	PROGRAMME SPECIFICATION **(Taught Postgraduate)**	Newcastle University

1	**Awarding Institution**	Newcastle University
2	**Teaching Institution**	Newcastle University
3	**Final Award**	MSc
4	**Programme Title**	Leadership for Climate Change and Sustainability
5	**Programme Code**	5495F
6	**Programme Accreditation**	None
7	**QAA Subject Benchmark(s)**	There is no one Subject Benchmark that maps fully to this course. The closest subject benchmarks are: Earth Sciences, Environmental Sciences and Environmental Studies (2022) and Business and Management (2019)
8	**FHEQ Level**	7
9	**Last updated**	20/07/2023

10	**Programme Aims**

The Leadership for Climate Change and Sustainability Master's Programme offers learners the opportunity to proactively address the challenges of a rapidly changing climate and promote sustainable practices. The curriculum is designed to provide a comprehensive understanding of climate change issues and their implications for society, organisations, and individuals. Through collaboration with researchers, policy experts, and industry/external organisations, learners will explore innovative responses to challenges at global to local scales within the context of climate change and sustainability.

This programme is specifically designed for learners who seek to enhance their personal development while effectively taking a leadership role in shaping the future of their organisations and communities, as well as more experienced professionals. It equips learners with the essential knowledge and skills needed to navigate the evolving landscape of work and wider society in the face of climate change. One of the key features of this programme is to offer learners the opportunity to enhance their teamworking and collaboration skills. Learners will also benefit from joining a growing network of graduates fostering lifelong learning beyond the programme.

The programme adopts a responsible and ethical approach to developing postgraduates, tackling global sustainability challenges and their solutions at an individual, organisational and societal level. This is achieved through the use of key frameworks such as the UN Sustainable Development Goals and the UN Inner Development goals. Specifically, students will explore and pioneer solutions to global challenges.

With a focus on the challenges of climate change and sustainability, this programme aligns with the sustainable development goals and the strategic priorities of Newcastle University. It prepares individuals to shape the future in an international context by fostering a global, responsible, and interconnected approach. Through a blended learning format, learners engage in transformative education that promotes critical thinking, reflection, analysis, development of leadership attributes and interdisciplinarity. Real-world challenges provide a rich learning environment and the opportunity to make an immediate impact on both personal and professional performance.

Employability is a key focus of the programme, offering tailored support from Newcastle University's award-winning career service. Learners are offered the opportunity to tackle local, national and international challenges in climate change and sustainability through live projects, supported by personal tutors and industry experts.

The overall educational aims of the Leadership for Climate Change and Sustainability Master's programme are:

1. To develop graduates who exhibit exceptional leadership qualities at all stages of their professional lives, within their chosen domain, whether it be in society or the career in which they operate, in respect to the challenges of and responses to climate change and sustainability.
2. To expose learners to the historical context and latest research, and responsible methodological practices in relation to climate change and sustainability.
3. To equip learners with the ability to work effectively and at pace with people from a range of disciplinary backgrounds, taking into consideration a wide range of quantitative and qualitative knowledges, methodologies, feedback and evaluative mechanisms, working practices and cultures.
4. To build a networked cohort of graduates who understand one another, the external organisations they met during the course, and Newcastle University as a resource and support mechanism to their leadership, both during and upon completing the course.

11   Learning Outcomes
The programme provides opportunities for learners to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

11a) Knowledge and Understanding
Upon completing this master's programme, learners will be able to:

A1: Analyse and evaluate key scientific theories and frameworks in relation to climate change and sustainability, drawn from expert, authoritative and verifiable sources of knowledge.

A2: Critically analyse the social, cultural and economic contexts in relation to climate change and sustainability.

A3: Evaluate and prioritise the challenges and opportunities for climate action and sustainability through a multi-disciplinary approach and in live contexts.

A4: Critically appreciate the challenges and possibilities of responsible leadership for more sustainable practice.

11 a) i. Teaching and Learning Methods
The teaching and learning methods employed in this Master's programme are underpinned by a multidisciplinary, experiential learning approach that fosters collaboration and innovation. The programme incorporates various face-to-face and online activities to promote the acquisition of knowledge and the application of theoretical concepts in real-world contexts. The curriculum recognises the importance of bridging theory and practice by involving both academic experts and practitioners from industry. Modules are designed to empower learners to consolidate their conceptual and practical understanding and prepare for assessments. Learners will achieve this by engaging in lectures, seminars, study visits, 'working parties' for team projects and reflective and interdisciplinary learning experiences. Individual and group-led research activities may involve conducting library research, visiting relevant sites and organisations, and interviewing subject matter experts. Furthermore, learners are provided with opportunities to deliver group presentations in front of internal and external audiences to receive valuable feedback and build supportive networks.

