

Programme Specification 2023-24

MASTER OF STUDIES IN INTERDISCIPLINARY DESIGN FOR THE BUILT ENVIRONMENT

1 Awarding body	University of Cambridge
2 Teaching institution	Cambridge Institute for Sustainability Leadership
3 Accreditation details	Master of Studies
4 Name of final award	Master of Studies
5 Programme title	Interdisciplinary Design for the Built Environment
6 HECoS code(s)	100150 (construction and the built environment) 100583 (architectural design)
7 Relevant QAA benchmark statement(s)	QAA 264 08/08 Qualification Descriptor
8 Qualifications framework level	7 (Masters)
9 Date specification produced	January 2023

The University of Cambridge Institute for Sustainability Leadership (CISL), an institute within the School of Technology, has run executive development programmes in sustainability for over 30 years, with open programmes in the UK, Europe, North America, South America, South Africa and Australia, and customised programmes for many leading organisations. CISL has a global alumni base of over 27,000 senior leaders from business, government and civil society.

The MSt in Interdisciplinary Design for the Built Environment (IDBE) is offered by Cambridge Institute for Sustainability Leadership (CISL) in association with the Departments of Architecture and Engineering.

Educational aims

The MSt in IDBE is part of CISL's mission to empower individuals and organisations to take leadership to tackle critical global challenges.

As an applied, practitioner-oriented Master's, the programme is designed to support personal and professional development. This is reflected in the content in the learning journey, which is focused on collaboration, reflective practice and applied learning, and which includes peer-learning groups, extensive feedback and assignments that are focused on the built environment industry.

More specifically, through a combination of inter-disciplinary insights, academic analysis, practical application, peer-learning, and personal reflection it aims to develop a community of built environment professionals who:

- Build awareness regarding current challenges and opportunities facing the built environment, such as sustainability, climate change and rapid urbanisation.
- Equip professionals with the strategic decision-making, inventive problem solving and team leadership skills need to respond to the challenges and opportunities.
- Develop skills in effective collaboration and communication, particularly between clients,

consultants, contractors, specialists and occupiers.

Learning outcomes

Learning Outcomes of Master's Programme:		Taught (Online and in person)	Studio	RCS	Assignments		
					LR	GP	Diss
Understanding and awareness	Have a broad and strategic understanding of the global social, environmental, economic and 'system pressures' affecting the built environment, and the resultant challenges and opportunities associated with the production of the built environment	x					
	Develop a multi-disciplinary perspective on sustainability and resilience in the built environment.	x					
	Understand the role of design in addressing future and current challenges, and, how design choices can influence environmental, social, and economic outcomes.	x	x				
	Awareness of the contribution made by the built environment to the quality of peoples' lives including their physical health, mental well-being and other social outcomes.	x	x				
	Develop an argument for the 'business case' for improvements in the quality and delivery of projects in the built environment, as well as understanding the limitations and challenges associated with it.	x	x				
Leadership and change	Understand own personal leadership motivations, values and agency, and how these align with wider business needs and drivers.	x	x				
	Develop the ability to communicate sustainability-related messages effectively to a variety of audiences.	x	x				
	Develop leadership skills to assist with engagement and influencing change including effective communication and presentation, listening, building coalitions, negotiation, identifying key leverage points, influencing/inspiring others, and resilience.	x	x			x	
	Understand professional ethics including personal and professional responsibilities to individuals and to wider society as a whole.	x	x				
Critical evaluation and analysis	Have a reflective attitude towards practice and ongoing learning, including a way to share, measure, assess, and/or track personal progress.	x	x	x	x	x	x
	Awareness of the differing (and sometimes conflicting) motivations and values of professional colleagues from other disciplines.	x	x	x		x	
	Able to be reflective and reflexive regarding sustainability worldviews or paradigms and the assumptions that shape those views.	x					
	Understand and interpret academic and practitioner theory, and apply this to an organisation and/or project.	x	x		x	x	x
	Engage with complexity and contradictions in the knowledge base, challenge and critically review evidence, and apply your own opinions and judgement to sustainability issues.	x	x		x		x

