Identification of National Occupational Standards for shore-based engineering occupations for potential use in the maritime sector

OSCEng

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MSA Review of NOS for Shore-Based Engineering Occupations, March 2007 Page 1 of 68

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1 Introduction

- 1.1 In April 2006 the Mackinnon Partnership delivered a report on 'Identification of Learning Pathways for the Maritime Sector' to the Maritime Skills Alliance (MSA). The MSA is a strategic alliance formed in January 2004 between the British Marine Federation, the Merchant Navy Training Board, Port Skills and Safety and the Sea Fish Industry Authority.
- 1.2 The Mackinnon report presented learning pathways, key occupational roles and key functions undertaken in the maritime sector and thus provided the means for creating appropriate learning pathways and the provision of any necessary educational and training and development activities.
- 1.3 The principal outputs of the Mackinnon report were:
 - (i) An occupational map, identifying key occupational roles and responsibilities
 - (ii) A map of qualifications, training provision and career pathways
 - (iii) A functional map, identifying key functions undertaken in the sector
 - (iv) A gap analysis of occupational roles and functions not covered by National Occupational Standards (NOS) or by nationally recognised qualifications
- 1.4 It is the last of these outcomes, the gap analysis of roles and functions not presently covered by NOS or qualifications, which this present project addresses. In particular it deals with the roles of Engineering Superintendent, Assistant Engineering Superintendent and Engineering Technical Assistant, that is engineers working in shore-based maritime roles.

2 Methodology

- 2.1 The research was desk-based, primarily using the database of accredited NOS currently managed and maintained by the Sector Skills Development Agency, SSDA (website address: <u>http://www.ssda.org.uk</u>. This database includes details of individual Units which are identified by the originating body (a Sector Skills Council or a Standards Setting Body) and, critically, by the 'suite' in which the individual Unit occurs. This latter represents the proposed qualification structure developed by the SSC or SSB.
- 2.2 The initial search of the SSDA database generated a list of 792 individual Units. The search criteria used (derived from the SSDA 'filtering' function in its search facility) to identify the Units were:

Electrical and Electronic Servicing
Engineering Leadership
Engineering Management
Engineering Technical Support
Maintaining Plant & Systems, Mechanical, Electrical, Instruments and Controls
Maintenance: Aeronautical
Maintenance: Business Improvement Techniques
Maintenance: Electricity System Technology Engineering Support
Maintenance: Electrotechnical Services
Maintenance: Engineering Leadership
Maintenance: Engineering Maintenance and Installation
Maintenance: Plant Maintenance, Construction
Maintenance: Process Engineering
Marine
Nuclear Decommissioning
Technical Support
Technology Management

- 2.3 The list of 792 Units is included as Appendix A. As can be seen, Units are listed under different search criteria, indicating their use in various suites originating from different SSCs and SSBs.
- 2.4 From this initial selection it was possible to eliminate those Units which were clearly not relevant, for instance those developed by sectors such as Skills For Health, Lantra (Land-Based Industries), Skills For Justice and Financial Services Skills Council which dealt with the very specific requirements of their sectors, under the general search criteria such as 'Technical Support'.
- 2.5 This resulted in a list of 369 Units, from which a further 318 were eliminated on the basis that either:
 - (a) they fell under the search criterion 'Marine' or were included in suites developed either by members of the Maritime Skills Alliance (for example, *Managing harbour staff, finances and marine assets*: 'Harbour Masters' suite (Ports Skills and Safety Ltd) or in the extensive suite 'Marine Engineering' developed by SEMTA, the Sector Skills Council for Science, Engineering and Manufacturing Technologies. For reference these 305 Units are listed in Appendix B.

or:

- (b) on closer inspection their coverage was too sector-specific and therefore would not readily transfer with their current content to the maritime sector's requirements.
- 2.6 The final resulting list from the SSDA database therefore contains 51 Units, included as Appendix C.
- 2.7 In addition to the individual NOS selected from the SSDA database, the following suites were also considered and their Unit Titles are included here for reference:
 - (i) Project Management (ECITB): see Appendix D
 - (ii) Management (Management Standards Centre): see Appendix E
 - (iii) The OSCEng Engineering Competence Reference Standards. (These are not National Occupational Standards: they are designed as generic competence standards to which contextual detail can be added, as required to meet sectoral needs, to develop sector-specific NOS. The OSCEng ECRS have been used in this way by a number of SSCs and SSBs; for example, SEMTA, Lantra, E&U Skills, ECITB and CITB.) The OSCEng ECRS Unit titles are included as Appendix F.
- 2.8 Mention should also be made of a new, cross-sector project being funded by the SSDA which will seek to review and rationalise the NOS currently available which cover Health and Safety competences. The project is being managed by Proskills, the SSC for the mining, quarrying, glass, ceramics and print industry sectors. Work on the project started in March 2007. The key objectives of the project are: to map and understand current NOS and associated qualifications across the Skills For Business network; to make recommendations for the development of an entry-level suite of NOS for generic Health and Safety activities; and to identify common areas of Health and Safety across the NOS Directory and current training provision. The outcomes of this project are likely to be of interest to MSA members.

3 Results

- 3.1 The 51 Units selected from the SSDA database appear to meet many of the anticipated general requirements for shore-based engineers and senior technicians operating at Levels 3, 4 and 5. However, in the absence of detailed job descriptions for shore-based engineering roles in the earlier Mackinnon report (by design: the project was not intended to develop such detail) it is difficult to extend this review and selection of existing NOS and qualification suites.
- 3.2 Whilst many of the Units in the final list of 51 have been developed for sector-specific functions, there is one group of 'suites' (ie qualification structures) which appears to offer more generic applications. This is the group developed by SEMTA covering:
 - Engineering Technical Support
 - Engineering Leadership
 - Engineering Management
- 3.3 By design these three qualifications overlap, by using the OSCEng generic standards contextualised to reflect the level for which each qualification is intended. This provides an inherent career development path through the Levels, with demands relating to scope and knowledge increasing as the Levels progress.
- 3.4 The other Units selected cover functions within the search criteria listed above (1.2) and have been chosen on the basis that they could possibly be used without amendment; or could provide the template for similar but sector-specific requirements for the MSA.
- 3.5 The selection is therefore commended to the Maritime Skills Alliance as the basis for further investigation to determine the suitability of the NOS and qualifications for the anticipated shore-based engineering functions.