Overall, this teaching and learning approach aims to equip learners with a well-rounded skill set that combines theoretical knowledge, practical application, collaboration, critical

thinking, and innovation, enabling them to succeed in their academic pursuits and future professional endeavours.

11 a) ii. Assessment Strategy

The main objective of the assessment strategy is to evaluate students' knowledge and understanding of key scientific theories and frameworks related to sustainability and climate change, their ability to analyse social, cultural, and economic contexts influencing climate action, and their appreciation of the challenges and responsibilities faced by business and societal leaders in promoting sustainability. Additionally, the assessment strategy aims to foster multi-disciplinary collaboration and reflective practice among learners.

The assessment criteria will focus on the depth of knowledge, critical analysis, creativity, interdisciplinary understanding, collaborative skills, ethical awareness, and communication capabilities demonstrated by the learners in their respective assessments.

Across the programme, summative and formative assessments employ a wide range of activities. These include:
- Written reports and policy briefs to assess learners' grasp of key scientific theories, sustainability frameworks, and climate change concepts, and communicate complex issues effectively (A1).
- Case studies focusing on real-world scenarios to analyse social, cultural, and economic influences on sustainability and climate action (A2).
- Group presentations, discussions, and debates to encourage collaboration and exchange of ideas among learners from diverse backgrounds, including multi-disciplinary group projects that require learners to work together, leveraging their diverse expertise to propose innovative solutions to climate change and sustainability challenges (A3).
- Reflective essays and reflective journals, encouraging students to critically analyse their learning experiences, personal growth, and insights on specific topics related to sustainability and climate change, prompting students to introspect on their learning journey (A4).

Regular constructive feedback will be provided to learners on their assessments. Feedback will emphasise strengths and areas of improvement to encourage continuous learning and development throughout the programme.

By employing this comprehensive assessment strategy, the programme will effectively evaluate learners' knowledge and understanding, foster multi-disciplinary collaboration, and promote a reflective approach to addressing complex sustainability and climate change challenges for responsible leadership.

b) Intellectual Skills

On completing the programme learners should be able to:

B1 Demonstrate critical thinking through making evidence-based decisions to identify key questions, relevant information and arguments, and their significance.
B2 Demonstrate creativity and flexibility through integrated problem solving with novel solutions, writing, and presentation.
B3 Undertake appropriate quantitative analysis of data pertaining to climate change and sustainability and/or appropriate qualitative analysis of existing, diverse sources of information.
B4 Demonstrate flexibility and resourcefulness and adapt a problem-solving mindset to fit changing or unforeseen circumstances.

11 b) i Teaching and Learning Methods

To develop the intellectual skills B1, B2, and B3, which encompass critical thinking, creativity, flexibility, problem-solving, and data analysis, the programme will provide a range of teaching and learning methods to engage learners actively. Including:

- Real-life scenarios or case studies related to climate change and sustainability, encouraging learners to identify key questions, gather relevant information, and analyse arguments to make evidence-based decisions and promote critical thinking (B1).
- Debates and discussions on controversial topics related to climate change and sustainability, requiring learners to critically analyse opposing viewpoints and develop evidence-based arguments (B1)
- Assign projects that require learners to propose and implement creative solutions to address specific climate change ad suitability issues (B2)
- Introduce the principles of design thinking to help learners approach problems with a creative and human-centred mindset (B2)
- Provide learners with real datasets related to climate change and sustainability and guide them through quantitative data analysis using appropriate tools and techniques (B3)
- Engage learners in conducting interviews or surveys to collect qualitative data from different stakeholders related to climate change and sustainability issues (B3)
- Expose learners to different perspectives and problem-solving approaches through collaborative learning experiences and group projects (B4)

Combining these teaching and learning methods will create a dynamic and enriching educational experience, fostering the development of critical thinking, creativity, and analytical skills necessary for addressing climate change and sustainability challenges effectively.

11 b) ii Assessment Strategy

The main objective of the overall programme assessment strategy is provided in section 11a. In addition, intellectual skills are assessed by problem-based report writing (B1), Project proposal and group presentations (B2), Live project presentation and research dissertation (B3), Reflective essay, interdisciplinary report and group report (B4).

11 c) Practical Skills

On completing the programme learners should be able to:

C1: Research, select and apply appropriate knowledge to practice-based projects.
C2: Plan and deliver team and individual work-packages and projects within timescale and given resources.
C3: Engage in peer and self-assessment to drive improvement and progressive personal and team development.
C4: Design and deliver effective communication strategies for a variety of audiences.

