THE UNIVERSITY of EDINBURGH

MSc Advanced Sustainable Design Information Session

Professor John Brennan | November 2024

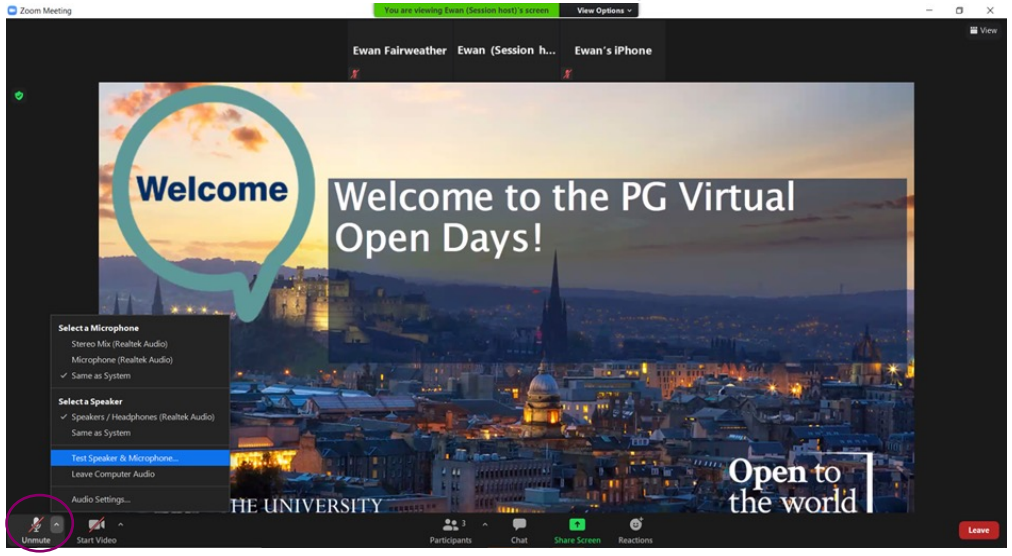
EDINBURGH
Extraordinary futures await

Welcome live from Edinburgh!

- Audio Check
- Recording of the session
- Presentation
- Question and Answer
- Next steps

Audio check (Zoom)

- In this session, your microphone will be muted but you should be able to hear the speaker
- Can you hear the presenter speaking?



If you can't hear:

- In the bottom left corner of your screen, select the drop down next to 'Unmute'
- then select 'Test Speaker and Microphone'
- Carry out the audio check

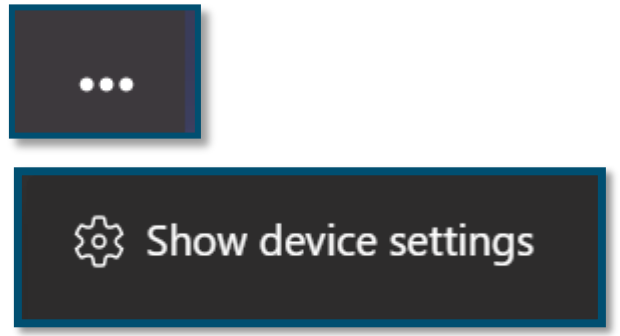
If you still can't hear:

- Select the 'Audio Settings' option and change your speaker settings here
- For more support, visit: https://support.zoom.us/hc/en-us/articles/201362283-Testing-audio-before-Zoom-Meetings

Audio check (Microsoft Teams)

- Can you hear the presenter speaking?
- Please type “**no**” in the Chat area **if you cannot hear the presenter**

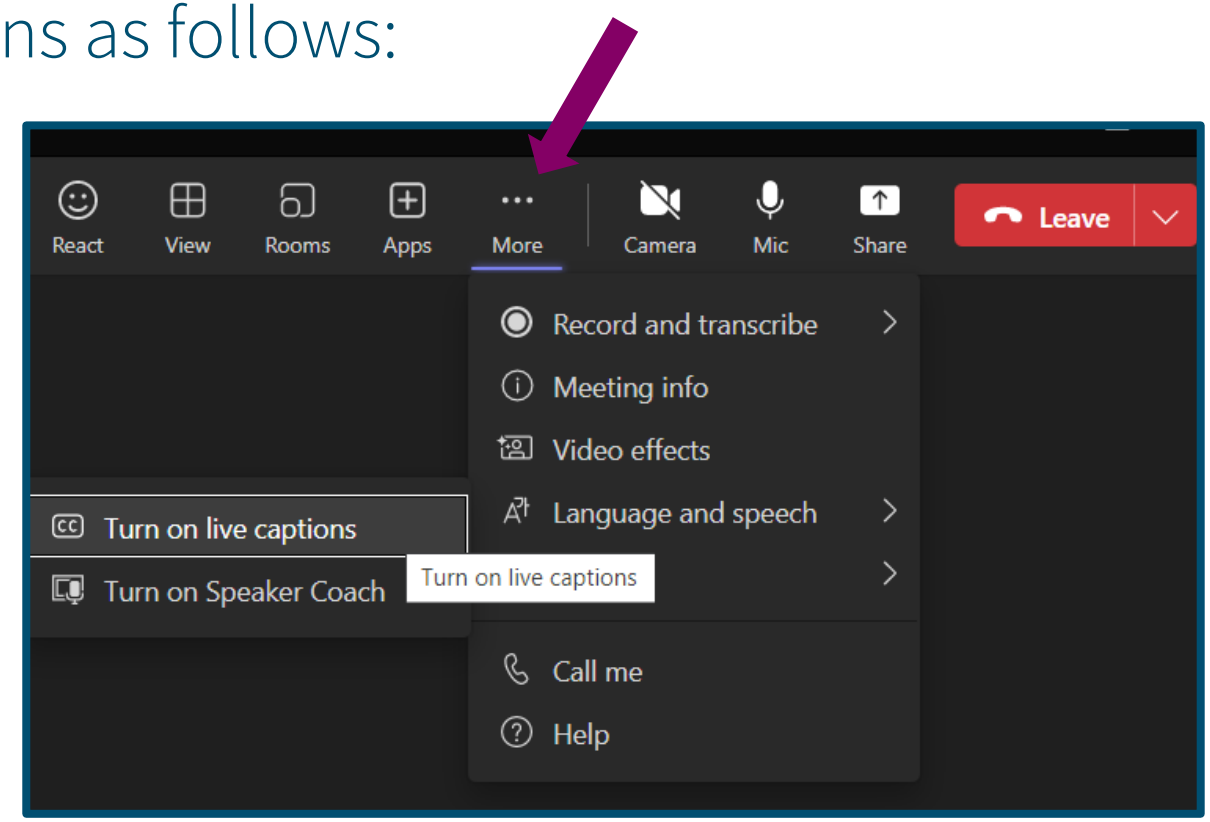
- If you can’t hear:
  - Check your settings by clicking on the three little dots on the options bar and then ‘show device settings’. Here you can check and change your speakers.
  - Try signing out and signing back into the session
  - Don’t worry, the session is being recorded