Appendix A

Initial search of SSDA Database of National Occupational Standards

Sorted by Search Criterion and Unit Title

#	PRIMARY SEARCH CRITERION	UNIT TITLE	SUITES	ORIGINATOR SUITE and SOURCE
1	ELECTRICAL AND ELECTRONIC SERVICING	Assisting in Modifying and Adding Electrical Circuits in Yachts and Boats	1	Marine Engineering (SEMTA)
2	ELECTRICAL AND ELECTRONIC SERVICING	Assisting in the Disconnection and Removal of Yacht and Boat Electrical/Electronic Equipment	1	Marine Engineering (SEMTA)
3	ELECTRICAL AND ELECTRONIC SERVICING	Assisting in the Installation of Domestic Equipment in Yachts and Boats	1	Marine Engineering (SEMTA)
4	ELECTRICAL AND ELECTRONIC SERVICING	Assisting in the Installation of Electrical/Electronic Equipment in Yachts and Boats	1	Marine Engineering (SEMTA)
5	ELECTRICAL AND ELECTRONIC SERVICING	Assisting in the Installation of Engine/Propulsion Systems in Yachts and Boats	1	Marine Engineering (SEMTA)
6	ELECTRICAL AND ELECTRONIC SERVICING	Carrying Out Routine Servicing of Electrical/Electronic Equipment	1	Performing Engineering Operations (SEMTA)
7	ELECTRICAL AND ELECTRONIC SERVICING	Carrying out routine servicing of electrical/electronic equipment and systems	1	Performing Engineering Operations (SEMTA)
8	ELECTRICAL AND ELECTRONIC SERVICING	Carrying out Routine Servicing of Yacht and Boat Electrical/Electronic	1	Marine Engineering (SEMTA)
9	ELECTRICAL AND ELECTRONIC SERVICING	Carrying out the Installation of Cable Runs and Circuits in Yachts and Boats	1	Marine Engineering (SEMTA)
10	ELECTRICAL AND ELECTRONIC SERVICING	Diagnose electrical faults in vehicle systems and components	1	Transport Engineering And Maintenance (GoSkills)
11	ELECTRICAL AND ELECTRONIC SERVICING	Service & maintain complex systems and components	1	LPG Installation & Maintenance; Industrial & Commercial Installation & Maintenance (E&U Skills)
12	ELECTRICAL AND ELECTRONIC SERVICING	Service and maintain complex natural gas systems and components	1	Domestic natural gas, Installation and Maintenance (E&U Skills)
13	ELECTRICAL AND ELECTRONIC SERVICING	Service and maintain complex natural gas systems and components	1	Emergency Services Operations (E&U Skills)
14	ELECTRICAL AND ELECTRONIC SERVICING	Servicing Anaesthetic and Ventilation Equipment	1	Engineering Maintenance (SEMTA)
15	ELECTRICAL AND ELECTRONIC SERVICING	Servicing Cardiovascular Equipment	1	Engineering Maintenance (SEMTA)
16	ELECTRICAL AND ELECTRONIC SERVICING	Servicing Dental Equipment	1	Engineering Maintenance (SEMTA)
17	ELECTRICAL AND ELECTRONIC SERVICING	Servicing Laboratory Equipment	1	Engineering Maintenance (SEMTA)
18	ELECTRICAL AND ELECTRONIC SERVICING	Servicing Medical Imaging Equipment	1	Engineering Maintenance (SEMTA)

