



Group Award Specification for:

**HND in Environmental Resource Management at
SCQF Level 8**

Group Award Code: GN1R 16

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1 Introduction

This document was previously known as the arrangements document. The purpose of this document is to:

- ◆ assist centres to implement, deliver and manage the qualification.
- ◆ provide a guide for new staff involved in offering the qualification.
- ◆ inform course managers teaching staff, assessors, learners, employers and HEIs of the aims and purpose of the qualification.
- ◆ provide details of the range of learners the qualification is suitable for and progression opportunities.

The HND in Environmental Resource Management has been developed to provide an up to date and vocationally relevant replacement to the existing HNDs in Environmental Management and Sustainability and Rural Resource Management. The relatively minor change to the HND title (from Rural Resource Management to Environmental Resource Management) provides a more accurate reflection of the range of contexts in which the qualification could be delivered.

Successful completion of the HND will provide learners with the opportunity to seek employment in the resource management and environmental sector, for example as conservation advisor, environmental field centre assistant, environmental management assistant, waste and recycling assistant, or to pursue further studies.

2 Qualification structure

2.1 Structure

The HND in Environmental Resource Management at SCQF level 8 requires the learner to achieve 240 SCQF credit points, consisting of 160 SCQF credit points (20 SQA unit credits) from the mandatory section and the remaining 80 SCQF credit points from the optional sections. The mandatory section contains 64 SCQF credit points at SCQF level 8 and includes an 8 SCQF point SCQF level 7 Graded Unit (1) and two 8 SCQF point SCQF level 8 Graded Units (2 and 3).

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
Mandatory units 20 units credits (160 SCQF credit points) required					
F430	34	Biodiversity Conservation	1	8	7
F3SJ	34	Biology: An Introduction	1	8	7
F3SL	34	Geology and Geomorphology	1	8	7
D75X	34	Information Technology: Applications Software 1	1	8	7
HV9V	34	Rural Land Use	1	8	7
F2G8	34	Environmental Awareness	1	8	7

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
F2EE	34	Pollution and Waste Management: An Introduction	1	8	7
F4AK	34	Scottish Rural Development	1	8	7
H93A	34	Ecology and Ecosystems	1	8	7
J462	34*	Economic Issues: An Introduction	1	8	7
F4BP	34	Countryside and Environmental Management: Graded Unit 1	1	8	7
F6D0	35	Environmental Management Systems	1	8	8
F55S	35	Waste Management and Pollution Control	1	8	8
F3X3	35	Data Collection and Handling Methods	1	8	8
F6CY	35	Resource Economics	1	8	8
F435	35	Freshwater Environments: Management and Protection	1	8	8
F5T6	35	Monitoring and Analytical Methods for Environmental Science	1	8	8
HV9X	35	Global Climate Systems	1	8	8
HW4R	35	Environmental Resource Management: Graded Unit 2	1	8	8
HW4T	35	Environmental Resource Management: Graded Unit 3	1	8	8
Optional units 10 unit credits (80 SCQF points) required					
F21J	34	Chemistry and Physics for Life Sciences	1	8	7
H92X	34	Fundamental Chemistry: Theory and Laboratory Skills	2	16	7
HV9W	34	Environmental Chemistry: An Introduction	1	8	7
F3X2	34	Classification and Identification of Organisms	1	8	7
F21V	34	Soil Management	1	8	7
J1BV	34*	Business Management: An Introduction	1	8	7
F6BK	35	Rural Socio-Economic Development	1	8	7
DF82	34	Quality and Health and Safety Systems in Science Industries	1	8	7
F432	34	Countryside Recreation and Access	1	8	7
DF4E	34	Developing Skills for Personal Effectiveness	1	8	7
F502	34	Geographic Information Systems	1	8	7

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4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
F5T5	35	Environmental Science: An Introduction	1	8	8
F6JK	35	Noise and Radioactivity	1	8	8
F6CS	35	Reclamation of Degraded Land	1	8	8
F6BL	35	Energy and the Environment	1	8	8
F2EH	35	Transport Towards a Sustainable Future	1	8	8
F566	35	Tourism: Sustainability and Rural Communities	1	8	8
F3SM	35	Habitat Management	1	8	8
DP4X	35	Terrestrial Ecosystems	1	8	8
F434	35	Education for Sustainable Development: Principles and Practices	1	8	8
F3SS	35	Marine Environments: Management and Protection	1	8	8
F2G9	35	Farm Scale Renewable Energy	1	8	8
F433	35	Ecological Surveying	1	8	8

3 Aims of the qualification

The principal aim of the HND in Environmental Resource Management at SCQF level 8 is to:

- ◆ develop learners' knowledge, understanding and skills in relevant sciences and environmental sectors in order to apply these in the protection and sustainable use of the environment and natural resources.

