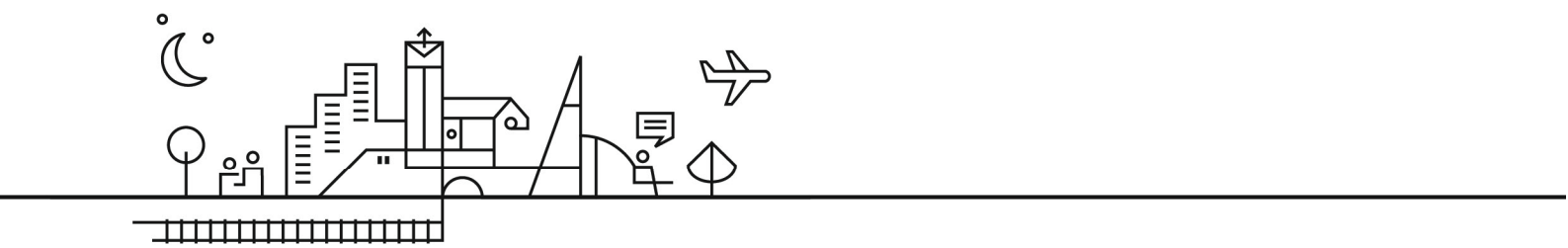
IEMA Transforming the world to sustainability

Course Specification

EMS Implementation



CONTENTS

1. ABOUT US

IEMA is the membership body for more than 15,000 environment and sustainability professionals worldwide.

We support individuals and organisations in setting and achieving globally recognised standards for sustainable practice, in turn driving the development and uptake of sustainability skills.

We add value for our members by providing the knowledge, connections and recognition necessary to lead change within organisations at all levels.

We are independent and international. We apply the combined expertise of our members to provide evidence and influence decision-making, working towards our vision of transforming the world to sustainability.

2. BACKGROUND

This course is designed to give learners the necessary knowledge and skills needed in a role to implement an Environmental Management System (EMS) that will be relevant to their own organisation, leading to environmental performance improvement and business benefits. Training providers should make candidates fully aware of the key differences between the 2015 version of ISO 14001 and the previous 2004 version.

3. COURSE DURATION

The guided learning hours for the EMS Implementation Course is a minimum of 24 hours (excluding breaks and assessment); which can include pre-course reading, guided homework as well as teaching delivery. This will normally be delivered over a period of three consecutive days, but can be split over a reasonable period, with IEMA approval.

Please see section 6 for details regarding the assessment weighting against each learning outcome, which provides guidance regarding the areas of focus within the course.

4. WHO IS THIS COURSE FOR?

This course is aimed at individuals planning on implementing an EMS in their organisation or who have been given responsibilities to help manage it.

There are no formal entry requirements for learners enrolling on the IEMA Certified EMS Implementation course; however, it is recommended that candidates have completed the IEMA Certified Foundation Course in Environmental Management or have an equivalent level of knowledge or experience of environmental issues. Initial assessment of a learner should include the appropriateness of the course for the learner and their ability to complete it.

5. MATERIALS AND CERTIFICATION

There are no IEMA materials available for this course and course providers must develop materials for approval by IEMA.

IEMA recognises that course providers may need to tailor courses for particular clients or learners. Tailoring of the course is encouraged provided that the learning outcomes of the course are still met. It is recommended that tailoring of the course is through case studies and case examples. Training courses may go beyond the minimum requirements set out in the learning outcomes; this should be supported by additional time to deliver the course and to suit the particular needs of the audience.

This course is an IEMA Certified course and certificates are provided by IEMA to learners who have successfully completed the course. Dual branding of certificates to include training partner logos is available as an option.

Please contact training@iema.net for further details.

6. ASSESSMENT

The course provider should develop a methodology for assessing learners and include this in their submission to IEMA for approval. Assessment should be via a combination of an end-of-course examination and post-course project:

1. End-of-course examination: The end-of-course examination should examine the learners' understanding and application of course learning outcomes 1-4 and should be weighted equally between each of the 4 learning outcomes – it should not be a test of memory of the course discussions or literature.

   The course examination may be either:
   - 'open book' under exam conditions (learners may have the supplied course notes, standards and their own course notes); or
   - 'closed book' (learners may have only the standards).