19	ELECTRICAL AND ELECTRONIC SERVICING	Servicing Medical Therapeutic Equipment	1	Engineering Maintenance (SEMTA)
20	ELECTRICAL AND ELECTRONIC SERVICING	Servicing Operating Theatre and Surgical Equipment	1	Engineering Maintenance (SEMTA)
21	ELECTRICAL AND ELECTRONIC SERVICING	Servicing Physiological Monitoring and Infusion Equipment	1	Engineering Maintenance (SEMTA)
22	ELECTRICAL AND ELECTRONIC SERVICING	Basic vehicle checks and servicing	1	Transport Engineering And Maintenance (GoSkills)
23	ELECTRICAL AND ELECTRONIC SERVICING	Carry out scheduled body maintenance on vehicles	1	Transport Engineering And Maintenance (GoSkills)
24	ELECTRICAL AND ELECTRONIC SERVICING	Carry out scheduled electrical maintenance on vehicles	1	Transport Engineering And Maintenance (GoSkills)
25	ELECTRICAL AND ELECTRONIC SERVICING	Carry out scheduled mechanical maintenance on vehicles	1	Transport Engineering And Maintenance (GoSkills)
26	ELECTRICAL AND ELECTRONIC SERVICING	Plan and organise work of self and others	1	Transport Engineering And Maintenance (GoSkills)
27	ELECTRICAL AND ELECTRONIC SERVICING	Support learners by mentoring and coaching in the workplace	1	Transport Engineering And Maintenance (GoSkills)
28	ELECTRICAL AND ELECTRONIC SERVICING	Thermal joining	1	Transport Engineering And Maintenance (GoSkills)
29	ELECTRICAL AND ELECTRONIC SERVICING	Vehicle servicing	1	Transport Engineering And Maintenance (GoSkills)
30	ENGINEERING LEADERSHIP	Conduct Risk Analysis on Engineering Activities	1	Engineering Leadership (SEMTA)
31	ENGINEERING LEADERSHIP	Contribute to technical leadership on signal engineering activities	1	Rail Engineering Signalling (GoSkills)
32	ENGINEERING LEADERSHIP	Develop Yourself in the Work Role.	1	Broadcast Engineering. (Skillset)
33	ENGINEERING LEADERSHIP	Implement Engineering Processes	1	Engineering Leadership (SEMTA)
34	ENGINEERING LEADERSHIP	Implement Quality Assurance Systems	1	Engineering Leadership (SEMTA)
35	ENGINEERING LEADERSHIP	Maintain a Healthy, Safe and Productive Work Environment	1	Engineering Leadership (SEMTA)
36	ENGINEERING LEADERSHIP	Manage a project 2005	1	Managing in Road Passenger Transport 2005 (GoSkills)
37	ENGINEERING LEADERSHIP	Monitor Engineering Activities	1	Engineering Leadership (SEMTA)
38	ENGINEERING LEADERSHIP	Obtain Resources For Engineering Activities	1	Engineering Leadership (SEMTA)
39	ENGINEERING LEADERSHIP	Plan and organise work of self and others	1	Transport Engineering And Maintenance (GoSkills)
40	ENGINEERING LEADERSHIP	Produce Detailed Drawings	1	Engineering Leadership (SEMTA)
41	ENGINEERING LEADERSHIP	Rectify Engineering Problems	1	Engineering Leadership (SEMTA)
42	ENGINEERING LEADERSHIP	Schedule Engineering Activities	1	Engineering Leadership (SEMTA)
43	ENGINEERING MANAGEMENT	Applying Value Management (Value Engineering and Value Analysis)	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
44	ENGINEERING MANAGEMENT	Assess the feasibility of an explosive substance or article repair	1	Explosive Substances and Articles (SEMTA)
45	ENGINEERING MANAGEMENT	Carrying Out Project Management Activities	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
46	ENGINEERING MANAGEMENT	Carrying Out Project Management of Aeronautical Engineering Activities.	1	Aeronautical Engineering (SEMTA)
47	ENGINEERING MANAGEMENT	Carrying Out Project Management of Engineering Activities	1	Engineering Technical Support (SEMTA)
48	ENGINEERING MANAGEMENT	Conduct Risk Analysis on Engineering Activities	1	Engineering Leadership (SEMTA)
49	ENGINEERING MANAGEMENT	Conducting Business Improvement Activities	1	Performing Engineering Operations (SEMTA)
50	ENGINEERING MANAGEMENT	Configure gas networks to meet operators' requirements	1	Pipeline Engineering (Gas Networks) (E&U Skills)

51	ENGINEERING MANAGEMENT	Configure gas networks to meet operators' requirements	1	Gas Networks Engineering Management (E&U Skills)
52	ENGINEERING MANAGEMENT	Configure pipelines (oil and gas) to meet operators' requirements	1	Pipelines (E&U Skills)
53	ENGINEERING MANAGEMENT	Configure pipelines (oil and gas) to meet operators' requirements	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
54	ENGINEERING MANAGEMENT	Contribute to effective working relationships (main laying)	1	Gas Network Operations (E&U Skills)
55	ENGINEERING MANAGEMENT	Contribute to effective working relationships (service laying)	1	Gas Network Operations (E&U Skills)
56	ENGINEERING MANAGEMENT	Contribute to effective working relationships in diverse situations	1	Gas Network Operations (E&U Skills)
57	ENGINEERING MANAGEMENT	Contribute to good working relationships	1	Broadcast Engineering. (Skillset)
58	ENGINEERING MANAGEMENT	Contribute to good working relationships.	1	Broadcast Engineering. (Skillset)
59	ENGINEERING MANAGEMENT	Control maintenance and other engineering options	1	Managing Waste Collection Operations (E&U Skills)
60	ENGINEERING MANAGEMENT	Creating Visual Management Systems	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
61	ENGINEERING MANAGEMENT	Determine the installation and construction requirements of gas networks	1	Gas Networks Engineering Management (E&U Skills)
62	ENGINEERING MANAGEMENT	Determine the installation and construction requirements of pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
63	ENGINEERING MANAGEMENT	Develop detailed transportation solutions	1	Transportation (ConstructionSkills – CIC)
64	ENGINEERING MANAGEMENT	Develop Maintenance Plans for Vessel Engineering Systems	1	Marine (Merchant Navy Training Board)
65	ENGINEERING MANAGEMENT	Develop project objectives for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
66	ENGINEERING MANAGEMENT	Develop project objectives for gas networks	1	Gas Networks Engineering Management (E&U Skills)
67	ENGINEERING MANAGEMENT	Develop project objectives for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
68	ENGINEERING MANAGEMENT	Develop project objectives for pipelines (oil and gas)	1	Pipelines (É&U Skills)
69	ENGINEERING MANAGEMENT	Develop Yourself in the Work Role.	1	Broadcast Engineering. (Skillset)
70	ENGINEERING MANAGEMENT	Diagnosing and Rectifying Faults in Vehicle Electrical and Electronic Systems	1	Automotive Engineering (SEMTA)
71	ENGINEERING MANAGEMENT	Direct Vessel Engineering Operations	1	Marine (Merchant Navy Training Board)
72	ENGINEERING MANAGEMENT	Establish a strategy for the design process for gas networks	1	Gas Networks Engineering Management (E&U Skills)
73	ENGINEERING MANAGEMENT	Establish a strategy for the design process for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
74	ENGINEERING MANAGEMENT	Establish project management systems for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
75	ENGINEERING MANAGEMENT	Establish project management systems for gas networks	1	Gas Networks Engineering Management (E&U Skills)
76	ENGINEERING MANAGEMENT	Establish project management systems for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
77	ENGINEERING MANAGEMENT	Establish project management systems for pipelines (oil and gas)	1	Pipelines (E&U Skills)
78	ENGINEERING MANAGEMENT	Evaluate projects for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
79	ENGINEERING MANAGEMENT	Evaluate projects for pipelines (oil and gas)	1	Pipelines (E&U Skills)
80	ENGINEERING MANAGEMENT	Evaluate projects for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
81	ENGINEERING MANAGEMENT	Identify and analyse hazards and specify actions to control risks to people, property and the environment	1	Building Services Engineering Design (ConstructionSkills – CIC)
82	ENGINEERING MANAGEMENT	Implement de-commissioning methods and procedures for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)

