

Group Award Specification for:

National Certificate in Shipping and Maritime Operations at SCQF level 6

Group Award Code: GT0K 46

Level 3 Diploma in Maritime Studies: Shipping and Maritime Operations

Group Award Code: GT17 57

Level 3 Diploma in Maritime Studies: Shipping and Maritime Operations (Deck)

Group Award Code: GT16 57

Level 3 Diploma in Maritime Studies: Shipping and Maritime Operations (Engineering)

Group Award Code: GT18 57

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## 1 Introduction

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

For the safety of life at sea and the protection of the marine environment it is essential that employees working in the maritime sector have a level of competence that enables them to carry out their duties safely and effectively.

This qualification has been designed in order to support the training and promotion of careers in the maritime industry, providing an academic ramp for learners to progress onto Merchant Navy Training Board (MNTB) approved cadetships or higher education in a maritime related discipline. This group of qualifications have been designed to replace the existing qualifications used for this purpose. These new qualifications will also reflect the wider maritime industry through introducing optional units for ETOs and Port Operations which were not accommodated in the previous suite of qualifications.

The group award has been designed with four career paths in mind, depending on the optional units completed. These include preparing learners to progress onto careers in the following fields:

* Merchant Navy Deck officer through completing the HNC/D Nautical Science Group Award
* Merchant Navy Marine Engineering Officer through completing HNC/D Marine Engineering Group Award
* Merchant Navy Electro-technical Officer through completing HND Marine   
  Electro-technology Group Award
* Port Logistics operator

The two shortened level 3 diplomas have been designed in order to reduce the length of time required in college during a cadetship programme; while still completing the units which are essential in developing sea-faring skills and knowledge ahead of a sea-placement.

## 2 Qualifications structure

### 2.1 Structure (NC Shipping and Maritime Operations)

In order to prepare learners to meet the changing requirements of the modern maritime industry, a solid foundation of theory and practice is required, so that they can build new knowledge, understanding and skills. This NC will provide a foundation level of technical competencies and knowledge to facilitate progression onto a higher level of study appropriate for the maritime industry.

A total of 12 SQA credits = 72 SCQF credit points is required to achieve the overall National Certificate Award at SCQF 6. In order to achieve the group award, learners must successfully complete all six mandatory units; one essential optional 2-credit unit and a selection of four optional units to achieve the group award.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **4 code** | **2 code** | **Unit title** | **SQA credit** | **SCQF credit points** | **SCQF level** |
| **Mandatory units** | | | | | |
| F1K8 | 11 | Computing: Office and Personal Productivity Applications | 1 | 6 | 5 |
| F3GB | 12 | Communication | 1 | 6 | 6 |
| F7HB | 12 | Shipboard Operations: An Introduction | 1 | 6 | 6 |
| F7HH | 12 | Maritime Industry: An Introduction | 1 | 6 | 6 |
| J5D9 | 46 | Transverse Stability of Ships: An Introduction | 1 | 6 | 6 |
| J5DA | 46 | Naval Architecture: An Introduction | 1 | 6 | 6 |
| **Essential optional units (learners must complete one unit)** | | | | | |
| J5DK | 45 | Mathematics for the Maritime Industry — Engineering Officer | 2 | 12 | 5 |
| J5DJ | 45 | Mathematics for the Maritime Industry — Deck Officer | 2 | 12 | 5 |
| **Optional units (learners must complete four credits)** | | | | | |
| F7HD | 12 | Nautical Science: An Introduction | 1 | 6 | 6 |
| J5DC | 46 | Chartwork and Tides: An Introduction | 1 | 6 | 6 |
| J5DB | 46 | Bridge Operations: An Introduction | 2 | 12 | 6 |
| J5DH | 46 | Monitor the Loading and Unloading of Cargo from a Vessel within a Port Environment | 1 | 6 | 6 |
| J5DG | 46 | Safety and Security of a Vessel Whilst in a Port Environment: An Introduction | 1 | 6 | 6 |
| J5DF | 46 | Marine Electro-technology: An Introduction | 1 | 6 | 6 |
| J5DE | 46 | Marine Thermodynamics: An Introduction | 1 | 6 | 6 |
| J5DD | 46 | Marine Mechanics: An Introduction | 1 | 6 | 6 |
| F9K6 | 12 | Marine Engineering Practice: An Introduction | 1 | 6 | 6 |
| F5HL | 12 | Electrical Principles | 1 | 6 | 6 |
| F9K7 | 12 | Merchant Navy Officer Operation and Maintenance: Work Based Learning | 2 | 12 | 6 |
| F9K8 | 12 | Merchant Navy Officer Safety and Management: Work Based Learning | 2 | 12 | 6 |

