning.

Located in the heart of Oxford, the building is close to the city's historic colleges, cultural attractions, and beautiful parks, offering an inspiring setting for your summer school experience.

Accommodation – St Hilda's College on St Giles, Oxford, OX1
During your stay, you'll be accommodated at St Hilda's College's St Giles property, a part of the University of Oxford. This central location offers comfortable rooms and is within easy reach of the city's historic landmarks, providing an ideal base for your summer school experience.

[Name]
Programme Tutor
Economics, Climate Change & Big Data Programme
[Date]

To Whom It May Concern,

This letter serves as confirmation that [Student's Full Name] participated in the Economics, Climate Change & Big Data Summer Programme, a collaboration between Oxford University's Department of Economics and Oxford Summer Courses, held from [Start Date] to [End Date].

Over the course of this two-week programme, [Student's Name] demonstrated a keen interest in economics and related disciplines, engaging actively with a rigorous curriculum designed and delivered by Oxford University tutors. The programme covered critical global topics such as the economics of climate change, sustainable development, econometrics, and big data analysis, providing students with an introduction to key concepts and practical skills in these areas.

[Student's Name] attended each scheduled session, including small group seminars, interactive workshops, and hands-on activities. While this programme is an introduction to these complex subjects, [Student's Name] displayed the motivation and potential to further develop their understanding of economics and its real-world applications.

This letter confirms [Student's Name]'s successful completion of the Economics, Climate Change & Big Data Programme and highlights their commitment to academic enrichment during their time with us.

Yours sincerely,
[Full Name]
Programme Tutor
Economics, Climate Change & Big Data Programme

EXAMPLE TIMETABLE | ECONOMICS, CLIMATE CHANGE & BIG DATA

Week 1: Economics of Climate Change and Sustainable Development

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08:00	Arrivals	Breakfast, sign-ins, room checks	Breakfast, sign-ins, room checks	Breakfast, sign-ins, room checks	Breakfast, sign-ins, room checks	Breakfast, sign-ins, room checks	Breakfast, sign-ins, room checks
09:00–10:30	Welcome Talk	Introduction to Climate Change and Economics	Economics of Climate Policies	Role-Playing Policy Interventions	Sustainable Development: SDGs and Inequality	Innovation: Green Energy and Tech	Excursion
10:30–11:00		Break	Break	Break	Break	Break	Excursion
11:00–12:30		Seminar: Real-World Climate Challenges	Case Studies: Tools for Action	Practical Exercises on Policy Making	Responsibilities of Developed vs. Developing Nations	Carbon Capture and Agriculture	Excursion
13:00–14:00		Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
14:00–15:30	City Tour/Orientation	Goal Setting and Tutorial Work	Small Group Workshop: Policy Innovation	Future Pathways Session	Study and Tutorial Work	Reflection and Feedback	Excursion
16:00–17:30		Break	Break	Break	Study	Activity	Excursion
18:00–19:00	Dinner	Dinner	Dinner	Dinner	Dinner	Dinner	Dinner
20:00–21:00	Activity	Activity	Activity	Activity	Activity	Celebratory Dinner	BOP

Week 2: Applied Econometrics and Big Data

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08:00	Excursion	Breakfast, sign-ins, room checks	Breakfast, sign-ins, room checks	Breakfast, sign-ins, room checks	Breakfast, sign-ins, room checks	Breakfast, sign-ins, room checks	Departures
09:00–10:30		Introduction to Econometrics and Big Data	Basics of Data Analysis: Visualisation	Introduction to Regression Models	Big Data Tools: Predictive Analytics	Practical Case Study Workshop	
10:30–11:00		Break	Break	Break	Break	Break	
11:00–12:30		Fundamentals of Data in Economics	Correlation vs. Causation Workshop	Applications of Regression Analysis	Machine Learning Introduction	Presentations and Feedback	
13:00–14:00		Lunch	Lunch	Lunch	Lunch	Lunch	
14:00–15:30		Small Group Tutorials	Study and Tutorial Work	Practical Application: Econometric Models	Reflection and Preparation for Careers	Programme Wrap-Up Session	
16:00–17:30		Break	Break	Break	Break	Break	
18:00–19:00		Dinner	Dinner	Dinner	Dinner	Celebratory Dinner	
20:00–21:00		Activity	Activity	Activity	Activity	BOP	

CERTIFICATE OF COMPLETION

OXFORD UNIVERSITY ECONOMICS SUMMER SCHOOLS

ECONOMICS, CLIMATE CHANGE & BIG DATA

27 JULY - 9 AUGUST

THIS CERTIFICATE IS AWARDED TO

FORENAME SURNAME

FORENAME SURNAME	BANU DEMIR-PAKEL
TUTOR	PROGRAMME DIRECTOR

OXFORD SUMMER COURSES