Professional & Interdisciplinary Practice	In a collaborative and interdisciplinary context, be able to pursue a reasoned argument, including the critical evaluation of assumptions, abstract concepts and evidence in the making of judgements, together with the ability to frame appropriate questions to achieve a solution – or identify a range of solutions – to a problem.		x			x	
	Have a clear position on the role of the professions in delivering better places and spaces for the future.	x					
	Critical awareness of current issues and new insights emerging at the forefront of the built environment and which advance professional practice.	x					
	Have a positive approach towards continuing professional development including an independent and self-directed learning ability to advance knowledge and understanding.	x		x	x	x	x
	Have an understanding of the needs and expectations of end-users and other stakeholders, including society, and how to capture them on specific projects.	x	x				
	Engage with actors across subject disciplines, institutional sectors and functional silos in order to advance project goals.		x			x	
	Work effectively in a collaborative group setting (in situ and remotely).		x			x	
Innovative, creative and strategic response	Have an understanding of the status of knowledge and the way in which techniques of enquiry and research are used to create and produce new knowledge, technologies, and innovation in the built environment.	x					
	Understand how design decisions based on inventiveness, originality and the application of knowledge can create innovative solutions to problems.	x	x				
	Understand a variety of responses to built environment challenges from different disciplinary backgrounds, including policy impacts, social engagement, and passive & technical innovation.	x	x				
	Be able to confidently draw upon learning from best practice cases of how the built environment is responding to complex sustainability challenges.		x				
	Respond innovatively and creatively to project challenges and opportunities.		x				
Academic research	Develop an understanding of research methods and associated research skills.	x		x	x	x	x
	Able to locate and access relevant leading-edge insights and research on issues of relevance.	x	x		x	x	x
	Able to undertake sound research.	x		x	x	x	x
	Able to write in a clear, concise, coherent and academically rigorous way.	x		x	x	x	x

Programme Structure

In recognition of the practical challenges of students undertaking study whilst holding down a full-time job, the programme does not require prolonged periods away from the workplace.

The IDBE programme is a two-year part-time Master's Degree course with the students

attending six intensive residential study sessions and completing online modules. The six residential weeks and online modules are compulsory, and there are no modular choices. The part-time format permits students to continue with their professional career while studying. They prepare their written work between residential sessions. The residential weeks are themed and the content and learning is delivered via the subject of lectures, workshops, and a studio design project.

Across the six weeks and online modules, students are introduced to a wide range of issues relating to the design and production of the built environment, including the construction industry, professional responsibilities, effective teamwork, as well as the social, economic and the environmental context within which they work. The programme explores how successful, sustainable built environment projects rely on the coordinated effort and visioning of multiple disciplines and professions, and it encourages the integration of skills between specialists from different background disciplines to improve project design. The core modules are:

1. Leadership, professionalism and interdisciplinary practice
2. Sustainability and resilience
3. Innovation and technology
4. Design thinking
5. Research skills

The course examines these modules across a diversity of contexts:

1. Living environments
2. Working environments
3. Moving environments
4. Heritage environments
5. Future urban environments

Each residential week includes a multidisciplinary design exercise or a group task. Students work on their individual written assignments between the residential weeks.

Teaching Methods

- Teaching methods on the programme span different session formats and techniques, to accommodate different learning styles. For example, plenary and small group sessions taught by academics and practitioners, who are thought leaders and/or case study contributors
- group work, involving dialogue, debate and presentations throughout the taught modules, as well as a group research assignment
- experiential techniques including role plays, simulations, debates and field trips;
- individual work, involving structured reading and reflection, research, and written presentation of findings on selected topics
- support and facilitation by a CISL-led team of faculty, tutors and supervisors from within the University
- an E-learning programme, including online modules and webinars

CISL's applied, practitioner-oriented postgraduate programmes are designed to support personal and professional development. The following are key features that underpin CISL's distinctive approach to

learning:

Flexible: Programmes are designed for professionals working full time; hence the intensive workshops are blended with remote working on assignments and other course-related activities.

Thought leadership: The speakers, lecturers and facilitators are leading experts and practitioners from academia, business, government and civil society.

Practical relevance: Business case studies and hearing from leading industry figures are an integral part of the taught content, and assignments are focused on organisational contexts; thereby developing skills needed to translate cutting-edge insights into practice.

Topical: The content includes developing a robust 'business case' for sustainability, a focus on sustainability leadership aims and responses, and change management, covering both established and emergent experience.

Interactive: The learning approach is highly interactive, collaborative, interdisciplinary, and designed to encourage reflection and debate.

Diversity of perspectives: Students come from a wide range of functions, sectors, and geographies; hence provide a wide spectrum of insights and opportunities to benchmark against how other organisations are responding to sustainability.

Peer-learning: Shared learning and networking with between peers and the extensive range of contributors together provide a rich learning environment.

Support and mentorship: A dedicated CISL team and expert tutors/supervisors support the learning journey, including by providing feedback on assignments that are focused on organisational contexts.

Personal application: Students are encouraged to identify personal opportunities for leadership and engage in reflective practice throughout the programme, supported by peers and tutors.

Assessment methods

The degree is awarded on the basis of the case study, two essays and thesis that every student writes and which form the main assessed part of the students' work. The collaborative studio design work is also graded but this assessment forms a relatively minor element in the overall assessment of the student's output.