### 2.2 Structure (Level 3 Extended Diploma Shipping and Maritime Operations)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SQA unit code** | | **Unit title** | **Regulator’s unit code** | **Level** | **Credit points** | **GLH** | **TQT** | |
| **Mandatory units** | | | | | | | |  | |
| J5HM | 54 | Computing: Office and Personal Productivity Applications | K/618/7926 | 2 | 6 | 40 | 63 | |
| J5HN | 57 | Communication | M/618/7927 | 3 | 6 | 40 | 63 | |
| J5HP | 57 | Shipboard Operations: An Introduction | L/618/7384 | 3 | 6 | 37 | 60 | |
| J5HR | 57 | Maritime Industry, and introduction | R/618/7399 | 3 | 6 | 37 | 63 | |
| J5HV | 57 | Transverse Stability of Ships: An Introduction | D/618/7387 | 3 | 6 | 37 | 60 | |
| J5HW | 57 | Naval Architecture: An introduction | K/618/7389 | 3 | 6 | 31 | 60 | |
| **Essential optional units (learners must complete one)** | | | | | | | |  | |
| J5HX | 54 | Mathematics for the Maritime Industry — Engineering Officer | R/618/7385 | 2 | 12 | 72 | 120 | |
| J5HY | 54 | Mathematics for the Maritime Industry — Deck Officer | Y/618/7386 | 2 | 12 | 72 | 120 | |
| **Optional units (learners must complete four credits)** | | | | | | | |  | |
| J5J0 | 57 | Nautical Science: An Introduction | R/618/7404 | 3 | 6 | 37 | 60 | |
| J5J1 | 57 | Chartwork and Tides: An Introduction | H/618/7391 | 3 | 6 | 37 | 60 | |
| J5J3 | 57 | Bridge Operations: An Introduction | D/618/7390 | 3 | 12 | 72 | 120 | |
| J5J4 | 57 | Monitor the Loading and Unloading of Cargo from a Vessel within a Port Environment | F/618/7396 | 3 | 6 | 37 | 60 | |
| J5J5 | 57 | Safety and Security of a Vessel Whilst in a Port Environment: An Introduction | J/618/7397 | 3 | 6 | 37 | 60 | |
| J5J6 | 57 | Marine Electro-technology: An Introduction | A/618/7395 | 3 | 6 | 37 | 60 | |
| J5J7 | 57 | Marine Thermodynamics: An Introduction | T/618/7394 | 3 | 6 | 37 | 60 | |
| J5J8 | 57 | Marine Mechanics: An Introduction | K/618/7392 | 3 | 6 | 37 | 60 | |
| J5J9 | 57 | Marine Engineering Practice: An Introduction | F/618/7401 | 3 | 6 | 37 | 60 | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **SQA unit code** | | **Unit title** | **Regulator’s unit code** | **Level** | **Credit points** | **GLH** | **TQT** |
| J5JA | 57 | Electrical Principles | Y/618/7405 | 3 | 6 | 36.5 | 60 |
| J5JB | 57 | Merchant Navy Officer Operation and Maintenance: Work Based Learning | J/618/7402 | 3 | 12 | 20 | 120 |
| J5JC | 57 | Merchant Navy Officer Safety and Management: Work Based Learning | L/618/7403 | 3 | 12 | 20 | 120 |

In order to prepare learners to meet the changing requirements of the modern maritime industry, a solid foundation of theory and practice is required, so that they can build new knowledge, understanding and skills. This level 3 extended diploma will provide a foundation level of technical competencies and knowledge to facilitate progression onto a higher level of study appropriate for the maritime industry.

In order to achieve the group award, learners must successfully complete all six mandatory units; one essential optional unit and a selection of four optional units to achieve the group award.

### 2.3 Structure (Level 3 Diploma in Shipping and Maritime Operations: Deck and Engineering)

In order to prepare learners to meet the changing requirements of the modern maritime industry, a solid foundation of theory and practice is required, so that they can build new knowledge, understanding and skills. This level 3 diploma will provide a foundation level of technical competencies and knowledge to facilitate progression onto a higher level of study appropriate for the maritime industry.

In order to achieve the group award, learners must successfully complete all four mandatory credits; and the credits required on the Deck, Engineer and ETO route.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SQA unit code** | | | | **Unit title** | **Regulator’s unit code** | **Level** | **Credit points** | **GLH** | **TQT** |
| **Mandatory units** | | | | | | | | | |
| J5HP | | 57 | | Shipboard Operations: An Introduction | L/618/7384 | 3 | 6 | 37 | 60 |
| J5HR | | 57 | | Maritime Industry: An Introduction | R/618/7399 | 3 | 6 | 37 | 63 |
| J5HV | | 57 | | Transverse Stability of Ships: An Introduction | D/618/7387 | 3 | 6 | 37 | 60 |
| J5HW | | 57 | | Naval Architecture: An introduction | K/618/7389 | 3 | 6 | 31 | 60 |
| **Deck specific units** | | | | | | | | | |
| J5HY | | 54 | | Mathematics for the Maritime Industry — Deck Officer | Y/618/7386 | 2 | 12 | 72 | 120 |
| J5J0 | | 57 | | Nautical Science: An Introduction | R/618/7404 | 3 | 6 | 37 | 60 |
| J5J1 | | 57 | | Chartwork and Tides: An Introduction | H/618/7391 | 3 | 6 | 36.5 | 59.5 |
| J5J3 | | 57 | | Bridge Operations: An Introduction | D/618/7390 | 3 | 12 | 72 | 120 |
| **Marine Engineering specific units** | | | | | | | | | |
| J5HX | | 54 | | Mathematics for the Maritime Industry — Engineering Officer | R/618/7385 | 2 | 12 | 72 | 120 |
| J5J6 | | 57 | | Marine Electro-technology: An Introduction | A/618/7395 | 3 | 6 | 37 | 60 |
| J5J8 | | 57 | | Marine Mechanics: An Introduction | K/618/7392 | 3 | 6 | 37 | 60 |
| J5J9 | | 57 | | Marine Engineering Practice: An Introduction | F/618/7401 | 3 | 6 | 37 | 60 |
| J5J7 | | 57 | | Marine Thermodynamics: An Introduction | T/618/7394 | 3 | 6 | 37 | 60 |
| **Marine Electro-technology specific units** | | | | | | | | | |
| J5HX | 54 | | Mathematics for the Maritime Industry — Engineering Officer | | R/618/7385 | 2 | 12 | 72 | 120 |
| J5J6 | 57 | | Marine Electro-technology: An Introduction | | A/618/7395 | 3 | 6 | 37 | 60 |
| J5JA | 57 | | Electrical Principles | | Y/618/7405 | 3 | 6 | 37 | 60 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **SQA unit code** | | **Unit title** | **Regulator’s unit code** | **Level** | **Credit points** | **GLH** | **TQT** |
| J5J9 | 57 | Marine Engineering Practice: An Introduction | F/618/7401 | 3 | 6 | 37 | 60 |
| J5J8 | 57 | Marine Mechanics: An Introduction | K/618/7392 | 3 | 6 | 37 | 60 |

## 3 Aims of the qualifications

The principal aims of the qualification are those identified by the MNTB and the marine industry as being a pre requisite for trainee programmes, which should be designed to maximise the achievement of learners and produce qualified and competent individuals at the end of the programme.