   The end-of-course examination should carry a weighting of 40% of the overall course mark.

2. Post-course project: This project should be based on a learner implementing an EMS for their own organisation, building on the knowledge gained during the course, specifically learning outcome 5. Alternatively, the project may be based on an organisation that the course provider knows of, and allocates to the individual.

   The post-course project should carry a weighting of 60% of the overall course mark.

7. TRAINER REQUIREMENTS

In addition to the trainer requirements set out in the policy manual, *Guide to becoming an IEMA Training Centre*, trainers are required to be a Full member of IEMA, or as a minimum have equivalent knowledge and experience that has been assessed against the IEMA Environmental Skills Map at the managerial level. Trainers must also have substantial proven practical experience of environmental management systems.

8. LEARNING OUTCOMES

There are five Learning Outcomes for this course which are as follows:

1. Understand the opportunities and risks corporate sustainability presents to organisations
2. Understand Environmental Management Systems and their application
3. Understand key Environmental Management Standards and the certification process
4. Understand how to plan and manage the implementation of an EMS
5. Understand how to implement an EMS and evaluate its effectiveness

Detailed assessment criteria and scope for each learning outcome are provided below.

Learning Outcome (the learner will . . .)	**Assessment Criteria** (the learner can . . .)	**Scope** (the learner will be familiar with . . .)
1. Understand the opportunities and risks corporate sustainability presents to organisations	1.1 Explain the meaning of **corporate sustainability** 1.2 Explain the concept of **organisational context** in terms of corporate sustainability 1.3 Explain the business drivers for corporate sustainability and the role of EMS in relationship to these 1.4 Explain the potential impacts upon organisations of a changing natural environment including reference to megatrends e.g. natural resource constraints, climate change, changing sea levels etc. and also of the impact of changing political, regulatory and technological landscape 1.5 Understand the importance of stakeholder expectations and involvement in the development of EMS, and how to gather and analyse them 1.6 Describe the complexities of trying to balance or resolve environmental and socio-economic needs 1.7 Explain the **environmental and business benefits** of environmental management systems 1.8 Explain the critical roles and responsibilities of **top management** in defining, designing and operating an EMS which delivers effective performance management within	**Corporate Sustainability** – see the emerging 'common lexicon' in the IEMA/GACSO white paper (and updates) **Organisational Context** – broad interpretation including aspects of product and service lifecycle and the value chain **Environmental and business benefits:** • Expectations of various stakeholders – legal, moral and financial • Opportunities and/or Risks between the environment and an organisation e.g. those that a changing environment presents to organisations in the short, medium and long term and those that an organisation presents to the environment • Implications for organisations of changes to resource availability, supply and security • Value creation through managing environment across the value chain • Enhancing environmental performance • Continual improvement in both process and outcomes **Top Management** – an initial description of elements associated with accountability, commitment, encouragement and allocation of resources, plus their role in the setting of organisational strategy and objectives and in the ongoing review of the performance and continual improvement of the

Learning Outcome (the learner will . . .)	**Assessment Criteria** (the learner can . . .)	**Scope** (the learner will be familiar with . . .)
	an organisational context	EMS
2. Understand Environmental Management Systems and their application	2.1 Explain the **strategic context** for establishing an environmental management system 2.2 Explain the **elements of an environmental management system** and explain the relationship between environmental management systems and **other organisational operational, financial and management systems** 2.3 Compare and contrast how **different organisations** approach environmental management 2.4 Introduce the concept of **stakeholder engagement** in the development of policies and processes by organisations 2.5 Explain the relationship between environmental management systems and **other environmental management, monitoring and assessment tools** 2.6 Explain the need to monitor performance, to evaluate and analyse outcomes and to develop **appropriate responses** and corrective outcomes on the basis of the results 2.7 Evaluate the importance of the continual improvement cycle within an environmental management system as a	**Strategic Context** – relationship with organisations strategic plans and opportunities to support corporate outcomes **Elements of an environmental management system -** Continual improvement cycle (plan, do, check, act), internal controls, document control, competence, communication etc **Other organisational operational, financial and management systems –** quality management systems, health and safety management systems, energy management systems process control, accounting systems and governance **Different organisations** – micro, SME, large, multi-national, sectors, and geography (e.g. approach between organisations in developed vs developing / emerging economies) **Stakeholder engagement -** the importance and role of interested parties both internal and external in determining the scope of the EMS and the development and definition of organisational corporate sustainability objectives **Other environmental management, monitoring and assessment tools** – environmental audit, risk assessment, life-cycle assessment, foot-printing, GHG/Carbon/Non-financial accounting