3.1 General aims of the qualification

- 1 To provide educational and industry relevant skills based training for potential and current employees in the environment and resource management industries.
- 2 To enable an articulated progression route to higher level of learning from National Certificate to Honours degree.
- 3 To raise levels of awareness, skills and knowledge and encourage a holistic approach to sustainable environmental resource management.
- 4 To develop transferable skills that enable learners to perform and communicate effectively in the workplace.
- 5 To promote adaptability in the learners approach to environmental resource management.

3.2 Specific aims of the qualification

- 6 To increase learners' awareness and understanding of key environmental issues.
- 7 To ensure that learners have a sound understanding of the principles of sustainable development and environmental management.
- 8 To provide a sound understanding of the relevance of environmental science and management principles in addressing environmental issues.
- 9 To produce environmental managers with a sound understanding of environmental impacts and ways of managing and minimising those impacts.
- 10 To develop a range of practical abilities in a variety of environmental contexts.
- 11 To produce environmental resource managers with a sound understanding of relevant scientific, technical, socio-economic and business principles.
- 12 To facilitate progression to degree level education based on a firm foundation of understanding, technical expertise, Core Skills, and an understanding of the multidisciplinary nature of environmental management and managing environmental impacts.

3.3 Graded units

The purpose of the graded units is to assess the learner's ability to integrate and apply the knowledge and/or skills gained in the individual units, to demonstrate that they have achieved the principal aims of the group award, and to grade the learner achievement. The graded units will be assessed and a grade of A, B or C will be awarded.

The HND in Environmental Resource Management contains the following graded units:

- ◆ Graded Unit 1 is an investigation that takes the form of a project-based case study.
- ◆ Graded Unit 2 takes the form of a project based investigation.
- ◆ Graded Unit 3 is an exam based unit.

The project graded units will develop the learners' planning, practical, scientific, research and reporting skills. The examination-based graded unit will help prepare learners for degree-level studies.

4 Recommended entry to the qualification

Entry to this qualification is at the discretion of the centre. The following information on prior knowledge, skills, experience or qualifications that provide suitable preparation for this qualification has been provided by the Qualification Design Team as guidance only.

Learners would benefit from having attained the skills, knowledge and understanding required by one or more of the following or equivalent qualifications and/or experience:

- ◆ Two SQA Highers (SCQF level 6) together with three National courses (to include one science or geography).
- ◆ An appropriate group of National Units at SCQF level 5/6. These may include: *Trees in the Environment*, *Investigating Animal Wildlife*, *Wildlife Conservation 1* and *The Physical Landscape of Scotland.*, *Managing an Environmental Area*, *Sustainable Lifestyles*.
- ◆ Appropriate vocational qualification such as an SVQ/NVQ at level 3 in a relevant subject, for example, Countryside Skills.
- ◆ Other combinations of National Qualifications, vocational qualifications and qualifications from other awarding bodies may be acceptable at equivalent SCQF levels.

4.1 Core Skills entry profile

The Core Skill entry profile provides a summary of the associated assessment activities that exemplify why a particular level has been recommended for this qualification. The information would be used to identify if additional learning support needs to be put in place for learners whose Core Skills profile is below the recommended entry level or whether learners should be encouraged to do an alternative level or learning programme.

Core Skill	Recommended SCQF entry profile	Associated assessment activities
Communication	SCQF level 5	Reports; extended response questions; presentations
Numeracy	SCQF level 4	Statistics and analysis; scientific calculations; graphical presentation of findings
Information and Communication Technology (ICT)	SCQF level 5	Collecting, collating and presenting evidence/data; presentations/ reports
Problem Solving	SCQF level 4	Practical activities in real life environments/project work
Working with Others	SCQF level 4	Group working; practical work.

5 Additional benefits of the qualification in meeting employer needs

This qualification was designed to meet a specific purpose and what follows are details on how that purpose has been met through mapping of the units to the aims of the qualification. Through meeting the aims, additional value has been achieved by linking the unit standards with those defined in national occupational standards and/or trade/professional body requirements. In addition, significant opportunities exist for learners to develop the more generic skill, known as Core Skills through doing this qualification.