Live captions (Microsoft Teams)

You can turn on automated live captions as follows:

- More > Language and speech > Turn on live captions



These are automated therefore won't be 100% accurate

Recording (MS Teams)

- Today's session is being recorded
- Any information that you provide during a session is optional and in doing so you give us consent to process this information
- If you don't want your question or name read out in public, you can email your question to futurestudents@ed.ac.uk
- Please note - a few attendees' names may be visible in the recording, if it is important that your name not be visible in the recording, please exit the session and re-enter using an incognito browser and typing in a pseudonym for yourself
- The session will be stored by the University of Edinburgh and published on our website after the event on a non-indexed web page
- ***You will be emailed with a link to watch the session recording by the end of next week***

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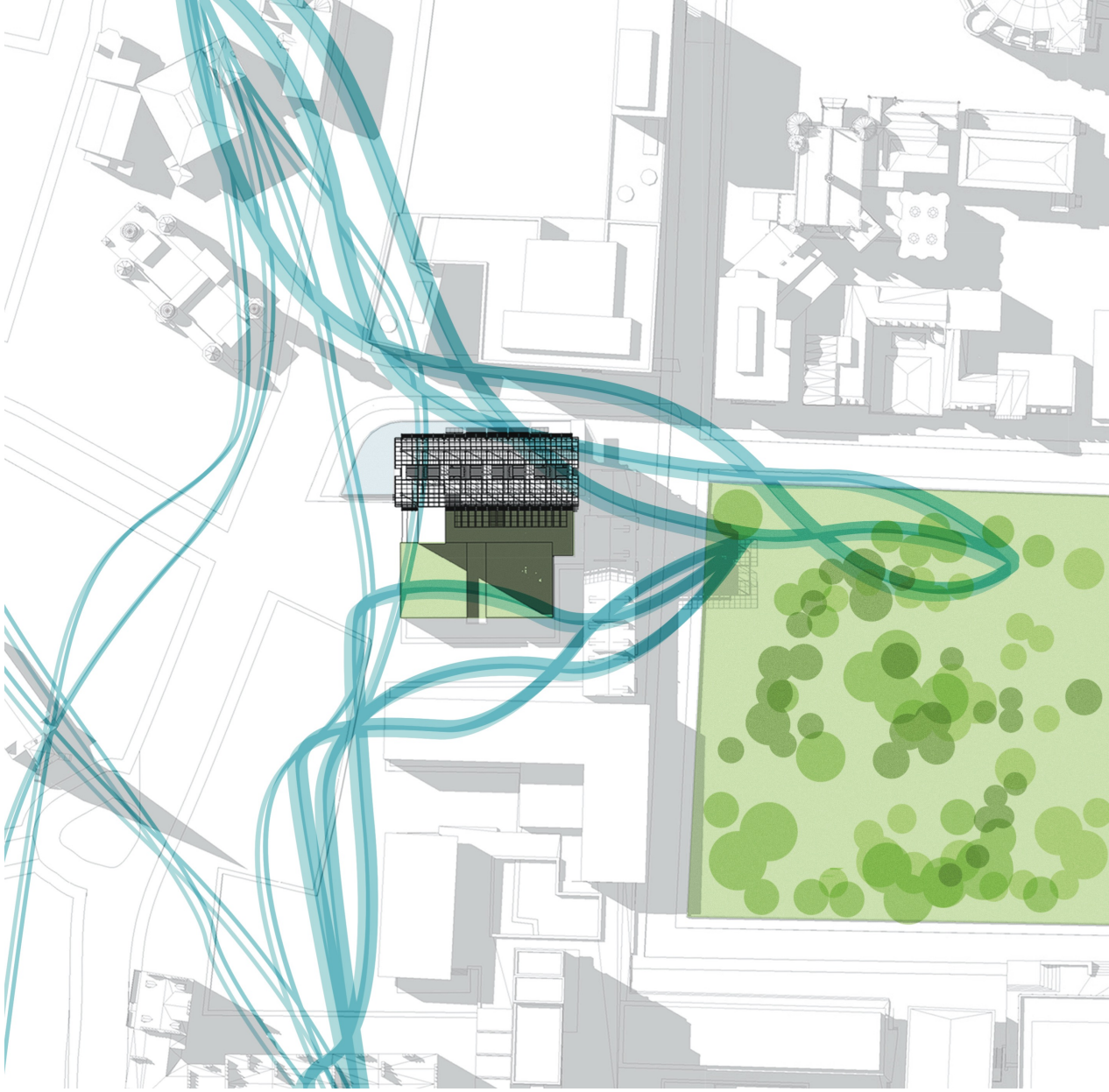
MSc Advanced Sustainable Design

Applicant Information



(Image Kawin Dhankoses)

Welcome to our Programme

You will discover underlying principles of sustainable design and be able to make intelligent and informed decisions to solve complex problems. We do not provide a narrow specialist technical training but instead to equip you with the knowledge and expertise to be creative.

You have your own workroom and access our Art and Architecture specialist library. We offer workstations with specialist environmental design software. You have access to our workshop, one of the best equipped in the UK with woodwork, metal work, CAD CAM and rapid prototyping all available.

(Image Brennan)

how we work:
global and local

Our students come from architecture and related built environment disciplines, but we welcome anyone with a deep interest in design and sustainability.

The most effective strategies for sustainable development are those built around understanding a specific place or challenge scenario. Our curriculum works in global contexts. You have opportunities to work in climates and contexts of your choice.

We enjoy projects that deal with real problems like settlement regeneration and designing future workspaces. Over the course of a semester, you might transition from planning at a settlement scale to the detail investigation of part of a building.

