PRME
an initiative of the
United Nations Global Compact

Sharing Information on Progress 2026

Lancaster University
Management School

Table of Contents

1. About PRME 3

2. About SDGs 5

3. Getting Started 6

4. Values 9

5. Teach 11

6. Research 26

7. Partner 41

8. Practice 43

9. Share 45

About the Principles for Responsible Management Education (PRME)

The Principles for Responsible Management Education (PRME) is a United Nations-supported initiative founded in 2007 that aims to raise the profile of sustainability in their classrooms through Seven Principles focused on serving society and safeguarding our planet.

PRME engages business and management schools to ensure they provide future leaders with the skills needed to balance economic and sustainability goals, while drawing attention to the Sustainable Development Goals (SDGs) and aligning academic institutions with the work of the UN Global Compact. Driven by its mission to transform management education, PRME equips today's business students with the understanding and ability to deliver change tomorrow. As a voluntary initiative with over 800 signatories worldwide, PRME has become the largest organized relationship between the United Nations and management-related higher education institutions.



> *The PRME initiative was launched to nurture responsible leaders of the future. Never has this task been more important. Bold leadership and innovative thinking are needed to achieve the Sustainable Development Goals (SDGs).*

Antonio Guterres

Secretary-General (2017 - Present)

United Nations

Principles of PRME



Purpose

We advance responsible management education to foster inclusive prosperity in a world of thriving ecosystems.



Values

We place organizational responsibility and accountability to society and the planet at the core of what we do.



Teach

We transform our learning environments by integrating responsible management concepts and practices into our curriculum and pedagogy.



Research

We study people, organizations, institutions, and the state of the world to inspire responsible management and education practice.



Partner

We engage people from business, government, civil society, and academia to advance responsible and accountable management education and practice.



Practice

We adopt responsible and accountable management principles in our own governance and operations.



Share

We share our successes and failures with each other to enable our collective learning and best live our common values and purpose.

The Sustainable Development Goals (SDGs)

In September 2015, all 193 Member States of the United Nations adopted a plan for achieving a better future for all – laying out a path over the next 15 years to end extreme poverty, fight inequality and injustice, and protect our planet. At the heart of Agenda 2030 are 17 Sustainable Development Goals (SDGs) and 169 related targets that address the most important economic, social, environmental and governance challenges of our time. The SDGs clearly define the world we want – applying to all nations and leaving no one behind. Successful implementation of the SDGs will require all players to champion this agenda; the role of higher education is critical to this.





Getting Started

This section provides foundational information about Lancaster University Management School, including key details and basic institutional data.

Mission

LUMS Mission is:

Impact through research:
Through our collaborative research expertise and capabilities, we will ensure positive societal impact through research that drives responsible practice and transformative solutions.

Cutting Edge Curriculum:
Through a cutting-edge and stimulating curriculum, we will equip our students with the knowledge, experience and skills to lead and shape positive futures

Civically Minded:
As a civic business school, we will model inclusive practice, serving our community and engaging actively with business, policy, and societal agendas.

People Operations:
Informed by our strong values, we will be recognised as an inclusive school dedicated to attracting and nurturing our student and staff community.

https://www.lancaster.ac.uk/lums/about-us/strategy/

Vision

LUMS Vision:
'Developing leaders for positive global impact through innovative education and purposeful research'

https://www.lancaster.ac.uk/lums/about-us/strategy/

Graduates & Enrollment

2025 Statistics	Number
Graduates	2161
Faculty & Staff at the University	3500
Faculty & Staff at the Institution	380

2025 Statistics	Number
Student Enrollment at the University	16115
Student Enrollment at the Institution	4082
Undergraduate Attendance	12811
Masters-Level Postgraduate Attendance	1690
Doctoral Student Attendance	1614

Degrees Offered

Bachelor Programs

- Bachelor of Science (B.Sc. or B.S.)

Masters Programs

- Master of Science (M.Sc. or M.S.)
- Master of Arts (M.A.)
- Master of Business Administration (M.B.A.)

Doctoral Programs

- Doctor of Philosophy (Ph.D.)



Values

We place organizational responsibility and accountability to society and the planet at the core of what we do.

Who Champions Responsible Management Education at Our Institution

- Interdisciplinary efforts across business school
- Research or issue group, society, or club leading sustainability efforts
- Disciplinary efforts within business school

Teach

We transform our learning environments by integrating responsible management concepts and practices into our curriculum and pedagogy.

Courses that support RME

Lancaster University Management School reports 14 courses in 2025 that support responsible management education and sustainable development goals.

Accounting and Finance Professional Ethics | ACF318

Multiple scandals reported in the press over the past decade have highlighted the ever-increasing role of professional ethics and ethical management practices in everyday business life. Whether it is decisions about professional ethics and ethical management practices in everyday business life. Whether it is decisions about tax policy, community engagement, social reporting or compliance with regulations and best practice – ethics is now firmly embedded in every aspect of professional work. This is, perhaps, why the major accounting institutes now incorporate ethical development into so many elements of their education programme. This course has been designed to give students a deep and comprehensive understanding of ethics in everyday life, in business life, and in the working life of a financial professional. Starting from the very core of ethical theories and some of the more entertaining studies (would you, or would you not, push the fat criminal off the bridge to save five other people?) we build an understanding of what ethics is, that we then weave through the rest of the course. In this way we bring to life the principles based ethics approach of financial bodies today, the ways codes of conduct are designed and used, and the choices organisations make about how they account for their ethical activities to diverse stakeholder groups and ethically minded investors. This course also aims to develop a range of other skills that are fundamental to student employability, and to future success in many chosen careers: you will develop your team-working skills teams, both online and offline, as part of the seminar activities; in these small groups you will learn presentation skills, problem solving skills and argument skills as you prepare for weekly, competitive debates; and your coursework assignment (which is an individual piece of work) will put your improved analytical skills to work on a real-life case study of ethics in an organisation. Note that this course is entirely qualitative, the assessment and the exams require good standards of written communication, and so do the weekly tutorial activities. Both the course tutor and the LUMS education support team can help you to refine your language skills as you go through the module, but there is limited time for this so you must come prepared for this type of study and assessment. ·Ethical theories and their relevance to every day decision making, business management, and the creation of ethical codes of practice for the accounting and other professions ·Ethical management in business - the balancing of stakeholder views and the use of a stakeholder approach when determining activites and reporting ·Corporate Responsibility, how it is understood, enacted and reported ·The role that governance plays in the management of a business, the evolution of good governance practice, and the development of codes of conduct ·The nature of professional ethics and its significnance in the business environment. ·National and international ethical issues and their impact on codes, standards, governance and financial decision making (focusiing on topical issues such as taxation and the role of accountants)