Learning Outcome (the learner will . . .)	**Assessment Criteria** (the learner can . . .)	**Scope** (the learner will be familiar with . . .)
	driver for system and environmental performance improvement 2.8 Describe the link between EMS and wider organisational **context**, governance and risk management controls	**Appropriate responses** – the adjustment of the system and performance criteria to take account of the impacts of a changing environment and organisational structures. To review both the long-term resilience of organisations to change as well as short term pollution prevention and incident response. **Context** – the internal and external issues relevant to the organisation's purpose and that affect its ability to achieve the intended outcomes of its EMS. Such issues include potential impacts on the organisation of emerging mega-trends in a changing environment and the importance of bio-diversity and resource efficiency to organisations
3. Understand key Environmental Management Standards and the certification process	3.1 Compare and contrast **key environmental management standards** and their purpose 3.2 Outline the relevance of **other environmental management standards** and identify where to access them 3.3 Outline the meaning of **key environmental management systems terminology** 3.4 Identify the benefits, costs, strengths and weaknesses of external certification 3.5 Describe the **certification process**	**Key environmental management standards** – ISO14001, EMAS, BS8555, ISO14005 (in countries where they are relevant) **Other environmental management standards** – ISO 14031, ISO 14040 series, ISO 14063, ISO 19011, ISO 26000, ISO 50001 and GRI **Key environmental management systems terminology** – organisational context, aspects and impacts, audit, inspections, stakeholders, management review, risks and opportunities, significance, continual improvement, initial environmental review, policy etc **Certification process** – difference between certification of the

Learning Outcome (the learner will . . .)	**Assessment Criteria** (the learner can . . .)	**Scope** (the learner will be familiar with . . .)
	3.6 Identify the competencies required of a **third party auditor**	system and accreditation of the certification body. The links and relationships with regulatory and enforcement regimes **Third party auditor**– accreditation, professional qualifications, competence: e.g. sector experience, auditing experience, environmental knowledge and understanding
4. Understand how to plan and manage the implementation of an EMS	4.1 Explain the critical importance of **top management** in the design, implementation and effective operation of the EMS 4.2 Explain the role and responsibilities of a project manager implementing an environmental management system 4.3 Identify the key organisational **issues and barriers** to consider in implementing an EMS 4.4 Describe how to prepare a **project plan** and what it should include 4.5 Explain how to **monitor** project progress 4.6 Demonstrate knowledge of **relevant sources** from where to access environmental information and advice	**Top Management** – an initial description of aspects associated with accountability, commitment, encouragement and allocation of resources, plus their role in the setting of organisational strategy and objectives and in the ongoing review of the performance and continual improvement of the EMS **Issues and barriers** – values, culture, communication, resource availability, stakeholders, knowledge and skills, top management buy-in, organisational structure **Project plan** – tasks, timescales, roles and responsibilities, resources, risks, opportunities and mitigation strategies to manage the identified issues **Monitor** – review progress against key milestones in the project plan, identify when problems occur and implement appropriate corrective action if needed **Relevant sources** – environmental consultants, professional