They will prepare the learners for the role they play in their first job in the marine industry and allow for a formal training structure to be built around the knowledge and skills developed in the group award. This programme will allow the learners an articulated progression to higher education in the maritime subject sector.

### 3.1 General aims of the qualifications

1 Develop the ability to complete tasks commonly encountered in the workplace.

2 Develop approaches to problem solving and critical thinking.

3 Develop a reflective approach to work and studies.

4 Develop the ability to plan and organise studies.

5 Develop skills for employability and progression to higher qualifications.

6 To enable the learner to consolidate knowledge and skills to enhance career progression.

7 To develop Core Skills required by employers.

8 To develop skills which are capable of being transferred to any employment.

9 Progression within the SCQF framework.

### 3.2 Specific aims of the qualifications

10 Meeting the identified needs of employers within the marine sector with reference to the shipping industry.

11 Providing new entrants to the Marine Industry with relevant understanding of safety aspects of life prior to going to sea.

12 Developing Core Skills in mathematics, communications and IT to allow trainees to progress smoothly to higher level awards such as HNC/HND programmes.

13 Developing an awareness of the importance of the marine sector to both the UK and world economy.

14 Developing knowledge about the various types of organisations within the wider marine sector and how these interact with each other.

15 Developing knowledge of the types of careers available within the marine sector and the different routes for progression available within the sector.

16 Developing an understanding of typical operations on board vessels across vessel departments.

17 Introducing a commonality in initial training for Merchant Navy Officers.

18 Introducing the purpose and design features of a variety of different vessels to enable trainees to be better prepared for their first sea phase.

19 Preparing deck and engine trainees for working on board ship by introducing them to the basic principles of marine navigation and engineering.

20 Progression to higher education in maritime related subjects.

## 4 Recommended entry to the qualifications

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 (QPM) 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:

* Completing of a SCQF level 5 pre-cadetship programme.
* At least four GCSE (grade 4 or above)/National 5 (grade C or above) qualifications to include:
* Mathematics
* English
* Physics/Engineering Science
* One other subject

Where non-UK qualifications are used to measure suitable entry level, then the learner would have equivalent qualifications to the above, including English language as necessary.

In all cases, the learner will be informed that for progression into a career in the Merchant Navy a level of physical health and fitness is required. This will be assessed via the MCA Medical Standard as detailed within Merchant Guidance Notice (MGN) 264.

### 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 | 5 | Produce and respond to oral communication.   * convey all essential information, opinions, or ideas with supporting detail accurately and coherently * show skill in sequencing and linking information, opinions, and/or ideas * use vocabulary and a range of spoken language structures appropriate to purpose and audience * take account of situation and audience during delivery * respond to others, listening and taking account of their contributions   Read, understand, and evaluate written communication.   * identify significant information, ideas, and supporting details in a written communication of non-fiction * evaluate the effectiveness of the communication in meeting its purpose   Produce well-structured written communication.   * present all essential ideas/information and supporting detail in a logical and effective order * use a structure which takes account of purpose and audience, and emphasises the main points * use conventions which are appropriate to target audience and effective in achieving the purpose * use spelling, punctuation, and sentence structure which are consistently accurate * vary sentence structure, paragraphing, and vocabulary to suit the purpose and target audience |

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| **Core Skill** | **Recommended SCQF entry profile** | **Associated assessment activities** |

|  |  |  |
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| Numeracy | 5 | Interpret and communicate graphical information in everyday situations.   * interpret information from a table, graph, chart, or diagram * use an appropriate form of table, graph, chart, or diagram, to communicate information   Apply a range of numerical skills in various everyday situations.   * work confidently to solve a numerical problem * decide on the types of numerical calculations to be carried out * decide on steps to be carried out and in what order to solve problems or situations, where the required processes are not obvious |
| Information and Communication Technology (ICT) | 5 | Use ICT independently, effectively, and responsibly to access information within a range of tasks.   * Make effective, independent, and responsible use of ICT * Carry out searches for information using a range of digital sources * Evaluate results of a search strategy   Use ICT independently, effectively, and responsibly to carry out a range of processing tasks.   * make effective, independent, and responsible use of ICT * carry out a range of processing tasks using ICT * locate and integrate data from a range of sources * evaluate information |

|  |  |  |
| --- | --- | --- |
| **Core Skill** | **Recommended SCQF entry profile** | **Associated assessment activities** |

|  |  |  |
| --- | --- | --- |
| Problem Solving | 5 | Analyse a situation or issue.   * identify the factors involved in the situation or issue * assess the relevance of these factors to the situation or issue * develop an approach to deal with the situation or issue   Plan, organise, and complete a task.   * develop a plan * identify and ensure you have the resources to carry out the plan * carry out the task   Review and evaluate a problem solving activity.   * evaluate the effectiveness of all stages of the problem solving strategy and assess or explain the relevance of the evidence * draw conclusions and justify them with reference to the evidence |
| Working with Others | 5 | In interactions, work with others co-operatively on an activity and/or activities.   * identify own role and the roles which make up the activity and/or activities and the relationships between them * organise own role to contribute effectively to the activity and/or activities, adapting role as necessary * proactively seek support and advice from others * proactively provide support and advice to others to complete the activity and/or activities   Review work with others in a co-operative activity and/or activities.   * evaluate overall co-operative working, considering own involvement and the involvement of others, referring to supporting evidence * draw conclusions and justify them with reference to supporting evidence * identify own learning and objectives for future co-operative working |

## 5 Additional benefits of the qualification in meeting employer needs

The qualification has been designed to provide the relevant mix of competencies to enable career progression within the marine industry; whilst at the same time providing an articulation route to HNC/HND courses currently used in training programmes for Merchant Navy Officers.

The award forms part of a scheme of training approved for professional certification by the Merchant Navy Training Board. Professional recognition and relationship between the NC Shipping and Maritime Operations and existing SQA awards will facilitate access to Merchant Navy Officer training programmes and the wider maritime industry.