·Content of professional ethics codes - ICAS, CFA and IoD ·Content of regulatory governance framework ·Important ethics related regulations covering whistleblowing, bribery, and money laundering

This course helps students develop career specific skills: Communication and presentation. Throughout the course you will develop your capabilities in presentation design, public speaking, argumentation and effective communication of both theoretical and practical ideas. ·Groupworking and leadership. Your tutor will help you to develop effective team working practices through the progressive design of the weekly tasks. One group member will be acting as co-ordinator each week, as collective knowledge is built up within the group about effective leadership and management practices . ·Theory-in-action. Weekly tasks demand the analysis of real-world problems using a wide range of theories learnt through the course. Students will gain significant experience of building theoretically robust yet practically relevant arguments. These skills will carry forward into the coursework assignment. ·Primary research. Students will learn how to search for, select and critically analyse multiple sources of information in order to build their arguments for both the weekly tasks and the more significant coursework assignment. ·Report writing and analysis. The development of effective subgroups through the tutorial activities creates a natural group that will then work together to collectively review and improve each other's coursework . Through small group, facilitated sessions you will develop critical reviewing skills and a deeper understanding of what creates a strong, well targeted, tightly argued and clearly articulated business report.



Labour Economics | ECON327

COURSE AIMS & OBJECTIVES, KEY SKILLS & LEARNING OUTCOMES Course aims: 1.To develop, using economic methodology, a range of skills that will be of value in employment and self-employment. These include, inter alia, cognitive skills (understanding the concepts of optimisation and equilibrium as a means of problem-solving, the ability to interpret statistical and theoretical analyses) and transferable skills (writing, presenting, communication and teamwork); 2.To equip students with a knowledge and understanding of analytical models , both theory and model based; 3.To develop a knowledge and understanding of different theoretical approaches to public policy and business problems; 4.To develop an understanding of how economics contributes to the analysis of human resource practices , and to develop a range of skills for constructive use of that understanding.

5.Cognitive: to develop an understanding of how economics contributes to the analysis of human resource practices and labour markets. Module Specification 14-Apr-2023 chb_rpt_module_specification01.rpt Page 4 of 6 6.Adaptive: to develop written communication skills in the delivery of coursework, and to develop oral communication and team working skills in the preparation and delivery of presentations. 7.Affective: to encourage critical reflection leading to sound judgement. Course objectives: 1.Cognitive: to develop an understanding of how economics contributes to the analysis of human resource practices and labour markets. 2.Adaptive: to develop written communication skills in the delivery of coursework, and to develop oral communication and team working skills in the preparation and delivery of presentations. 3.Affective: to encourage critical reflection leading to sound judgement. i. Subject Specific COURSE AIMS & OBJECTIVES, KEY SKILLS & LEARNING OUTCOMES Desired outcomes: Upon completion of this course, you should be able to: ·Understand the methods of applied and theoretical economics in the context of the economics of labour and human resources; ·Use methods of economic analysis when confronted by previously unseen labour market problems; ·Engage in abstract thinking by extracting the essential features of complex systems to facilitate problem solving and decision-making; ·Engage in deductive and inductive reasoning to enhance problem solving and decision-making skills; ·Apply theoretical, historical and quantitative methods to the analyses of HR issues and problems; ·Understand the nature of incentives and opportunity costs in decision-making; ·Think in marginal terms about the trade-offs involved in public policy and business decision-making; ·Plan and manage your time effectively in relation to deadlines while displaying individual initiative and enterprise; ·Conduct individual assignments and perform effectively in a group environment by demonstrating leadership and team-building qualities; ·Demonstrate a logical argument, analyse and interpret data and evaluate alternative perspectives based on objective reasoning; ·Communicate and present complex arguments in oral and written form



Business Ethics and Sustainability | EMBA573

The module is divided into three substantive themes: i) Business Ethics, ii) Corporate Social Responsibility and iii) Sustainability. Within these themes the module will explore issues of the responsibility at the micro, meso and macro levels. The module will include the following: Business Ethics: to define and discuss virtue ethics, practical wisdom and what this means in practice. Examine the implications of business practices when rules and procedures are followed and how this is then enacted at an employee and business level. Corporate Social Responsibility: to discuss what corporate social responsibility is and the core characteristics. Mapping responsibilities is also considered, alongside stakeholder theory and CSR strategies. Sustainability: to include a discussion of

sustainability, sustainable development, and global risks in the context of the challenges business face. Also, to consider cotemporary solutions to these challenges and connect with management and strategic responses in keeping with sustainable outcomes.



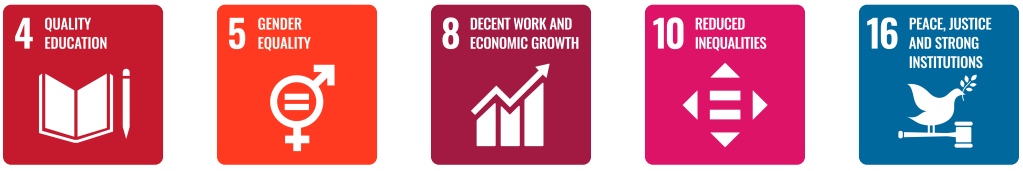
Business Ethics | OWT229

The main aim of this course is to provide students with a critical understanding of the moral foundations that shape business and management. It will examine the various perspectives through which we make sense and speak about ethics and the ways in which they influence and direct our moral choices both on an individual and an institutional level.



Rethinking Leadership | MNGT320

It is often argued that "effective leadership" is a key factor in improving organizational performance. Yet, it is also increasingly evident that traditional understandings of what constitutes leadership - especially charismatic and transformational models - have not always lived up to their promise. Against this background, Mngt 320 seeks to re-think leadership dynamics by introducing students to a number of perspectives on leadership, and by exploring their respective strengths and weaknesses. In particular, the course addresses leader-centred, follower-centred, cultural, and critical approaches and explores important issues such as distributed leadership and proactive followership, power and resistance, identity, emotions and emotional labour, and authentic leadership. The course is designed to rethink leadership dynamics in ways that critically examine the facilitators and challenges to effective leadership that frequently exist in contemporary organizations and societies .



