OXFORD INTERNATIONAL
STUDY ABROAD PROGRAMME

AT ST ANTONY'S COLLEGE
UNIVERSITY OF OXFORD

**Internet Data Analysis and
Fundamentals of Research Methods
Oxford International Study Abroad Programme
Spring 2021 Online Course**

Oxford International Study Abroad Programme

Address: 16-17 Turl Street, Oxford Students Hub, Oxford, OX1 3DH, England, UK

Tel: +44(0)1865 521959

Email: info@oxfordstudyabroad.org.uk

Web: www.oxfordstudyabroad.org.uk

01| Oxford International Study Abroad Programme

The on-campus academic programmes are well organised for students from universities all over the world at St Antony's College, University of Oxford. The programmes enable the students to benefit from knowledge of Oxford University, experience Oxford city and world-famous institutions in the UK.

The Spring 2021 Online Course Internet Data Analysis and Fundamentals to Research Methods is the transition in response to COVID-19 pandemic. The goal of these changes is to minimize the need to gather in large groups and spend prolonged time in close proximity with each other in spaces such as classrooms, dining halls, and residential buildings. Our actions are consistent with the recommendations of leading health officials on how to limit the spread of COVID-19 pandemic and are also consistent with similar decisions made by our peer institutions.

Academic programmes are designed to provide talented and advanced university students and professionals aspiring to pursue high-level research or management careers with the exposure to the key areas involved in exploring and discover the new trend of the world. These areas include governance and policy; design and planning; technology and innovation; economics, finance and commerce; and socio and cultural development. Aiming to connect top research and best practice, the courses engage participants in interactive and participatory lectures and seminars taught by leading experts at the University of Oxford as well as business and industrial sectors. It provides a global and comparative perspective on major aspects of contemporary and near future world development with case studies around the world, in order to explore innovative and sustainable practices that balance economic, environmental and social aspects of world development.

Online courses are much like classroom courses, except that the delivery of learning materials (lectures, homework, quizzes, readings) and interaction with students and instructors will be through the online system. Students may need to purchase textbooks or access to materials online. Instructors and teaching assistants lead discussions and are available for feedback and questions. The final evaluation will taken online through the supervision of the instructors.

A certificate of participation and final report with grades of each participant will be awarded to participants who contribute constructively to weekly discussions and exercises/assignments for the duration of the course.

02| Internet Data Analysis and Fundamentals of Research Methods

Course Description:

The online course will enable students to study with the instructors of Oxford University from anywhere in the world. Our 12-day course take place via virtual learning environment, such as Zoom and Dingtalk depending on the practical availability. Class sizes are kept small less than 30 to maximise interaction between students and instructors. Students will

·Study with us wherever you are – all you need is a computer with internet access
·Engage in highly interactive live online teaching sessions
·Benefit from peer-to-peer support, engage in stimulating discussion and join a wide community of learners
·Receive personal feedback on your work from an expert tutor
·Gain a certificate of participation at the end of your course
·Access class resources after your course finishes

Schedule (this course is completed entirely online)
Course: Internet Data Analysis and Fundamentals of Research Methods
  Orientation Day: 29th January 2021
  Teaching Weeks: 1st-19th February 2021
  Feedback Week: 22nd-26th February 2021
12-day online course is roughly equivalent to 40 hours of classroom time. On top of this, participants will be expected to spend roughly 5-10 hours on other recommended reading material, although this will vary from person to person.
While they have a specific start and end date and will follow the weekly schedule, our instructor-led online course would normally require participants to be online for some specific days of the week and time of the day. Unless otherwise stated, all course material will be posted on the Virtual Learning Environment so that they can be accessed at any time throughout the duration of the course and interaction with your instructor and fellow participants will take place in a variety of different ways(discussion boards, etc).
Oxford student teaching assistants will work in each Virtual classroom to offer timely help for teachers and students. Student support begins at the first contact with the prospective student and ends when he or she graduates from the programme.Our recruitment and retention counselors are in regular phone and email contact with individual students to answer questions, provide information, and counsel them on what it takes to be successful as a distance learning student. They orient students to the programme and assist them with administrative details and paperwork.

03｜Course Content:

Internet Data Analysis (24 hours):
▶ Introduction to Social Data Science and Data Mining (Design and Epistemology)
▶ Text-mining and Computational Text Analysis
▶ Motif Analysis in Signed Networks Data Mining in Internet Research (examples and summary)
▶ Social Network Mining and Analysis: Position and Centrality
▶ Social Network Mining and Analysis
▶ Homophily and Community Structure

Fundamentals of Research Methods(12 hours)
▶ Module 1: Research Fundamentals
This module focuses on research fundamentals. Research methods in all subject disciplines are grounded in the social and natural sciences and utilise similar techniques to conduct research, especially literature searches and reviews. However, there are distinct differences with regards to theory development, identifying research problems and developing research questions.