5.1 Mapping of qualification aims to units

Code	Unit title	General aims					Specific aims						
		1	2	3	4	5	6	7	8	9	10	11	12
F430 34	Biodiversity Conservation	X	X	X		X	X			X		X	X
F3SJ 34	Biology: An Introduction	X	X						X			X	X
F3SL 34	Geology and Geomorphology	X	X					X	X		X	X	X
D75X 34	Information Technology: Applications Software 1	X	X		X						X		X
HV9V 34	Rural Land Use	X	X	X		X	X					X	X
F2G8 34	Environmental Awareness	X	X	X		X	X	X		X		X	X
F2EE 34	Pollution and Waste Management: An Introduction	X	X	X			X	X	X	X		X	X
F4AK 34	Scottish Rural Development	X	X	X		X		X				X	X
H93A 34	Ecology and Ecosystems	X	X						X		X	X	X
F7J8 34	Economic Issues: An Introduction	X	X	X				X				X	X
F6D0 35	Environmental Management Systems	X	X	X		X	X	X	X	X		X	X
F55S 35	Waste Management and Pollution Control	X	X	X			X	X	X	X		X	X
F3X3 35	Data Collection and Handling Methods	X	X		X						X		X
F6CY 35	Resource Economics	X	X		X			X					X

Code	Unit title	General aims					Specific aims						
		1	2	3	4	5	6	7	8	9	10	11	12
F435 35	Freshwater Environments: Management and Protection	X	X	X		X	X		X	X	X	X	X
F5T6 35	Monitoring and Analytical Methods for Environmental Science	X	X		X		X		X	X	X	X	X
HV9X 35	Global Climate Systems	X	X	X			X	X	X			X	X
F21J 34	Chemistry and Physics for Life Sciences	X	X						X		X	X	X
H92X 34	Fundamental Chemistry: Theory and Laboratory Skills	X	X						X		X	X	X
HV9W 34	Environmental Chemistry: An Introduction	X	X	X			X		X		X	X	X
F3X2 34	Classification and Identification of Organisms	X	X								X	X	X
F21V 34	Soil Management	X	X	X			X		X			X	X
F1RJ 34	Business Management: An Introduction	X	X		X	X	X					X	X
F6BK 35	Rural Socio-Economic Development	X	X	X		X	X	X				X	X
DF82 34	Quality and Health and Safety Systems in Science Industries	X	X		X	X				X			X
F432 34	Countryside Recreation and Access	X	X	X			X					X	X
DF4E 34	Developing Skills for Personal Effectiveness	X	X		X						X		X
F502 34	Geographic Information Systems	X	X		X				X		X	X	X

Code	Unit title	General aims					Specific aims						
		1	2	3	4	5	6	7	8	9	10	11	12
F5T5 35	Environmental Science: An Introduction	X	X	X		X	X		X	X	X	X	X
F6JK 35	Noise and Radioactivity	X	X	X			X		X			X	X
F6CS 35	Reclamation of Degraded Land	X	X	X		X	X		X	X		X	X
F6BL 35	Energy and the Environment	X	X	X			X	X				X	X
F2EH 35	Transport Towards a Sustainable Future	X	X	X		X	X	X		X		X	X
F566 35	Tourism: Sustainability and Rural Communities	X	X	X		X		X			X	X	X
F3SM 35	Habitat Management	X	X			X	X		X		X	X	X
DP4X 35	Terrestrial Ecosystems	X	X						X		X	X	X
F434 35	Education for Sustainable Development: Principles and Practice	X	X	X	X	X	X	X			X	X	X
F3SS 35	Marine Environments: Management and Protection	X	X			X	X		X			X	X
F2G9 35	Farm Scale Renewable Energy	X	X			X						X	X
F433 35	Ecological Surveying	X	X		X				X		X	X	X