* By following the Deck options route, learners will be able to progress onto the HNC/D Nautical Science Group Award.
* By following the Engineering options route, learners will be able to progress onto the HNC/D Marine Engineering Group Award; or Mechanical Engineering Group Award.
* By following the ETO options route, learners will be able to progress onto the HND Marine Electro-technology Group Award or HNC/D Electrical Engineering Group Award.
* By following the Ports options route, learners will be able to progress onto the port logistics SVQ qualification suite.

### 5.1 Mapping of qualification aims to units

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Code** | **Unit title** | **Aims** | | | | | | | | | | | | | | | | | | | |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** |
| **Mandatory units** | | | | | | | | | | | | | | | | | | | | | |
| F1K8 11 | Computing: Office and Personal Productivity Applications | X | X | X | X | X | X | X | X | X | X |  | X |  |  |  |  | X |  |  |  |
| F3GB 12 | Communication | X | X | X | X | X | X | X | X | X | X |  | X |  |  |  |  | X |  |  |  |
| F7HB 12 | Shipboard Operations: An Introduction | X | X | X | X | X | X | X | X | X | X | X |  |  | X | X | X | X | X |  |  |
| F7HH 12 | Maritime Industry, and introduction | X | X | X | X | X | X | X | X | X | X | X |  | X | X | X | X | X | X |  |  |
| J5D9 46 | Transverse Stability of Ships: An Introduction | X | X | X | X | X | X | X | X | X | X |  |  |  |  |  |  | X |  |  | X |
| J5DA 46 | Naval Architecture: An introduction | X | X | X | X | X | X | X | X | X |  |  |  |  | X | X |  | X |  |  | X |
| **Essential optional units** | | | | | | | | | | | | | | | | | | | | | |
| J5DK 45 | Mathematics for the Maritime Industry — Engineering Officer | X | X | X | X | X | X | X | X | X | X |  | X |  |  |  |  | X |  |  | X |
| J5DJ 45 | Mathematics for the Maritime Industry — Deck Officer | X | X | X | X | X | X | X | X | X | X |  | X |  |  |  |  | X |  |  | X |
| **Optional units** | | | | | | | | | | | | | | | | | | | | | |
| F7HD 12 | Nautical Science: An Introduction | X | X | X | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  | X | X |
| J5DC 46 | Chartwork and Tides: An Introduction | X | X | X | X | X | X | X | X | X | X |  |  |  |  | X |  |  |  | X |  |
| J5DB 46 | Bridge Operations: An Introduction | X | X | X | X | X | X | X | X | X | X | X |  |  | X | X | X |  |  | X |  |
| J5DH 46 | Monitor the Loading and Unloading of Cargo from a Vessel Within a Port Environment | X | X | X | X | X | X | X | X | X | X |  |  | X |  | X |  |  | X |  |  |
| J5DG 46 | Safety and Security of a Vessel Whilst in a Port Environment: An Introduction | X | X | X | X | X | X | X | X | X | X | X |  | X | X | X | X |  |  |  |  |
| J5DF 46 | Marine Electro-technology: An Introduction | X | X | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  | X | X |
| J5DE 46 | Marine Thermodynamics: An Introduction | X | X | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  | X | X |
| J5DD 46 | Marine Mechanics: An Introduction | X | X | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  | X | X |
| F9K6 12 | Marine Engineering Practice: An Introduction | X | X | X | X | X | X | X | X | X | X | X |  |  | X | X | X |  |  | X |  |

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| **Code** | **Unit title** | **Aims** | | | | | | | | | | | | | | | | | | | |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** |
| F5HL 12 | Electrical Principles | X | X | X | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  | X | X |
| F9K7 12 | Merchant Navy Officer Operation and Maintenance: Work Based Learning | X | X | X | X | X | X | X | X | X | X | X |  |  | X | X | X | X |  | X |  |
| F9K8 12 | Merchant Navy Officer Safety and Management: Work Based Learning | X | X | X | X | X | X | X | X | X | X | X |  |  | X | X | X | X |  | X |  |

### 5.2 Mapping of Core Skills development opportunities across the qualifications

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| **Mandatory units** | | | | | | | | | | | | | |
| F1K8 11 | Computing: Office and Personal Productivity Applications |  |  |  |  |  | E | E |  |  |  |  |  |
| F3GB 12 | Communication | E | E | E |  |  |  |  |  |  |  |  |  |
| F7HB 12 | Shipboard Operations: An Introduction | S | S | S |  |  |  |  |  |  |  | S | S |
| F7HH 12 | Maritime Industry, and introduction | S | S | S |  |  |  |  |  |  |  | S | S |
| J5D9 46 | Transverse Stability of Ships: An Introduction |  |  |  | E | E |  |  | E | E | E |  |  |
| J5DA 46 | Naval Architecture: An introduction | E | E |  |  |  | S | S |  | S | S | S | S |
| **Essential optional units** | | | | | | | | | | | | | |
| J5DK 45 | Mathematics for the Maritime Industry — Engineering OfficerS |  |  |  | E | E |  |  | E | E | E |  |  |
| J5DJ 45 | Mathematics for the Maritime Industry — Deck Officer |  |  |  | E | E |  |  | E | E | E |  |  |
| **Optional units** | | | | | | | | | | | | | |
| F7HD 12 | Nautical Science: An Introduction |  |  |  | E | E | S | S | E | E | E |  |  |
| J5DC 46 | Chartwork and Tides: An Introduction |  |  |  | E | E | S | S | E | E | E |  |  |
| J5DB 46 | Bridge Operations: An Introduction | E | E | E |  |  |  |  |  |  |  | S | S |