Retrofit Singapore: A project where students can choose their climatic zone for office retrofit (Image Grace Rityasmara)

Resilient Borders:
Our Resilient Borders Project was a live project looking at how we transform towns through an integrated approach to network. Through community workshops we produced a Toolkit for future development

Our Graduate Outcomes

Vero
Product Design
Senior
Design Manager

Ananya
Architect
Simulation
Engineer

Colin
Builder
Sustainability
consultant

Ben
Environmental
Science
Recycling Startup

Kawin
Architect
University
Lecturer

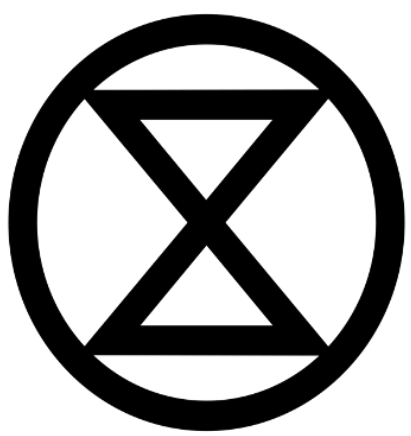
Regina
Designer
Lifecycle
Consultant

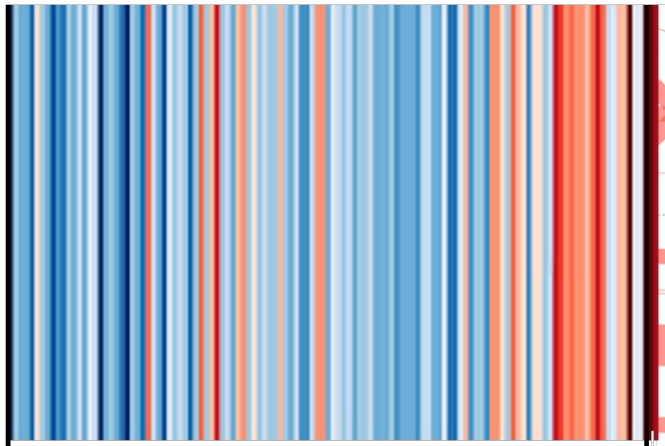
Myela
Architect
Director of Energy
Efficiency for City

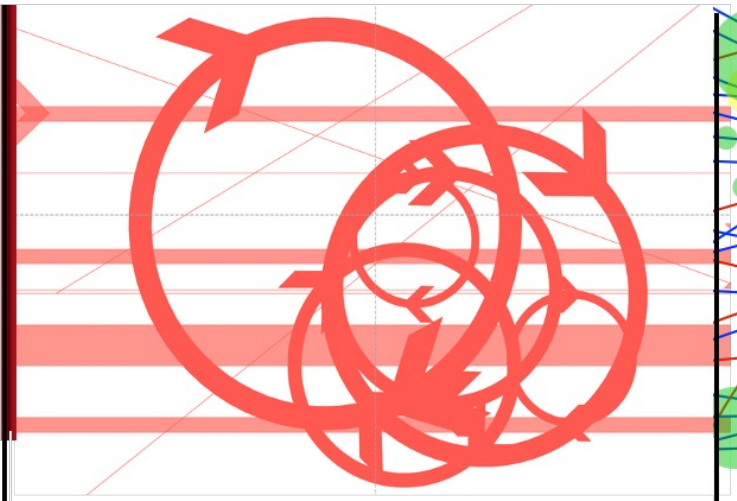
Hannah
Architect
Sustainability
Specialist

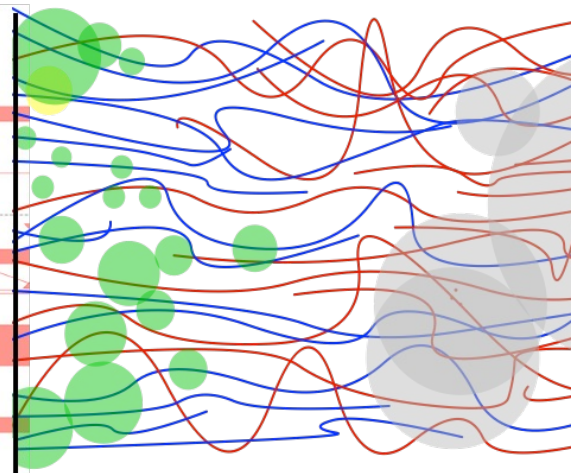
Thinking about Sustainability

Image: Brennan









extinction
rebellion
climate
emergency
global treaty

DRIVING

carbon accounting
decarbonization

REACTING

linear
consumption
cyclical
economy

UNDERSTANDING

top down
Bottom up

INTERVENING

some starting points: the content is overwhelming!

Image: Brennan

© University of Edinburgh : MSc Advanced Sustainable Desi

some starting points: context is everything

Image: Brennan

Programme Design: Semester Themes

Semester 1: Principles & Skills

A grounding in the nature of architecture and sustainability taught through seminars and workshops. Work collaboratively in design projects that examine a specific. In your first semester you take an elective course or can follow our building simulation pathway.

Semester 2 Design Integration

You apply your learning to a design project exploring transformation of a settlement. You work collaboratively with each other, examining the critical stages in the design process. You supplement this with an elective course or continue to follow our building simulation pathway.

Summer Research Project

Over summer you complete a research dissertation. This is a substantial critical study of an aspect of sustainable design. It is your chance to study a topic based on your home context, professional interests or a subject you love.

	MSc ASD semester 1 : principles and skills		MSc ASD semester 2 : design integration	MSc ASD summer : independent research
Core Courses Automatic Enrolment	Course ARCH11038 **Sustainable Theory and Contexts [20]**	Course ARCH11039 **Sustainable Design Methodologies [20]**	Course ARCH11041 **Advanced Sustainable Design Project [40]**	Course ARCH11043 **Advanced Sustainable Design Dissertation [60]**
Pathway Courses Guaranteed Enrolment	Course ARCH11265 **Building Simulation Principles [20]** — Simulation pathway		Course ARCH11266 **Building Simulation Applications [20]** — Simulation pathway	
Open Elective courses Student choice Enrolment not Guaranteed	**OR** **An Elective Course of your choice [20]**		**OR** **An Elective Course of your choice [20]**	
	60 credits Each semester		**60 credits Each semester**	**60 credits Each semester**

Our Staff

We are academics working on cutting edge research and practitioners with experience in the delivery of sustainable buildings.

John Brennan is Programme Director and Professor of Sustainable Architecture. He is an architect working in the field of holistic sustainable design for 20 years with a specialism in community architecture and rural design.

David Seel is an architect and a Teaching Fellow. He worked with ARC Architects, and in Europe. David has expertise in environmental simulation modelling and alternative models for housing procurement. He edits the journal of the the Scottish Ecological Design Association.

Dr Kate Carter is a senior lecturer in architectural technology and is an Architect with ten years practice-based experience. Kate obtained a PhD in the delivery of Sustainable Social Housing. She has since led research projects incorporating sustainability into the built environment.

We have tutors who are practicing architects or specialists in their fields including passive house design, community empowerment, sustainable urban data and circular economy along with visiting academic and critics.