Learning Outcome (the learner will . . .)	**Assessment Criteria** (the learner can . . .)	**Scope** (the learner will be familiar with . . .)
		bodies (e.g. IEMA), regulators, certification bodies
5. Understand how to implement an EMS and evaluate its effectiveness	5.1 Identify the **scope** of an EMS and set it within the concept of the organisational context 5.2 Understand the importance of an initial environmental review and its outcomes taking into account how the changing external environment impacts upon the organisation, its market place, and its internal and external stakeholders 5.3 Identify **relevant** environmental aspects and impacts 5.4 Evaluate the **significance** of environmental aspects and impacts 5.5 Describe the key features of an environmental policy 5.6 Outline the legislative framework, **types of law** and the role of regulators 5.7 Identify **relevant** compliance obligations and know how to maintain compliance 5.8 Determine the risks and opportunities related to aspects, compliance and the organisation's context	**Scope** – includes consideration of the organisation, its context, its value chain and the needs and expectations of interested parties and lifecycle considerations **Relevant** – impacts to and from the environment, considering what it can control or influence, having a life cycle perspective reviewing the entire value chain to include aspects of product and service design, development and delivery, including procurement and end of life considerations as appropriate **Significance** – criteria (e.g. those commonly accepted) for determining significance; the relationship to wider organisational risks and opportunities; and the relationship between significance and materiality (from both a financial and non-financial reporting perspective – the definitions are different) **Types of law** - common and statute law, and civil and criminal law (in jurisdictions where they exist) **Relevant compliance obligations** - legislation relevant to an organisation's environmental context/ aspects (e.g. Mandatory GHG reporting and pollution control type legislation as well as voluntary codes of conduct, client contractual obligations etc.)

Learning Outcome (the learner will . . .)	**Assessment Criteria** (the learner can . . .)	**Scope** (the learner will be familiar with . . .)
	5.9 Explain how to set objectives and to set them in the context of broader business processes and controls (including aspects of design and purchase) 5.10 Prepare an action plan/programme for achieving objectives 5.11 Explain how to establish and maintain **operational controls**, change management processes and controls; and the response to unplanned changes in the organisational context 5.12 Describe the role of documented information, **documented information control and storage** within an EMS 5.13 Identify which components of the EMS and the organisation's performance should be monitored 5.14 Outline appropriate **methods** for monitoring and measuring environmental performance, evaluate the results and determine effectiveness of process and outcomes, in mitigating adverse impacts or organisational activities and in reviewing the effectiveness of corrective actions 5.15 Describe how to **evaluate environmental performance** and performance outcomes of the EMS and how this information is used to drive continual improvement	**Operational controls** – work instruction, procedures, training, technologies, strategies; applicable to the entire value chain of the organisation including aspects of product and service design, development and delivery, and procurement **Documented information control and storage** – electronic and hard copy information; information security, relevant IT systems control (e.g. archive, back up, etc – relevant to mandatory data reporting); and appropriate retention periods **Methods** - including direct approaches e.g. equipment and meters, and indirect approaches e.g. staff awareness surveys **Evaluate environmental performance** – audit and audit programmes, top management review, key performance indicators, benchmarking, evaluating compliance status and system effectiveness, fulfilment of compliance obligations **Accounting and reporting** – including data accounting systems, data verification and quality control, review and use of data for internal decision making, and external reporting **Communications** – review likely organisational communications that may have environmental sustainability content (e.g. board papers, investor feedback, product brochures, regulatory reports etc). Identify the likely channels and persons responsible for such communications; clearly

Learning Outcome (the learner will . . .)	**Assessment Criteria** (the learner can . . .)	**Scope** (the learner will be familiar with . . .)
	5.16 Explain the role of monitoring, measurement, **accounting and reporting** in an effective environmental management system and in the management or environmental improvement 5.17 Explain the importance of **communications** both internal and external in the development and ongoing implementation of the EMS, and stress the criticality of the reliability of information provided in those communications 5.18 Outline the role of internal audit in improving the EMS and in driving performance improvement 5.19 Describe the key importance of Management Review in the assessment of the effectiveness of the EMS, and in particular at the strategic level, and describe its critical role in driving forward the process of continual improvement of both the system and the organisation's environmental performance	define the objectives and required outcomes for such communications; define the requirements for quality control and assurance of data/information to ensure reliable information is output from the management system and the communications process

9. PROGRESSION AFTER THIS COURSE

Learners wishing to progress after this course should consider taking the following courses:

- Internal Environmental Management System (EMS) Auditor course
- Foundation Course in Environmental Auditing
- Associate Certificate in Environmental Management

10.CONTACT US

IEMA
City Office Park
Tritton Road
Lincoln
LN6 7AS
UK

Tel: 01522 540 069
Email: training@iema.net
Web: www.iema.net/training