Postgraduate Open Days 2024

THE UNIVERSITY of EDINBURGH
Edinburgh Futures Institute

Join us to **Challenge. Create. Change.**

With you today

- Dr Esther Mijers, Director of Teaching
- Dr Neneh Rowa-Dewar, Director of Students
- Professor Shannon Vallor, MSc Data and AI Ethics
- Dr Seongsook Choi, MSc Education Futures
- Professor Cristian Vaccari, MSc Future Governance
- Dr Ashleigh McFeeters, MSc Child Protection Data Futures
- Veronica Silvestre, EFI Education Team
- Abby Gleave, EFI Education Team

Study at Edinburgh Futures Institute

Interdisciplinary

Bringing arts, humanities and social sciences together with sciences, engineering and medicine to address complex global issues.

Participatory

Inviting diverse groupings to bring their ways of working and thinking together. Edinburgh Futures Institute extends this invitation to industry, the public and government.

Critical and research-led

Working on pressing social issues that require new ways of thinking. Mindful of the role of universities in confronting uncomfortable questions.

Future-facing

Embracing the non-traditional, the untried and the unexpected. The Futures Institute defines challenges and co-creates responses to build better futures.

Sustainable Futures

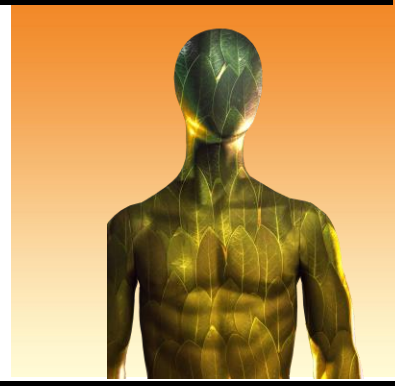
- Data, Inequality and Society
- Planetary Health
- Sustainable Lands and Cities
- Circular Economy
- Future Infrastructure, Sustainability and Climate Change

Creative Futures

- Service Management and Design
- Creative Industries
- Narrative Futures: Art, Data, Society
- Cultural Heritage Futures

Just Futures

- Data and AI Ethics
- Education Futures
- Future Governance
- Child Protection Data Futures



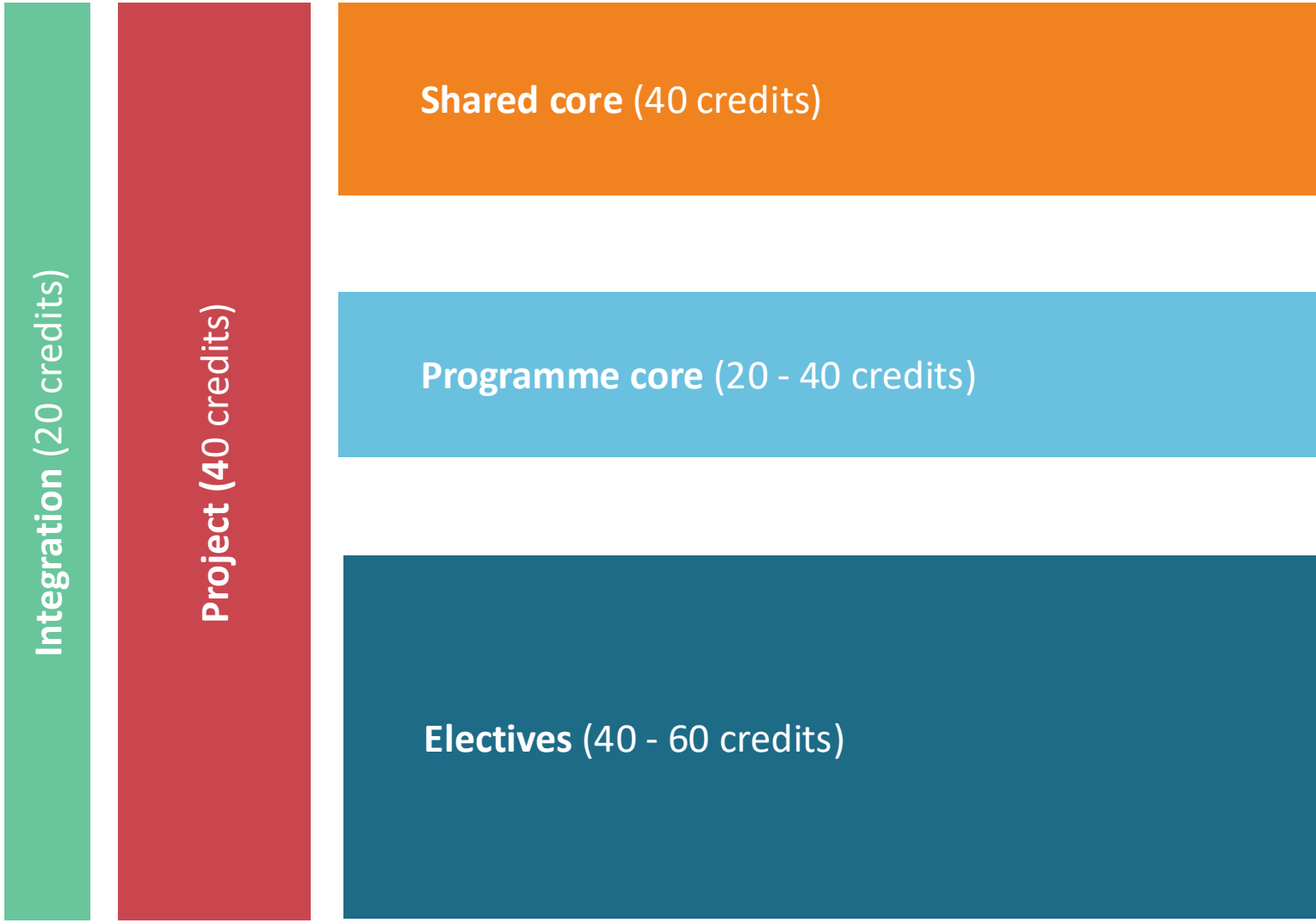
What's different at the Futures Institute?