5.2 Mapping of National Occupational Standards (NOS) and/or trade body standards

Code	Unit title	National Occupational Standard															
		CS2	CS23	CS27	CS36	CS39	CS40	CS42	CS70	Em15	EnC1	EnC3	EnC4	EnC5	EnC8	EnC15	ENC33
F43034	Biodiversity Conservation						X			X							
F3SJ34	Biology: An Introduction													X			X
F3SL34	Geology and Geomorphology	X									X						
D75X34	Information Technology: Applications Software 1			X		X						X		X			
HV9V34	Rural Land Use				X	X	X	X	X		X	X				X	
F2G834	Environmental Awareness		X	X					X	X							
F2EE34	Pollution and Waste Management: An Introduction		X	X		X				X							
F4AK34	Scottish Rural Development						X	X	X		X					X	
H93A34	Ecology and Ecosystems	X			X	X						X	X		X		X
F7J834	Economic Issues: An Introduction																
F6D035	Environmental Management Systems		X	X			X			X							
F55S35	Waste Management and Pollution Control	X	X	X		X				X		X					
F3X335	Data Collection and Handling Methods					X	X	X				X		X			
F6CY	Resource Economics									X							

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Code	Unit title	National Occupational Standard															
		CS2	CS23	CS27	CS36	CS39	CS40	CS42	CS70	Em15	EnC1	EnC3	EnC4	EnC5	EnC8	EnC15	ENC33
F435 35	Freshwater Environments: Management and Protection	X	X		X	X	X	X		X	X	X	X		X	X	X
F5T6 35	Monitoring and Analytical Methods for Environmental Science	X		X			X	X				X	X	X			
HV9X 35	Global Climate Systems		X							X				X		X	
F21J 34	Chemistry and Physics for Life Sciences	X				X						X		X			
H92X 34	Fundamental Chemistry: Theory and Laboratory Skills	X				X						X		X			
HV9 W 34	Environmental Chemistry: An Introduction	X	X			X		X				X		X			
F3X2 34	Classification and Identification of Organisms	X			X	X					X	X	X		X		X
F21V 34	Soil Management		X		X	X		X				X					
F1RJ 34	Business Management: An Introduction			X				X	X								
F6BK 35	Rural Socio-Economic Development						X	X	X		X						
DF82 34	Quality and Health and Safety Systems in Science Industries	X						X		X							
F432 34	Countryside Recreation and Access		X			X	X	X	X		X	X	X				

Code	Unit title	National Occupational Standard															
		CS2	CS23	CS27	CS36	CS39	CS40	CS42	CS70	Em15	EnC1	EnC3	EnC4	EnC5	EnC8	EnC15	ENC33
DF4E34	Developing Skills for Personal Effectiveness	X					X							X			
F50234	Geographic Information Systems					X	X	X	X			X	X	X			
F5T535	Environmental Science: An Introduction		X														
F6JK35	Noise and Radioactivity		X														
F6CS35	Reclamation of Degraded Land	X				X				X		X					
F6BL35	Energy and the Environment		X							X							
F2EH35	Transport Towards a Sustainable Future		X						X	X							
F56635	Tourism: Sustainability and Rural Communities	X		X			X		X	X	X						
F3SM35	Habitat Management	X			X	X	X	X				X	X		X	X	X
DP4X35	Terrestrial Ecosystems		X		X							X	X		X	X	X
F43435	Education for Sustainable Development: Principles and Practice		X	X						X	X						X
F3SS35	Marine Environments: Management and Protection		X					X		X					X	X	X
F2G935	Farm Scale Renewable Energy								X	X							
F433	Ecological Surveying	X			X	X		X				X	X	X	X		X

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NOS unit key	
SSC code	Title
CS2	Monitor and maintain health, safety and security
CS23	Install site furniture
CS27	Consult to improve or protect the conservation or recreational value of land or marine sites
CS36	Carry out work to create or manage habitats
CS39	Conduct site assessments in the land-based and environmental sector
CS40	Evaluate options for the development of sites in the land-based and environmental sector
CS42	Manage sites in the land-based and environmental sector
CS70	Identify and assess rural land use
Em15	Develop an awareness of environmental good practice
EnC1	Promote responsible public use of outdoor sites
EnC3	Survey and report on the condition of the environment
EnC4	Conduct field surveys
EnC5	Analyse data from field surveys and report on findings
EnC8	Identify species
EnC15	Identify areas at risk of flooding
EnC33	Identify species