83	ENGINEERING MANAGEMENT	Implement de-commissioning methods and procedures for gas networks	1	Gas Networks Engineering Management (E&U Skills)
84	ENGINEERING MANAGEMENT	Implement de-commissioning methods and procedures for gas networks	1	Gas Networks Engineering Management (E&U Skills)
85	ENGINEERING MANAGEMENT	Implement de-commissioning methods and procedures for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
86	ENGINEERING MANAGEMENT	Implement de-commissioning methods and procedures for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
87	ENGINEERING MANAGEMENT	Implement de-commissioning methods and procedures for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
88	ENGINEERING MANAGEMENT	Implement de-commissioning methods and procedures for pipelines (oil and gas)	1	Pipelines (É&U Skills)
89	ENGINEERING MANAGEMENT	Implement de-commissioning methods and procedures for pipelines (oil and gas)	1	Pipelines (E&U Skills)
90	ENGINEERING MANAGEMENT	Implement installation and construction methods and procedures for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
91	ENGINEERING MANAGEMENT	Implement installation and construction methods and procedures for gas networks	1	Gas Networks Engineering Management (E&U Skills)
92	ENGINEERING MANAGEMENT	Implement installation and construction methods and procedures for pipelines (oil and gas)	1	Pipelines (E&U Skills)
93	ENGINEERING MANAGEMENT	Implement installation and construction methods and procedures for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
94	ENGINEERING MANAGEMENT	Implement operational methods and procedures for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
95	ENGINEERING MANAGEMENT	Implement operational methods and procedures for gas networks	1	Gas Networks Engineering Management (E&U Skills)
96	ENGINEERING MANAGEMENT	Implement operational methods and procedures for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
97	ENGINEERING MANAGEMENT	Implement operational methods and procedures for pipelines (oil and gas)	1	Pipelines (E&U Skills)
98	ENGINEERING MANAGEMENT	Implement the maintenance processes for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
99	ENGINEERING MANAGEMENT	Implement the maintenance processes for gas networks	1	Gas Networks Engineering Management (E&U Skills)
100	ENGINEERING MANAGEMENT	Implement the maintenance processes for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
101	ENGINEERING MANAGEMENT	Implement the maintenance processes for pipelines (oil and gas)	1	Pipelines (É&U Skills)
102	ENGINEERING MANAGEMENT	Investigate transportation data and develop forecast tools	1	Transportation (ConstructionSkills – CIC)
103	ENGINEERING MANAGEMENT	Manage a contract	1	Quantity Surveying Practice (ConstructionSkills – CIC)
104	ENGINEERING MANAGEMENT	Manage a project 2005	1	Managing in Road Passenger Transport 2005 (GoSkills)
105	ENGINEERING MANAGEMENT	Manage information requirements	1	Integrated Logistic Support (ILS) Management (SEMTA)
106	ENGINEERING MANAGEMENT	Manage the implementation of projects for gas networks	1	Gas Networks Engineering Management (E&U Skills)
107	ENGINEERING MANAGEMENT	Manage the implementation of projects for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
108	ENGINEERING MANAGEMENT	Manage the implementation of projects for pipelines (oil and gas)	1	Pipelines (E&U Skills)
109	ENGINEERING MANAGEMENT	Manage the implementation of projects for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
110	ENGINEERING MANAGEMENT	Minimise risks to life, property and the railway engineering environment	1	Rail Engineering Signalling (GoSkills)