Our Courses

Advanced Sustainable Design is structured to give you more control of your learning as your studies develop. We don't think that simply delivering facts is useful where every context you work in is different, all with their own complexities and opportunities.

.You learn skills in design, communication, sustainable metrics and infrastructures as well as a pathway available to you in environmental simulation. However, we think it is just as important that you learn how to be an active researcher and to be critical of what you're finding out.

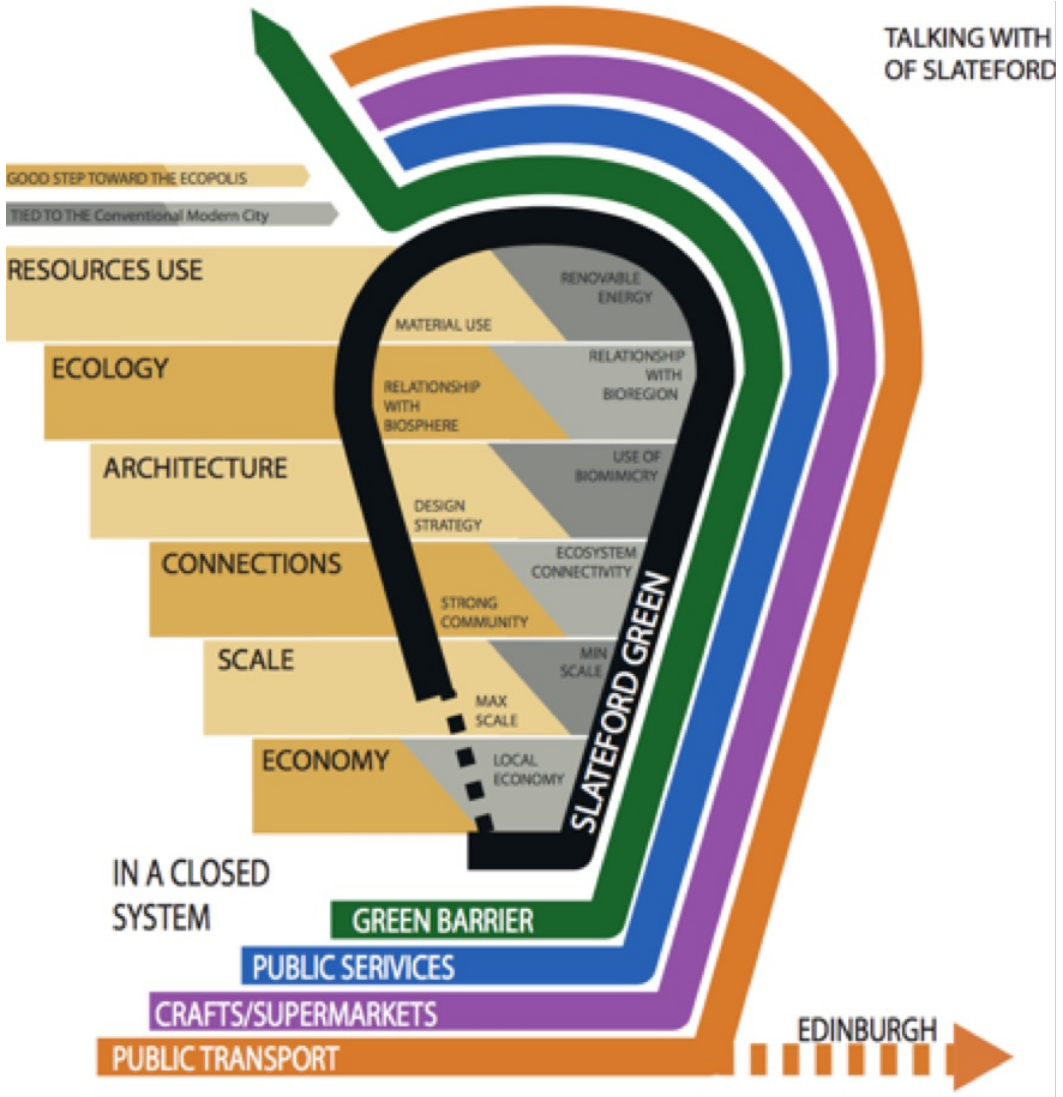
(Image Aurangzeb Mirza)

our courses:

Sustainable Theory and Contexts

This course engages with key theories and contexts of sustainable development in the built environment. The course does not require any specific design skills but you should have an interest and engagement with buildings, neighbourhoods and cities.

This course has three key themes:
Communicating Complexity: This theme immerses you in sustainable design discourses. Building Capacity: How do we get the tools we need to undertake sustainable design? Critical Theories and Practice: Much of what we understand as sustainable architecture is underpinned by theory.



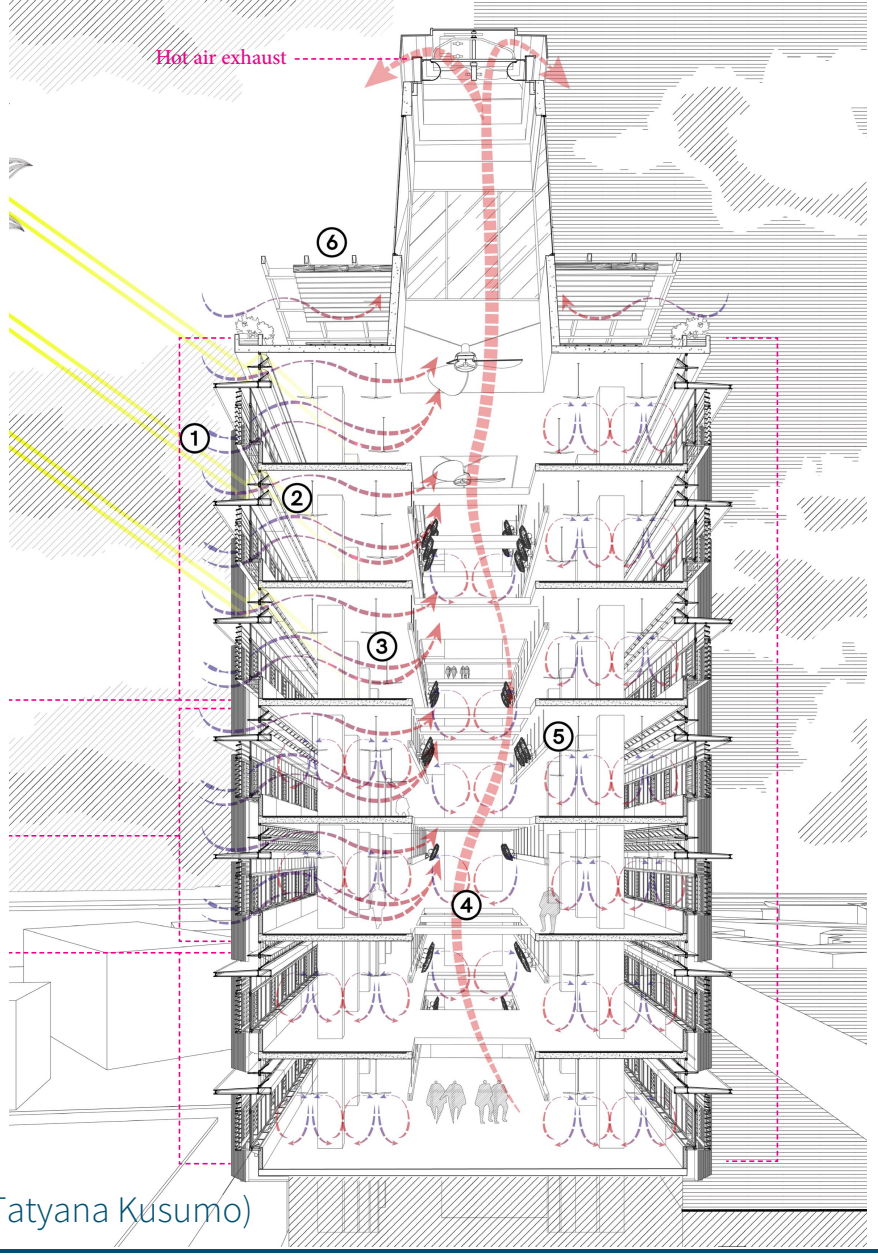
(Image Brennan)