5.3 Mapping of Core Skills development opportunities across the qualification

Unit code	Unit title	Communication		Numeracy			ICT		Problem Solving			Working with Others	
		Written (Reading)	Written (Writing)	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
F43034	Biodiversity Conservation	X	X	X					X	X	X		
F3SJ34	Biology: An Introduction	X	X	X									
F3SL34	Geology and Geomorphology	X	X	X					X	X	X	X	
D75X34	Information Technology: Applications Software 1						SCQF level 6	SCQF level 6					
HV9V34	Rural Land Use	X	X	X			X	X	SCQF level 5	X			
F2G834	Environmental Awareness	X	X	X									
F2EE34	Pollution and Waste Management: An Introduction	X	X	X					X	X		X	
F4AK34	Scottish Rural Development	X	X	X					X	X		X	
H93A34	Ecology and Ecosystems						X	X	X	X	X	X	
F7J834	Economic Issues: An Introduction	X	X	X					X	X	X		
F6D035	Environmental Management Systems	X	X	X					X	X	X		
F55S35	Waste Management and Pollution Control	X	X	X					X	X	X		
F3X335	Data Collection and Handling Methods				X	X			X	X	X		

Unit code	Unit title	Communication		Numeracy			ICT		Problem Solving			Working with Others	
		Written (Reading)	Written (Writing)	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
F6CY35	Resource Economics	X	X	X					X	X	X		
F43535	Freshwater Environments: Management and Protection	X	X	X									
F5T635	Monitoring and Analytical Methods for Environmental Science	X	X	X	X	X			X	X	X		
HV9X35	Global Climate Systems								SCQF level 5				
F21J34	Chemistry and Physics for Life Sciences	X	X	X	X	X			X	X	X		
H92X34	Fundamental Chemistry: Theory and Laboratory Skills				SCQF level 6	X	X	X	X	X	X		
HV9W34	Environmental Chemistry: An Introduction								SCQF level 5				
F3X234	Classification and Identification of Organisms	X	X	X									
F21V34	Soil Management	X	X	X	X	X			X	X	X		
F1RJ34	Business Management: An Introduction	X	X	X	X	X			X	X	X		
F6BK35	Rural Socio-Economic Development	X	X	X								X	X
DF8234	Quality and Health and Safety Systems in Science Industries	X	X	X								X	X
F43234	Countryside Recreation and Access	X	X	X			X	X	X	X	X	X	

Unit code	Unit title	Communication		Numeracy			ICT		Problem Solving			Working with Others	
		Written (Reading)	Written (Writing)	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
DF4E 34	Developing Skills for Personal Effectiveness								SCQF level 6	SCQF level 6	SCQF level 6		
F502 34	Geographic Information Systems				X	X	X	X	X	X	X	X	X
F5T5 35	Environmental Science: An Introduction	X	X	X	X	X			X	X	X		
F6JK 35	Noise and Radioactivity	X	X	X	X	X			X	X	X		
F6CS 35	Reclamation of Degraded Land	X	X	X					X	X	X		
F6BL 35	Energy and the Environment	X	X	X	X	X							
F2EH 35	Transport Towards a Sustainable Future	X	X	X								X	X
F566 35	Tourism: Sustainability and Rural Communities	X	X	X			X	X					
F3SM 35	Habitat Management	X	X	X					X	X	X		
DP4X 35	Terrestrial Ecosystems	X	X	X								X	X
F434 35	Education for Sustainable Development: Principles and Practice	X	X	X								X	X
F3SS 35	Marine Environments: Management and Protection	X	X	X									
F2G9 35	Farm Scale Renewable Energy	X	X	X	X	X							
F433 35	Ecological Surveying	X	X	X					X	X	X		

5.4 Assessment strategy for the qualification

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Biodiversity Conservation	Case study				
Biology: An Introduction	Closed-book assessment		Extended response questions		
Geology and Geomorphology	Investigation				
Information Technology: Applications Software 1	Project case study				
Rural Land Use	Report	Restricted/extended response questions			
Environmental Awareness	Case study/questions		Report/personal action plan		
Pollution and Waste Management: An Introduction	Short/extended response questions	Case study	Short/extended response questions	Case study	
Scottish Rural Development	Restricted response questions	Closed-book assessment	Project based report		
Ecology and Ecosystems	Closed-book assessment	Report/presentation	Practical and report		
Economic Issues: An Introduction	Supervised extended response questions		Investigation		
Environmental Management Systems	Report				
Waste Management and Pollution Control	Report				
Data Collection and Handling Methods	Report				
Resource Economics	Case study presentation	Extended response questions	Essay/report		