Gender and Entrepreneurship in a Global Context | ENSI321

The aim of this module is to: Provide you with an insight into the diversity of the entrepreneur and the embeddedness of entrepreneurship within gendered economic, political and societal contexts. Go beyond the theories of entrepreneurship and provide you with real-life experience (as consultants

conducting 'Diversity Cultural Audits' in businesses) which develops your skills in identifying and exploring the impact of gender and diversity on models of business. Review and critically analyse the controversial facts and fictions presented in the media, policy and everyday societal attitudes to management and entrepreneurship. Highlight the importance of gender and diversity within organisations for their sustainability and prosperity in an increasingly globalised world. Raise the your awareness of the arguably "Western" lens underpinning entrepreneurship and enrich your global entrepreneurial knowledge beyond their home borders.

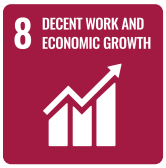


Innovation Practice Lab | ENSI536

This module brings together everything you have learned throughout the programme, helping you apply your knowledge and skills in entrepreneurship and innovation with focus on responsible and inclusive innovation. The objective of the module is to assess innovation readiness of the organisations you will work with. The innovation readiness will include: - Assessment of the external business environment and appraisal of industry pressures that the organisations may be facing. Applying Future Scenario Planning method will provide opportunities to look not the future and assess the organisation resilience and future strategic innovation planning. - Internal assessment of the organisation's ability to manage information and data – Intelligence, their ability to think outside the box and maintain user-centric focus – Creativity, and finally their ability to communicate the innovation logic to the wider organisation and their stakeholders – Emotional ability. - Overall responsible innovation assessment applying the Good Dividends framework in order to enable organisation reflect on their understanding how they balance profit with social and environmental responsibilities. Experiential Learning Approach The module is delivered through challenge-based experiential learning. You will gain hands-on experience in consulting, problem-solving, and innovation strategy development. • You will work in teams as innovation consultants, analysing real client organisations and developing actionable innovation strategies. • The outcome is an innovation readiness report that meets responsible innovation criteria and provides feasible, desirable, and sustainable business recommendations. You will focus on learning: • How to approach innovation responsibly in a consultancy context. • Learn essential consulting skills and the consultant mindset. • Key consultancy skills, including problem-solving and effective intervention. • How to conduct research and assess the client's innovation readiness. • How to assess an organisation's innovation readiness and develop practical recommendations. Subject specific learning outcomes of this module are: • Demonstrate complex and conceptually challenging knowledge of different organisational structures and their impact on responsible innovation capability • Demonstrate a critical awareness of different types of innovation in organisational context in intrapreneurial and entrepreneurial environment • Critically evaluate innovation enablers and disablers in organisational culture and methods of innovation

readiness evaluation • Synthesise information and make informed judgements by critically evaluating & applying business research concepts using appropriate quantitative and qualitative evidence The module will also put emphasis on developing innovation consultancy skills that have been mapped as follows: Creative problem solving Client centric approach Flexibility and resourcefulness Objectivity and criticality





ICE Summer school, Leadership and Sustainability | INT297

This is a guest lecture which raises awareness with visiting international students coming to Lancaster for a summer school. The guest lecture introduces the students to responsible leadership and sustainability with an interactive activity on the SDGs.

Raising awareness and creating opportunities for dialogue about the topic from different global perspectives.



Environmental Economics and Climate Change | ECON230

Environmental Economics and Climate Change introduces students to the economic principles and policy tools used to address major environmental challenges, including climate change, air and water pollution, biodiversity loss, natural resource depletion, and ecosystem degradation. The module examines how economic activities interact with the environment and explores the role of markets, institutions, and government policies in promoting sustainable outcomes. Students develop the analytical skills needed to evaluate environmental problems through the concepts of externalities, property rights, cost-benefit analysis, and economic efficiency. Through the study of real-world policy challenges, such as net-zero transitions, pollution control, and resource management, students learn

to assess the effectiveness and trade-offs of alternative policy interventions. The module encourages critical thinking about sustainability, social welfare, and long-term environmental stewardship, equipping students to engage with complex environmental issues from an evidence-based and policy-oriented perspective.

This module helps students develop the ability to analyse complex environmental challenges through an economic lens and to evaluate the trade-offs involved in policy and business decision-making. By studying issues such as climate change, pollution, biodiversity loss, and natural resource management, students gain a deeper understanding of the links between economic activity, environmental sustainability, and social welfare. Students learn to critically assess environmental policies using evidence-based approaches, moving beyond simplistic narratives to consider incentives, costs, benefits, distributional impacts, and long-term consequences. Through discussions of contemporary policy challenges, including net-zero transitions and urban air pollution, they develop analytical, problem-solving, and communication skills that are highly relevant to careers in business, government, consultancy, and the non-profit sector. The module also aims to foster responsible citizenship by encouraging students to engage with sustainability challenges in an informed and critical manner. Many students report that the course changes how they think about environmental issues, equipping them with the tools to contribute to more sustainable and evidence-based decision-making in their future professional and personal lives.



Strategic Marketing | MKTG301

Strategic Marketing equips students with the theoretical knowledge and practical skills required to develop evidence-based, metrics-driven, sustainability-conscious marketing strategies. Through engagement with contemporary academic research, industry case studies and real-world strategic challenges, students learn to critically analyse markets, evaluate strategic alternatives and develop sustainable, performance-oriented marketing plans. The module combines strategic theory with experiential seminar activities that simulate graduate assessment centre tasks, strengthening students' analytical, communication and employability skills while preparing them for careers in strategic marketing management.

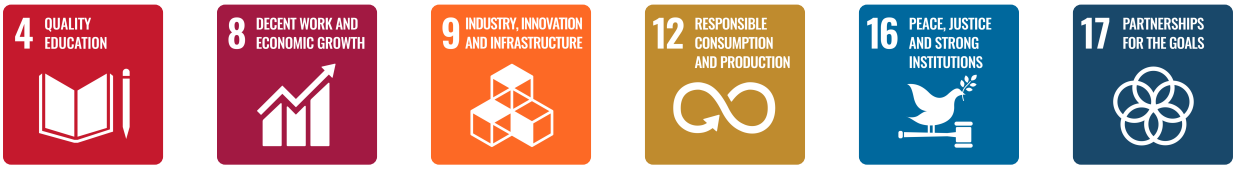
Rather than learning strategic marketing solely through lectures, students engage in authentic, practice-based learning that mirrors the work of professional marketing managers. Throughout the module they analyse live market developments, evaluate controversial and emerging markets, collaborate on strategic challenges, present recommendations, and defend their decisions before peers and tutors.