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| **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** |
| J5DH 46 | Monitor the Loading and Unloading of Cargo from a Vessel within a Port Environment | S | S | S |  |  | S | S |  |  |  | S | S |
| J5DG 46 | Safety and Security of a Vessel in a Port Environment: An Introduction | S | S | S |  |  | S | S |  |  |  | S | S |
| J5DF 46 | Marine Electro-technology: An Introduction |  |  |  | E | E |  |  | E | E | E |  |  |
| J5DE 46 | Marine Thermodynamics: An Introduction |  |  |  | E | E |  |  | E | E | E |  |  |
| J5DD 46 | Marine Mechanics: An Introduction |  |  |  | E | E |  |  | E | E | E |  |  |
| F9K6 12 | Marine Engineering Practice: An Introduction | E | E | E |  |  | S | S |  |  |  | S | S |
| F5HL 12 | Electrical Principles |  |  |  | E | E |  |  | E | E | E |  |  |
| F9K7 12 | Merchant Navy Officer Operation and Maintenance: Work Based Learning | E | E | E |  |  | S | S |  |  |  | E | E |
| F9K8 12 | Merchant Navy Officer Safety and Management: Work Based Learning | E | E | E |  |  | S | S |  |  |  | E | E |

**E — Embedded**

**S — Signposted**

### 5.3 Assessment strategy for the qualifications

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| **Unit** | **Assessment** | | | | | |
| **Outcome 1** | **Outcome 2** | **Outcome 3** | **Outcome 4** | **Outcome 5** | **Outcome 6** |
| **Mandatory units** | | | | | | |
| Computing: Office and Personal Productivity Applications | It may be appropriate for some of the evidence for this unit to be produced using e-assessment provided the national standard is applied and the conditions of assessment are consistent for all learners. This may take the form of  e-testing (for knowledge and understanding) and/or  e-portfolios (for practical abilities). | | |  |  |  |
| Shipboard Operations: An Introduction | Written and/or recorded oral evidence is required to demonstrate that the learner has achieved this unit to the standard specified in the outcomes and performance criteria. The evidence for this unit should be obtained under controlled, supervised conditions. | | | |  |  |
| Maritime Industry, and introduction | Outcomes 1, 2, 3 and 4 may be assessed on an individual basis or as a combination of outcomes (eg Outcomes 1 and 2 assessed together and Outcomes 3 and 4 together), or as a single, holistic assessment covering all five outcomes. The total time for assessment(s) of the five outcomes must not exceed three hours. Assessment(s) may be conducted under supervised, closed-book conditions in which learners may use reference materials provided by the centre but are not allowed to bring their own notes, handouts, textbooks or other materials into the assessment. Alternatively a project based approach may be suitable for Outcomes 1 and 2. | | | |  |  |
| Transverse Stability of Ships: An Introduction | Outcomes 1, 2, 3 and 4 may be assessed on an individual basis, as a combination of outcomes, or as a single, holistic assessment covering all four outcomes. | | | |  |  |

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| **Unit** | **Assessment** | | | | | |
| **Outcome 1** | **Outcome 2** | **Outcome 3** | **Outcome 4** | **Outcome 5** | **Outcome 6** |
| Naval Architecture: An introduction | Assessment for both outcomes of this unit can be combined into one assessment paper for the wholistic exams. This paper could be taken by learners at one single assessment event that should last two hours.  Alternatively, a project-based or  open-book exam can be conducted as laid out in the evidence requirement for this unit. | |  |  |  |  |
| **Essential optional units** | | | | | | |
| Mathematics for the Maritime Industry — Engineering Officer | Evidence can be generated using different types of assessment. A recommended approach is the use of an examination question paper under closed-book conditions, but where an appropriate formula sheet is provided. The question paper could be composed of an appropriate balance of short answer, restricted response and structured questions. | | | | | |
| Mathematics for the Maritime Industry — Deck Officer | Evidence can be generated using different types of assessment. A recommended approach is the use of an examination question paper under closed-book conditions, but where an appropriate formula sheet is provided. The question paper could be composed of an appropriate balance of short answer, restricted response and structured questions. | | | | | |
| **Optional units** | | | | | | |
| Nautical Science: An Introduction | All outcomes may be assessed on an individual basis at appropriate points throughout the delivery of the unit, or as a combination of outcomes (eg Outcome 1 assessed on its own and Outcomes 2 and 3 together), or as a single, holistic assessment covering all five outcomes. Assessment(s) must be conducted under supervised, closed-book conditions in which learners may use reference materials provided by the centre but are not allowed to bring their own notes, handouts, textbooks or other materials into the assessment. Learners should be allowed to use a non-programmable scientific calculator during assessment. | | | | |  |
| Chartwork and Tides: An Introduction | This unit may be assessed as individual components: Outcomes 2 and 3 may be assessed by means of a recorded oral examination provided that Outcomes 1, 4 and 5 have written evidence demonstrating learner knowledge. | | | | |  |

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| **Unit** | **Assessment** | | | | | |
| **Outcome 1** | **Outcome 2** | **Outcome 3** | **Outcome 4** | **Outcome 5** | **Outcome 6** |
| Bridge Operations: An Introduction | Outcomes 1 and 2 will be assessed by completion of practical time constrained chartwork exercises.  Outcomes 3, 4 and 5 will be assessed by short answer test. Outcome 3 and 4 will be assessed using a sample of flash cards depicting vessel lights, shapes and navigational buoys.  With regard to Outcome 5, learners will be expected to draw an idealised wind pressure system of the world and demonstrate correctly the areas of high and low pressure and associated wind direction; name correctly five Beaufort scale wind speeds and identify four major cloud types, from a random sample. | | | | |  |
| Monitor the Loading and Unloading of cargo from a Vessel Within a Port Environment | The unit could be assessed holistically, with the case study written so that the leaner would be considering a realistic maritime environment with possibly, certain weather conditions, vessel types and various cargo forming the content of the case study. The leaner’s final submissions can be authenticated using oral questioning of the leaner’s ideas or their written responses given as part of a written assessment. | | |  |  |  |
| Safety and Security of a Vessel Whilst in a Port Environment: An Introduction | The unit evidence can be generated by the learner either orally or in writing and could be completed in one single assessment. Where the evidence is generated as a written report by the leaner, the word count should not exceed 1,500 words or when done orally not more than a 10-minute presentation. | | |  |  |  |

