Param Level 8 International Diploma in Environmental and Sustainable Management (ESM)

About Param Qualifications

Param Qualifications provides academic and vocational qualifications designed to meet international professional standards and evolving industry needs. Our commitment to the development and delivery of high-quality qualifications is underpinned by a focus on consistency, integrity, and continuous improvement across all programmes.

Param Qualifications develops qualifications that are accessible to all learners who have the potential to achieve the required standards. We promote equality, diversity, and inclusion at every stage of the qualification lifecycle, ensuring that learners are not disadvantaged by barriers that may restrict access, participation, or progression.

Delivery Centres offering our qualifications are required to operate fair, transparent, and consistent policies, provide appropriate learner support, and ensure that all assessment decisions are valid, reliable, and standardised. Centres are also expected to recognise prior learning where appropriate, enabling learners' existing knowledge, skills, and experience to be considered when accessing qualifications.

Param Qualifications maintains a strong duty of care towards learners, employers, and stakeholders through robust quality assurance processes. These processes are designed to safeguard the integrity of assessment outcomes, support continuous improvement, and ensure that qualifications remain relevant, credible, and aligned with current professional and industry practices.

Supporting Diversity

Param Qualifications and its Delivery Centres value individual differences and are committed to promoting equality, diversity, and inclusion. We aim to remove barriers to learning and ensure fair access for all learners, regardless of age, gender, disability, religion, cultural background, or other protected characteristics.

Learner Voice

Learners are central to Param Qualifications' quality improvement processes. We actively encourage learner feedback to ensure that teaching, learning, and assessment practices remain effective, relevant, and responsive.

Feedback is gathered through structured surveys, evaluations, and ongoing engagement between learners, tutors, and Delivery Centre staff. This enables Param Qualifications to identify areas for enhancement, recognise good practice, and continually raise standards.

By providing opportunities for learners to share their views and experiences, we ensure that our qualifications reflect learner expectations and support a positive, inclusive, and engaging learning experience.

Contents

Introduction

Why Choose Param Qualifications?

Param Qualifications' programmes are designed to provide learners with advanced opportunities for professional development, strategic leadership, and career progression in environmental and sustainable management within complex and dynamic global environments. The qualifications support learners in achieving their full potential by developing high-level analytical, evaluative, and decision-making capabilities aligned to sustainability, governance, and organisational transformation.

The objectives of this qualification are to:

- To develop advanced strategic, analytical, and leadership capability in environmental and sustainable management within complex organisational and global contexts.
- To enable learners to critically evaluate environmental systems, governance frameworks, and sustainability risks to support strategic decision-making.
- To support the application of professional judgement and leadership in improving organisational sustainability performance and environmental outcomes.

Param Qualifications programmes integrate advanced theoretical knowledge with applied professional practice. Learners will critically examine how organisations manage environmental and sustainability challenges, respond to regulatory and stakeholder expectations, and maintain resilience in uncertain and rapidly evolving global environments.

Through this qualification, learners will develop the ability to:

- Critically evaluate environmental systems, sustainability performance, and governance frameworks within complex organisational contexts
- Develop and apply evidence-based solutions to complex environmental and sustainability challenges
- Exercise strategic leadership, professional judgement, and accountability in sustainability decision-making
- Synthesise information from diverse sources to support environmental and organisational improvement
- Undertake independent research and apply findings to environmental and sustainability practice

Employer Support for Qualification Development

The development of this qualification has been informed through consultation with employers, industry professionals, and training providers. Their input has ensured that the qualification reflects current industry expectations and emerging global sustainability and environmental workforce requirements.

Feedback from employers identified a growing demand for highly skilled professionals capable of leading environmental and sustainability strategies, managing complex environmental risks, ensuring regulatory compliance, and supporting organisations in achieving sustainability and ESG objectives. This qualification has been designed to meet these expectations by developing advanced competencies aligned with professional environmental and sustainability practice.

Qualification Title

This programme is titled:

Param Qualifications Level 8 International Diploma in Environmental and Sustainable Management (ESM)

This qualification is positioned at Level 8, reflecting advanced knowledge at the forefront of environmental and sustainable management, together with critical evaluation, strategic leadership capability, and independent research competence. It is designed to prepare learners for senior leadership roles and progression to doctoral-level academic study.

The qualification is aligned with Level 8 descriptors, requiring learners to demonstrate originality in the application of knowledge, the ability to generate new insights, and the capacity to address complex and unpredictable challenges within environmental and sustainability contexts. Learners are expected to exercise a high level of autonomy, professional judgement, and strategic decision-making in both academic and professional environments.

Each unit within the qualification carries a defined credit value and is aligned with internationally recognised postgraduate and advanced-level study expectations. The qualification includes a substantial research component, enabling learners to design, undertake, and apply independent research that contributes to the advancement of professional practice and knowledge in environmental and sustainable management.

This qualification is designed as a pre-doctoral programme, supporting progression to higher-level research qualifications such as Doctor of Business Administration (DBA), Doctor of Philosophy (PhD), or equivalent professional doctoral programmes.

Upon successful completion, learners will be awarded the full diploma by Param Qualifications Limited. The qualification has been developed in alignment with recognised quality principles to ensure validity, reliability, comparability, manageability, and minimisation of bias across delivery and assessment.

Qualification Purpose and Outcomes

Qualification Purpose

The Level 8 International Diploma in Environmental and Sustainable Management (ESM) is designed for professionals who are currently operating in, or aspiring to, senior leadership roles within environmental and sustainability functions across a range of industries. It is intended for learners who are responsible for designing, leading, and transforming organisational environmental and sustainability strategies within complex and dynamic global environments.

This qualification equips learners with advanced expertise required for senior-level professional practice, while also developing the capacity to extend knowledge, generate new insights, and contribute to the advancement of environmental and sustainable management practice.

Centres and learners are expected to benefit significantly from this programme through the development of advanced knowledge, strategic capability, and applied professional skills. The qualification promotes both academic and professional development, enabling learners to operate with a high level of autonomy and professional judgement in complex and unpredictable contexts.

The purpose of this qualification is aligned to Level 8 descriptors. Learners will develop advanced knowledge at the forefront of the discipline, with critical awareness of complex environmental and sustainability issues, demonstrate originality in problem-solving, and undertake independent research activities that contribute to professional practice and organisational improvement.

The qualification emphasises strategic leadership, innovation, and the ability to influence organisational sustainability outcomes, while preparing learners for progression to higher-level academic study, including doctoral-level research. The qualification adopts a research-led approach, enabling learners to develop advanced investigative capability and contribute to the advancement of environmental and sustainability practice.

Learning Outcomes

The qualification aims:

1. To enable learners to develop advanced analytical and evaluative capability in environmental and sustainable management within complex and dynamic organisational and global contexts
2. To enable learners to critically evaluate and synthesise environmental systems, governance frameworks, and sustainability performance to support strategic decision-making
3. To develop learners' ability to formulate and apply advanced methodologies and approaches to address complex, high-impact, and unpredictable environmental and sustainability challenges
4. To ensure learners can initiate, design, and undertake independent research and strategic activities that demonstrate originality and contribute to the advancement of environmental and sustainability practice and knowledge
5. To enable learners to critically evaluate legal, regulatory, ethical, and organisational factors and their short- and long-term implications within environmental and sustainability contexts
6. To enable learners to exercise autonomy, leadership, and professional judgement to influence organisational sustainability performance and generate new insights in environmental and sustainable management

Entry Requirements

To ensure that learners are able to successfully engage with and complete this Level 8 qualification, applicants are expected to meet the following entry criteria:

Academic Requirements

Applicants should normally:

- Hold a Master's degree or equivalent Level 7 qualification in environmental management, sustainability, engineering, business, or a related discipline
- Or possess an equivalent recognised qualification that demonstrates advanced academic capability

Professional Experience

Applicants are expected to:

- Have a minimum of 3 years' relevant professional experience in environmental, sustainability, management, or related fields
- Ideally be working in, or have experience of, senior or strategic-level roles where they can apply advanced knowledge and contribute to organisational decision-making

Research Capability and Context

Given the advanced and research-led nature of this qualification, applicants should:

- Be able to demonstrate access to a relevant organisational or professional context to support applied research
- Have the capacity to undertake independent research activities, including the completion of a substantial research project

English Language Requirements

Where English is not the applicant's first language, they must demonstrate proficiency through one of the following:

- An academic qualification that was taught and assessed in English
- Or an English language qualification equivalent to:
    - IELTS 6.5 (or equivalent), or
    - Other recognised international English language standards

Qualification Structure and Requirements

Credits and Total Qualification Time (TQT)

The Param Qualifications Level 8 International Diploma in Environmental and Sustainable Management (ESM) consists of 180 credits, which equates to an estimated 1800 hours of Total Qualification Time (TQT).