▶ Module 2: Research Methods
In this module, students are guided to develop a working knowledge of the most commonly used qualitative and quantitative research methods. Students learn the differences between qualitative and quantitative research and how the choice of research method depends on the ontological position of the researcher and the epistemology suitable to the research question.

Lectures (4 hours):
▶ How is My Life in Oxford?
▶ Big Data and AI

04| Timetable (40 hours in total)

WEEK ONE	Day 1 01/02	Day 2 02/02	Day 3 03/02	Day 4 04/02	Day 5 05/02	Day 6 08/02
UK Time 9:00-11:00 China Time 17.00-19.00	Introduction to Social Data Science and Data Mining (Design and Epistemology) -1	Introduction to Social Data Science and Data Mining (Design and Epistemology) -2	Text-mining and Computational Text Analysis-1	Text-mining and Computational Text Analysis-2	Motif Analysis in Signed Networks Data Mining in Internet Research (examples and summary) -1	Motif Analysis in Signed Networks Data Mining in Internet Research (examples and summary) -2
30-Min Break	Break	Break	Break	Break	Break	Break
UK Time 11:30-12:30 China Time 19:30-20.30	Fundamentals of Research Methods-1	Fundamentals of Research Methods-2	Fundamentals of Research Methods-3	Fundamentals of Research Methods-4	Fundamentals of Research Methods-5	Fundamentals of Research Methods-6
WEEK TWO	Day 7 09/02	Day 8 15/02	Day 9 16/02	Day 10 17/02	Day 11 18/02	Day 12 19/02
UK Time 9:00-11:00 China Time 17.00-19.00	Social Network Mining and Analysis: Position and Centrality-1	Social Network Mining and Analysis: Position and Centrality-2	Social Network Mining and Analysis-1	Social Network Mining and Analysis-2	Homophily and Community Structure-1	Homophily and Community Structure-2
30-Min Break	Break	Break	Break	Break	Break	Break
UK Time 11:30-12:30 China Time 19:30-20.30	Fundamentals of Research Methods-7	Fundamentals of Research Methods-8	Fundamentals of Research Methods-9	Fundamentals of Research Methods-10	Fundamentals of Research Methods-11	Fundamentals of Research Methods-12

Note:
1.Lectures on *How is My Life in Oxford?* and Big Data and AI will be posted depending on the speaker's availability when the programme is approaching.
2.The above schedule may be subject to change.

05 | Instructors:

Gina Neff

Professor, Oxford Internet Institute, University of Oxford

Professor Gina Neff is a Senior Research Fellow and Associate Professor at the Oxford Internet Institute and the Department of Sociology at the University of Oxford. She studies the future of work in data-rich environments. Professor Neff leads a new multinational comparative research project on the effects of the adoption of AI across multiple industries. She is the author of *Venture Labor* (MIT Press, 2012), which won the 2013 American Sociological Association Communication and Information Technologies Best Book Award; and with Dawn Nafus *Self-Tracking* (MIT Press, 2016). Her writing for the general public has appeared in *Wired*, *Slate* and *The Atlantic*, among other outlets. She holds a Ph.D. in sociology from Columbia University, where she remains a faculty affiliate at the Center on Organizational Innovation, and she serves as a strategic advisor on the social impact of AI for the Women's Forum.

Balazs Vedres

Senior Research Fellow, Oxford Internet Institute, University of Oxford

Vedres' research furthers the agenda of developing network science with social theoretical insight. His research results were published in the top journals of sociology, with two recent articles in the American Journal of Sociology developing the pragmatist notion of structural folds: creative tensions in intersecting yet cognitively diverse cohesive communities. Vedres' recent research follows entrepreneurs, video game developers, jazz musicians, programmers, and graphic designers as they weave collaborative networks through their projects and recording sessions, analysing questions of the sources of creativity, gender inequality, and the historical sustainability of innovation systems. In another line of work, Vedres has analysed historical network evolution in the areas of transnational civic activism, politicised business groups, and the evolution of global economic flows.