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| **Unit** | **Assessment** | | | | | |
| **Outcome 1** | **Outcome 2** | **Outcome 3** | **Outcome 4** | **Outcome 5** | **Outcome 6** |
| Marine  Electro-technology: An Introduction | In any assessment of this unit, Outcomes 1, 2 and 3 must be assessed as a combination of outcomes as a single, holistic assessment covering all three outcomes. This assessment must sample three of any five performance criteria from Outcome 1, two of any four performance criteria from Outcome 2 and two of any three performance criteria from Outcome 3. When reassessment takes place, an alternative sample should be used. All items listed under the performance criteria should be available for assessment. | | |  |  |  |
| Marine Thermodynamics: An Introduction | Outcomes 1–3 should be combined using holistic assessment that could last two hours.  The assessment will be conducted under closed-book conditions. A formula sheet will be provided and steam tables will be provided. | | |  |  |  |
| Marine Mechanics: An Introduction | The assessment for all three outcomes of this unit should be combined into one assessment paper. This paper could be taken by learners at one single assessment event that should last 2 hours. Assessment should be conducted under controlled closed-book conditions with a formula sheet provided. Learners are permitted to use a scientific calculator but not a programmable calculator. Where sampling is used an alternative sample should be used when reassessing learners. | | |  |  |  |
| Marine Engineering Practice: An Introduction | Outcomes 1, 2, 3 and 4 may be assessed on an individual basis, as a combination of outcomes (eg Outcomes 1 and 2 assessed together and Outcomes 3 and 4 together), or as a single, holistic assessment covering all four outcomes. The total time for assessment(s) of the four outcomes must not exceed two hours. Assessment(s) must be conducted under supervised, closed-book conditions in which learners may use reference materials  provided by the centre but are not allowed to bring their own notes, handouts, textbooks or other materials into the assessment. | | | |  |  |

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| --- | --- | --- | --- | --- | --- | --- |
| **Unit** | **Assessment** | | | | | |
| **Outcome 1** | **Outcome 2** | **Outcome 3** | **Outcome 4** | **Outcome 5** | **Outcome 6** |
| Electrical Principles | Outcomes may be assessed on an individual basis or as combinations of Outcomes (eg Outcomes 1 and 2 together and Outcomes 3 and 4 together). Regardless of which approach is taken total assessment time for Outcomes 1, 2, 3 and 4 should not exceed two hours. | | | |  |  |
| Merchant Navy Officer Operation and Maintenance: Work Based Learning | Learners should participate in two maintenance activities, one of which should involve electrical plant. Learners should be able to identify the need for maintenance, prepare a work sequence for the maintenance and then describe the legislation that will impact on the work completed. | | | Learners will have an opportunity to participate in the preparing and operation of a marine plant. In the operation of a marine plant learners will have the opportunity to work with the main propulsion system. Learners will be able to examine the safe operation of equipment and complete the steps for safe start-up and shut down of the plant. The operating requirements and instructions of the plant will be assessed and monitored during its use. | | |
| Merchant Navy Officer Safety and Management: Work Based Learning | Learners should participate in two different emergency/security exercises onboard ship and describe the purpose and process, their role and others’ role in the exercises. This outcome will allow learners the opportunity to examine the competences required to identify and deal with emergencies/security exercise and demonstrate how to take initial action, follow the required emergency/security procedure and comply with the ship muster requirements. | | | Learners will have an opportunity to examine the operational management of the engineering section of a ship and identify the job roles within it. The learners will have an opportunity to examine safe work practices and work to the agreed safety and environmental standards onboard ship.  Learners could negotiate independently with their Onboard Training Officer a suitable programme of activities which will enable him or her to practise the required skills and also to plan and organise it. | | |

## 6 Guidance on approaches to delivery and assessment

Throughout the design and development of the NC Shipping and Maritime Operations award; emphasis was placed on producing a coherent award; that allows learners to develop appropriate technical and practical skills, to meet the requirements of employers within the marine industry.

The award provides a solid foundation of theory and practice upon which learners can build new knowledge, understanding and skills. Transferable skills and Core Skills have been built into the award to allow easy progression onto HNC and HND awards that deliver the required underpinning knowledge required for professional certification.

An appropriate assessment strategy is in place for the NC Shipping and Maritime Operations. The assessment strategy is outlined below:

**Aims**

To ensure that:

* A consistent, rigorous and efficient approach to assessment is used.
* Assessment instruments units satisfy agreed standards.
* The assessment load on learners and staff; is reasonable and does not unduly detract from teaching and learning elements.
* Reliable and rigorous verification processes are put in place in order to ensure that standards are achieved.

**Objectives**

Adopt a holistic approach to assessment. The implications of this are:

* Assessment instruments will be designed to sample knowledge and skills in each unit.
* A unit assessment strategy will be adopted, where possible, to produce a single assessment instrument for the whole unit. Where this is not possible the minimum number of assessment instruments should be used.
* While not seeking to be entirely prescriptive with regards to time spent on assessment, over assessment should be avoided.
* Ensure that consistent and rigorous internal and external verification procedures operate throughout.

**Holistic assessment**

The learning outcomes of each unit can be combined together into one, holistic assessment, if possible. Learners are permitted to use scientific calculators and also data books/formula sheets developed by the centre during examinations.

In cases where a single error at one stage of an extended calculation sequence has a cumulative effect on the final answer, provided that working/formulae are correct, acknowledgement of the correct working should be given.

**Formative assessment**

Formative assessment should be used throughout unit delivery to reinforce learning, build learner’s confidence and prepare them for summative assessment.

**Re-assessment**

The way in which centres re-assess learners is integral to the way they manage the award assessment process as a whole. Re-assessment should be subject to same rigorous internal verification as the primary assessment process.

Due to the sampling nature of assessment for the group award, all learners should be reassessed utilising a substantially different and alternative assessment. This will be undertaken by the re-assessment of the unit that has not yet achieved the pass grade, and should be based on a substantially different assessment paper.

Re-assessment should be operated in accordance with a centre’s assessment policy and the professional judgement of the assessor. The award will utilise current SQA advice that there should normally be at least one re-assessment opportunity available to all learners.

The design of original assessments should inform the re-assessment process to a large extent as the original determines the type of assessment instruments used and the purpose of the assessment. It is normal practice for centres to build up a bank of assessments which can be used for re-assessment purposes.