The qualification is structured across 10 units, including:

- 6 mandatory units
- 4 optional units, of which learners must select any 2 units

Each standard unit carries 20 credits, and the research project unit carries 40 credits. To achieve the full qualification, learners must successfully complete all mandatory units and the required combination of optional units to achieve a total of 180 credits.

The indicative duration for completion of this qualification is typically between 12 to 18 months.

Qualification Structure

Unit No.	Unit Title	Level	Credit Value	TQT (Hours)	GLH (Hours)	Unit Type
1	Strategic Environmental Leadership and Global Sustainability Governance	8	20	200	100	Mandatory
2	Advanced Circular Economy Systems and Sustainable Resource Transformation	8	20	200	100	Mandatory
3	Integrated Environmental Risk, Resilience, and Regulatory Strategy	8	20	200	100	Mandatory
4	Climate Change Strategy, Net Zero Leadership, and Carbon Transition	8	20	200	100	Mandatory
5	Transformational Leadership, Organisational Change, and Sustainable Culture	8	20	200	100	Mandatory
6	Applied Research Project in Environmental and Sustainable Management	8	40	400	200	Mandatory
7	Sustainability Assurance, Impact Measurement, and Integrated Reporting	8	20	200	100	Optional
8	ESG Strategy, Corporate Sustainability, and Ethical Governance	8	20	200	100	Optional
9	Digital Transformation, AI, and Advanced Analytics for Sustainability Systems	8	20	200	100	Optional
10	Climate Risk, Adaptation, and Resilience Strategy	8	20	200	100	Optional

Total Qualification Credits: 180 Credits

Total Qualification Time (TQT): 1800 Hours

Total Guided Learning Hours (GLH): 900 Hours

Total Qualification Time (TQT)

Total Qualification Time (TQT) represents the estimated amount of time required for a learner to achieve the qualification. This includes all learning and assessment activities.

Examples of activities contributing to TQT include:

- Guided learning and tutor-led sessions
- Independent study and research
- Preparation of assignments and reports
- Work-based learning activities
- E-learning and digital learning activities
- Assessment preparation and completion

Guided Learning Hours (GLH)

Guided Learning Hours (GLH) refer to the time spent under the direct guidance of a tutor or trainer. This includes:

• Lectures, seminars, and tutorials
• Supervised study sessions
• Live online learning (e.g., webinars)
• Tutor-supported e-learning
• Supervised assessment activities

Rules of Combination

To achieve the qualification, learners must:

- Successfully complete all 6 mandatory units, and complete any 2 optional units from the available options
- This ensures that learners achieve the required total of 180 credits

Achievement Requirements

Learners must demonstrate that they have met all learning outcomes and assessment criteria for each unit undertaken in order to achieve the qualification.

Assessment is conducted through internally assessed assignments, which are reviewed and quality assured to ensure consistency, validity, and reliability.

Staffing Requirements and Competence

Staff involved in the delivery, assessment, and internal quality assurance of the qualification must be appropriately qualified, experienced, and competent to support learning at Level 8.

Delivery Centres must ensure that staff:

- Possess relevant academic or professional qualifications, typically at Level 7 or above, in environmental management, sustainability, engineering, management, or a related discipline
- Have substantial and recent occupational or professional experience in environmental and sustainable management or a related field
- The level of experience should be sufficient to support learners undertaking advanced study, including strategic-level work and independent research activities
- Staff are required to engage in ongoing Continuing Professional Development (CPD) to ensure that their knowledge, skills, and professional practice remain current and relevant

Where appropriate, Delivery Centres should ensure that staff involved in supporting research-based units, particularly the Applied Research Project, have experience in supervising or guiding postgraduate-level research or equivalent professional activity.

Internal Quality Assurers (IQAs)

Internal Quality Assurers are responsible for monitoring the quality and consistency of assessment decisions within the Delivery Centre.

IQAs must:

- Have appropriate knowledge, experience, and competence in internal quality assurance processes
- Hold, or be working towards, a Level 4 qualification in the internal quality assurance of assessment processes and practice, or an equivalent recognised qualification
- Be familiar with the qualification structure, learning outcomes, and assessment requirements
- Support standardisation activities to ensure consistency across assessors

Continuing Professional Development (CPD)

Delivery Centres are expected to support the ongoing professional development of their staff to ensure that knowledge and practice remain current and relevant.

Staff should engage in continuing professional development activities that:

- Maintain and enhance subject knowledge and technical competence
- Support effective teaching, learning, and assessment practices
- Reflect current developments in environmental and sustainable management and related fields

Centres should retain appropriate records of CPD activity to demonstrate ongoing staff development and capability.

Progression

Successful completion of the Param Qualifications Level 8 International Diploma in Environmental and Sustainable Management (ESM) enables learners to progress to:

This qualification is designed to support progression to advanced academic study, including doctoral-level programmes, subject to the entry requirements of the receiving institution.

This qualification supports both academic progression and research-based programmes, including doctoral-level study, by developing learners' ability to formulate research proposals and contribute to academic and professional knowledge in environmental and sustainable management.

Delivering the Qualification

Delivery Centres intending to offer Param Qualifications programmes are required to complete an approval process prior to delivery. This process is designed to ensure that centres have the appropriate systems, resources, and expertise in place to support effective teaching, learning, and assessment.

Delivery Centres must demonstrate that they:

- Have suitably qualified and experienced staff to deliver, assess, and internally quality assure the qualification
- Provide access to appropriate learning resources and facilities that support learner achievement
- Operate clear and consistent procedures for learner support, assessment, and internal quality assurance
- Are able to maintain accurate records of learner progress, assessment decisions, and quality assurance activity

Param Qualifications will review and approve Delivery Centres based on their ability to meet these requirements. Centres are expected to maintain these standards throughout the delivery of the qualification.

Assessment

This qualification is assessed through internally assessed assignments, projects, and applied professional tasks designed to reflect realistic and complex environmental and sustainability scenarios.

Assessment is criterion-referenced and based on the achievement of all specified learning outcomes and assessment criteria for each unit. Learners are required to demonstrate evidence of achievement through written work, applied analysis, and research-based activities.

To achieve a pass, learners must provide sufficient, valid, and reliable evidence to meet all learning outcomes and associated assessment criteria. Assessment decisions are made by assessors based on the quality and completeness of evidence presented.

Assessors are responsible for:

- Evaluating learner evidence against the defined assessment criteria
- Making consistent and informed assessment judgements
- Providing clear and constructive feedback to support learner development

Assessment decisions must be supported by an appropriate audit trail, demonstrating how judgements have been reached in relation to the learning outcomes and assessment criteria. Assessment activities include research-based tasks and applied investigation, enabling learners to demonstrate independent inquiry and critical evaluation.

Delivery Centres are required to implement internal quality assurance processes to ensure that assessment decisions are consistent, valid, and reliable. This includes internal verification, standardisation activities, and regular review of assessment practices.