111	ENGINEERING MANAGEMENT	Monitor maintenance processes for gas networks	1	Gas Networks Engineering Management (E&U Skills)
112	ENGINEERING MANAGEMENT	Monitor maintenance processes for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
113	ENGINEERING MANAGEMENT	Monitor operational processes for gas networks	1	Gas Networks Engineering Management (E&U Skills)
114	ENGINEERING MANAGEMENT	Monitor operational processes for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
115	ENGINEERING MANAGEMENT	Monitor operational processes for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
116	ENGINEERING MANAGEMENT	Monitor operational processes for pipelines (oil and gas)	1	Pipelines (É&U Skills)
117	ENGINEERING MANAGEMENT	Obtain the resources to implement the installation and construction of gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
118	ENGINEERING MANAGEMENT	Obtain the resources to implement the installation and construction of gas networks	1	Gas Networks Engineering Management (E&U Skills)
119	ENGINEERING MANAGEMENT	Obtain the resources to implement the installation and construction of pipelines (oil and gas)	1	Pipelines (E&U Skills)
120	ENGINEERING MANAGEMENT	Obtain the resources to implement the installation and construction of pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
121	ENGINEERING MANAGEMENT	Obtain the resources to implement the maintenance methods and procedures for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
122	ENGINEERING MANAGEMENT	Obtain the resources to implement the maintenance methods and procedures for gas networks	1	Gas Networks Engineering Management (E&U Skills)
123	ENGINEERING MANAGEMENT	Obtain the resources to implement the maintenance methods and procedures for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
124	ENGINEERING MANAGEMENT	Obtain the resources to implement the maintenance methods and procedures for pipelines (oil and gas)	1	Pipelines (E&U Skills)
125	ENGINEERING MANAGEMENT	Obtain the resources to implement the operational methods and procedures	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
126	ENGINEERING MANAGEMENT	Obtain the resources to implement the operational methods and procedures	1	Gas Networks Engineering Management (E&U Skills)
127	ENGINEERING MANAGEMENT	Plan and Schedule Vessel Engineering Operations	1	Marine (Merchant Navy Training Board)
128	ENGINEERING MANAGEMENT	Plan for engineering activities in diverse situations	1	Gas Network Operations (E&U Skills)
129	ENGINEERING MANAGEMENT	Plan Maintenance for Vessel Engineering Systems	1	Marine (Merchant Navy Training Board)
130	ENGINEERING MANAGEMENT	Plan the delivery of projects	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
131	ENGINEERING MANAGEMENT	Plan the delivery of projects	1	Gas Networks Engineering Management (E&U Skills)
132	ENGINEERING MANAGEMENT	Prepare Vessel Response Plans for Engineering Contingency Situations	1	Marine (Merchant Navy Training Board)
133	ENGINEERING MANAGEMENT	Project management (Imported Units)	2	Communication Technology Practitioners and Professionals (e-e-skills UK)
134	ENGINEERING MANAGEMENT	Project management (Imported Units)	2	IT Practitioners and Professionals (e-skills UK)
135	ENGINEERING MANAGEMENT	Schedule maintenance activities to implement maintenance methods and procedures for gas networks	1	Gas Networks Engineering Management (E&U Skills)
136	ENGINEERING MANAGEMENT	Schedule maintenance activities to implement maintenance methods and procedures for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
137	ENGINEERING MANAGEMENT	Schedule operational activities to implement the operational methods and procedures for gas networks	1	Gas Networks Engineering Management (E&U Skills)

138	ENGINEERING MANAGEMENT	Schedule operational activities to implement the operational methods and procedures for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
139	ENGINEERING MANAGEMENT	Specialist or bespoke software Level 1	1	IT Users (e-skills UK)
140	ENGINEERING MANAGEMENT	Specialist or bespoke software Level 2	1	IT Users (e-skills UK)
141	ENGINEERING MANAGEMENT	Specialist or bespoke software Level 3	1	IT Users (e-skills UK)
142	ENGINEERING MANAGEMENT	Specify installation and construction methods and procedures for gas networks	1	Gas Networks Engineering Management (E&U Skills)
143	ENGINEERING MANAGEMENT	Specify installation and construction methods and procedures for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
144	ENGINEERING MANAGEMENT	Specify maintenance methods and procedures to achieve maintenance requirements for gas networks	1	Gas Networks Engineering Management (E&U Skills)
145	ENGINEERING MANAGEMENT	Specify maintenance methods and procedures to achieve maintenance requirements for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
146	ENGINEERING MANAGEMENT	Specify maintenance methods and procedures to achieve maintenance requirements for pipelines (oil and gas)	1	Pipelines (E&U Skills)
147	ENGINEERING MANAGEMENT	Specify maintenance methods and procedures to achieve maintenance requirements for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
148	ENGINEERING MANAGEMENT	Specify methods and procedures to reduce risks on gas networks	1	Gas Networks Engineering Management (E&U Skills)
149	ENGINEERING MANAGEMENT	Specify methods and procedures to reduce risks on gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
150	ENGINEERING MANAGEMENT	Specify methods and procedures to reduce risks on pipelines (oil and gas)	1	Pipelines (E&U Skills)
151	ENGINEERING MANAGEMENT	Specify methods and procedures to reduce risks on pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
152	ENGINEERING MANAGEMENT	Specify operational methods and procedures to achieve operational requirements for gas networks	1	Pipeline Engineering (Gas Networks) (E&U Skills)
153	ENGINEERING MANAGEMENT	Specify operational methods and procedures to achieve operational requirements for gas networks	1	Gas Networks Engineering Management (E&U Skills)
154	ENGINEERING MANAGEMENT	Specify operational methods and procedures to achieve operational requirements for pipelines (oil and gas)	1	Pipeline (Oil and Gas) Engineering Management (E&U Skills)
155	ENGINEERING MANAGEMENT	Specify operational methods and procedures to achieve operational requirements for pipelines (oil and gas)	1	Pipelines (E&U Skills)
156	ENGINEERING TECHNICAL SUPPORT	Assess the Performance and Condition of Broadcast Equipment	1	Broadcast Engineering. (Skillset)
157	ENGINEERING TECHNICAL SUPPORT	Carry Out Planned Maintenance on Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
158	ENGINEERING TECHNICAL SUPPORT	Carrying Out Project Management Activities	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
159	ENGINEERING TECHNICAL SUPPORT	Conduct Specified Testing of Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
160	ENGINEERING TECHNICAL SUPPORT	Contribute to good working relationships.	1	Broadcast Engineering. (Skillset)
161	ENGINEERING TECHNICAL SUPPORT	Control Allocated Resources to Achieve Requirements.	1	Broadcast Engineering. (Skillset)
162	ENGINEERING TECHNICAL SUPPORT	Develop Yourself in the Work Role.	1	Broadcast Engineering. (Skillset)
163	ENGINEERING TECHNICAL SUPPORT	Ensure your own actions reduce risks to health and safety.	1	Broadcast Engineering. (Skillset)