The **project case study** (4,000 words) is the opportunity for the student to reflect on and to critically analyse a recent project on which he or she has worked in practice. Students are expected to account for the successes and difficulties encountered, provide commentary on the effectiveness of the team and offer conclusions of relevance to other practitioners.

The **literature review essay** (3,000 words) develops research skills in searching, analysing and writing a critique of the academic literature. There are no prescribed titles; however the focus must be sustainability-related (including resilience or efficiency). Students are encouraged to venture beyond the boundaries of their home disciplines.

The **group research project** (5,000 – 7,000 words) is produced collaboratively by members of group of 5-7 students. It represents the outcomes of an original piece of research undertaken collectively. It is up to the group – guided by a supervisor – to choose a topic for the research.

The **research dissertation** (15,000 words) must be of relevance to the built environment; however students are permitted a high degree of freedom in selecting the focus. Students are expected to undertake original research and to make academic contribution to the field.

During the first year, students complete their case study, essay and group project, and in the second, the dissertation. Students who do not show sufficient progress in the first year are advised or required to leave the course.

Full and active participation in the studio projects is compulsory, although the assessment of their contributions is only a relatively minor element of the overall assessment. The projects are intended to be an opportunity for students to experiment with new ideas in a supportive and collaborative, rather than a competitive and adversarial, environment.

The course also makes use of workshops which along with the programme of lectures and seminars do not form part of the examination scheme; however their value is monitored through the self-reporting of the students. This feedback is sought through on-line feedback on the Virtual Learning Environment which the students are expected to complete for each residential week.

Entry and/or progression requirements

Candidates are assessed and accepted on the basis that they have:

1. At least a 2.i honours degree from a UK University or an equivalent standard from an overseas institution.*
2. A minimum of three years' work experience after graduation.
3. Demonstrable enthusiasm and/or aptitude for interdisciplinary design in the built environment.
4. Good ability in written and spoken English language.
5. Endorsement from employer or, if independent, from an organisation that will be the focus of work on the programme
6. Access to appropriate computer technology and internet software.
7. The ability to pay the course fees or to identify a sponsoring institution.

* Exceptional applicants who do not meet the standard admission criteria of a 2.i honours degree will be assessed on an individual basis and may be required to provide further materials in support of their application.

Student Support

Students are provided with significant support, including;

- s and assignment guidelines and books and assignment guidelines
- an online Virtual Learning Environment.
- a dedicated CISL team to handle enquiries and deal with any issues that may arise
- project groups for the duration of the first year of the programme, which provide a tutor and peer support network

- and sessions assessed work on research skills, and inductions to the University Library, to help students prepare for and execute their assessed work
- a Tutor who has primary responsibility for supporting their individual and group assignments
- Course Director or for the duration of the programme programme and
- to support the dissertation to support the dissertation
- MSt students are members of a college and have access to a Tutor and other support from their college.
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Management of teaching quality and standards

The University ensures high quality of teaching and learning in the following ways:

- Scrutiny of the External Examiners Reports for all teaching programmes
- Encouraging student engagement at both the local level, through involvement in Faculty and Departmental Committees, and at a central level by participation in nationally-benchmarked surveys
- Participation in the biennial Education Monitoring and Review Process to explore provision, share good practice and suggest constructive courses of action
- Mentoring, appraisal, and peer review of staff, and encouraging staff participation in personal development programmes

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Graduate employability and career destinations

On completion of the first residential workshop, students are invited to join the CISL Network which brings together over 27,000 senior decision-makers, thought-leaders, policy-influencers and executives from across the world who share an interest in and a commitment to creating a sustainable future.

As the MSt is a part-time degree, the students will mostly be in employment and will use the programme to improve their career prospects. The programme takes an applied approach to knowledge, with both the teaching and assignments oriented towards relevance to their work situation.

It is also clear from our research into the sustainability market that this is a growing field of work, both as a result of the high profile global policy developments (such as those around climate change) and significant financial stimulus investments in the “green jobs” sector. The Careers Service maintains links with employers and takes their needs and opinions into account in the services which it provides for students. The Careers Service also allocates a Careers Adviser to each College, faculty and department to act as a point of contact.

Every effort has been made to ensure the accuracy of the information in this programme specification. At the time of publication, the programme specification has been approved by the relevant Faculty Board (or equivalent). Programme specifications are reviewed annually, however, during the course of the academical year, any approved changes to the programme will be communicated to enrolled students through email notification or publication in the *Reporter*. The relevant faculty or department will endeavour to update the programme specification accordingly, and prior to the start of the next academical year.

Further information about specifications and an archive of programme specifications for all awards of the University is available online at: <https://www.camdata.admin.cam.ac.uk/>