Param Qualifications may implement external quality assurance arrangements to monitor the effectiveness of assessment and internal quality assurance processes across Delivery Centres. This is intended to ensure that standards are maintained and that learners are assessed fairly and consistently.

Assessment materials and guidance will be provided to Delivery Centres to support consistent delivery and assessment. Centres are expected to apply these requirements in a transparent and standardised manner.

Opportunities for Learners to Achieve

Delivery Centres are responsible for supporting learners who do not initially meet the required standards. Centres must provide clear and constructive feedback, enabling learners to improve their performance and, where appropriate, undertake reassessment.

Recognition of Prior Learning (RPL)

Recognition of Prior Learning (RPL) is a method of assessment that enables learners to demonstrate achievement of learning outcomes through knowledge, understanding, or skills they have already acquired. This avoids unnecessary repetition of learning.

Param Qualifications encourages Delivery Centres to recognise learners' prior achievements and experiences, whether gained through employment, training, independent study, or previous formal qualifications. RPL supports continuous learning and ensures fair and inclusive access to the qualification.

RPL may be applied where valid evidence demonstrates that the assessment requirements of a unit or qualification have been fully met. Acceptable forms of evidence may include workplace documentation, prior qualifications, project work, reflective accounts, or direct observation.

All RPL evidence must be:

- Valid – directly aligned to the learning outcomes
- Authentic – produced by the learner
- Sufficient – comprehensive enough to meet requirements
- Reliable – capable of verification

Delivery Centres must apply Param Qualifications' RPL policy consistently to ensure fairness, transparency, and integrity in the recognition process.

Equality and Diversity

Param Qualifications recognises that discrimination, harassment, and victimisation are unacceptable. We are committed to promoting fairness, respect, and equal opportunity across all areas of our operations. It is our aim to ensure that no learner, employee, or representative of Param Qualifications receives less favourable treatment, either directly or indirectly, on the grounds of age, disability, gender, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.

Param Qualifications aims to create an inclusive environment in which learners and staff feel respected, valued, and able to achieve their full potential. We actively promote equality, diversity, and inclusion, and work to identify and remove barriers that may restrict access, participation, or progression.

Delivery Centres and learners may access the Equality and Diversity Policy through official Param Qualifications communication channels. This qualification is designed to align with the principles of the Equality Act 2010 and ensures that learners are not disadvantaged by artificial barriers to entry, delivery, or assessment.

Unit Specification

Strategic Environmental Leadership and Global Sustainability Governance

Unit Name: Strategic Environmental Leadership and Global Sustainability Governance
Unit Number: ESM801
Unit Level: 8
No.of credits: 20
Mandatory/ Optional: Mandatory

Unit Aim

The aim of this unit is to develop advanced knowledge and critical understanding of strategic environmental leadership and global sustainability governance frameworks. Learners will critically evaluate leadership approaches, governance structures, ESG integration, and regulatory environments, and develop strategic capabilities to influence organisational sustainability performance, decision-making, and long-term resilience in complex, uncertain, and dynamic global contexts.

Learning Outcomes, Assessment Criteria

Learning Outcomes (LO)- Will be able to	Assessment Criteria (AC)- Learner can:
1. Be able to critically evaluate strategic environmental leadership and governance frameworks.	1.1 Critically evaluate global environmental governance frameworks and sustainability standards.
	1.2 Analyse the role of strategic leadership in shaping organisational sustainability outcomes.
	1.3 Critically assess governance structures, accountability mechanisms and board-level oversight.
	1.4 Synthesise approaches for integrating environmental governance into organisational strategy.
2. Be able to critically analyse the integration of ESG frameworks within organisational strategy.	2.1 Critically evaluate ESG frameworks and their application in organisational contexts.
	2.2 Analyse integration of sustainability principles within business models and strategic planning.
	2.3 Evaluate alignment with global sustainability priorities (e.g., SDGs, Net Zero).
	2.4 Critically assess the effectiveness of ESG integration in driving organisational performance.
3. Be able to evaluate regulatory and ethical dimensions of environmental governance.	3.1 Critically evaluate international and national regulatory frameworks.
	3.2 Analyse ethical challenges in environmental decision-making.
	3.3 Evaluate governance mechanisms ensuring compliance and accountability.

	3.4 Critically assess transparency and reporting systems in sustainability governance.
4. Be able to critically analyse stakeholder influence and governance dynamics.	4.1 Analyse stakeholder roles and influence in sustainability governance.
	4.2 Critically evaluate stakeholder engagement strategies in complex environments.
	4.3 Assess conflicts, power dynamics and negotiation in sustainability decision-making.
	4.4 Synthesise approaches for managing stakeholder relationships at strategic level.
5. Be able to develop strategic approaches for organisational sustainability transformation and performance.	5.1 Critically evaluate organisational readiness for sustainability transformation.
	5.2 Analyse leadership role in driving sustainability culture and change.
	5.3 Develop strategies for embedding sustainability into organisational systems.
	5.4 Synthesise innovative approaches to improve sustainability performance and resilience.

Indicative Content

1. Strategic Environmental Leadership and Governance Frameworks

- Global environmental governance frameworks and institutional structures
- ESG (Environmental, Social, Governance) principles and integration models
- Role of board-level leadership and executive decision-making in sustainability
- Governance models: corporate governance, sustainability governance, integrated governance
- Leadership approaches in complex, high-risk and uncertain global environments

2. ESG Integration and Sustainability Strategy

- ESG frameworks (GRI, SASB, TCFD, Integrated Reporting)
- Integration of sustainability into organisational strategy and business models
- Alignment with global sustainability priorities (UN SDGs, Net Zero targets)
- Strategic decision-making under environmental and social constraints
- Value creation through sustainability and long-term organisational performance

3. Regulatory, Ethical and Stakeholder Governance

- International and national environmental regulatory frameworks
- Legal compliance and governance integration within organisations
- Ethical leadership and decision-making in sustainability contexts

- Stakeholder engagement strategies and influence mapping
- Transparency, accountability and sustainability reporting mechanisms

4. Organisational Transformation and Sustainability Leadership

- Organisational readiness and maturity models for sustainability transformation
- Leadership and cultural change in sustainability-driven organisations
- Embedding sustainability into organisational systems and operational processes
- Performance measurement, KPIs and sustainability metrics
- Innovation, digital transformation and future sustainability leadership trends

5. Strategic Resilience and Sustainability Performance

- Organisational resilience in dynamic environmental and regulatory environments
- Risk-informed sustainability strategy and adaptive governance
- Continuous improvement and system optimisation approaches
- Integration of sustainability with business continuity and risk management
- Long-term environmental performance and strategic sustainability outcomes

Recommended Texts & Resources

Books

- Epstein, M. J. & Buhovac, A. R. – *Making Sustainability Work*
- Carroll, A. & Brown, J. – *Corporate Social Responsibility: Concepts and Cases*
- Northouse, P. – *Leadership: Theory and Practice*
- Hollnagel, E. – *Safety-I and Safety-II* (systems thinking relevance)
- Porter, M. & Kramer, M. – *Creating Shared Value*

Standards & Frameworks

- ISO 14001 – Environmental Management Systems
- ISO 26000 – Social Responsibility
- Global Reporting Initiative (GRI Standards)
- Task Force on Climate-related Financial Disclosures (TCFD)
- United Nations Sustainable Development Goals (SDGs)
- OECD Environmental Governance Frameworks

Professional Resources

- Institute of Environmental Management and Assessment (IEMA)
- World Economic Forum – ESG and Sustainability Reports
- United Nations Environment Programme (UNEP) publications
- Harvard Business Review – Sustainability and Leadership articles
- CDP (Carbon Disclosure Project) resources

Advanced Circular Economy Systems and Sustainable Resource Transformation

Unit Name: Advanced Circular Economy Systems and Sustainable Resource Transformation
Unit Number: ESM802
Unit Level: 8
No.of credits: 20
Mandatory/ Optional: Mandatory

Unit Aim

The aim of this unit is to develop advanced knowledge and critical understanding of circular economy systems and sustainable resource transformation. Learners will critically evaluate resource management frameworks, circular economy models, and system-level sustainability strategies, and develop the capability to design and implement transformative approaches that optimise resource efficiency, support organisational sustainability, and drive long-term environmental and economic value in complex global contexts.