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Freshwater Environments: Management and Protection	Case study				
Monitoring and Analytical Methods for Environmental Science	Closed-book short/extended response questions		Practical/log book	Report	
Global Climate Systems	Open-book short response	Open-book short response	Open-book short response		
Chemistry and Physics for Life Sciences	Closed-book assessment		Closed-book assessment and practical		
Fundamental Chemistry: Theory and Laboratory Skills	Closed-book assessment				Practical and report
Environmental Chemistry: An Introduction	Closed-book assessment	Practical			
Classification and Identification of Organisms	Portfolio				
Soil Management	Closed-book assessment	Case study			
Business Management: An Introduction	Case study — report				
Rural Socio-Economic Development	Case study				
Quality and Health and Safety Systems in Science Industries	Short/restricted response questions	Report	Report		
Countryside Recreation and Access	Restricted response questions	Practical	Case study		

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Developing Skills for Personal Effectiveness	Action plan	Case study	Action plan		
Geographic Information Systems	Data collection	Data analysis and presentation			
Environmental Science: An Introduction	Short answer questions		Extended response/ report	Extended response/ report	
Noise and Radioactivity	Closed-book assessment	Short reports	Closed-book assessment		
Reclamation of Degraded Land	Case study report				
Energy and the Environment	Restricted/extended response questions		Case study		
Transport Towards a Sustainable Future	Restricted/extended response questions		Report		
Tourism: Sustainability and Rural Communities	Closed-book restricted response questions	Case study			
Habitat Management	Restricted response questions	Project evaluation	Project proposal		
Terrestrial Ecosystems	Closed-book assessment		Practical		
Education for Sustainable Development: Principles and Practice	Report	Practical			
Marine Environments: Management and Protection	Restricted/extended response questions	Case study	Restricted/extended response questions		
Farm Scale Renewable Energy	Closed-book restricted/extended response questions		Report		
Ecological Surveying	Extended response questions		Practical and report		

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6 Guidance on approaches to delivery and assessment

This qualification provides learners with the appropriate knowledge, skills and experience for employment or further study in the environmental sector and is based on a sound foundation of theoretical knowledge, which is reflected in the applied nature of the units studied and the overall award. The qualification builds on the HNC Countryside and Environmental Management HNC framework, implemented as year one of this qualification resulting in learners having, and developing, a wide knowledge over a range of relevant issues. Such issues include land use strategies, environmental issues and impacts, sustainability and environmental resource management, relevant legislation, policy, risk and health and safety issues. These issues are explored both in a classroom context but also through the use of real-life case studies and frequent site visits. This range of knowledge builds a strong theoretical and applied foundation, and enables learners to take a flexible and holistic approach to issues.

The HND in Environmental Resource Management is designed to develop learner's knowledge and skills in relevant sciences and environmental sectors, along with the ability to apply these in sustainable management and use of environmental resources. Learners develop knowledge in a range of areas vital to environmental resource management, and learn how to monitor and manage the environment in a holistic and sustainable manner. The HND combines theoretical knowledge with practical and applied skills, which are mainly delivered through site visits, for example to nature reserves, environmental monitoring sites, and industrial sites. These site visits allow learners to see appropriate techniques and practices in action, and add to their knowledge and awareness of actual workplace situations and the industry overall. Upon completion of the HND learners should have understanding of human interactions with the environment, management of environmental resources, and skills in monitoring, evaluation and remediation.

6.1 Sequencing/integration of units

Delivery of this qualification would normally extend over two years of full-time study, but can be taken on a part-time basis over an extended period. It will be delivered by means of lectures, practical and laboratory classes, tutorials, and field or industrial visits. After a first year foundation covering a range of environmental science and resource management issues, learners will further develop knowledge and skills in the area of use of environmental resources, environmental issues, and impacts and management, focusing on the practical understanding and management or mitigation of such impacts. Throughout the qualification learners will have the opportunity to further develop awareness of environmental management issues and practices. Learners will have the opportunity to develop the Core Skills of *Communication, Numeracy, Information Technology, Problem Solving and Working with Others*. The inclusion of a broad range of options from across the environmental and management spectrum allows the development of abilities and interests leading to preferred progression or career paths. Assessments may take the form of open /closed-book tests (in class or e-assessment), practical assessments, assignments, reports, presentations and projects. The overall assessment strategy is to encourage a holistic approach to assessment which means that the assessment of some outcomes within units, or across some units, may be combined.