Digital Marketing | MKTG233

Digital Marketing equips students with the knowledge and practical skills required to design data-informed, integrated digital marketing strategies in an increasingly technology-driven business environment. Students critically explore emerging technologies including AI, IoT, digital analytics, big data, cybersecurity and digital transformation while applying industry-standard analytics software (Similarweb) to develop evidence-based digital marketing campaigns. This is the only UG digital marketing module in the UK (to my knowledge) to teaching digital marketing analytics with real-life, real-time data analytics (Similarweb) access for students. This is not a simulation, but a full access package to industry software. The module combines academic theory with hands-on industry practice, preparing students for graduate careers in digital marketing, consulting and digital strategy.

Students develop both advanced digital marketing knowledge and practical industry experience by working with Similarweb, a leading commercial web analytics platform used by digital agencies and global organisations. Through authentic consultancy-style projects, students analyse real company data, develop integrated digital marketing campaigns and present evidence-based strategic recommendations.



Global Classroom | GRC247

Global Media Classroom (GCR247) is a ground-breaking, 15-credit module that explores how traditional and new media shape everyday life and global dynamics—from marketing and election campaigns to AI, climate emergencies, and social media influencing. Co-designed and co-taught by a global teaching team, the module connects students simultaneously across five countries: the UK, Germany, Ghana, Malaysia, and China. Through virtual connections and local workshops, students collaborate in a low-carbon fashion to examine topics such as popular culture, glocal development,

and emerging media technologies. A central focus is global inclusivity and sustainability; students actively apply their learning by working in cross-country groups to develop a global media campaign addressing one of the 2030 United Nations Sustainable Development Goals (SDGs).

Key impacts include: Intercultural Collaboration: By virtually connecting classrooms across five countries, students gain first-hand experience navigating cross-cultural communication, managing global time differences, and building international friendships without geographical displacement. Sustainability Literacy: Students directly engage with the 2030 United Nations Sustainable Development Goals (SDGs) by designing and delivering a global media campaign tackling critical real-world issues like climate change, poverty, or gender equality. Critical Awareness: The module fosters reflexive thinking, challenging students to evaluate media framing, soft power, and intersectional digital inequalities between the Global North and Global South. Digital Skills: Working in a low-carbon, hybrid fashion builds vital competencies in global team coordination and inclusive digital platform usage.



Marketing Research and Consultancy Project | MKTG310

The 310 Marketing and Research Consultancy module is an action-learning based capstone module. We run the module very year and this year we had 74 Students, 13 groups, 9 clients. It is designed as a natural progression from the second year modules – Qualitative Marketing Research (MKTG211) and Quantitative Marketing Research (MKTG212) where students were introduced to key concepts and techniques in marketing research. This module provides students with the opportunity to work with a real-life company and to put into practice the ideas and techniques of marketing research. It is assumed students will be competent in all the areas studied on MKTG211 and MKTG212. It also provides students with the opportunity to improve their employability skills. Successful completion of the module also necessitates the understanding and deployment of relevant concepts and techniques from all other marketing modules students have undertaken up to this point. Students work together in teams to negotiate, design and deliver a market research project for a company/public sector

organisation. The companies/organisations involved may be large or small, global, national or local, for profit or not for profit. The clients for our projects are not involved for the fun of it, or because they just want to help students get an education; they want, sometimes desperately need, the results! Students will be working with a real life company on a live project and the client may have concerns about confidentiality and budget. However, the market research they ask to undertake is important, sometimes crucial to their business/operational development – particularly if they are a start-up company.

Student scores were overall higher than last year. Overall: Teaching: 4.9 (last year 4.30) 4.9 (last year 3.9) (referred to as quality of supervision) Student involvement with the module: 4.9 (last year 4.6) Undertaking the MKTG310 project has provided me with valuable skills and knowledge that will enhance my employability prospects: 5 (last year 4.7) I am confident that I can articulate my MKTG310 experience for a potential employer: 4.9 (last year 4.8) The qualitative feedback given is largely positive and it appears that students appreciate the opportunity of working with a client. Most Valuable Parts of the Module (comments from final evaluation): • Working with a client and doing meaningful work • Working on research proposals • Developing consultancy skills • Applying marketing knowledge to real life company A Sample of Student Comments (most valuable parts of the module): “Engaging with an actual client” “Weekly advisor meetings, produced great insight and direction for our project” “Producing client facing output “ “Meetings with supervisors” “Getting to work with a real company and gaining a real understanding of how conducting a market research project. it was interesting to work with an actual client” “The whole client and practical side of it is so valuable” This module is sometimes referred to by students as being key to their degree experience and often discussed in job interviews as evidence of employability.





Ethical Responsibility in Business | OWT314

The objective of this module is to attempt to develop moral sensibility and practical reasoning in the context of managerial everyday action in organisations. The module will be concerned with morality in action, as it happens, rather than a removed reflection on codes and principles of ethics and CSR (corporate social responsibility). The module will aim to show that ethics and CSR in action is diffused and difficult. Nevertheless, managers and employees have a responsibility to ‘work it out’ for themselves. It is this ‘how to work it out’ that the module will keep as its focus. Managers and employees must eventually make a choice and not only do they have to justify this choice but also respect that others may have a different perspective. The module will use a number of case studies as a basis to develop this moral sensibility so that managers will be able to act in a morally appropriate manner as part of their ongoing organisational practice.

The module helps student rethink the aim of business from profits and growth at any cost - to sustainable growth with ethics at the heart of it



Teaching Awards

In 2025, 1 award was given to faculty and educators at Lancaster University Management School.

Graduate Futures Institute - Academic Employability Award in Postgraduate Employability Category

Granter: Graduate Futures Institute

Grantee: Lancaster University, Accounting and Finance Department, with collaboration from LUMS Careers and LUMS Learning and Development Teams

Award Description:

The Postgraduate Employability Award, sponsored by Vitae, recognises initiatives that significantly enhance the employability, career readiness, and long-term professional development of postgraduate students. It highlights programmes or practices that build advanced skills, strengthen researcher development, and support successful transitions into diverse career pathways. The award celebrates impactful, evidence-based approaches that empower postgraduates to navigate the labour market with confidence and to thrive in academic, industry, and public sector roles.

Continue telling your story

Impact Innovation Circles

Period Covering: February, 2026 - August, 2026

Department: Management

The project aims to prepare graduates to act responsibly, relationally, and fairly. It uses Impact Innovation Circles (IICs - participant-led, international peer groups) to support institutions to prototype practical changes in pedagogy, programmes, and institutional practices. IICs are emerging co-operative inquiries: a lightly structured, relational space in which participating institutions move through cycles of exploration, experimentation, integration, and shared learning.