Learning Outcomes, Assessment Criteria

Learning Outcomes (LO)- Will be able to	Assessment Criteria (AC)- Learner can:
1. Be able to critically evaluate circular economy frameworks and sustainable resource systems.	1.1 Critically evaluate global circular economy frameworks and sustainability models.
	1.2 Analyse resource consumption patterns and sustainability challenges in complex systems.
	1.3 Critically assess lifecycle approaches and system thinking in resource management.
	1.4 Synthesise approaches for integrating circular economy principles into organisational systems.
2. Be able to critically analyse resource transformation and circular economy implementation strategies.	2.1 Critically evaluate approaches for implementing circular economy practices across sectors.
	2.2 Analyse the role of leadership, innovation and technology in enabling resource transformation.
	2.3 Evaluate integration of waste minimisation and resource efficiency within operational systems.
	2.4 Critically assess organisational barriers and challenges in transitioning to circular economy models.
3. Be able to evaluate governance, policy and regulatory frameworks influencing sustainable resource systems.	3.1 Critically evaluate regulatory and policy frameworks supporting circular economy transitions.
	3.2 Analyse governance structures that enable sustainable resource management systems.
	3.3 Evaluate the role of compliance, standards and international agreements in resource sustainability.
	3.4 Critically assess policy effectiveness in driving sustainable resource transformation.

4. Be able to critically analyse stakeholder integration and value creation in circular economy systems.	4.1 Analyse stakeholder roles and collaboration in sustainable resource systems.
	4.2 Critically evaluate supply chain integration in circular economy implementation.
	4.3 Assess value creation through circular economy models for organisations and society.
	4.4 Synthesise approaches for managing stakeholder engagement in complex resource systems.
5. Be able to develop strategic approaches for sustainable resource optimisation and system transformation.	5.1 Critically evaluate performance measurement frameworks for resource efficiency and sustainability.
	5.2 Analyse data-driven approaches for monitoring and improving resource utilisation.
	5.3 Develop strategies for embedding circular economy practices within organisational systems.
	5.4 Synthesise innovative solutions to enhance sustainability, resilience and long-term value creation.

Indicative Content

1. Circular Economy Frameworks and System Design

- Global circular economy principles and frameworks
- Lifecycle thinking and systems-based resource management
- Resource consumption patterns and environmental pressures
- Integration of circular economy into organisational systems

2. Resource Transformation and Operational Integration

- Circular economy implementation strategies across sectors
- Waste reduction, reuse, recycling and recovery systems
- Role of innovation, digitalisation and emerging technologies
- Integration of sustainable resource practices into operations

3. Governance, Policy and Regulatory Drivers

- National and international circular economy policies
- Regulatory frameworks and compliance requirements
- Governance structures supporting resource sustainability
- Role of global agreements and sustainability standards

4. Stakeholder Engagement and Value Creation

- Stakeholder roles in circular economy systems

- Sustainable supply chain and resource value chains
- Collaboration, partnerships and ecosystem approaches
- Economic, environmental and social value creation

5. Performance Measurement and Strategic Transformation

- Resource efficiency KPIs and sustainability metrics
- Data-driven monitoring and lifecycle performance evaluation
- Continuous improvement and system optimisation
- Organisational transformation towards circular economy models

Recommended Texts & Resources

Books

- Ellen MacArthur Foundation – *The Circular Economy Handbook*
- McDonough, W. & Braungart, M. – *Cradle to Cradle*
- Stahel, W. – *The Circular Economy: A User's Guide*
- Geissdoerfer, M. et al. – Circular Economy research publications

Standards & Frameworks

- Ellen MacArthur Foundation Framework
- ISO 14001 – Environmental Management Systems
- ISO 14040/44 – Life Cycle Assessment
- UN Sustainable Development Goals (SDGs)
- EU Circular Economy Action Plan

Professional Resources

- United Nations Environment Programme (UNEP)
- World Economic Forum – Circular Economy Reports
- OECD – Resource Efficiency and Sustainability
- IEMA – Circular Economy and Sustainability resources
- Industry case studies on circular business models

Integrated Environmental Risk, Resilience, and Regulatory Strategy

Unit Name: Integrated Environmental Risk, Resilience, and Regulatory Strategy
Unit Number: ESM803
Unit Level: 8
No.of credits: 20
Mandatory/ Optional: Mandatory

Unit Aim

The aim of this unit is to develop advanced knowledge and critical understanding of environmental risk, resilience, and regulatory strategy by enabling learners to critically evaluate risk assessment frameworks, regulatory environments, and resilience models, and to design integrated strategies that support proactive risk management, regulatory compliance, and organisational resilience in complex and high-impact environmental contexts.

Learning Outcomes, Assessment Criteria

Learning Outcomes (LO)- Will be able to	Assessment Criteria (AC)- Learner can:
1. Be able to critically evaluate environmental risk assessment frameworks and methodologies.	1.1 Critically evaluate qualitative and quantitative environmental risk assessment frameworks.
	1.2 Analyse the application of lifecycle and impact-based risk assessment approaches.
	1.3 Critically assess uncertainty, complexity and interdependencies in environmental risk systems.
	1.4 Synthesise approaches for integrating risk assessment within organisational decision-making.
2. Be able to critically analyse environmental risk management and mitigation strategies.	2.1 Critically evaluate environmental risk control and mitigation strategies across sectors.
	2.2 Analyse integration of risk management within organisational systems and operations.
	2.3 Evaluate the role of monitoring, early warning systems and predictive tools in risk management.
	2.4 Critically assess organisational effectiveness in managing high-impact environmental risks.
3. Be able to evaluate regulatory frameworks and compliance strategies in environmental management.	3.1 Critically evaluate international and national environmental regulatory frameworks.
	3.2 Analyse organisational responsibilities and compliance obligations in environmental governance.
	3.3 Evaluate enforcement mechanisms and implications of non-compliance.
	3.4 Critically assess integration of regulatory requirements within organisational systems.

4. Be able to critically analyse resilience and adaptive capacity in environmental systems.	4.1 Critically evaluate organisational and system resilience frameworks in environmental contexts.
	4.2 Analyse adaptive strategies for managing environmental uncertainty and change.
	4.3 Evaluate the role of leadership and governance in enhancing resilience.
	4.4 Synthesise approaches for embedding resilience within organisational strategy and operations.
5. Be able to develop integrated strategies for environmental risk, compliance and resilience.	5.1 Critically evaluate performance measurement frameworks for environmental risk and compliance.
	5.2 Analyse data-driven approaches for monitoring and improving risk performance.
	5.3 Develop integrated strategies for aligning risk management, compliance and resilience systems.
	5.4 Synthesise innovative approaches to enhance organisational sustainability and long-term resilience.