- Interdisciplinary programmes taught by leading academics from different Schools and disciplines
- Equipping you with the critical, data and creative skills needed to navigate a rapidly-changing world
- You can choose to study online, on-campus or a combination of both (apart from MSc Creative Industries which is currently on-campus only)
- Choose to study part-time over 2 years, or full-time
- Take an MSc, a PG Diploma or a PG Certificate
- We will help you apply leading-edge knowledge to live projects you care about
- We will connect you to our partners in the community, industry and government

Fusion teaching

- Breaking down the online/on-campus distinctions
- Inclusive: full time or part time study
- Flexible: you can choose to study online or on-campus (with the exception of MSc Creative Industries)
- Community-focused: bringing students from across the world together as a single cohort
- Accessible: most courses are taught via two-day intensives with pre- and post-intensive activity
- Connected: employers work with us on the design and teaching of our programmes and help support projects

Our programme structure



Future skills focused

Working in cross-disciplinary teams with students from other Futures Institute programmes, you will learn critical data skills, ethical awareness, creative thinking, and methods to address complex issues:

- Collect, manage and analyse computational datasets
- Use emerging methodologies for mapping and designing possible futures
- Learn the fundamentals of data ethics
- Learn to use creative skills in the analysis and representation of data-informed and qualitative inquiry

The student experience

- Global and diverse cohort, on campus and online
- A very well supported experience with a student experience and support team
- Events and networks to connect with each other
- Meet our students

Just Futures: Interdisciplinary Masters

MSc Data and AI Ethics (fusion)

MSc Education Futures (fusion)

MSc Future Governance (fusion)

MSc Child Protection Data Futures (fusion)

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Future Governance

Professor Cristian Vaccari
School of Social and Political Science

What is ‘Future Governance’?

- Response to shifting world with new and rapidly changing technologies and data sources;
- Transforming the parameters of governance: both in terms of how we are governed, what needs to be governed and who is involved in making these decisions.
- MSc Future Governance participants will gain the skills and knowledge required to evaluate and harness diverse data sources and emerging technologies and to understand, critique and shape the future of governance, policy-making and democracy.
- Interdisciplinary teaching teams (social & political science, computer science, design informatics, business, psychology, cognitive neuroscience, digital humanities) & cross-sectoral partnerships, addressing contemporary governance issues.

Who is it for?

- Full time postgraduate students transitioning from undergraduate studies and seeking to develop interdisciplinary knowledge and skills to carve out a niche in the rapidly transforming field of governance;
- Mid-career professionals from the private, public, and third sectors, aiming to lead on governance projects with a strong data aspect, or transition to such careers.
- Future Governance graduates will have a robust understanding of data-driven decision-making in governance processes; they will be ready to institute positive change in the decision-making environment.

Why?

- The impact of technology and the need for data-literacy for understanding and shaping governance processes is unlikely to abate.