There are three graded units within the HND Award. Graded Unit 1 is undertaken in the first year of the HND. This will take the form of an investigation in which learners will apply the knowledge, understanding and practical skills that they have developed throughout the first year units. This graded unit is at SCQF level 7 and is worth 1 HN credit.

In the second year of the HND learners will undertake two graded units at SCQF level 8, each worth one HN credit. One will be a three hour examination, to assess and grade ability to retain and integrate knowledge and understanding. The other will be an investigation which will assess the learner's ability to apply knowledge, understanding and practical skills to research a particular topic.

6.2 Recognition of prior learning

SQA recognises that learners gain knowledge and skills acquired through formal, non-formal and informal learning contexts.

In some instances, a full group award may be achieved through the recognition of prior learning. However, it is unlikely that a learner would have the appropriate prior learning and experience to meet all the requirements of a full group award.

The recognition of prior learning may **not** be used as a method of assessing in the following types of units and assessments:

- ◆ HN Graded Units
- ◆ Course and/or external assessments
- ◆ Other integrative assessment units (which may or not be graded)
- ◆ Certain types of assessment instruments where the standard may be compromised by not using the same assessment method outlined in the unit
- ◆ Where there is an existing requirement for a licence to practice
- ◆ Where there are specific health and safety requirements
- ◆ Where there are regulatory, professional or other statutory requirements
- ◆ Where otherwise specified in an assessment strategy

More information and guidance on the *Recognition of Prior Learning* (RPL) may be found on our website www.sqa.org.uk.

The following sub-sections outline how existing SQA unit(s) may contribute to this group award. Additionally, they also outline how this group award may be recognised for professional and articulation purposes.

6.2.1 Articulation and/or progression

The HND Environmental Resource Management is designed to articulate primarily with Year 3 of the BSc Environmental Resource Management programme. This articulation route may enable entry to a much wider range of possible career pathways, such as:

- ◆ Research assistant
- ◆ Environmental officer
- ◆ Countryside manager
- ◆ Energy auditor
- ◆ Environmental recruitment advisor
- ◆ Local authority development officer
- ◆ Rural business planner/advisor
- ◆ Farm business assessor
- ◆ Environmental consultancy
- ◆ Further studies (MSc, PhD)

There are other progression routes to environmental and resource management qualifications at other Higher Education establishments which further broaden possible career pathways. Learners are advised to liaise directly with the HE establishments prior to each year's intake of learners as unit credits that count towards entry requirements can vary and applications will be considered on an individual basis.

6.2.2 Credit transfer

There is no transition framework for the HND Environmental Resource Management but learners can be given credit transfer for individual units. Credit transfer can be given where there is broad equivalence between the subject related content of the unit or combination of units. Learners who are given credit transfer between predecessor units and revised HN Units must still satisfy all other conditions of the HND in Environmental Resource Management.

6.3 Opportunities for e-assessment

E-assessment may be appropriate for some assessments within this HND but not for all of the programme. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software.

6.4 Support materials

A **list of existing ASPs** is available to view on SQA's website.

6.5 Resource requirements

In addition to the requirement for suitably experienced and qualified staff to deliver and assess the qualification centres will also require access to computer laboratories with GIS capability together with laboratory and relevant case-study field sites.

7 General information for centres

Equality and inclusion

The unit specifications making up this group award have been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners will be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

Internal and external verification

All assessments used within this/these qualification(s) should be internally verified, using the appropriate policy within the centre and the guidelines set by SQA.

External verification will be carried out by SQA to ensure that internal assessment is within the national guidelines for these qualifications.

Further information on internal and external verification can be found in *SQA's Guide to Assessment* (www.sqa.org.uk/GuideToAssessment).

8 Glossary of terms

Embedded Core Skills: is where the assessment evidence for the unit also includes full evidence for complete Core Skill or Core Skill components. A learner successfully completing the unit will be automatically certificated for the Core Skill. (This depends on the unit having been successfully audited and validated for Core Skills certification.)

Finish date: The end of a group award's lapsing period is known as the finish date. After the finish date, the group award will no longer be live and the following applies:

- ◆ learners may not be entered for the group award
- ◆ the group award will continue to exist only as an archive record on the Awards Processing System (APS)

Graded unit: Graded units assess learners' ability to integrate what they have learned while working towards the units of the group award. Their purpose is to add value to the group award, making it more than the sum of its parts, and to encourage learners to retain and adapt their skills and knowledge.