Indicative Content

1. Environmental Risk Frameworks and Assessment

- Qualitative and quantitative risk assessment methodologies
- Lifecycle and environmental impact assessment approaches
- Complex risk systems and interdependencies
- Uncertainty and probabilistic modelling in environmental risk

2. Risk Management and Mitigation Strategies

- Environmental risk control and mitigation frameworks
- Integration of risk management within organisational systems
- Monitoring systems and predictive risk analytics
- Early warning systems and proactive risk management

3. Regulatory Frameworks and Compliance

- International and national environmental legislation
- Regulatory compliance strategies and obligations
- Enforcement mechanisms and compliance risks
- Integration of regulatory frameworks within governance systems

4. Resilience and Adaptive Environmental Systems

- Organisational resilience frameworks and models

- Adaptive capacity and dynamic risk environments
- Role of leadership in resilience development
- Integration of resilience into sustainability strategy

5. Integrated Risk, Compliance and Resilience Strategy

- Risk-informed decision-making and governance
- Performance measurement and environmental risk KPIs
- Data-driven risk monitoring and reporting systems
- Continuous improvement and system optimisation
- Strategic resilience and long-term sustainability outcomes

Recommended Texts & Resources

Books

- ISO 31000 – *Risk Management Guidelines*
- Hopkin, P. – *Fundamentals of Risk Management*
- Hollnagel, E. – *Resilience Engineering*
- Aven, T. – *Risk Assessment and Risk Management*

Standards & Frameworks

- ISO 31000 – Risk Management
- ISO 14001 – Environmental Management Systems
- UN Environment Programme (UNEP) Risk Frameworks
- EU Environmental Risk & Compliance Directives
- UK Environment Agency Guidance

Professional Resources

- IEMA – Environmental Risk and Compliance Resources
- UNEP – Environmental Risk and Resilience Reports
- World Economic Forum – Global Risk Reports
- OECD – Environmental Risk Governance
- Industry case studies on environmental risk and resilience

Climate Change Strategy, Net Zero Leadership, and Carbon Transition

Unit Name: Climate Change Strategy, Net Zero Leadership, and Carbon Transition
Unit Number: ESM804
Unit Level: 8
No.of credits: 20
Mandatory/ Optional: Mandatory

Unit Aim

The aim of this unit is to develop advanced knowledge and critical understanding of climate change strategy, net zero leadership, and carbon transition by enabling learners to critically evaluate climate science, policy frameworks, and carbon management systems, and to design and lead strategic approaches that support decarbonisation, organisational transition, and long-term climate resilience in complex and evolving global environments.

Learning Outcomes, Assessment Criteria

Learning Outcomes (LO)- Will be able to	Assessment Criteria (AC)- Learner can:
1. Be able to critically evaluate climate change science and global frameworks.	1.1 Critically evaluate the scientific basis and drivers of climate change in global contexts.
	1.2 Analyse sectoral contributions to greenhouse gas emissions and environmental impact.
	1.3 Critically assess international climate frameworks and agreements (e.g., Paris Agreement, IPCC).
	1.4 Synthesise implications of climate change for organisational strategy and sustainability.
2. Be able to critically analyse carbon management systems and decarbonisation strategies.	2.1 Critically evaluate carbon accounting and footprinting methodologies.
	2.2 Analyse carbon reduction strategies including energy transition and low-carbon technologies.
	2.3 Evaluate emissions management across Scope 1, 2 and 3 boundaries.
	2.4 Critically assess organisational approaches to achieving carbon neutrality and net zero targets.
3. Be able to evaluate climate policy, governance and regulatory frameworks.	3.1 Critically evaluate national and international climate policy frameworks and regulations.
	3.2 Analyse organisational responsibilities in climate governance and reporting.
	3.3 Evaluate compliance challenges and regulatory risks in carbon management.

	3.4 Critically assess governance mechanisms supporting climate strategy implementation.
4. Be able to critically analyse climate transition, risk and resilience strategies.	4.1 Critically evaluate climate-related risks including transition and physical risks.
	4.2 Analyse adaptation and resilience strategies in organisational and environmental systems.
	4.3 Evaluate the role of leadership in managing climate transition and uncertainty.
	4.4 Synthesise approaches for integrating climate resilience into organisational strategy.
5. Be able to develop strategic approaches for net zero leadership and climate transformation.	5.1 Critically evaluate performance measurement frameworks for carbon and climate strategy.
	5.2 Analyse data-driven approaches for monitoring emissions and climate performance.
	5.3 Develop strategies for embedding net zero and decarbonisation within organisational systems.
	5.4 Synthesise innovative solutions to support long-term climate sustainability and organisational resilience.

Indicative Content

1. Climate Science and Global Frameworks

- Scientific principles and drivers of climate change
- Greenhouse gas emissions and sectoral contributions
- Global frameworks: IPCC, Paris Agreement, UNFCCC
- Climate change implications for organisations

2. Carbon Management and Decarbonisation

- Carbon accounting and footprinting methodologies
- Scope 1, 2 and 3 emissions management
- Low-carbon technologies and energy transition
- Carbon reduction and net zero strategies

3. Climate Policy, Governance and Compliance

- International and national climate policies
- Climate governance and organisational responsibilities
- Regulatory compliance and reporting frameworks
- Carbon disclosure and transparency mechanisms

4. Climate Risk, Transition and Resilience

- Physical and transition climate risks
- Climate adaptation and resilience strategies
- Risk modelling and scenario analysis (e.g., TCFD)
- Leadership in managing climate uncertainty

5. Net Zero Strategy and Organisational Transformation

- Net zero frameworks and strategic planning
- Climate performance KPIs and metrics
- Data-driven monitoring and reporting systems
- Organisational transformation and sustainability integration

Recommended Texts & Resources

Books

- Stern, N. – *The Economics of Climate Change*
- Weart, S. – *The Discovery of Global Warming*
- Helm, D. – *Net Zero: How We Stop Causing Climate Change*

Standards & Frameworks

- IPCC Assessment Reports
- Paris Agreement (UNFCCC)
- GHG Protocol Corporate Standard
- TCFD (Task Force on Climate-related Financial Disclosures)
- ISO 14064 – Greenhouse Gas Accounting

Professional Resources

- International Energy Agency (IEA) – Net Zero Reports
- UNEP – Climate Action and Emissions Gap Reports
- World Economic Forum – Climate Risk Reports
- CDP (Carbon Disclosure Project)
- IEMA – Climate Change and Sustainability resources

Transformational Leadership, Organisational Change, and Sustainable Culture

Unit Name: Transformational Leadership, Organisational Change, and Sustainable Culture
Unit Number: ESM805
Unit Level: 8
No.of credits: 20
Mandatory/ Optional: Mandatory

Unit Aim

The aim of this unit is to develop advanced knowledge and critical understanding of transformational leadership, organisational change, and sustainable culture by enabling learners to critically evaluate leadership theories, behavioural dynamics, and change management frameworks, and to design and lead strategic approaches that embed sustainability within organisational culture, enhance performance, and support long-term organisational transformation in complex and evolving environments.

Learning Outcomes, Assessment Criteria

Learning Outcomes (LO)- Will be able to	Assessment Criteria (AC)- Learner can:
1. Be able to critically evaluate leadership theories and approaches in sustainability contexts.	1.1 Critically evaluate leadership theories relevant to sustainability and organisational transformation.
	1.2 Analyse the role of leadership in shaping organisational culture and sustainability performance.
	1.3 Critically assess leadership styles in complex, dynamic and high-impact environments.
	1.4 Synthesise leadership approaches to support sustainability-driven organisational change.
2. Be able to critically analyse organisational culture and behavioural dynamics.	2.1 Critically evaluate organisational culture frameworks and their impact on sustainability outcomes.
	2.2 Analyse behavioural factors influencing sustainability performance and decision-making.
	2.3 Evaluate the role of human factors and behavioural change in organisational systems.
	2.4 Critically assess challenges in developing and sustaining a positive sustainability culture.
3. Be able to evaluate organisational change management frameworks and strategies.	3.1 Critically evaluate change management models and frameworks in sustainability contexts.
	3.2 Analyse organisational readiness and barriers to change.
	3.3 Evaluate the role of leadership, communication and engagement in change implementation.
	3.4 Critically assess the effectiveness of change strategies in achieving sustainability outcomes.