our courses:

Sustainable Design Methodologies

This is a studio course putting into practice knowledge from sustainable theories and contexts. It explores themes through practical design studies at the scale of settlement and that of individual building.

Discover how settlements are designed by examining sustainable infrastructures and work to develop social and economic structures. The concept of the autonomous settlement is critically assessed, At a closer scale, building skin and building services are explored in a global context.

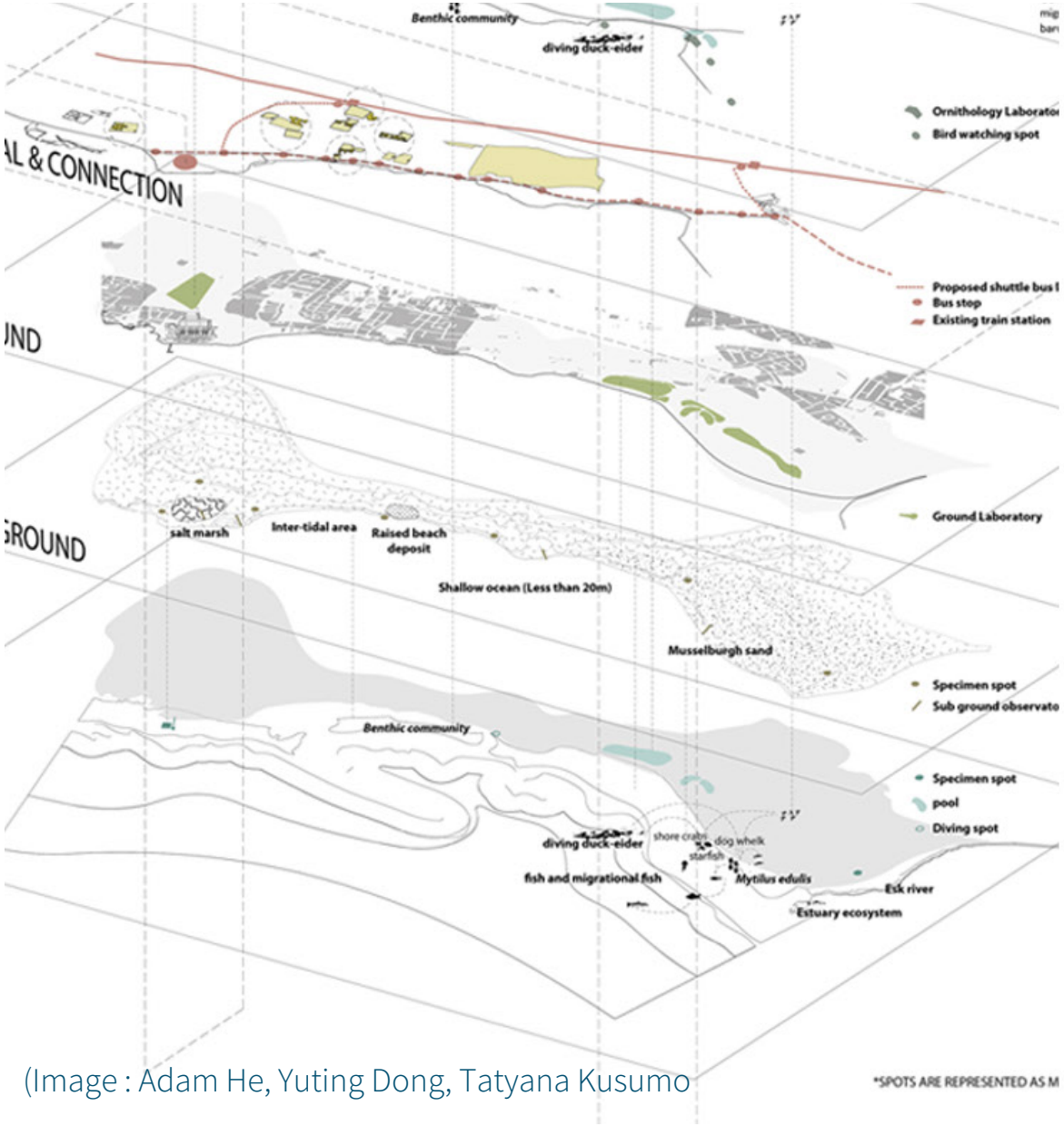


(Image Tatyana Kusumo)

our courses:
ASD Project

Through a series of design journeys, you will learn skills that will help you to intervene in the built environment in a creative way.

You gain knowledge and skills to deploy sustainable solutions and strategies that have both breadth and depth. You have opportunities to work collaboratively in groups and also develop your individual response to design contexts and programmes. Your work will follow the aims and objectives of the course but also can be moulded to your own professional background, skills and experience.