164	ENGINEERING TECHNICAL SUPPORT	Establish Compliance with Specifications.	1	Broadcast Engineering. (Skillset)
165	ENGINEERING TECHNICAL SUPPORT	Hand over Broadcast Equipment for the Control of Others.	1	Broadcast Engineering. (Skillset)
166	ENGINEERING TECHNICAL SUPPORT	Monitor the Performance and Condition of Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
167	ENGINEERING TECHNICAL SUPPORT	Monitor the Use of Resources to Meet Engineering Requirements.	1	Broadcast Engineering. (Skillset)
168	ENGINEERING TECHNICAL SUPPORT	Plan Broadcast Engineering Activities	1	Broadcast Engineering. (Skillset)
169	ENGINEERING TECHNICAL SUPPORT	Produce One-Off Components.	1	Broadcast Engineering. (Skillset)
170	ENGINEERING TECHNICAL SUPPORT	Provide Operational Support to Users of Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
171	ENGINEERING TECHNICAL SUPPORT	Provide Technical Information in Required Formats.	1	Broadcast Engineering. (Skillset)
172	ENGINEERING TECHNICAL SUPPORT	Providing Technical Advice and Guidance on Engineering Activities	1	Engineering Technical Support (SEMTA)
173	ENGINEERING TECHNICAL SUPPORT	Providing Technical Sales and Marketing Support for Engineering Activities	1	Engineering Technical Support (SEMTA)
174	ENGINEERING TECHNICAL SUPPORT	Remove and Dismantle Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
175	ENGINEERING TECHNICAL SUPPORT	Remove and Replace Assembly or Sub-Assembly Components.	1	Broadcast Engineering. (Skillset)
176	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Accept and confirm responsibility for the control of mechanical plant and equipment.	1	Maintaining Plant & Systems – Mechanical (ECITB)
177	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Adjust electrical plant and equipment to meet operating requirements	1	Maintaining Plant & Systems – Electrical (ECITB)
178	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Adjust instrument and control systems to meet operating requirements	1	Maintaining Plant & Systems – Instrument & Controls (ECITB)
179	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Assess the performance and condition of electrical plant and equipment	1	Maintaining Plant & Systems – Electrical (ECITB)
180	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Carry out planned maintenance procedures on electrical plant and equipment	1	Maintaining Plant & Systems – Electrical (ECITB)
181	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Carry out planned maintenance procedures on instrument and control systems	1	Maintaining Plant & Systems – Instrument & Controls (ECITB)
182	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Carry out planned maintenance procedures on mechanical plant and equipment.	1	Maintaining Plant & Systems – Mechanical (ECITB)
183	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Establish that an engineering maintenance process has been completed to specification	1	Maintaining Plant & Systems – Electrical (ECITB)

184	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Establish that an engineering maintenance process has been completed to specification	1	Maintaining Plant & Systems – Instrument & Controls (ECITB)
185	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Establish that an engineering maintenance process has been completed to specification.	1	Maintaining Plant & Systems – Mechanical (ECITB)
186	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Hand over mechanical plant and equipment to the control of others.	1	Maintaining Plant & Systems – Mechanical (ECITB)
187	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Handover plant and equipment	1	Maintaining Plant & Systems – Electrical (ECITB)
188	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Handover plant and equipment	1	Maintaining Plant & Systems – Instrument & Controls (ECITB)
189	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Prepare materials for the maintenance of electrical plant and equipment	1	Maintaining Plant & Systems – Electrical (ECITB)
190	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Prepare materials for the maintenance of mechanical plant and equipment.	1	Maintaining Plant & Systems – Mechanical (ECITB)
191	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Prepare work areas for the maintenance of electrical plant and equipment	1	Maintaining Plant & Systems – Electrical (ECITB)
192	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Prepare work areas for the maintenance of mechanical plant and equipment.	1	Maintaining Plant & Systems – Mechanical (ECITB)
193	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Reinstate the work area after completing the maintenance of electrical plant and equipment	1	Maintaining Plant & Systems – Electrical (ECITB)
194	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Reinstate the work area after completing the maintenance of instrument and control systems	1	Maintaining Plant & Systems – Instrument & Controls (ECITB)
195	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Reinstate the work area after completing the maintenance of mechanical plant and equipment.	1	Maintaining Plant & Systems – Mechanical (ECITB)
196	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Replace components in electrical plant and equipment	1	Maintaining Plant & Systems – Electrical (ECITB)
197	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Restore components from instrument and control systems to operational condition by repair	1	Maintaining Plant & Systems – Instrument & Controls (ECITB)
198	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Restore components from mechanical plant and equipment to operational condition by repair.	1	Maintaining Plant & Systems – Mechanical (ECITB)
199	MAINTAINING PLANT & SYSTEMS, MECHANICAL, ELECTRICAL, INSTRUMENTS AND CONTROLS	Store mechanical plant and equipment maintenance related resources for further use.	1	Maintaining Plant & Systems – Mechanical (ECITB)