Dissertation in Place

Period Covering: June, 2023 - July, 2026

Department: Marketing | Entrepreneurship

What if postgraduate dissertations could do more than fulfil assessment requirements? What if they became catalysts for civic engagement, responsible management practice, and meaningful local impact? In this session, we introduce Dissertation in Place, an innovative framework that connects student research with real-world challenges, community partners, and place-based opportunities. Drawing on our experiences at Lancaster University Management School, we explore how dissertations can become vehicles for public value creation, stakeholder collaboration, and responsible management education. Join us to discover the opportunities, challenges, and lessons learned from reimagining the dissertation as a civic and place-based learning experience.





I-Connect: Co-designing Sustainable Communities

Period Covering: February, 2023 - December, 2025

Department: Marketing | Entrepreneurship

I-Connect was a place-based research and innovation project led by Lancaster University that explored how stronger connections between people, places, and organisations can support sustainable regional development. Initially inspired by the opportunities and challenges associated with the Eden Project Morecambe, the project brought together residents, businesses, policy makers, community organisations, and researchers to better understand the future of transport, connectivity, and economic development across the Lancaster and Morecambe area.

Using human-centred design, stakeholder engagement, future scenario planning, and collaborative innovation methods, I-Connect generated new insights into how local people experience place and mobility. The project developed practical tools and frameworks to support decision-making, strengthen cross-sector collaboration, and enable stakeholders to co-create solutions to complex regional challenges.

Through its research, public engagement activities, and partnerships, I-Connect helped inform local policy, supported community-led initiatives, and fostered a more connected and resilient innovation ecosystem. The project demonstrated how universities can act as civic partners, bringing together diverse stakeholders to imagine and build more sustainable and inclusive futures.





Marketing Pavilion - Come and design your favourite snack with us

This engagement project aimed to engage with families with young children to showcase what marketing as a management subject actually does, and to dispel myths and negative views about marketing with reference to its lack of concern for sustainability, consumer welfare and so on. It was delivered as part of the Campus in the City 2025, and was attended by 50 people. Young children got to make decisions about sustainable snack design and pricing and packaging, and then experienced through eye tracking technology how consumers might react to the defining features of their product. https://www.lancaster.ac.uk/lums/our-departments/marketing/news/marketing-department-highlights-research-and-teaching-at-campus-in-the-city-showcase

iGrow Green Careers

The iGrow Green Careers project is an international employability and sustainability initiative led by Lancaster University Management School (LUMS) and funded by the British Council's Climate Skills Global Collaboration Grant. It is delivered in partnership with AI Labs and INCREASE Indonesian Social Enterprises, creating a collaborative programme between the UK and Indonesia to prepare young people for careers in the green economy.

Project Overview

iGrow Green Careers was developed in response to the growing demand for a workforce equipped with the knowledge, skills, and mindset needed to support the transition to a more sustainable economy. The project targets young people, particularly those from underrepresented or disadvantaged backgrounds, by providing free, hands-on learning experiences that combine sustainability, employability, innovation, and real-world business engagement. Rather than focusing solely on environmental awareness, the programme aims to build confidence, career readiness, and practical capabilities that enable participants to secure meaningful employment and become agents of sustainable change within their communities and organisations.

Main Aims

The project aims to:

1- Develop green employability skills by equipping participants with competencies in sustainability, circular economy, digital technologies, artificial intelligence, entrepreneurship, and innovation.
2- Improve career readiness through professional development activities including CV writing, interview preparation, networking, communication, teamwork, and leadership.
3- Provide experiential learning by engaging participants in real business challenges and consultancy projects with industry partners, allowing them to apply their learning to authentic sustainability problems.
4- Promote social inclusion by widening access to career development opportunities for young people who have traditionally faced barriers to higher education or employment.
5- Strengthen international collaboration between the UK and Indonesia, enabling participants to learn from different cultural and business contexts while addressing shared global sustainability challenges.
6- Support the transition to a greener economy by preparing future professionals who can contribute to sustainable organisations, responsible businesses, and climate action in line with national and international sustainability goals.

Long-Term Vision

Beyond delivering training, iGrow Green Careers seeks to establish a sustainable ecosystem connecting universities, employers, community organisations, and international partners. By combining academic expertise with industry engagement, the project aims to create lasting pathways into green careers while fostering responsible leadership, innovation, and lifelong learning among young people.



Research

We study people, organizations, institutions, and the state of the world to inspire responsible management and education practice.

Research vs Research for RME/Sustainable Development

479 Peer-reviewed articles were published by Lancaster University Management School from this past calendar year.

vs

156 Peer-reviewed articles were published by Lancaster University Management School from this past calendar year in support of RME.

Research Funding

In 2025, Lancaster University Management School was awarded funding for research that is:



Socializing Research

In 2025, Lancaster University Management School contributed research findings to:

- Community organizations
- Government and policy makers
- Industry and business networks
- International media
- Local media
- National media
- Open-access platforms

Research Projects

In 2025, Lancaster University Management School reported 1 research project that implemented responsible or sustainable activities.

Digital Resilience for the Climate Crisis: A Multi-Perspective Analysis

Period Covering: March, 2022 - February, 2026

Department: Management Science

Paper published in FT50 and ABS4* journal following internal seed funding from LUMS for a project on "Embedding local insights in centralised decision making in natural disaster monitor rooms: The cases of Brazil and Indonesia" - this paper was based on extensive data collection on the effects of climate related natural disasters in developing countries of Brazil and Indonesia. The paper then uses these case studies to show how the field of information systems can help with the problems from climate crisis.



Research Awards

In 2025, Lancaster University Management School was awarded 2 research awards for responsibility- and/or sustainability-related research.

Developing Leadership Capacity Conference (DLCC) Best Paper Award

Granter: Centre for Leadership and Empowerment, Greater Manchester Business School, Bolton.

Grantee: Marian Iszatt White and Emma Watton

Award Description:

This award was presented to Marian Iszatt White and Emma Watton for their paper titled "Bolt on, Built In or Embedded – how far do we want to go with sustainability and responsibility in leadership development?" at the Developing Leadership Capacity Conference (DLCC).

Mentor Award - Entrepreneurship Division, Academy of Management, 2025

Granter: Entrepreneurship Division, Academy of Management, 2025

Grantee: Professor Sarah Jack

Award Description:

The Mentor Award from the Entrepreneurship Division of the Academy of Management recognises individuals who have made outstanding and sustained contributions to mentoring in the field of entrepreneurship. It honours those who support the development of doctoral researchers, early-career scholars, and students by providing guidance, encouragement, and long-term professional development. The award highlights mentoring excellence that strengthens the entrepreneurship community and helps shape the next generation of researchers and educators.