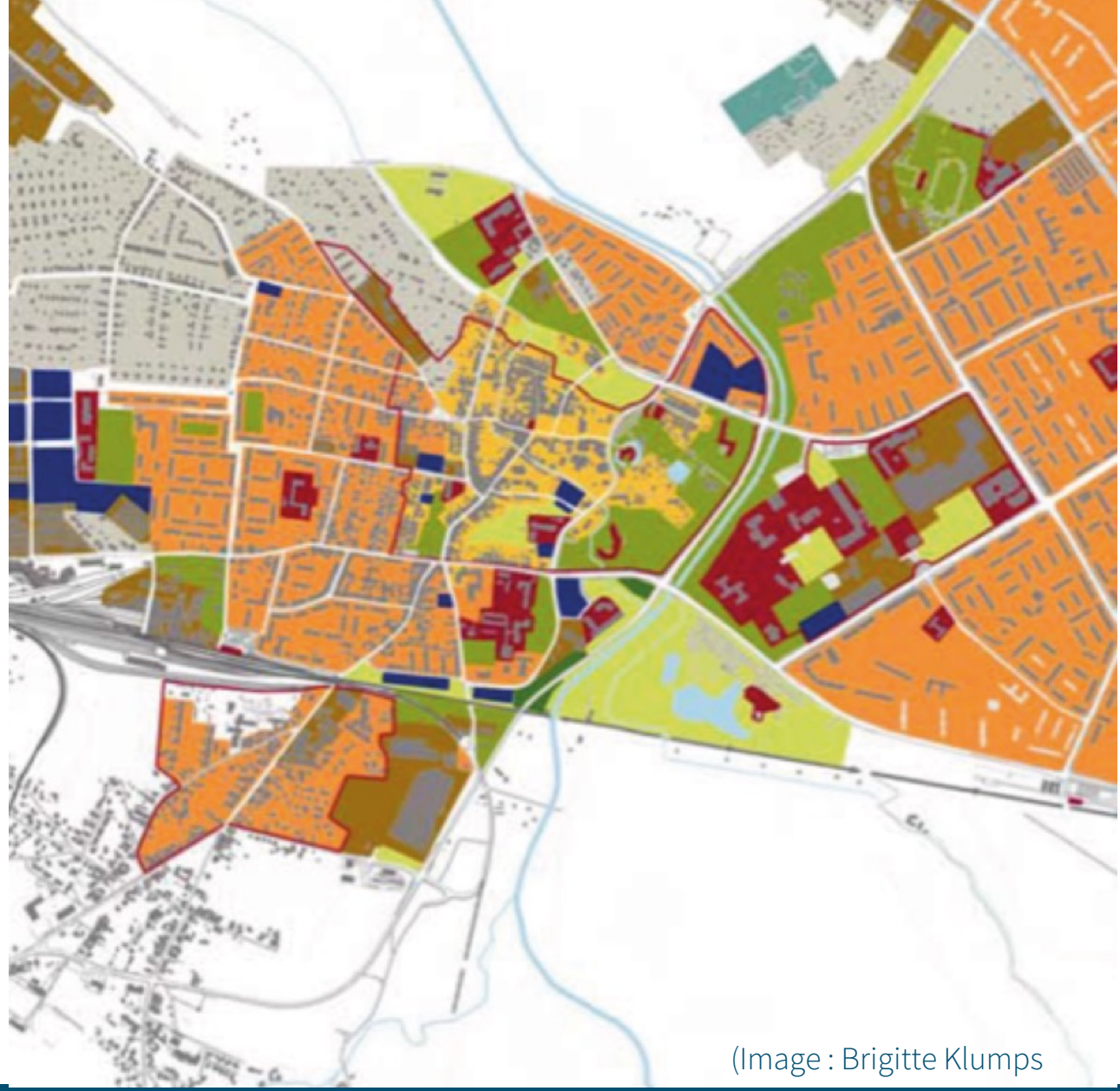
(Image : Adam He, Yuting Dong, Tatyana Kusumo

our courses:

ASD Dissertation

A dissertation is more than just a description of gathered research material. The best dissertations use your newly acquired knowledge of a topic to make distinctive and incisive contributions to debates and discourses in your chosen field You are taught how to develop these ideas in a mature and independent manner and present them in a well-written and structured format.

You can choose any dissertation topic in our field to help you develop knowledge for your future career or simply explore a topic that you value and wish to explore.