11 c) i Teaching and Learning Methods

Teaching and learning methods for developing practical skills in the areas of C1, C2, C3, and C4 require a combination of theoretical knowledge, practical exercises, and reflective practices. Achieved through:

- Interactive lectures and workshops where instructors provide guidance on research techniques, critical evaluation of sources and case studies, and applying theoretical knowledge to practical scenarios (C1)
- Project management principles and methodologies, including planning, scheduling, resource allocation, and risk management (C2)
- Introducing self-assessment tools and techniques and reflective learning through collaborative and individual projects (C3)
- Integrative workshops and opportunities to develop and showcase their communication skills (C4)

Regular opportunities for reflection and feedback will contribute to the development of these practical skills. Additionally, incorporating real-life examples and involving professionals from relevant fields will enhance the learning experience and better prepare learners for the challenges they may face in practice.

11 c) ii Assessment Strategy

The main objective of the overall programme assessment strategy is provided in section 11a. In addition, practical skills will be assessed by live projects final written report and presentation (C1), individual project proposal (C2), reflective essays and reflective journals (C3) and induvial and group presentation (C4).

11 d) Transferable/Key Skills

On completing the programme learners should be able to:

D1: Source expert, authoritative and verifiable knowledge

D2: Work and lead effectively in multi-disciplinary teams by understanding and drawing on the skills, knowledges, practices, cultures, and motivations of each team member.

D3: Respond to challenges and opportunities in a pre-planned, organised and timely manner.

D4: Design and present arguments in a clear and impactful manner for a range of audiences.

11 d) i Teaching and Learning Methods

The teaching and learning methods for developing transferable and key skills include lectures delivered by subject matter experts to provide learners with foundational knowledge and insights. Case studies to help learners understand how experts apply their knowledge to solve complex problems (D1). Engaging learners in debates and discussions to enhance their ability to distinguish authoritative knowledge from biased or unreliable information (D1). Assign group projects that require learners to collaborate with peers from diverse backgrounds, fostering understanding and teamwork (D2). Present learners with real-world challenges and opportunities, guiding them to develop structured approaches to address them (D3). Provide opportunities for learners to present their arguments in front of their peers, academics and industry colleagues, allowing for constructive feedback (D4).

11 d) ii Assessment Strategy

The main objective of the overall programme assessment strategy is provided in section 11a. In addition, transferable an key skills will be assessed in the live projects the project proposal (D1, D3, D4), final project report (D1-D4) and group presentations (D2-D4), building on knowledge acquired in the Facing up to Climate Change and Professional Skills modules.

12	Programme Curriculum, Structure and Features

Basic structure of the programme
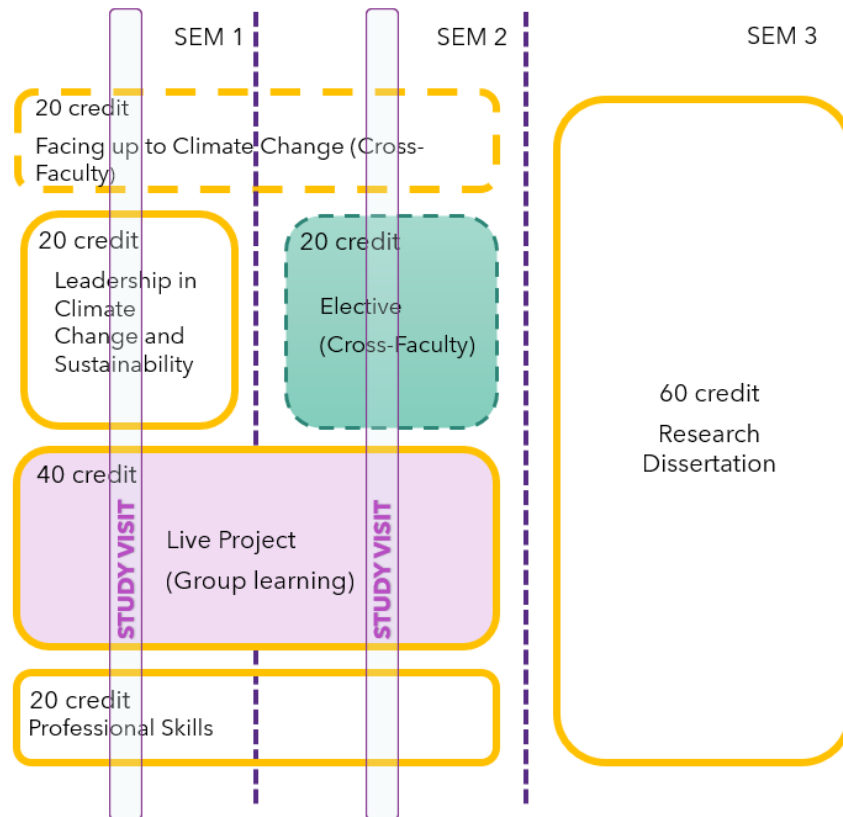
Key features of the programme (including what makes the programme distinctive)