Bernie Hogan

Senior Research Fellow, Oxford Internet Institute, University of Oxford

Bernie Hogan (PhD Toronto, 2009) is a Senior Research Fellow at the OII and Research Associate at the Department of Sociology. With training in sociology and computer science, Hogan focuses on how social networks and social media can be designed to empower people to build stronger relationships and stronger communities. Hogan has published in a wide variety of venues, from peer-reviewed papers in sociology journals (such as Social Networks, City and Community, Bulletin of Science Technology and Society, and), in computer science proceedings (such as CHI, ICWSM, and CSCW) and related disciplines, particularly geography (with papers in Environment and Planning B, the Annals of the Association of American Geographers and Tijdschrift voor Economische en Sociale Geografie) and communication (with papers in New Media & Society, Social Media + Society, International Journal of Communication, and Information, Communication and Society). This is in addition to many chapters in books, grey literature reports and public opinion pieces. He is on the editorial boards of Social Media + Society, Journal of Computer-Mediated Communication and Social Networks.

Taha Yasseri

Previous Senior Research Fellow, Oxford Internet Institute, University of Oxford
Associate Professor, University College Dublin

Taha Yasseri is an Associate Professor at the School of Sociology of University College Dublin, Ireland. Formerly he was a Senior Research Fellow in Computational Social Science at the Oxford Internet Institute, a Turing Fellow at the Alan Turing Institute for Data Science, and a Research Fellow in Humanities and Social Sciences at Wolfson College, University of Oxford. Taha Yasseri has interests in analysis of large-scale transactional data and conducting experiments to understand human dynamics, government-society interactions, mass collaboration and collective intelligence, information and opinion dynamics, collective behaviour, and online dating.

06| Requirements

Sound academic performance:

70 (on a 100 scale) at the minimum

* 1st-year undergraduates from some partner universities do not need to submit academic results.
Requirement can be different due to different grading systems of different partner universities. For more details, please contact your home institutions.

English proficiency:

(1) IELTS: minimum 5.5 for overall average
(2) TOEFL: minimum 85 for the overall score
(3) College English Test (CET)-4: minimum 425 (applicable to Chinese university applicants only.)
(4) College English Test (CET)-6: minimum 500 (applicable to Chinese university applicants only)

* For those applicants who have not taken the above tests by the time of application or have not been in a professional English-speaking environment for years, their English proficiency must be assessed through Tele-interview by a programme officer

✳ This requirement for proof of English proficiency is not required for applicants whose first language is English, those whose first language is not English but have been involved in a full-time degree-level academic programme at a university where English is the language of instruction, or those who have extensive experience working in a professional English- speaking environment.

* The selection panel of the Course will consider the overall qualifications of each applicant.
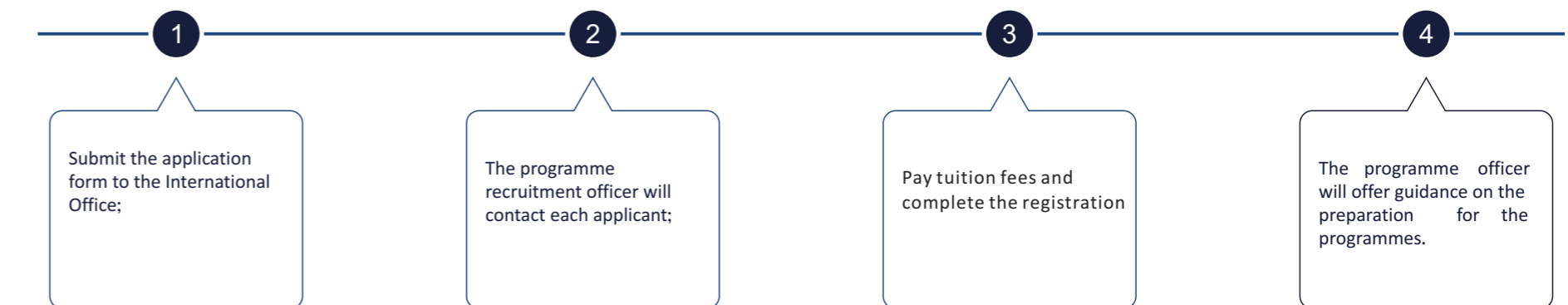
07| Application

Registration Requirement:
Undergraduate and Postgraduate
(including PhD students)

● APPLICATION PROCESS

1 Submit the application form to the International Office;

2 The programme recruitment officer will contact each applicant;

3 Pay tuition fees and complete the registration

4 The programme officer will offer guidance on the preparation for the programmes.

For more information on the programme, please contact the international office of your home institution, or email to apply@oxfordstudyabroad.org.uk.