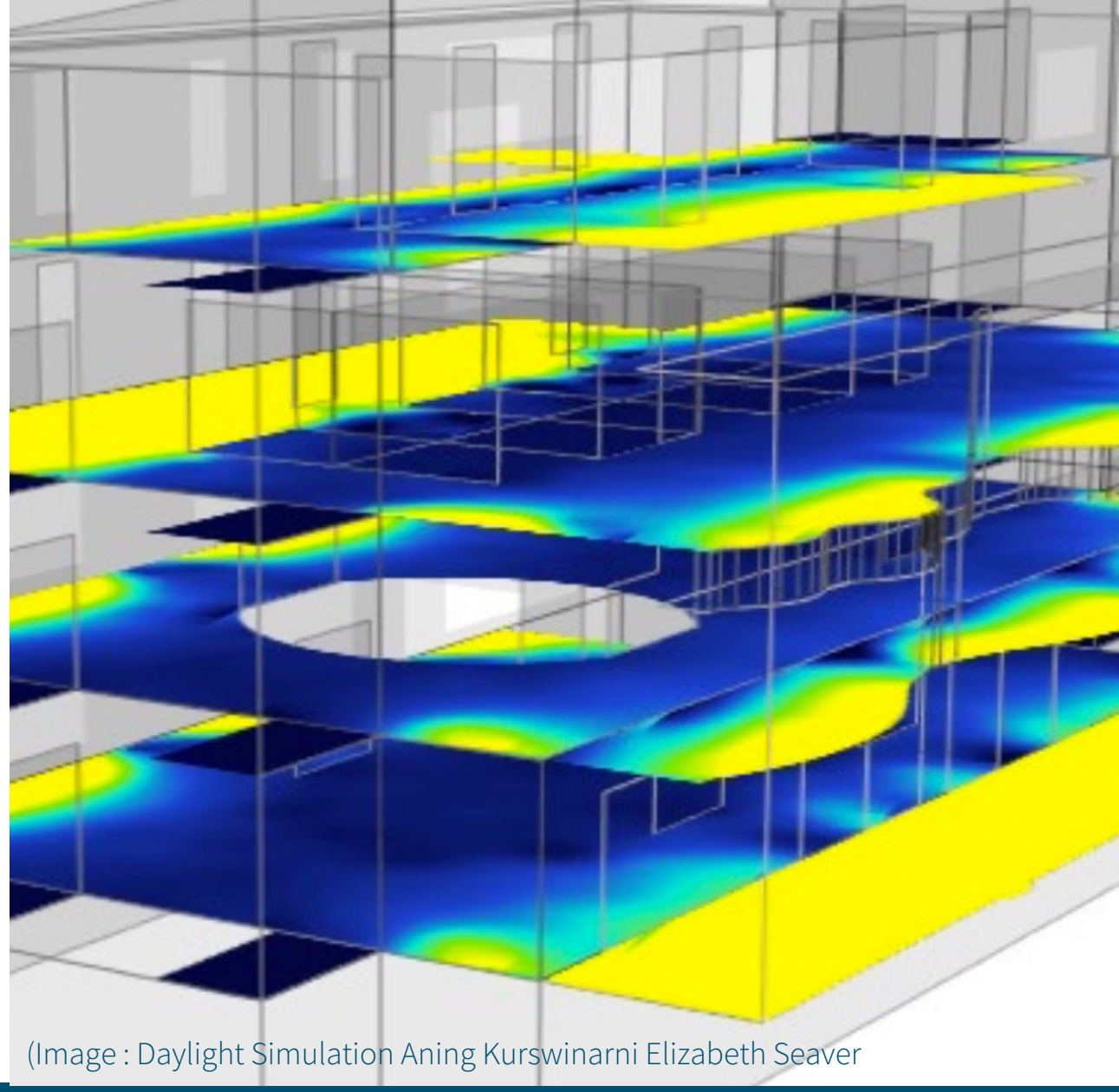
(Image : Brigitte Klumps

our courses:

Building Simulation Principles

This course introduces the theory and practice of building simulation. The ability to model, predict, and iterate building proposals in terms of carbon emissions, energy loads and thermal comfort is increasingly important in design practice. The course provides skills and knowledge to represent buildings in a way suitable for analysis. Acquire expertise in modelling buildings using different constructional systems and climatic contexts.

This is an elective course - it is not a compulsory part of MSc Advanced Sustainable Design but is relevant and complementary to the programme.



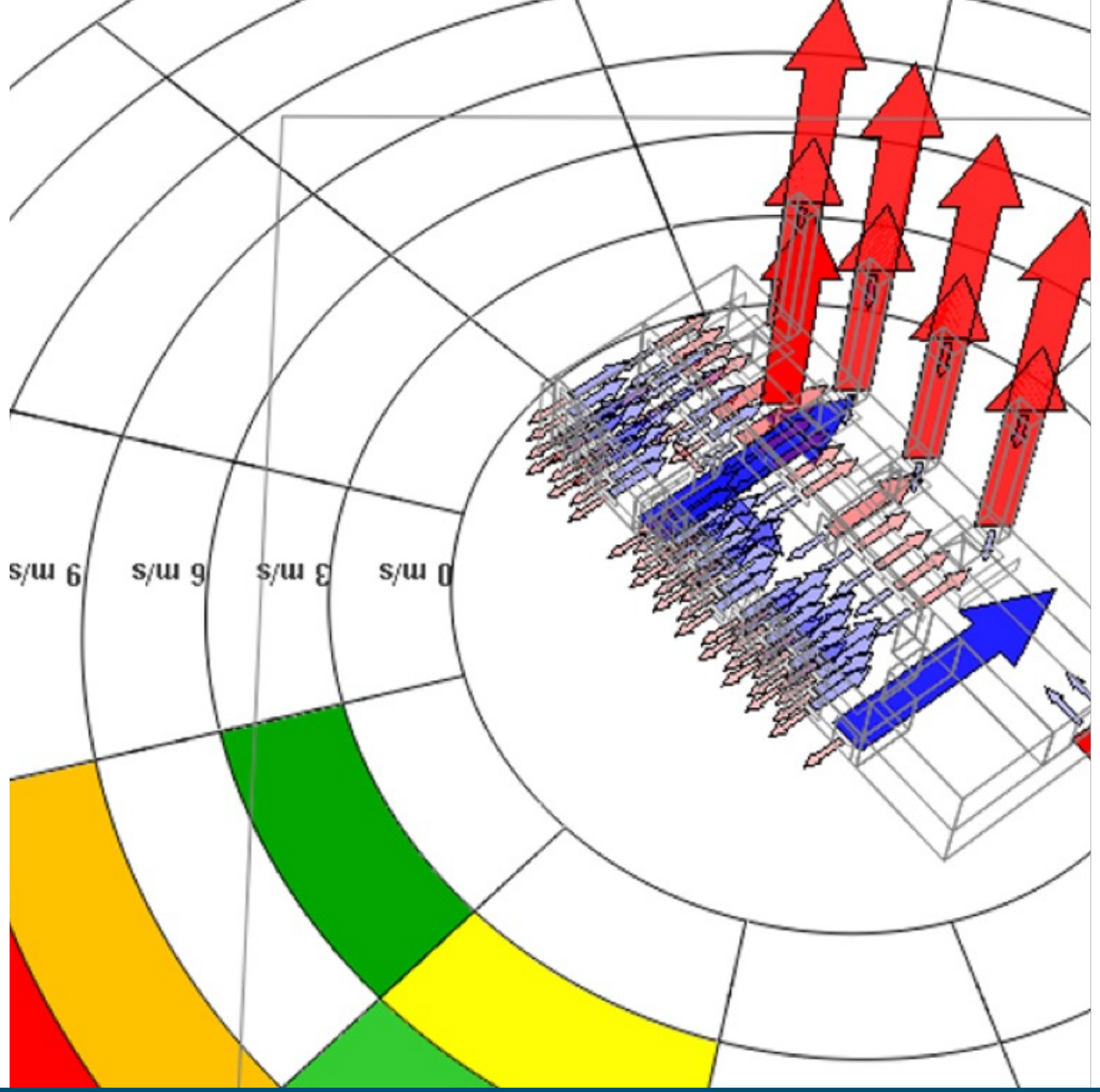
(Image : Daylight Simulation Aning Kurswinarni Elizabeth Seaver

our courses:

Building Simulation Applications

This course is intended for students who have some knowledge and experience of building simulation. You will gain skills in applying sophisticated simulation techniques that define building services and user patterns in a precise way. It builds on Building Simulation Principles and uses industry standard software to provide skills attractive in recruitment market places.

.This is an elective course - it is not a compulsory part of MSc Advanced Sustainable Design but is relevant and complementary to the programme.



(Image : Markos Segariadis

How to Apply

We welcome applications from all backgrounds and disciplines. This is a programme that is very much about design, so many of our students come from architecture and design backgrounds. We have had many successful graduates from engineering, contracting and the sciences as well as those from product design, graphic design, and architecture disciplines.