Assessment writers should always refer to the unit specification when developing an alternative assessment to ensure that it is of equal demand to the original and that it covers the relevant criteria.

**Alternative assessment**

It is possible for centres to design alternative assessment methodologies to make use of technology such as simulators. This is to be encouraged by centres and will be supported through the SQA guide to assessment. Where alternative assessment is proposed; the sampling nature described in the unit specification will also require to be reviewed as part of the assessment design to ensure the sufficiency of the evidence generated meets the aims and principles of the unit and overall qualification.

### 6.1 Sequencing/integration of units

Within the NC Group Award and the extended diploma, there are 4 identified progression routes. It is recommended that learners who wish to pursue a particular career route should complete the appropriate optional units as listed below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit title** | **Progression route** | | | |
| **Deck** | **Engine** | **ETO** | **Ports** |
| Mathematics for the Maritime Industry — Engineering Officer |  | X | X |  |
| Mathematics for the Maritime Industry — Deck Officer | X |  |  | X |
| Nautical Science: An Introduction | X |  |  |  |
| Chartwork and Tides: An Introduction | X |  |  |  |
| Bridge Operations: An Introduction | X |  |  | X |
| Monitor the Loading and Unloading of Cargo from a Vessel Within a Port Environment |  |  |  | X |
| Safety and Security of a Vessel Whilst in a Port Environment: An Introduction |  |  |  | X |
| Marine Electro-technology: An Introduction |  | X | X |  |
| Marine Thermodynamics: An Introduction |  | X | X |  |
| Marine Mechanics: An Introduction |  | X | X |  |
| Marine Engineering Practice: An Introduction |  | X | X |  |
| Electrical Principles |  | X | X |  |
| Merchant Navy Officer Operation and Maintenance: Work Based Learning | X | X | X |  |
| Merchant Navy Officer Safety and Management: Work Based Learning | X | X | X |  |

While the above is recommended, centres have the flexibility to use the options in the best way they see fit to benefit their learners and stakeholders within the group award framework.

A suggestion for pattern of delivery is given below, based on a three block system of study.

1 — Complete in block 1

2 — Complete in block 2

3 — Complete in block 3

Sea — Complete during sea phase.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit title** | **Progression route** | | | |
| **Deck** | **Engine** | **ETO** | **Ports** |
| Computing: Office and Personal Productivity Applications | 1 | 1 | 1 | 1 |
| Communication | 1 | 1 | 1 | 1 |
| Shipboard Operations: An Introduction | 2 | 2 | 2 | 2 |
| Maritime Industry, and introduction | 1 | 1 | 1 | 1 |
| Transverse Stability of Ships: An Introduction | 3 | 3 | 3 | 3 |
| Naval Architecture: An introduction | 2 | 2 | 2 | 2 |
| Mathematics for the Maritime Industry — Engineering Officer |  | 1 and 2 | 1 and 2 |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit title** | **Progression route** | | | |
| **Deck** | **Engine** | **ETO** | **Ports** |
| Mathematics for the Maritime Industry — Deck Officer | 1 and 2 |  |  | 1 and 2 |
| Nautical Science: An Introduction | 3 |  |  |  |
| Chartwork and Tides: An Introduction | 3 |  |  |  |
| Bridge Operations: An Introduction | 2 and 3 |  |  | 2 and 3 |
| Monitor the loading and Unloading of Cargo from a Vessel Within a Port Environment |  |  |  | 3 |
| Safety and Security of a Vessel Whilst in a Port Environment: An Introduction |  |  |  | 3 |
| Marine Electro-technology: An Introduction |  | 3 | 3 |  |
| Marine Thermodynamics: An Introduction |  | 3 | 3 |  |
| Marine Mechanics: An Introduction |  | 3 | 3 |  |
| Marine Engineering Practice: An Introduction |  | 3 | 3 |  |
| Electrical Principles |  | 2 | 2 |  |
| Merchant Navy Officer Operation and Maintenance: Work Based Learning | Sea | Sea | Sea |  |
| Merchant Navy Officer Safety and Management: Work Based Learning | Sea | Sea | Sea |  |

### 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**](http://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

**Progression to HNC/D Nautical Science**

In order to progress onto the HNC/D Nautical Science Group Award; it is advisable that learners complete the following optional modules:

* Mathematics for the Maritime Industry — Deck Officers.
* Nautical Science: An Introduction
* Chartwork and Tides: An Introduction
* Bridge Operations: An Introduction

Learners would also benefit from completing the following units during their sea phase:

* Merchant Navy Officer Operation and Maintenance: Work Based Learning
* Merchant Navy Officer Safety and Management: Work Based Learning

**Progression to HNC/D Marine Engineering**

In order to progress onto the HNC/D Marine Engineering Group Award; it is advisable that learners complete the following optional modules:

* Mathematics for the Maritime Industry — Engineering Officers.
* Marine Electro-technology: An Introduction
* Marine Thermodynamics: An Introduction
* Marine Mechanics: An Introduction
* Marine Engineering Practice: An Introduction
* Electrical Principles

Learners would also benefit from completing the following units during their sea phase:

* Merchant Navy Officer Operation and Maintenance: Work Based Learning
* Merchant Navy Officer Safety and Management: Work Based Learning

**Progression to HND Marine Electro-technology**

In order to progress onto the HNC/D Marine Electro-technology Group Award; it is advisable that learners complete the following optional modules:

* Mathematics for the Maritime Industry — Engineering Officers.
* Marine Electro-technology: An Introduction
* Marine Thermodynamics: An Introduction
* Marine Mechanics: An Introduction
* Marine Engineering Practice: An Introduction
* Electrical Principles

Learners would also benefit from completing the following units during their sea phase:

* Merchant Navy Officer Operation and Maintenance: Work Based Learning
* Merchant Navy Officer Safety and Management: Work Based Learning

#### 6.2.3 Transitional arrangements

* alternative routes
* transition framework

An alternative route is when the group award code is the same as that for the ‘normal’ route. Old units are mapped for credit transfer against revised units. Learners who have achieved the old units are entered for the revised units, to which they map, together with the remaining units and the HND Graded units required to achieve the revised HND Group Award. Alternative routes give alternative recognition for Graded Unit 1. However, alternative routes are not always clear and stay on APS permanently.