4. Be able to critically analyse stakeholder engagement and communication in organisational transformation.	4.1 Analyse stakeholder roles and influence in organisational change processes.
	4.2 Critically evaluate communication strategies in sustainability transformation.
	4.3 Assess collaboration and engagement approaches in complex organisational systems.
	4.4 Synthesise approaches for managing stakeholder relationships during transformation.
5. Be able to develop strategic approaches for embedding sustainability culture and organisational transformation.	5.1 Critically evaluate performance measurement frameworks for cultural and organisational change.
	5.2 Analyse data-driven approaches to monitoring behavioural and cultural performance.
	5.3 Develop strategies for embedding sustainability into organisational culture and systems.
	5.4 Synthesise innovative approaches to enhance organisational resilience and long-term transformation.

Indicative Content

1. Leadership Theories and Strategic Influence

- Transformational, adaptive and strategic leadership models
- Leadership in sustainability and organisational contexts
- Decision-making in complex and uncertain environments
- Leadership influence on organisational performance

2. Organisational Culture and Behaviour

- Organisational culture frameworks and models
- Behavioural dynamics and human factors
- Culture maturity models and sustainability integration
- Behavioural change and performance improvement

3. Change Management and Organisational Transformation

- Change management frameworks (e.g., Kotter, Lewin)
- Organisational readiness and resistance to change
- Leadership role in driving change
- Integration of sustainability into organisational transformation

4. Stakeholder Engagement and Communication

- Stakeholder mapping and influence analysis

- Communication strategies in organisational change
- Collaboration and cross-functional engagement
- Managing conflict and stakeholder expectations

5. Embedding Sustainability and Long-Term Transformation

- Cultural integration of sustainability practices
- Performance measurement and behavioural KPIs
- Continuous improvement and organisational learning
- Innovation and transformation in sustainability systems

Recommended Texts & Resources

Books

- Northouse, P. – *Leadership: Theory and Practice*
- Kotter, J. – *Leading Change*
- Schein, E. – *Organisational Culture and Leadership*
- Burnes, B. – *Managing Change*

Standards & Frameworks

- ISO 14001 – Environmental Management Systems
- ISO 45001 – Leadership and organisational culture elements
- UN SDGs – Organisational sustainability alignment
- OECD – Governance and organisational performance frameworks

Professional Resources

- Harvard Business Review – Leadership and change articles
- World Economic Forum – Leadership and transformation insights
- IEMA – Sustainability leadership resources
- CIPD – Organisational behaviour and change management
- Industry case studies on organisational transformation

Applied Research Project in Environmental and Sustainable Management

Unit Name: Applied Research Project in Environmental and Sustainable Management
Unit Number: ESM806
Unit Level: 8
No.of credits: 40
Mandatory/ Optional: Mandatory

Unit Aim

The aim of this unit is to develop advanced research capability in environmental and sustainable management by enabling learners to critically evaluate research methodologies, design and conduct independent research, and generate original insights that contribute to organisational practice and sustainability knowledge, demonstrating autonomy, critical thinking, and strategic decision-making in complex and uncertain environments.

Learning Outcomes, Assessment Criteria

Learning Outcomes (LO)- Will be able to	Assessment Criteria (AC)- Learner can:
1. Be able to critically evaluate research methodologies and approaches in environmental and sustainability contexts.	1.1 Critically evaluate qualitative, quantitative and mixed research methodologies.
	1.2 Analyse the suitability of research methods for complex environmental and sustainability issues.
	1.3 Critically assess data collection and analysis techniques.
	1.4 Synthesise methodological approaches for addressing research problems.
2. Be able to design an independent research project in environmental and sustainable management.	2.1 Formulate a clear research aim, objectives and research questions.
	2.2 Critically evaluate literature and theoretical frameworks relevant to the research topic.
	2.3 Design an appropriate research methodology and research plan.
	2.4 Develop ethical and practical considerations in research design.
3. Be able to critically analyse and interpret research data.	3.1 Critically analyse qualitative and/or quantitative research data.
	3.2 Evaluate the reliability and validity of research findings.
	3.3 Interpret findings in relation to research objectives and theoretical frameworks.
	3.4 Critically assess limitations and uncertainties in research outcomes.

4. Be able to develop evidence-based conclusions and recommendations.	4.1 Synthesise research findings to develop coherent conclusions.
	4.2 Critically evaluate implications of findings for environmental and sustainability practice.
	4.3 Develop practical and strategic recommendations based on research outcomes.
	4.4 Assess the contribution of research to organisational and sustainability knowledge.
5. Be able to demonstrate autonomy, critical thinking and professional research practice.	5.1 Demonstrate independent research capability and self-direction.
	5.2 Critically reflect on the research process and personal learning.
	5.3 Evaluate ethical considerations and professional responsibilities in research.
	5.4 Present research outcomes in a structured and academically rigorous format.

Indicative Content

1. Research Methodology and Design

- Qualitative, quantitative and mixed methods
- Research design and strategy development
- Literature review and theoretical frameworks
- Research ethics and governance

2. Data Collection and Analysis

- Primary and secondary data collection methods
- Statistical analysis and qualitative data interpretation
- Data validity, reliability and limitations
- Use of digital tools and research software

3. Research Implementation and Project Management

- Planning and managing research projects
- Time management and research milestones
- Risk management in research processes
- Documentation and research reporting

4. Critical Analysis and Knowledge Development

- Critical thinking and analytical reasoning

- Interpretation of complex data and findings
- Linking theory to practice
- Identifying research gaps and contributions

5. Research Outcomes and Professional Practice

- Developing conclusions and recommendations
- Academic writing and dissertation structure
- Professional presentation of research findings
- Reflective practice and continuous learning

Recommended Texts & Resources

Books

- Saunders, M. – *Research Methods for Business Students*
- Creswell, J. – *Research Design*
- Bryman, A. – *Social Research Methods*
- Easterby-Smith, M. – *Management and Business Research*

Standards & Frameworks

- UK Research Integrity Office Guidelines
- Ethical Research Frameworks (ESRC)
- ISO 14001 (for applied environmental research context)
- UN SDGs (research alignment)

Professional Resources

- Google Scholar and academic journals
- ResearchGate and academic databases
- IEMA sustainability research publications
- UNEP and World Bank research reports
- University research guidelines and dissertation frameworks

Sustainability Assurance, Impact Measurement, and Integrated Reporting

Unit Name: Sustainability Assurance, Impact Measurement, and Integrated Reporting
Unit Number: ESM807
Unit Level: 8
No.of credits: 20
Mandatory/ Optional: Optional

Unit Aim

The aim of this unit is to develop advanced knowledge and critical understanding of sustainability assurance, impact measurement, and integrated reporting by enabling learners to critically evaluate assurance frameworks, performance measurement systems, and reporting standards, and to design strategic approaches that enhance transparency, accountability, and evidence-based decision-making in organisational sustainability and governance contexts.

Learning Outcomes, Assessment Criteria

Learning Outcomes (LO)- Will be able to	Assessment Criteria (AC)- Learner can:
1. Be able to critically evaluate sustainability assurance frameworks and practices.	1.1 Critically evaluate sustainability assurance frameworks and standards.
	1.2 Analyse assurance processes in environmental and sustainability systems.
	1.3 Critically assess the role of independent assurance in organisational governance.
	1.4 Synthesise approaches for strengthening assurance systems and credibility.
2. Be able to critically analyse sustainability impact measurement and performance frameworks.	2.1 Critically evaluate sustainability performance measurement frameworks and indicators.
	2.2 Analyse environmental and social impact assessment methodologies.
	2.3 Evaluate the effectiveness of KPIs and metrics in measuring sustainability outcomes.
	2.4 Critically assess limitations and challenges in impact measurement systems.
3. Be able to evaluate integrated reporting frameworks and disclosure requirements.	3.1 Critically evaluate integrated reporting frameworks and sustainability disclosure standards (e.g., GRI, TCFD).
	3.2 Analyse organisational reporting practices and transparency mechanisms.
	3.3 Evaluate the role of reporting in supporting governance and stakeholder engagement.
	3.4 Critically assess the effectiveness of reporting systems in driving accountability and performance.