Lapsing date: When a group award is entered into its lapsing period, the following will apply:

- ◆ the group award will be deleted from the relevant catalogue
- ◆ the group award specification will remain until the qualification reaches its finish date at which point it will be removed from SQA's website and archived
- ◆ no new centres may be approved to offer the group award
- ◆ centres should only enter learners whom they expect to complete the group award during the defined lapsing period

SQA credit value: The credit value allocated to a unit gives an indication of the contribution the unit makes to an SQA group award. An SQA credit value of 1 given to an SQA unit represents approximately 40 hours of programmed learning, teaching and assessment.

SCQF: The Scottish Credit and Qualification Framework (SCQF) provides the national common framework for describing all relevant programmes of learning and qualifications in Scotland. SCQF terminology is used throughout this guide to refer to credits and levels. For further information on the SCQF visit the SCQF website at www.scqf.org.uk.

SCQF credit points: SCQF credit points provide a means of describing and comparing the amount of learning that is required to complete a qualification at a given level of the Framework. One National Unit credit is equivalent to 6 SCQF credit points. One National Unit credit at Advanced Higher and one Higher National Unit credit (irrespective of level) is equivalent to 8 SCQF credit points.

SCQF levels: The level a qualification is assigned within the framework is an indication of how hard it is to achieve. The SCQF covers 12 levels of learning. HNCs and HNDs are available at SCQF levels 7 and 8 respectively. Higher National Units will normally be at levels 6–9 and graded units will be at level 7 and 8. National Qualification Group Awards are available at SCQF levels 2–6 and will normally be made up of National Units which are available from SCQF levels 2–7.

Subject unit: Subject units contain vocational/subject content and are designed to test a specific set of knowledge and skills.

Signposted Core Skills: refers to opportunities to develop Core Skills arise in learning and teaching but are not automatically certificated.

History of changes

It is anticipated that changes will take place during the life of the qualification and this section will record these changes. This document is the latest version and incorporates the changes summarised below. Centres are advised to check SQA's APS Navigator to confirm they are using the up to date qualification structure.

NOTE: Where a unit is revised by another unit:

- ◆ No new centres may be approved to offer the unit which has been revised.
- ◆ Centres should only enter learners for the unit which has been revised where they are expected to complete the unit before its finish date.

Version Number	Description	Date
03	Revision of Unit: F7J8 34 Economics Issues: An Introduction (finished 31/07/2021) has been replaced by J462 34 Economics Issues: An Introduction (start date 01/08/2020)	26/04/20
02	Revision of Unit: F1RJ 34 Business Management: An Introduction (finish date 31/07/21) has been replaced by J1BV 34 Business Management: An Introduction (start date 01/08/18)	31/07/18

Acknowledgement

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of this qualification.

9 General information for learners

This section will help you decide whether this is the qualification for you by explaining what the qualification is about, what you should know or be able to do before you start, what you will need to do during the qualification and opportunities for further learning and employment.

The HND in Environmental Resource Management has been designed to provide you with an opportunity to develop the knowledge and skills required to work effectively in the environmental sector.

You will have the opportunity to study a range of vocationally relevant areas including:

- ◆ Biodiversity conservation
- ◆ Ecology and ecosystems
- ◆ Waste management and pollution control
- ◆ Data collection and handling methods
- ◆ Resource economics
- ◆ Global climate systems
- ◆ Geology and geomorphology
- ◆ Environmental awareness
- ◆ Rural land use

Depending on where you study and your particular interests there are also a range of more specialist units that will allow you to deepen and develop your knowledge and skills, for example:

- ◆ Environmental chemistry
- ◆ Soil management
- ◆ Classification and identification of organisms
- ◆ Geographic information systems
- ◆ Sustainable transport
- ◆ Reclamation of degraded land

The HND will be assessed by a wide range of methods, including practical work, reports, presentations, written or recorded responses and portfolio building. There may also be opportunities to undertake e-assessment.

In order to achieve the HND you will also need to complete two graded units (in addition to the graded unit you achieved for your HNC), that will allow you to demonstrate that you can integrate and apply the knowledge and skills you have developed throughout the HND. Graded Unit 2 will require you to undertake a project based investigation, including planning the investigation, undertaking it and evaluate it once complete. Graded Unit 3 is a closed-book exam, split in two 1.5 hour papers, including both short and extended response questions.

Upon completion of the HND you will be well equipped to seek employment within the environmental and wider land-based industries or to progress to further degree level study.