Transition frameworks are separate frameworks from the ‘normal’ framework and have a different group award code. Old units are mapped for credit transfer against revised units and both appear on the framework. This means that learners who hold existing units, which have been mapped for credit transfer, do not have to be entered for the corresponding revised unit. They will be entered for the remaining units and graded units required to achieve the revised HND.

The NC Shipping and Maritime Operations legacy qualification (G9GW 46) will finish on 31 July 2024 to accommodate part-time and distance learning students as well as for   
re-assessment.

However, centres may use credit mapping arrangements in Section 6.2.4 to transfer legacy learners onto the revised framework.

#### 6.2.4 Credit transfer

All decisions relating to credit transfer remain with centres, however the table below provides details and guidance on credit transfer arrangements agreed by the Qualification Development Team. Units that have not been included in this table do not attract full or partial credit transfer.

Centres must retain proof of all credit transfer arrangements (normally a photocopy of the learner’s Scottish Qualification Certificate) for the purposes of internal and external verification.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **New unit code** | **New unit title** | **Old unit code** | **Old unit title** | **Credit transfer** | **Comments** |
| J5DA 46 | Naval Architecture: An introduction | F7HC 12 | Ship Construction and Stability: An Introduction | Partial |  |
| J5D9 46 | Transverse Stability of Ships: An Introduction | F7HC 12 | Ship Construction and Stability: An Introduction | Partial |  |
| J5DB 46 | Bridge Operations: An Introduction | F7HK 12 | Bridge Watchkeeping: An Introduction | Partial |  |
| J5DE 46 | Marine Thermodynamics: An Introduction | F7HG 12 | Marine Heat Engines | Full |  |
| J5DD 46 | Marine Mechanics: An Introduction | F5K9 12 | Strength of Materials | Partial |  |
| J5DD 46 | Marine Mechanics: An Introduction | F5K8 12 | Statics | Partial |  |
| J5DD 46 | Marine Mechanics: An Introduction | F5K7 12 | Engineering Dynamics | Partial |  |

### 6.3 Opportunities for e-assessment

All units for this group award can be adapted in order to support e-assessment through the SQA prior-verification service.

### 6.4 Support materials

A [**list of existing Assessment Support Packs (ASPs)**](http://www.sqa.org.uk/sqa/46233.2769.html) is available to view on SQA’s website.

### 6.5 Resource requirements

In certain units such as chartwork and tides; access to charts and plotting equipment will be required to demonstrate and allow learners to practice their skills. Additionally centres may wish to utilize their workshops and simulators to build learning experiences if these facilities are available.

Ideally activities such as ship/port visits or lectures from visiting speakers with a wide knowledge of the industry should carried out wherever possible, although not all centres will have the option of a ship visit. An alternative may be to organise a trip for students on board a ferry. Many ferry operators will be more than willing to show learners round the vessel in such cases.

There is a vast resource of marine related areas available on the internet and learners should be encouraged to do some self study with regard to the different agencies such as the International Maritime Organisation (IMO), The Merchant Navy Training Board (MNTB), Maritime and Coastguard Agency (MCA) as well as other organisations in the UK which promote the maritime industry eg Seavision UK.

In the case of dedicated core/key skills Units as far as possible the content of the Unit should be contextualised for the marine sector, eg calculations should use examples which the learners will be able to put into practice when they join their first vessel. An example could be the calculation of the displacement of a vessel, using geometry and basic hydrostatic principles.

## 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**](http://www.sqa.org.uk/sqa/14977.html).

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**](http://www.sqa.org.uk/sqa/files_ccc/GuideToAssessment.pdf)**)**.

## 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)

**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**](http://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 toopportunities 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.

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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.

This qualification has been designed in order to support the training and promotion of careers in the maritime industry, providing an academic ramp for learners to progress onto Merchant Navy Training Board (MNTB) approved cadetships or higher education in a maritime related discipline.

Although the group awards have been specifically written for the Merchant Navy, there are a range of transferrable knowledge and skills that could be used within the wider Maritime Sector.

If you wish to go to sea you should be aware that you must meet the medical standards laid down by the Maritime and Coastguard Agency.

Entry to this qualification is at the discretion of the centre; however you would benefit from having attained the skills, knowledge and understanding required by one or more of the following or equivalent qualifications and/or experience:

* At least 4 GCSE (grade 4 or above)/National 5 (grade C or above) qualifications to include:
* Mathematics
* English
* Physics/Engineering Science
* One other subject

Where non-UK qualifications are used to measure suitable entry level, then you would have equivalent qualifications to the above, including English language as necessary.

Whilst the sea service articulated is an integral element of the certification to MCA Certificate of Competency, it does not form part of the NC award. For MCA certification a sea service requirement is required.

During this NC you will develop five Core Skills — *Communication, Numeracy, Information and Communication Technology (ICT), Problem Solving* and *Working with Others*. You will develop these Core Skills to SCQF level 6.

**Entrance**

National 5/GCSE passes in four subjects at grade C or above, including:

* Mathematics
* English
* Physical Science
* one other subject

**HNC**

Nautical Science

Marine Engineering

**HND**

Nautical Science

Marine Engineering

Marine Electro-technology

**PDA**

Marine Management

**Employment Opportunities**

* Merchant Navy Officer on worldwide trading vessels (after gaining a MCA Certificate of Competency)
* Maritime regulatory authorities
* Ship repair and marine equipment production
* Ship management
* Marine insurance

**Diploma**

Marine Vessel Maintenance

**Diploma**

Shipping and Maritime Operations

**BEng**

Marine Engineering

**Entrance**

* At least two Higher level (SCQF level 6) passes (grade C or above) of which one should be Mathematics or a Physical Science.
* Learners should also have National 5 English at SCQF level 5 or better.

**NC**

Shipping and Marine Operations