- Live project-based learning is the key feature of this programme. All modules feed through and support the live project module where learners work together to respond to a theme set by external organisations, intellectually informed by leading researchers and framed pedagogically by the course team - made up of climate change fellows drawn from across the university.
- Interdisciplinary team teaching is a significant feature of the course. In the 'Facing up to Climate Change' module, the Live Project module and the Research Dissertation module, the learners will be tutored by 'teamed' climate change fellows, purposefully exposing the different approaches, methodologies, and concerns of different disciplines to the same challenges, and allowing learners to 'triangulate' and establish the value of their own expertise within this interdisciplinary context.
- Learners will also be exposed to further disciplines across the university by engaging with learners on other master's courses through both the cross-university 'Facing up to Climate Change' module and the module electives (20 credits in total).
- Exploring Leadership, at micro, meso and macro levels is a key element of this programme and will start with an understanding of self which is explored in the skills module. Leadership theory will be explored, critically evaluated and related to individual contexts and practices within the Leadership for Sustainability and Climate Change Module
- The Study Visits are a particular feature of this course, aimed at building course community and introducing participants to the local area and resources, examining aspects of global climate change and sustainability through a local lens Historically, the process of industrialisation that led to climate change was initially fuelled by the coal seams of the northeast of England - a pertinent and profound opening discussion for this course.

- The research dissertation is designed to allow international learners to apply learning gained in semester 1 and 2 to propose their own project, set if they wish, in their own country. This is intended to stimulate discussion and reflection on how different approaches to climate change and sustainability differ or are similar depending on context, supporting learners to apply course learning to their own cultural context.

Programme regulations (link to on-line version)

[5495 Programme Regulations 24-25](#)

---

13   Support for Student Learning

Generic information regarding University provision is available [here](#).

---

14   Methods for evaluating and improving the quality and standards of teaching and learning

Generic information regarding University provision is available [here](#).

Academic and programme evaluation

The degree programme concept was derived from executive board and it has been managed as a strategic project. The programme will have two facets of evaluation; firstly the pedagogic approach and academic content, and secondly, as proof of concept for how PGT programmes can be delivered as strategic projects.

The programme has a number of core modules, one of which (Facing up to Climate Change) will be delivered as a standalone pilot module in 2023. The wider programme will take learning from this module, both academically as well as an evaluation of the required PS framework around it. It is expected that an interdisciplinary module will require a greater level of PS resource than usual programme model to deliver effectively.

The Project to develop a new interdisciplinary PGT programme is not 'just' about developing the degree. Significantly, it is about building, sharing, and evaluating new practices, processes, and cultures of working.   Therefore, the project has initiated a range of 'proof of concept' approaches as part of development.

Additional mechanisms

Extensive evaluation of market demand and evaluation of the proposed degree course PGT, from both student groups and potential employers has been carried out. This documentation captures and reflects their input. Please see appendix 1.

The design and proposed delivery of the course has been in collaboration with cross-Faculty colleagues, including leading researchers in the field as well as academic and professional services.
Accreditation reports

We are beginning to pursue professional/sector accreditation for this programme in 2025 start date (year 2 of programme).

---

15   Regulation of assessment

Generic information regarding University provision is available [here](#).

In addition, information relating to the programme is provided in:

The University Prospectus: http://www.ncl.ac.uk/postgraduate/courses/

Degree Programme and University Regulations: http://www.ncl.ac.uk/regulations/docs/

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical learner might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided.

Mapping of Intended Learning Outcomes onto Curriculum/Modules

Module	Type	Intended Learning Outcomes			
		A	**B**	**C**	**D**
SCX8000 Facing Up to Climate Change	Compulsory	1,2,3		1,2,3,4	1,2,4
Professional Skills Module SCX8002	Compulsory	1		1,2,3,4	2
SCX8003 Dissertation	Compulsory	1,2,3		1,2,3	1,3,4
SCX8004 Live Projects	Compulsory	3,4	1,2,3,4	1,2,3,4	1,2,3,4
SCX8005 Leadership for Climate Change and Sustainability	Compulsory	1,4		1	1,4