- This unique programme will leave our data-literate graduates well placed to offer the cross disciplinary skills that are in demand from decision-makers and researchers in the public, private and third sectors.

- Exciting EFI vision, community & delivery model: International cohort, fusion teaching, flexible learning journey, intensive delivery model, future-oriented challenge-based approach.

Programme core courses

- **FUTURE GOVERNANCE**
  Examines how technology and data is used within governance and public policy, in the policy process, in political communication, and more widely how big data, algorithms, and artificial intelligence are used within government. Eengages critically with the interface between governance/public policy and technology, considers how technology is used in the delivery of public services, and addresses the limitations of these approaches.
- **DIGITAL DEMOCRATIC INNOVATIONS**
  Explores how digital tools are transforming democratic engagement by enhancing citizen participation and influence in governance. Examines the rise of data-driven innovations, such as crowdsourced policymaking, participatory budgeting, and citizen assemblies, across various governmental and community platforms. Empowers students to assess global democratic innovations and develop strategies for collaborative governance.

Electives and optional courses

- Data Civics
- Datafication, Accountability & Democracy
- Designing Market Places and Place Markets
- Digital Influence
- Evidence, Argument & Persuasion in a Digital World
- Neuropolitics of Decision Making
- Text Mining for Social Research

Education Futures

Dr Seongsook Choi

Centre for Research in Digital Education
Moray House School of Education and Sport

Education Futures

Education, in all its forms, is essential to a thriving society. How organisations, systems and people learn and change profoundly affects our lives, our surroundings and our futures. Our programme is for those who wish to engage critically with educational possibilities for the future, and understand how educational knowledge, institutions and agents can positively shape society.

Key subjects include: education, open education, digital learning and engagement, digital technologies, social science, community education, developmental psychology, philosophy of education, data ethics, science and innovation

This programme respond to the need for creative, critical and experimental thinking across education in **schools, universities and colleges**, and learning within **communities, industries and organisations**.

You will explore the ways that knowledge, culture and skills are produced and reproduced, how people, organisations and systems learn, and how this influences global challenges and change. Your studies on this programme will support you to think ambitiously about the future of education across all sectors, gain vital data and creative skills to support your future career, and apply innovative methods to building a strong future for education and learning.

Core courses

The Future of Learning Organisations

Educating for a Challenging Future

Optional/elective courses

Culture, Heritage and Learning Futures

Education, Personalisation and Surveillance

Education, Data and Change

EdTech and Entrepreneurship

Interrogating Interdisciplinary Practice

Learning and Resilience

Relationality, Creative Practice and Education

Utopia and the Future

Suited to those who…

- Thrive in learning situations characterised by **creativity, collaboration** and **criticality**
- Are excited about experiencing different teaching approaches and are enthusiastic about **working with different types of academic material and knowledge**
- Have a desire to **positively shape education** in the near future and beyond
- **Work in, or aspire to, roles in** education leadership, policy and research, learning design, teaching and delivery, educational research and design, community, voluntary, corporate and private sector learning and development roles

What current and former students value …

- Incredible peers (programme- and EFI-wide)
- Creative assessment and teaching methods
- The ability to pursue questions and topics of importance to them, their communities and organisations
- The way we integrate online and on-campus participation
- An opportunity to experience and contribute to a cutting-edge environment where education futures are being made and enacted every day!

Your project could approach education futures through …

- **Examination of a current issue in education** which explores in some depth the possible future implications of this (for practice, knowledge and so on)
- **Emerging issues or topics** that may be significant for the future of education
- **Applying futuring methods** to work with participants, analysis of materials
- **A focus on how futures work is being done** in different education and learning settings
- **Consideration** of organisational or community **change** and how people or organisations **learn** in complex or shifting settings

Child Protection Data Futures

Dr Ashleigh McFeeters
Moray House School of Education and Sport

Child Protection Data Futures

- OCSEA affects 302 million children globally.
- To make change, we must first understand the nature and prevalence of (O)CSEA.
- Data is fragmented and disjointed.
- Guest lectures from practitioners.
- Research-led learning.

CHILDLIGHT

Global Child Safety Institute

ONLINE CHILD SEXUAL EXPLOITATION AND ABUSE IN NUMBERS

1

case of abuse is reported every second

300 MILLION+

children have been affected by abusive behaviours

3.5%

of children experienced sexual extortion

1 IN 9

men offend in the United States

1 IN 8

children faced non-consensual image offences (12.6%) and online solicitation (12.5%)

Compulsory Core Courses

- International Child Protection Futures.
- Violence against Children Epidemiology and Global Challenges.
- Advanced Issues in Child Protection Research.