Publications Related to RME and/or Sustainability

Understanding Student Attendance Decisions: The Role of Learner-Centred Factors in Higher Education | DOI

Authors: Neil Ralph Lancaster University | Nonhlanhla Dube Lancaster University

Date of publication: September, 2025

Department: Management

Student attendance in university teaching sessions is widely acknowledged as a key factor influencing retention and academic success. However, declining attendance rates suggest a need for deeper insights into the learner-centred factors that shape students' attendance decisions. While institutional and educator-related factors have been extensively studied, students' individual circumstances, motivations, and perceptions remain underexplored. This research investigates how learner-centred factors influence attendance choices at Lancaster University Management School, a top-rated institution in the Teaching Excellence Framework (TEF), where staff have observed declining in-person attendance despite high institutional standards.

Thematic analysis of survey results identified five key factors affecting attendance: (i) instrumental and consumption-related considerations, (ii) teaching and learning experiences, (iii) social dynamics, (iv) personal circumstances, and (v) timetabling constraints. Findings suggest that students weigh the perceived value of in-person sessions against competing academic, personal, and professional commitments. While engaging, interactive teaching fosters attendance, logistical barriers, mental health concerns, and the availability of digital resources often deter students from attending. Notably, a strong sense of belonging emerged as a critical determinant of attendance, underscoring the importance of social and academic integration.

These results highlight the need for higher education institutions to prioritise learner-centred factors in programme design. By aligning institutional policies with students' lived experiences, universities can create more inclusive and engaging learning environments that better support attendance and academic success.



The Effect of PRME on Curriculum: A Case Study | DOI

Authors: Rose White Lancaster University

Date of publication: September, 2025

Department: Management

In the past decade, the theme of sustainability has transitioned from a peripheral topic to a central element of business education, reflected in changes to international business school accreditation standards. More than 850 Schools globally have become signatories of the UN-sponsored initiative PRME, whose mission is to 'transform management education and develop the responsible decision-makers of tomorrow to advance sustainable development', but what difference does this actually make to what Schools teach and how they operate? This case study examines Lancaster University Management School's progress since becoming a signatory of PRME in 2019 to evaluate its impact on the School.



Using Imagination in Management Education: The Case of Actual Jobs and Imagined Diaries | DOI

Authors: Emre Tarim Lancaster University

Date of publication: September, 2025

Department: Marketing

In this article, I discuss the often-neglected utility of imagination in management education and how imagination can help us narrow the teaching and practice gap. One way of utilising imagination for this purpose is using actual management jobs and encouraging students to apply taught material by writing imagined diaries on fulfilling responsibilities listed in job adverts. Using the case of an undergraduate marketing module at Lancaster University where I utilise this authentic approach by asking students to write imagined diaries on actual marketing jobs, I demonstrate how imagination help students understand the practical relevance of taught material to real-life problems, and how students benefit from an increased awareness of actual management issues, dynamics and demands. I conclude by reiterating the case for using imagination in authentic assessments and narrowing the teaching (theory) and practice gap in management that will benefit both management educators and students.



Engaging Students With Video Pedagogy | DOI

Authors: Lee Francis Lancaster University

Date of publication: August, 2025

Department: Marketing

As new technologies continue to evolve, educators face the challenge of teaching complex software and skills within limited time frames and heavy workloads. This case study will explore a structured approach to bringing new technology to the classroom, leveraging scaffolded sessions and video pedagogy to enhance student learning, whilst balancing direct instruction with independent learning. The result is year-on-year project success that could inspire educators.



Reflections on an Industry-Sponsored Global Student collaboration project | DOI

Authors: Niki Panteli Lancaster Univeristy

Date of publication: August, 2027

Department: Management

The paper reflects on an industry-sponsored initiative that involved Master level students at Lancaster University Management School working on a globally dispersed collaboration project with students at another European university. It draws on the implementation of this initiative over two academic years with an emphasis on the role of the industry partner. Following these, the paper presents the pedagogical implications of such initiatives as well as the lessons learned.



From Classroom to Boardroom: Exploring the Impact of Environmental Education on Career Intentions of Entrepreneurship Students | DOI

Authors: Shreeyaa Khatri | Jennifer Raechel Scrivener Lancaster University

Date of publication: August, 2025

Department: Entrepreneurship

Higher education plays a crucial role in sustainable thinking and development. With ever increasing pressures of environmental challenges, entrepreneurship students will be looked to for responsible leadership and innovative problem-solving in their futures. This research explores the impact of environmental education on the career intentions of undergraduate entrepreneurship students. Through the thematic analysis of qualitative interviews, the study finds the challenges of students in embracing their university-enhanced eco-consciousness when searching for their graduate career.





Integrating Experiential and Problem-Based Learning for Generation Z and Alpha: A Comparative Study

DOI

Authors: Richard Baguley Lancaster University

Date of publication: August, 2025

Department: Entrepreneurship

This article explores the evolution of educational strategies, focusing on experiential and problem-based learning (PBL) in the context of Generation Z and Generation Alpha. Drawing from recent literature, it highlights technological advancements, learner preferences and pedagogical innovations. The discussion emphasises how these approaches cater to the unique characteristics of both generations, while offering actionable insights to design effective learning environments.



The Embedment of Equity, Diversity, and Inclusion in UK Undergraduate Accounting Programmes

DOI

Authors: Zhan Gao Lancaster University

Date of publication: August, 2025

Department: Accounting

This study investigates the embedment of equity, diversity, and inclusion (EDI) in undergraduate (UG) accounting curricula at leading UK universities. Guided by Advance HE's EDI framework, we assess a sample of programme and module descriptions using textual analysis tools. Our findings reveal that EDI topics receive limited coverage within the UG accounting curricula. While modules generally employ multiple forms of assessment, the prevalent methods are relatively rigid and less accessible.

Additionally, the inferred cultural diversity of staff is largely aligned with that of students. Based on these insights, we propose several recommendations to strengthen EDI embedment in accounting education and foster a more inclusive learning environment.





Empowered Growth: Integrating LifeComp Framework and LinkedIn Learning in Postgraduate Professional Development

DOI

Authors: Radka Newton Lancaster University | Andy Holgate Lancaster University | Jennifer Raechel Scrivener Lancaster University

Date of publication: August, 2025

Department: Entrepreneurship

This article explores the integration of the LifeComp Framework and LinkedIn Learning within the ENSI585 Professional Development module at Lancaster University Management School. By aligning these tools with the CareerEDGE model, the module fosters key employability skills, including self-regulation, emotional intelligence, and career development learning. We evaluate the effectiveness of this structured yet flexible approach and inquire into the uptake of LinkedIn learning, longer term engagement with the learning materials and students' overall module feedback.