4. Be able to critically analyse data management, analytics and decision-making in sustainability reporting.	4.1 Analyse data collection, validation and management processes in sustainability systems.
	4.2 Critically evaluate data analytics tools and techniques in sustainability performance assessment.
	4.3 Assess data reliability, accuracy and governance in reporting systems.
	4.4 Synthesise approaches for using data to support strategic sustainability decision-making.
5. Be able to develop strategic approaches for sustainability assurance, reporting and performance improvement.	5.1 Critically evaluate performance monitoring and continuous improvement frameworks.
	5.2 Analyse integration of assurance, measurement and reporting within organisational systems.
	5.3 Develop strategies to enhance sustainability reporting quality and organisational transparency.
	5.4 Synthesise innovative approaches to improve sustainability performance and long-term value creation.

Indicative Content

1. Sustainability Assurance Frameworks

- Assurance standards and frameworks
- Internal and external assurance processes
- Governance and accountability in assurance systems
- Role of assurance in organisational credibility

2. Impact Measurement and Performance Systems

- Sustainability KPIs and performance metrics
- Environmental and social impact assessment methodologies
- Measurement challenges and limitations
- Outcome-based and value-based performance evaluation

3. Integrated Reporting and Disclosure

- Reporting frameworks (GRI, TCFD, Integrated Reporting)
- Sustainability disclosure and transparency mechanisms
- Alignment with regulatory and stakeholder expectations
- Reporting as a governance tool

4. Data Management and Sustainability Analytics

- Data collection, validation and governance

- Use of analytics in sustainability performance
- Digital tools and reporting systems
- Data-driven decision-making

5. Strategic Performance Improvement and Integration

- Continuous improvement frameworks
- Integration of assurance, measurement and reporting
- Performance optimisation strategies
- Enhancing organisational transparency and value creation

Recommended Texts & Resources

Books

- Eccles, R. & Krzus, M. – *The Integrated Reporting Movement*
- Adams, C. – *Sustainability Reporting and Accountability*
- Epstein, M. – *Making Sustainability Work*

Standards & Frameworks

- GRI Standards (Global Reporting Initiative)
- TCFD Framework
- Integrated Reporting Framework (<IR>)
- ISO 14064 – GHG Measurement
- AA1000 Assurance Standard

Professional Resources

- CDP (Carbon Disclosure Project)
- World Economic Forum – ESG & Reporting
- IEMA – Sustainability Reporting Resources
- UNEP – Sustainability Assessment Reports
- Corporate sustainability disclosures and case studies

ESG Strategy, Corporate Sustainability, and Ethical Governance

Unit Name: ESG Strategy, Corporate Sustainability, and Ethical Governance
Unit Number: ESM808
Unit Level: 8
No.of credits: 20
Mandatory/ Optional: Optional

Unit Aim

The aim of this unit is to develop advanced knowledge and critical understanding of ESG strategy, corporate sustainability, and ethical governance by enabling learners to critically evaluate ESG frameworks, governance structures, and ethical principles, and to design and implement strategic approaches that enhance organisational sustainability performance, accountability, and long-term value creation in complex and dynamic global environments.

Learning Outcomes, Assessment Criteria

Learning Outcomes (LO)- Will be able to	Assessment Criteria (AC)- Learner can:
1. Be able to critically evaluate ESG frameworks and corporate sustainability models.	1.1 Critically evaluate global ESG frameworks and sustainability standards (e.g., GRI, SASB, TCFD).
	1.2 Analyse the integration of ESG principles within organisational strategy and operations.
	1.3 Critically assess the effectiveness of ESG frameworks in driving sustainability performance.
	1.4 Synthesise approaches for aligning ESG models with organisational objectives.
2. Be able to critically analyse governance structures and sustainability decision-making.	2.1 Critically evaluate governance structures supporting ESG and sustainability integration.
	2.2 Analyse board-level roles, responsibilities and decision-making processes.
	2.3 Evaluate accountability mechanisms and governance controls in sustainability systems.
	2.4 Critically assess the relationship between governance, risk management and sustainability performance.
3. Be able to evaluate ethical principles and corporate responsibility in sustainability contexts.	3.1 Critically evaluate ethical frameworks relevant to sustainability and corporate governance.
	3.2 Analyse ethical challenges and dilemmas in ESG decision-making.
	3.3 Evaluate organisational approaches to ethical governance and responsible business practices.
	3.4 Critically assess the role of ethics in enhancing stakeholder trust and organisational reputation.

4. Be able to critically analyse stakeholder engagement and ESG communication strategies.	4.1 Analyse stakeholder expectations and influence in ESG contexts.
	4.2 Critically evaluate ESG communication and disclosure strategies.
	4.3 Assess transparency, accountability and reporting practices in sustainability governance.
	4.4 Synthesise approaches for managing stakeholder relationships in ESG frameworks.
5. Be able to develop strategic approaches for ESG integration and sustainability performance.	5.1 Critically evaluate ESG performance measurement frameworks and sustainability KPIs.
	5.2 Analyse data-driven approaches for monitoring ESG performance.
	5.3 Develop strategies for embedding ESG into organisational systems and processes.
	5.4 Synthesise innovative approaches to enhance sustainability performance and long-term organisational value.

Indicative Content

1. ESG Frameworks and Sustainability Strategy

- ESG frameworks (GRI, SASB, TCFD, Integrated Reporting)
- Corporate sustainability strategies and models
- ESG integration into business operations
- Alignment with global sustainability goals (SDGs)

2. Governance and Strategic Decision-Making

- Corporate governance structures and sustainability oversight
- Board-level accountability and governance mechanisms
- Risk management and governance integration
- Leadership role in sustainability decision-making

3. Ethical Governance and Corporate Responsibility

- Ethical theories and sustainability leadership
- Corporate responsibility and governance principles
- Managing ethical dilemmas in ESG contexts
- Transparency and integrity in organisational practices

4. Stakeholder Engagement and Communication

- Stakeholder mapping and influence analysis

- ESG reporting and disclosure practices
- Communication strategies in sustainability governance
- Managing stakeholder expectations and trust

5. ESG Performance and Strategic Integration

- ESG KPIs and performance measurement frameworks
- Data-driven sustainability monitoring systems
- Continuous improvement and organisational performance
- Long-term value creation through ESG integration

Recommended Texts & Resources

Books

- Eccles, R. & Krzus, M. – *The Integrated Reporting Movement*
- Carroll, A. – *Corporate Social Responsibility*
- Crane, A. – *Business Ethics*

Standards & Frameworks

- GRI Standards
- SASB Standards
- TCFD Framework
- UN Sustainable Development Goals (SDGs)
- OECD Corporate Governance Principles

Professional Resources

- World Economic Forum – ESG Reports
- CDP (Carbon Disclosure Project)
- IEMA – ESG and Sustainability Resources
- UNEP – Corporate Sustainability Publications
- Harvard Business Review – ESG insights

Digital Transformation, AI, and Advanced Analytics for Sustainability Systems

Unit Name: Digital Transformation, AI, and Advanced Analytics for Sustainability Systems
Unit Number: ESM809
Unit Level: 8
No.of credits: 20
Mandatory/ Optional: Optional

Unit Aim

The aim of this unit is to develop advanced knowledge and critical understanding of digital transformation, artificial intelligence, and advanced analytics in sustainability systems by enabling learners to critically evaluate digital technologies, data-driven approaches, and intelligent systems, and to design and implement innovative strategies that enhance environmental performance, organisational decision-making, and long-term sustainability in complex and rapidly evolving technological environments.