Optional Courses

- Approaches to Administrative Data for Children.
- Children and the Justice System.
- Communicating Child Protection Data for Impact.
- Legislative Data for Children's Rights.
- Participatory Methods: Research and Practice.
- Working with Big Data to Improve Children’s Safety and Wellbeing.
- Measuring Online Harms.

Data and Artificial Intelligence Ethics

Professor Shannon Vallor
Department of Philosophy/
Centre for Technomoral Futures

What we offer

- An interdisciplinary degree within the Edinburgh Futures Institute
- Offered in the Edinburgh Futures Institute's model of flexible, fusion learning
- Designed with the University's world-leading expertise in this area, drawing on philosophy, law, informatics, and science and technology innovation studies (STIS)
- Meets the urgent demand for interdisciplinary skills and knowledge in the ethical design, use and governance of artificial intelligence and other data-intensive technologies.

Academic Leadership

ACADEMIC STAFF

Shannon Vallor

The Centre is led by Director Shannon Vallor, the Baillie Gifford Professor in Ethics of Data and Artificial Intelligence at the University of Edinburgh's Futures Institute and Department of Philosophy. Professor Vallor also chairs the University's AI and Data Ethics Advisory Board.

VIEW PROFILE

ACADEMIC STAFF

Zeerak Talat

Zeerak Talat will join the Centre in November 2024. They are Chancellor's Fellow in Responsible Machine Learning and AI. Their research centres on if, and how, machine learning and AI technologies can be used towards fair and equitable futures to answer how machine learning and AI should look, if we must live with them in our societies.

VIEW PROFILE

ACADEMIC STAFF

Cristina Richie

Dr Cristina Richie joined the Centre in August 2023. She is Lecturer and Cohort Lead for the MSc in Data and Artificial Intelligence Ethics at the University of Edinburgh's Futures Institute. Her research is driven by a global vision of clean, just, and ethical health care and technology through the development of strategies and policies.

VIEW PROFILE

ACADEMIC STAFF

John Zerilli

Dr John Zerilli joined the Centre in May 2023. He is the Chancellor's Fellow (Assistant Professor) in AI, Data, and the Rule of Law at the University of Edinburgh, a Research Associate in the Oxford Institute for Ethics and AI at the University of Oxford, and an Associate Fellow in the Centre for the Future of Intelligence at the University of Cambridge.

VIEW PROFILE

What you'll learn

- **Key challenges** for the ethical design and use of AI and data
- How to **map** ethical values, principles, and practices onto AI & Data, and how they relate to regulation, policy, and design
- How to **identify** and **evaluate practical interventions** to align AI and data-intensive tools with ethical norms.
- How to **translate** and **clearly communicate** ethical concepts and framings for diverse audiences and across multiple domains of data/AI application.
- How to **lead** and **work collaboratively** with others to **produce** clear, accessible, and actionable guidance and tools for ethical design and governance of AI & data technologies

Who needs the skills you'll get

- **Industry:** Policy, compliance, trust and safety, UX, privacy and data governance, risk management, DEI, responsible innovation and product review/management teams

- **Public Sector:** Auditing, digital transformation and strategy groups, policy, regulatory and advisory bodies

- **Third Sector/Civil Society:** Citizen advocacy groups, philanthropic foundations, think tanks, watchdog orgs, human rights organisations, non-profit public services and research organisations

Shared core courses

- ETHICAL DATA FUTURES: Introduces the fundamentals of data ethics as part of a mature data philosophy, along with 6 critical data skills:
  - ethical **reflection**
  - ethical **analysis**
  - ethical **deliberation**
  - ethical **evaluation**
  - ethical **contestation**
  - ethical **decision-making**
- INTERDISCIPLINARY FUTURES
- INSIGHTS THROUGH DATA OR TEXT REMIX
- REPRESENTING DATA OR BUILDING NEW FUTURES

Programme core courses

- **DATA & AI ETHICS, LAW & GOVERNANCE**
  Examines how ethical norms work alongside law, policy and other modes of AI and data governance to steer the production and use of these technologies to align with justice and the reduction of harm, as well as the realisation of benefits for individuals and society.
- **DATA ETHICS AS A PRACTICE**
  Exposure to concrete methods, skills and techniques for putting AI and data ethics into practice, individually and in teams. Through case studies, you'll learn about using tools like model cards and datasheets, practice building ethical risk and threat models, and co-develop ethical design briefs and/or ethical research or product reviews.