The Role of Experiential Learning and Reflection in Transition from Student to Graduate Worker

DOI

Authors: Lee Francis Lancaster University | Helen Meek Lancaster University

Date of publication: August, 2025

Department: Marketing

A final year undergraduate marketing module at Lancaster University, MKTG310, provides students with the opportunity to work on a client project using experiential learning (Kolb, 2015) to gain valuable work experience. However, the experience alone was insufficient as students did not fully recognise the value of the project and were often unable to articulate their experiences to future employers. MKTG310 was redesigned to embed employability skills and reflection. The assessment

required students to reflect on their experiences using the CareerEDGE Questionnaire (Dacre Pool and Sewell, 2007), build self-confidence and ensure they could articulate their learning experiences. The paper concludes reflection should be an integral part of any university employability initiative.



Why Do We Need Authentic Assessment in Entrepreneurship Courses? A Case Study Based on an Undergraduate Module

DOI

Authors: Muntasir Alam, Lancaster University | Magnus George, Lancaster University

Date of publication: August, 2025

Department: Entrepreneurship

Authentic assessment encourages the student to get involved with real-world tasks and increase their engagement, thereby reducing the scope for academic malpractice. Using the five-dimensional model (Gulikers et al., 2004), this article illustrates key elements of authenticity and reflection using an undergraduate module's assessment.



How Do We Develop Pedagogical Approaches that Embrace Different Ways of Knowing and Being?

DOI

Authors: Sylvia D'souza Lancaster University | Christine Mortimer Lancaster University/Beijing Jiaotong University

Date of publication: August, 2025

Department: Business Administration

There is no such thing as 'a view from nowhere'. We all view the world and phenomena in it from our own situated socio-cultural-historical locations. However, when we teach, we somehow assume a single epistemic location, a single worldview, a single vantage point—the dominant western one. This assumption is so entrenched in our education system and pedagogic practices that we are rarely conscious of it, let alone question it. How do we expand or transform our epistemic frames to embrace other worldviews, other modes of knowing and being...? How do we look at views from elsewhere? How do we give up claims to a superior view? We offer some reflections from our experiences of teaching from a different location, China.



Social values and sustainable development in business education | DOI

Authors: Mike Ryder, Lancaster University | Walter Leal Filho | Halima Begum | Tony Wall | Ann Hindley | Rosley Anholom | Kent Williams | Jan Brown | Sue Cronshaw | oão Henrique Paulino Pires Eustachio | Enrique Nuñez | Alice Annelin | Eszter Gedeon | Laís Trevisan | Noé Aguilar-Rivera | Gert-Olof Boström

Date of publication: December, 2025

Department: Marketing

The study employs a mixed-methods approach including a bibliometric analysis of 637 publications and an analysis of 15 international case studies.



Radical product sustainability oriented innovation (SOI) and triple-bottom-line (3BL) performance: findings from Malaysian and Singaporean B2B firms | DOI

Authors: Wasim Ahmad, Lancaster University

Date of publication: February, 2024

Department: Marketing

This study shows radical green innovation boosts triple-bottom-line goals but introduces risks that can hurt outcomes. Manufacturing faces higher risks than service firms, guiding managers on SOI.



Contributing to the sustainable development goals as normative and instrumental acts: The role of Buddhist religious logics in family SMEs | DOI

Authors: Allan Discua Cruz, Lancaster University | Mai Chi Vu, Northumbria University | Nicholas Burton, Northumbria University

Date of publication: March, 2024

Department: Entrepreneurship

Prior studies suggest that religion matters in the adoption of corporate social responsibility (CSR) initiatives in SMEs. This study draws on an institutional logics perspective to illuminate a hitherto underexplored interplay of multiple logics that in combination influence family SMEs when pursuing CSR. Based on a qualitative study of family SMEs in Northern Vietnam, this article aims to deepen our understanding of how constellations of institutional logics entwine to influence their CSR initiatives, in particular where these initiatives include commitments to contributing towards the UN Sustainable Development Goals. We find that when a religious logic is present there is a shift away from the dominance of a family logic and a turn towards a community logic. Further, whereas non-religious family SMEs act instrumentally towards CSR initiatives, seeking benefits primarily for the family and the firm, a religious logic introduces a normative character to the market logic, whereby economic benefits are construed as resources to support local communities rather than the family. Implications for theory, practice and further research are offered.



Partial Passive Ownership and Environmental Innovation: The Role of Emission Taxes and Information Sharing

| DOI

Authors: Ally Zhang, Lancaster University | Mingqing Xing, Weifang University | Xiaoliang Li, Shanghai University of Finance and Economics

Date of publication: April, 2026

Department: Accounting | Finance

This paper examines the effects of partial passive ownership (PPO) on environmental research and development (ER&D), environmental quality, and social welfare in a polluting duopoly. To the best of our knowledge, this is the first analysis to integrate PPO with strategic clean-technology ER&D,

explicitly comparing exogenous and endogenous emission tax regimes and allowing for different degrees of information disclosure. We develop a model in which firms can reduce emissions through ER&D investments in clean technologies, subject to either exogenous or endogenous emission tax regimes, and with or without ER&D information sharing. The analysis shows that PPOs consistently reduce aggregate emissions, thereby improving environmental quality. Under exogenous taxation, PPOs increase total ER&D, while under endogenous taxation the effect depends on the severity of environmental damage and the degree of information disclosure. When environmental damage is low, PPOs either leave total ER&D unchanged or reduce welfare; when damage is high, PPOs may enhance both ER&D and welfare, particularly when firms share ER&D information. The results highlight the need for antitrust and environmental regulators to adopt context-specific approaches when assessing PPOs in high-polluting industries.







Green Goodwill in a Monopolistic Market: A Dynamic Game Approach to Carbon Emission Abatement and Market Stability

DOI

Authors: Ally Zhang, Lancaster University | Xiaoliang Li, School of Business, Guangzhou College of Technology and Business | Yuhao Cheng, School of Business, Guangzhou College of Technology and Business

Date of publication: January, 2026

Department: Accounting | Finance

This paper examines how carbon taxation, green awareness, and abatement technology jointly affect emissions and market stability in a monopolistic setting. We develop a dynamic model in which a bounded-rational firm builds green goodwill in response to environmentally conscious consumers. The analysis uncovers a counter-intuitive, market-size-dependent effect: awareness and technology reduce total emissions only when the market is sufficiently large, while in smaller markets they may increase emissions by expanding output. Carbon taxation, by contrast, consistently lowers emissions. Welfare analysis shows that awareness and technology enhance surplus, whereas excessive taxation can reduce welfare. The stability analysis further indicates that while a higher carbon tax rate tends to enhance market stability, excessively strong environmental awareness or overly low abatement costs may instead lead to instability. These findings highlight that effective climate policy must balance awareness, taxation, and technology according to market scale.