All successful applicants do need to demonstrate that they are engaged with sustainable issues and discourses as well as showing an interest and willingness to working within design and visual paradigms. We welcome candidates who have significant professional experience but might not have studied for some time.

- **Apply through the University Portal**
- **Direct questions through postgraduate admissions. If it's relevant, they'll contact us**
- **Apply Early, especially if you're looking for Scholarships.**
- **All University Scholarships are posted on the University Website.**

The Portfolio

Our programme asks for a portfolio. This is because the programme has an emphasis on communication.

If your background is in architecture, then it will be the case that your folio will feature building design. If you come from a different background, then we're interested to see what you've done in the field of sustainability.

We look for engagement in sustainable issues. It can include design work, or photographs and text. We are interested how you describe your academic and professional experiences in an engaging way.

We like portfolios that tell a story.

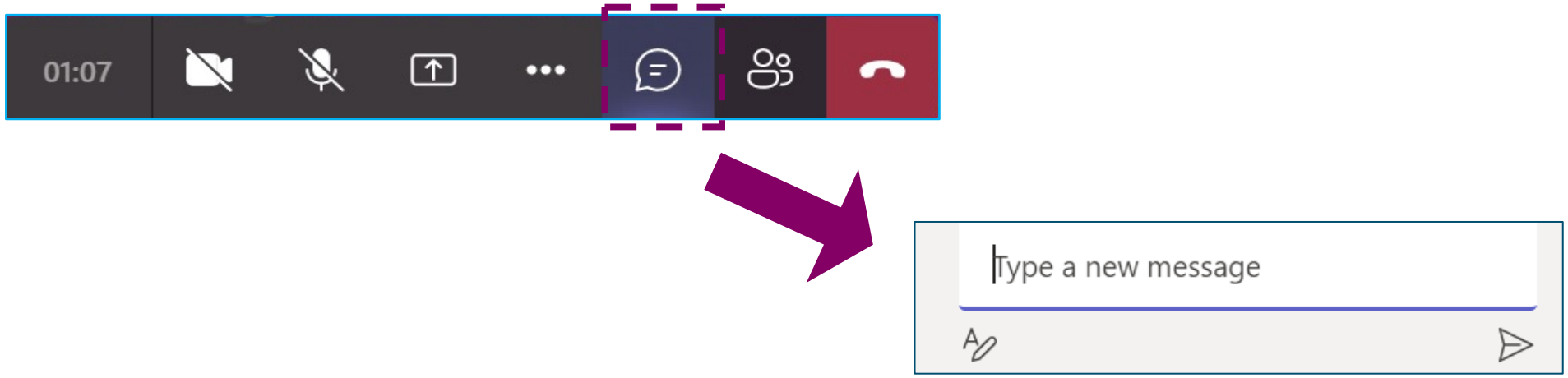
Don't Submit a portfolio that is too large .A key skill in our programme is being able to edit your work and get to what you think is important.

Don't Prepare a portfolio just full of render visualisations of buildings and interiors. They don't tell us much about you.

Don't Send a portfolio not showing us the interest and experience you have in sustainable issues and discourses.

Asking questions (Microsoft Teams)

- Type your question into the Chat Area



Asking questions (Zoom)

- Please hold all questions until the end of the formal presentation
- When asking a question, select ‘Chat’, then type your question

Next steps…

https://virtualvisits.ed.ac.uk/pg

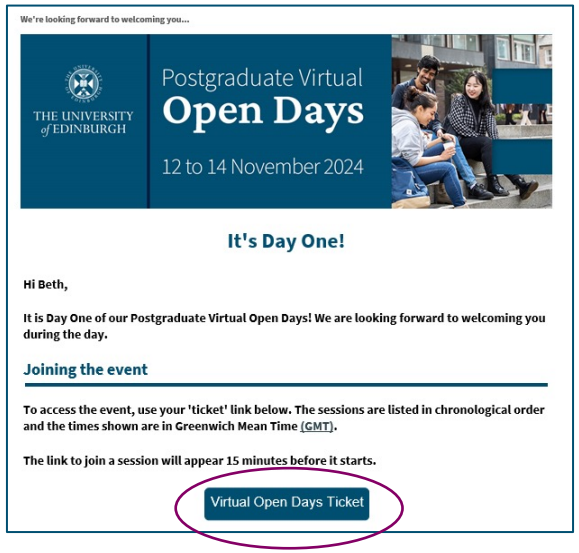
https://edin.ac/student-chat-pg

Contact details for follow-up questions

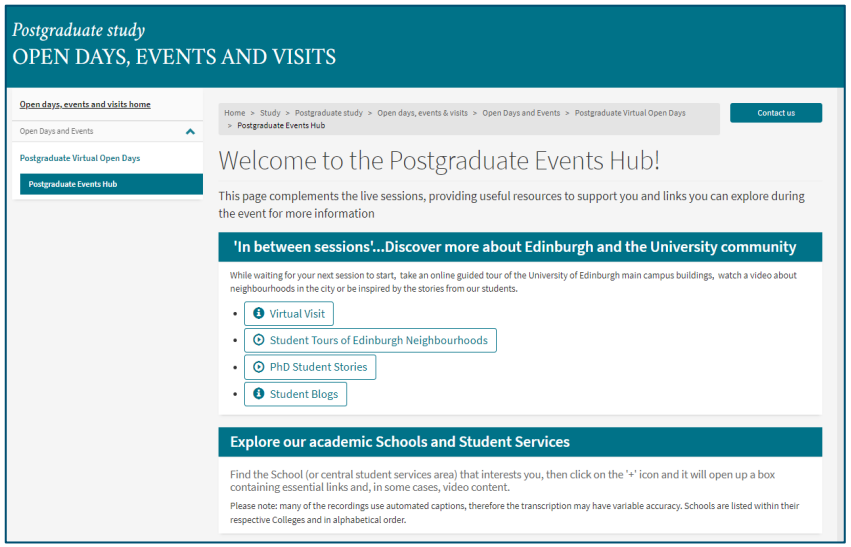
- We apologise if we did not get through all of your questions in the time allotted for this session. If you have further questions that have not been answered, please email: futurestudents@ed.ac.uk
- If you have a question about the academic content of the programme, please contact John Brennan by email at john.brennan@ed.ac.uk

Thank you – click ‘Leave’ when the session ends

- Return to your ‘e-ticket’ to find and attend other sessions you’ve booked – by clicking on the button in the email we sent you…



- …and visit the events hub:
- https://edin.ac/4gZuP3G



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Thank you

John Brennan

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