Electives and optional courses

Algorithmic Bias, Fairness and Justice

Translational Data and AI Ethics

Ethics of Robotics and Autonomous Systems

Democracy, Rights & the Rule of Law in the Data-Driven Society

Environmental Sustainability and Artificial Intelligence

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Digital Influence

Coloniality of Data

Work Futures

Education, Personalisation and Surveillance

Narratives of Digital Capitalism

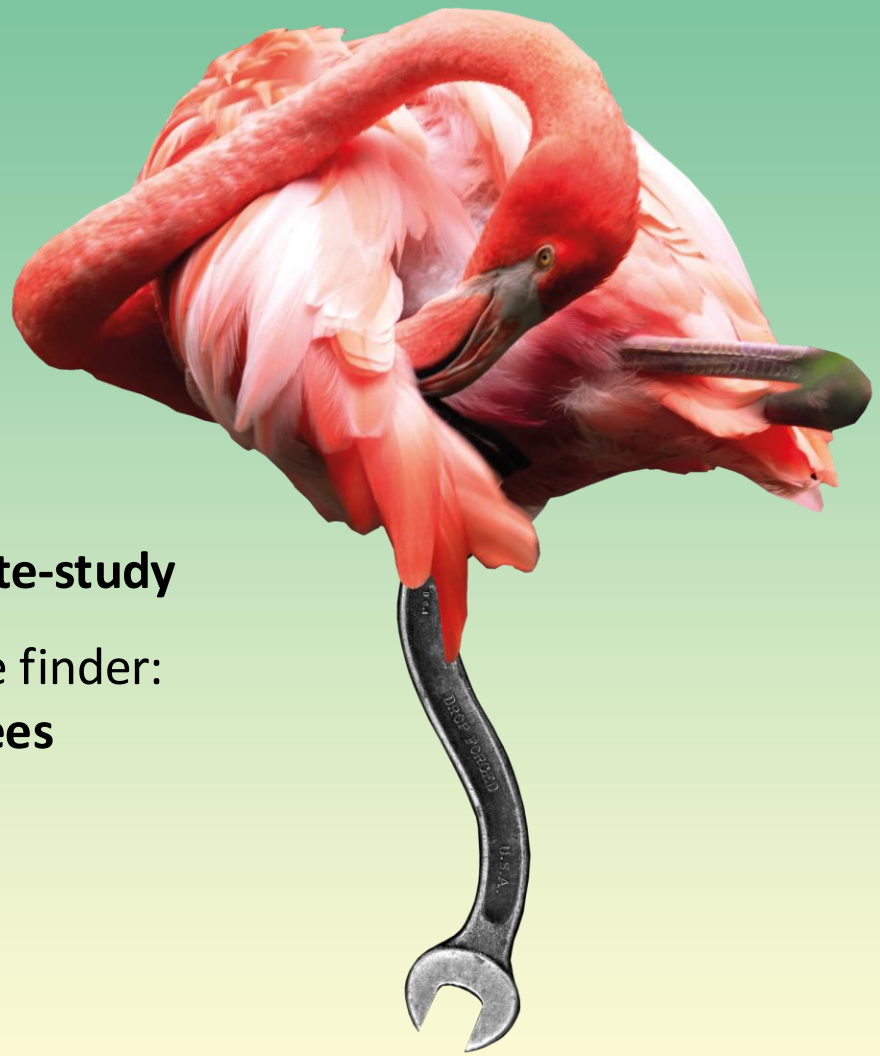
Project component

Develop, propose, justify and self-critique an ethical intervention (in design, deployment, or regulation) that could facilitate the:

- ethical design of ‘smart’ and sustainable cities
- ethical use of AI to optimise allocation of health care resources
- ethical use of data to identify bias/discrimination in the judicial system
- ethical use of analytics to identify at-risk children in the social care system
- ethical use of biometric data to predict and manage disease outbreaks
- ethical design of robots for use to support elder care
- ethical design of ‘open data’ tools to increase government transparency
- ethical design of AI tools for content moderation/disinformation detection

Questions?

- for further queries contact: **efi.education@ed.ac.uk**
- visit the EFI website: **https://efi.ed.ac.uk/postgraduate-study**
- search for '**Edinburgh Futures Institute**' on our degree finder: **https://www.ed.ac.uk/studying/postgraduate/degrees**



Join us to **challenge**, **create**, and make **change** happen.