200	MAINTENANCE AERONAUTICAL	Carry Out Maintenance on Aircraft Mechanical Systems by Component Replacement	1	Aeronautical Engineering (SEMTA)
201	MAINTENANCE AERONAUTICAL	Carrying Out Maintenance of Aircrew Personal Survival Packs (PSP).	1	Aeronautical Engineering (SEMTA)
201	MAINTENANCE AERONAUTICAL	Carrying Out Maintenance of Aircrew Quick Release Fasteners (QRF).	1	Aeronautical Engineering (SEMTA)
202	MAINTENANCE AERONAUTICAL	Carrying Out Maintenance of Parachute Assemblies.	1	Aeronautical Engineering (SEMTA)
204	MAINTENANCE AERONAUTICAL	Carrying Out Maintenance on Aircraft Electrical/Electronic Systems by Component Replacement	1	Aeronautical Engineering (SEMTA)
205	MAINTENANCE AERONAUTICAL	Carrying Out Routine Servicing of Aircraft	1	Aeronautical Engineering (SEMTA)
206	MAINTENANCE AERONAUTICAL	Undertaking Scheduled Maintenance of Aircraft Airframe and Mechanical Equipment.	1	Aeronautical Engineering (SEMTA)
207	MAINTENANCE AERONAUTICAL	Undertaking Scheduled Maintenance of Aircraft Avionic Equipment/Systems.	1	Aeronautical Engineering (SEMTA)
208	MAINTENANCE BUSINESS IMPROVEMENT TECHNIQUES	Applying continuous improvement techniques (Kaizen)	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
209	MAINTENANCE BUSINESS IMPROVEMENT TECHNIQUES	Applying Total Productive Maintenance (TPM)	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
210	MAINTENANCE BUSINESS IMPROVEMENT TECHNIQUES	Applying Workplace Organisation Techniques	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
211	MAINTENANCE BUSINESS IMPROVEMENT TECHNIQUES	Creating visual management systems	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
212	MAINTENANCE ELECTROTECHNICAL SERVICES	Application of Electrotechnical Technology	1	Electrotechnical Services – Electrotechnical Technology & Project Management (SummitSkills)
213	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Air Conditioning and Ventilation Equipment	1	Engineering Maintenance and Installation (SEMTA)
214	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Communication-Electronic Systems	1	Engineering Maintenance and Installation (SEMTA)
215	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Compressed Air Equipment	1	Engineering Maintenance and Installation (SEMTA)
216	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Electrical/Electronic Equipment	1	Engineering Maintenance and Installation (SEMTA)
217	MAINTENANCE ENGINEERING MAINTENANCE & INSTALLATION	Assisting in the Installation of Emergency Electrical Power Generation	1	Engineering Maintenance and Installation (SEMTA)
218	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Equipment to Produce an Engineered System	1	Engineering Maintenance and Installation (SEMTA)
219	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Fluid Power Equipment	1	Engineering Maintenance and Installation (SEMTA)
220	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Fresh Water Distribution Equipment	1	Engineering Maintenance and Installation (SEMTA)
221	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Heating and Ventilation Equipment	1	Engineering Maintenance and Installation (SEMTA)

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222	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Instrumentation and Control Equipment	1	Engineering Maintenance and Installation (SEMTA)
223	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Mechanical Equipment	1	Engineering Maintenance and Installation (SEMTA)
224	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Process Control Equipment	1	Engineering Maintenance and Installation (SEMTA)
225	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Refrigeration Equipment	1	Engineering Maintenance and Installation (SEMTA)
226	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Assisting in the Installation of Waste/Foul Water Distribution Equipment	1	Engineering Maintenance and Installation (SEMTA)
227	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Carrying Out Modifications or Rewiring Electrical Circuits	1	Engineering Maintenance and Installation (SEMTA)
228	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Carrying Out Project Management of Engineering Activities	1	Engineering Technical Support (SEMTA)
229	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Checking Lift Function	1	Engineering Maintenance (SEMTA)
230	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Commission Broadcast Systems.	1	Broadcast Engineering. (Skillset)
231	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Conduct an Assessment of Risks in the Workplace.	2	Broadcast Journalism. (Skillset)
232	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Conduct an Assessment of Risks in the Workplace.	2	Broadcast Engineering. (Skillset)
233	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Conduct Risk Analysis on Engineering Activities	1	Engineering Leadership (SEMTA)
234	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Contribute to good working relationships	1	Broadcast Engineering. (Skillset)
235	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Contribute to the assessment and settlement of claims	1	Quantity Surveying Practice (ConstructionSkills – CIC)
236	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Contribute to the organisation of work activities (main laying)	1	Gas Network Operations (E&U Skills)
237	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Contribute to the organisation of work activities (service laying)	1	Gas Network Operations (E&U Skills)

238	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Contribute to the organisation of work activities in diverse situations	1	Gas Network Operations (E&U Skills)
239	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Control allocated resource to achieve requirements in diverse situations	1	Gas Network Operations (E&U Skills)
240	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Control allocated resources to achieve requirements (main laying)	1	Gas Network Operations (E&U Skills)
241	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Control allocated resources to achieve requirements (service laying)	1	Gas Network Operations (E&U Skills)
242	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Create Designs for Broadcast Systems.	1	Broadcast Engineering. (Skillset)
243	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Determine Maintenance Requirements of Broadcast Equipment or Systems.	1	Broadcast Engineering. (Skillset)
244	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Determine resource requirements to achieve objectives in diverse situations	1	Gas Network Operations (E&U Skills)
245	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Determine technical requirements to achieve objectives in diverse situations	1	Gas Network Operations (E&U Skills)
246	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Determine the Requirements for Engineering Activities	1	Engineering Management (SEMTA)
247	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Ensure your own actions reduce risks to health and safety	2	Broadcast Journalism. (Skillset)
248	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Ensure your own actions reduce risks to health and safety	2	Broadcast Engineering. (Skillset)
249	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Erecting and dismantling access structures (up to two metres)	1	Performing Engineering Operations (SEMTA)
250	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Evaluate Designs for Broadcast Systems	1	Broadcast Engineering. (Skillset)
251	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Handing Over and Confirming Completion of Maintenance or Installation Activities	1	Engineering Maintenance and Installation (SEMTA)
252	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Handing Over and Exchanging Responsibility for Control of Engineering	1	Engineering Technical Support (SEMTA)
253	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Identify the Requirements of Clients for Broadcast Systems	1	Broadcast Engineering. (Skillset)