Radical Retirement | DOI

Authors: Christine Eastman, Lancaster University | Jo Greenwood, Lancaster University | Krista Court, Lancaster University

Date of publication: March, 2026

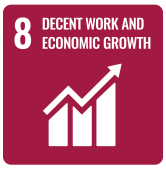
Department: Management

Most retirement books advocate for a soft and safe landing into retirement. Radical Retirement: The Reinvention of Self After Work awakens a sense of excitement about reinventing your sense of self and stepping out into a new time in your life, which might not follow what you had previously thought or what others had thought for you.

Taking stock of one's life upon retirement is daunting. Regret for lost opportunities, an awareness of unfulfilled goals, a nostalgia for happier times, and the inquiry into human purpose can feel overwhelming. Each of the chapters, written by people across a wide variety of sectors and with different experiences and stories to tell, shows in an honest way how to seize the opportunity to take life in a new and perhaps unexpected direction. Conscious of the formative psychological influences on personality, the chapter authors share with readers how to create appropriate new roles and identities in retirement.

This book is for professionals working in any sector who are thinking about retirement, on the cusp of retirement, or who are retired and are rethinking their professional future. It will also be of use as a reference book for retirement coaches.















In pursuit of the third mission: Exploring women's participation in academic engagement activities in sub-Saharan Africa | DOI

Authors: Sarah Jack, Lancaster University and House of Innovation & Misum, | Cynthia Forson, Lancaster University | Olufunmilola (Lola) Dada, Lancaster University | Afua Owusu-Kwarteng, Northumbria Unoversiy

Date of publication: March, 2025

Department: Entrepreneurship

With a commitment to foster innovation and economic growth, universities in Sub-Saharan Africa have been encouraged to embrace the various policies and practices promoting university-industry collaboration (UIC) in Europe and North America, including the creation of industry liaison offices. However, to-date, little is known about the most appropriate and effective ways of contextualizing these prescriptive frameworks to the realities of Sub-Saharan Africa, where UIC continues to be perceived as weak, limited, and lacking in formality. Drawing on semi-structured interviews with 36 women academics and research scientists, we present an organizational justice perspective of UIC in six Sub-Saharan African countries: Kenya, Ghana, Malawi, Botswana, Nigeria and Zambia. Our findings reveal the existence of information asymmetry, organizational inefficiency, and organizational mistrust within universities in Sub-Saharan Africa. We contribute to the literature by developing a conceptual framework that highlights how managerial practices shape three distinct dimensions of UIC in Sub-Saharan Africa: motives, channels, and outcomes. Our article shows that addressing problems of equity and fairness within the organizational and relational context can help to improve UIC in Sub-Saharan Africa, especially the subtle culture of exclusion within universities weakening the visionary attempts to foster innovation and economic growth through UIC.



Give or Take: Cultivating Supportive Entrepreneurial Communities in the Gen-AI Era.

DOI

Authors: Sarah Jack, Lancaster University | Johan Wiklund, Syracuse University, US | Moren Levesque, York University, Canada | David Audretsch, Indiana University & Alpen-Adria-Universität Klagenfurt |

Date of publication: July, 2025

Presented at: National or international academy of management

Department: Entrepreneurship

This plenary critically examines the interplay between individual and collective behaviors in fostering healthy entrepreneurial communities, particularly within the ENT Division. It challenges the prevalence of opportunistic behaviors and emphasizes the importance of balanced "give and take" dynamics for

sustaining collaborative and resilient ecosystems. The session explores how AI can either exacerbate these behaviors by encouraging shortcuts or be leveraged to strengthen community-driven practices for value creation. Finally, it highlights how internal and external pressures, such as institutional priorities on value-added activities like publications, can reshape community engagement and calls for strategies that prioritize shared benefits and long-term sustainability.





Partner

We engage people from business, government, civil society, and academia to advance responsible and accountable management education and practice.

Institutional Partnerships

- AACSB (Association to Advance Collegiate Schools of Business)
- AMBA (Association of MBAs)
- EFMD (European Foundation for Management Development)
- Financial Times
- Local institutions and associations
- Quacquarelli Symonds (QS)
- Responsible Research in Business & Management (RRBM)

Student Organization Partnerships

- Enactus

Continue telling your story

Good Growth / Good Dividends Programme

This programme, underpinned by world-leading research produced by Lancaster University Management School, develops business leaders so they can implement 'Good Growth' strategies within their organisations, paving the way for long-term success through sustainable growth. Four cohorts have been delivered across Lancashire since 2023, supporting 34 business (mostly SMEs) to consider their growth plans alongside the SDGs.

Good Dividends is a concept of how businesses can be a force for good in the world by incorporating purpose into the core of the business and linking it to social impact and an organisation's business model. The Six Good Dividends are defined as:

❶ People Dividend
❷ Innovation Dividend
❸ Operations Dividend
❹ Finance Dividend
❺ Reputation-brand Dividend
❻ Planet-community Dividend

When these are integrated greater value is developed by engaging with people, enriching the planet and improving business performance.
https://gooddividends.online/



Practice

We adopt responsible and accountable management principles in our own governance and operations.

Institutional Policies and Practices

- Accreditation body recommendation documents
- Carbon reduction or offset commitments
- Curriculum guidelines
- Responsible procurement policies
- Sustainability strategy or strategic plan (school or university level)
- Travel guides



Share

We share our successes and failures with each other to enable our collective learning and best live our common values and purpose.

Engagement Opportunities

Lancaster University Management School offers transparent engagement opportunities for members of our institution and community to contribute to our sustainability and responsibility efforts in the following ways:

- Boards and advisory committees
- Annual reports
- Community events and consultation forums
- Feedback mechanisms (e.g., surveys, suggestion boxes)
- Partnerships with local organizations
- Publicly accessible sustainability data and dashboards
- Sustainability-focused research and collaboration Opportunities

Communication Audiences

Lancaster University Management School communicates its policies and progress on sustainable development and responsibility with:

- Accreditation bodies
- Boards and advisory committees
- Business and industry partners
- Faculty and staff

SIGNATORY

Lancaster University Management School

Address

Lancaster University Management School, Lancaster, Lancaster, LA1 4YX
United Kingdom

Website

https://www.lancaster.ac.uk/lums/