Learning Outcomes, Assessment Criteria

Learning Outcomes (LO)- Will be able to	Assessment Criteria (AC)- Learner can:
1. Be able to critically evaluate digital transformation frameworks in sustainability systems.	1.1 Critically evaluate digital transformation models and frameworks in organisational contexts.
	1.2 Analyse the role of digital technologies in enhancing sustainability performance.
	1.3 Critically assess integration of digital systems within environmental management frameworks.
	1.4 Synthesise approaches for embedding digital transformation into sustainability strategies.
2. Be able to critically analyse artificial intelligence and emerging technologies in sustainability applications.	2.1 Critically evaluate the application of AI and machine learning in sustainability systems.
	2.2 Analyse the role of automation and intelligent systems in resource optimisation and risk management.
	2.3 Evaluate emerging technologies (e.g., IoT, big data) in environmental contexts.
	2.4 Critically assess ethical and governance challenges associated with AI implementation.
3. Be able to evaluate data management, analytics and decision-making processes.	3.1 Critically evaluate data collection, validation and governance processes in sustainability systems.
	3.2 Analyse advanced analytics techniques for environmental performance assessment.
	3.3 Evaluate predictive modelling and data-driven decision-making approaches.
	3.4 Critically assess limitations and risks associated with data-driven systems.

4. Be able to critically analyse digital system integration and organisational implementation.	4.1 Analyse integration of digital technologies within organisational sustainability systems.
	4.2 Critically evaluate implementation challenges and organisational readiness.
	4.3 Assess leadership and governance roles in digital adoption.
	4.4 Synthesise strategies for effective implementation of digital sustainability systems.
5. Be able to develop strategic approaches for digital innovation and sustainability transformation.	5.1 Critically evaluate performance measurement frameworks for digital sustainability systems.
	5.2 Analyse data-driven approaches for continuous improvement and optimisation.
	5.3 Develop strategies for leveraging digital technologies to enhance sustainability performance.
	5.4 Synthesise innovative solutions for long-term digital and environmental transformation.

Indicative Content

1. Digital Transformation and Sustainability Systems

- Digital transformation frameworks and organisational models
- Role of digitalisation in sustainability strategy
- Integration of digital systems within environmental management
- Organisational digital maturity and transformation pathways

2. Artificial Intelligence and Emerging Technologies

- AI and machine learning applications in sustainability
- Internet of Things (IoT) and smart environmental systems
- Automation and intelligent resource management
- Ethical and governance challenges in AI adoption

3. Data Analytics and Decision-Making

- Data collection, validation and governance frameworks
- Big data analytics and environmental performance assessment
- Predictive modelling and simulation tools
- Data-driven sustainability decision-making

4. Digital System Integration and Implementation

- Integration of digital technologies into organisational systems

- Change management and digital adoption challenges
- Leadership role in digital transformation
- Risk, cybersecurity and system governance considerations

5. Innovation and Strategic Transformation

- Digital innovation in sustainability systems
- Performance measurement and digital KPIs
- Continuous improvement and optimisation
- Future trends in digital sustainability and intelligent systems

Recommended Texts & Resources

Books

- Marr, B. – *Big Data in Practice*
- Russell, S. & Norvig, P. – *Artificial Intelligence: A Modern Approach*
- Westerman, G. – *Leading Digital Transformation*

Standards & Frameworks

- ISO 14001 – Environmental Management Systems
- ISO 27001 – Information Security Management
- OECD Digital Economy Framework
- UN Digital Transformation and Sustainability Reports

Professional Resources

- World Economic Forum – Digital Transformation Reports
- UNEP – Digitalisation and Sustainability
- IEMA – Digital Sustainability Resources
- McKinsey – AI and Sustainability Insights
- Industry case studies on digital transformation

Climate Risk, Adaptation, and Resilience Strategy

Unit Name: Climate Risk, Adaptation, and Resilience Strategy
Unit Number: ESM810
Unit Level: 8
No.of credits: 20
Mandatory/ Optional: Optional

Unit Aim

The aim of this unit is to develop advanced knowledge and critical understanding of climate risk, adaptation, and resilience strategy by enabling learners to critically evaluate climate-related risks, adaptation frameworks, and resilience models, and to design and implement strategic approaches that enhance organisational preparedness, adaptive capacity, and long-term sustainability in the face of complex and uncertain climate challenges.

Learning Outcomes, Assessment Criteria

Learning Outcomes (LO)- Will be able to	Assessment Criteria (AC)- Learner can:
1. Be able to critically evaluate climate-related risks and impact frameworks.	1.1 Critically evaluate physical and transition climate risks in organisational contexts.
	1.2 Analyse climate risk assessment frameworks and methodologies.
	1.3 Critically assess sector-specific climate vulnerabilities and impacts.
	1.4 Synthesise approaches for integrating climate risk into organisational decision-making.
2. Be able to critically analyse climate adaptation strategies and frameworks.	2.1 Critically evaluate global and regional climate adaptation frameworks.
	2.2 Analyse adaptation strategies across different sectors and systems.
	2.3 Evaluate effectiveness of adaptation measures in reducing climate risks.
	2.4 Critically assess challenges and limitations in adaptation planning.
3. Be able to evaluate resilience frameworks and organisational preparedness.	3.1 Critically evaluate resilience models in environmental and organisational contexts.
	3.2 Analyse organisational preparedness and adaptive capacity.
	3.3 Evaluate the role of leadership and governance in building resilience.
	3.4 Critically assess resilience strategies in complex and uncertain environments.

4. Be able to critically analyse climate governance, policy and stakeholder engagement.	4.1 Analyse climate governance frameworks and policy drivers.
	4.2 Critically evaluate regulatory and institutional responses to climate risks.
	4.3 Assess stakeholder roles in climate adaptation and resilience strategies.
	4.4 Synthesise approaches for managing stakeholder engagement in climate governance.
5. Be able to develop strategic approaches for climate resilience and sustainability transformation.	5.1 Critically evaluate performance measurement frameworks for climate resilience.
	5.2 Analyse data-driven approaches for monitoring climate risk and adaptation outcomes.
	5.3 Develop strategies for integrating resilience into organisational systems and sustainability frameworks.
	5.4 Synthesise innovative approaches to enhance long-term climate resilience and organisational sustainability.

Indicative Content

1. Climate Risk and Impact Assessment

- Physical and transition climate risks
- Climate risk assessment frameworks and tools
- Sector-specific vulnerabilities and impacts
- Integration of climate risk into organisational strategy

2. Climate Adaptation Frameworks

- Global and regional adaptation strategies
- Sector-based adaptation approaches
- Risk reduction and adaptive planning
- Challenges in adaptation implementation

3. Resilience and Organisational Preparedness

- Resilience frameworks and models
- Adaptive capacity and organisational readiness
- Leadership role in resilience development
- Managing uncertainty and complex risk environments

4. Climate Governance and Stakeholder Engagement

- Climate policy and governance frameworks

- Regulatory and institutional responses
- Stakeholder engagement in adaptation strategies
- Collaboration and partnership approaches

5. Strategic Resilience and Sustainability Integration

- Climate resilience KPIs and performance metrics
- Data-driven monitoring and reporting
- Integration of resilience into sustainability systems
- Long-term climate strategy and transformation

Recommended Texts & Resources

Books

- IPCC Reports – Climate Change Assessment
- Helm, D. – *Net Zero*
- Adger, W. N. – *Adaptation to Climate Change*

Standards & Frameworks

- TCFD (Climate Risk Disclosure)
- IPCC Frameworks
- UNFCCC Adaptation Framework
- ISO 14090 – Climate Adaptation
- ISO 14091 – Climate Risk Assessment

Professional Resources

- UNEP – Climate Adaptation Reports
- World Economic Forum – Global Risk Reports
- IEMA – Climate Risk and Resilience
- OECD – Climate Risk Governance
- Industry case studies on resilience strategies