-	MAINTENANCE ENGINEERING	Implement Engineering Processes	1	Engineering Leadership (SEMTA)
	INSTALLATION			
	MAINTENANCE ENGINEERING	Implement Engineering Processes	1	Engineering Management (SEMTA)
	MAINTENANCE AND			
	INSTALLATION			
256 I	MAINTENANCE ENGINEERING	Implement Quality Assurance Methods and Procedures	1	Engineering Management (SEMTA)
1	MAINTENANCE AND			
1	INSTALLATION			
257	MAINTENANCE ENGINEERING	Implement Quality Assurance Processes	1	Engineering Management (SEMTA)
	MAINTENANCE AND	1		5 · · · · 5 · · · · · · · · · · · · · ·
	INSTALLATION			
	MAINTENANCE ENGINEERING	Implementing Quality Control Systems and Procedures in an Engineering	1	Engineering Technical Support (SEMTA)
	MAINTENANCE AND	Implementing during optimior bysterns and rifectures in an Engineering		
	INSTALLATION			
	MAINTENANCE ENGINEERING	Improve the Quality of Engineering Products or Processes	1	Engineering Management (SEMTA)
		improve the quality of Engineering Products of Processes		Engineering management (SEIMTA)
	INSTALLATION			
	MAINTENANCE ENGINEERING	Inspecting and Servicing Escalators	1	Engineering Maintenance (SEMTA)
	MAINTENANCE AND			
	INSTALLATION			
-	MAINTENANCE ENGINEERING	Inspecting and Servicing Lift Equipment	1	Engineering Maintenance (SEMTA)
	MAINTENANCE AND			
	INSTALLATION			
	MAINTENANCE ENGINEERING	Maintain and Develop Engineering Expertise.	1	Broadcast Engineering. (Skillset)
1	MAINTENANCE AND			
1	INSTALLATION			
263 I	MAINTENANCE ENGINEERING	Manage a contract	1	Quantity Surveying Practice (ConstructionSkills –
1	MAINTENANCE AND			CIC)
1	INSTALLATION			
264	MAINTENANCE ENGINEERING	Manage Maintenance Methods and Procedures.	1	Broadcast Engineering. (Skillset)
-	MAINTENANCE AND		-	
	INSTALLATION			
	MAINTENANCE ENGINEERING	Modifying or Rewiring Electrical Circuits	1	Engineering Maintenance (SEMTA)
	MAINTENANCE AND			
	INSTALLATION			
	MAINTENANCE ENGINEERING	Monitor and Evaluate Engineering Processes	1	Engineering Management (SEMTA)
	MAINTENANCE ENGINEERING MAINTENANCE AND	Mornicor and Evaluate Engineering F10665565		Engineering Management (SEMTA)
	INSTALLATION			
	MAINTENANCE ENGINEERING	Manitar and Evoluate the Maintenance of Dreadeast Equipment of Outbarr	4	Dreadeast Engineering (Clvillast)
-		Monitor and Evaluate the Maintenance of Broadcast Equipment or Systems	1	Broadcast Engineering. (Skillset)
	MAINTENANCE ENGINEERING	Monitor and Evaluate the Operation of Broadcast Systems	1	Broadcast Engineering. (Skillset)
	MAINTENANCE AND			
	INSTALLATION			
		Obtain Resources For Engineering Activities	1	Engineering Leadership (SEMTA)
269 I	MAINTENANCE ENGINEERING	Obtain Resources For Engineering Activities		Ligineening Leadership (SEINTA)
269 I	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Obtain Resources For Engineering Activities	1	

270	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Obtain Resources for the Implementation of Engineering Activities	1	Engineering Management (SEMTA)
271	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Plan and Manage the Implementation of Broadcast Systems.	1	Broadcast Engineering. (Skillset)
272	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Plan and organise work of self and others	1	Transport Engineering And Maintenance (GoSkills)
273	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Plan for engineering activities in diverse situations	1	Gas Network Operations (E&U Skills)
274	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Planning Engineering Activities	1	Engineering Technical Support (SEMTA)
275	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Produce and Agree Functional Specifications with Clients.	1	Broadcast Engineering. (Skillset)
276	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Producing Technical Information for Engineering Activities	1	Engineering Technical Support (SEMTA)
277	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Providing Technical Advice and Guidance on Engineering Activities	1	Engineering Technical Support (SEMTA)
278	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Rectify Engineering Problems	1	Engineering Leadership (SEMTA)
279	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Repairing/Replacing Lift Doors, Chains and Ropes	1	Engineering Maintenance (SEMTA)
280	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Schedule Activities for Engineering Methods and Procedures	1	Engineering Management (SEMTA)
281	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Schedule Engineering Activities	1	Engineering Leadership (SEMTA)
282	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Scheduling Engineering Activities	1	Engineering Technical Support (SEMTA)
283	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Solve Broadcast Installation Problems	1	Broadcast Engineering. (Skillset)
284	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Solve Broadcast Maintenance Problems	1	Broadcast Engineering. (Skillset)
285	MAINTENANCE ENGINEERING MAINTENANCE AND INSTALLATION	Solve Broadcast Operational Problems	1	Broadcast Engineering. (Skillset)

286	MAINTENANCE ENGINEERING	Solve Engineering Problems	1	Engineering Management (SEMTA)
200	MAINTENANCE AND	Corve Engineering Froblems	I	
	INSTALLATION			
287	MAINTENANCE ENGINEERING	Testing and Reinstating Escalator Installations	1	Engineering Maintenance (SEMTA)
_	MAINTENANCE AND			3 . 3 ,
	INSTALLATION			
288	MAINTENANCE MARINE	Carry Out Maintenance of Vessel Instrumentation and Control Systems	1	Marine (Merchant Navy Training Board)
289	MAINTENANCE MARINE	Carry Out Maintenance of Vessel Mechanical Machinery and Systems	1	Marine (Merchant Navy Training Board)
290	MAINTENANCE MARINE	Carry Out Maintenance of Vessel Telecommunication and Navigation	1	Marine (Merchant Navy Training Board)
		Systems		
291	MAINTENANCE MARINE	Contribute to Maintenance of Vessel Electrical Equipment	1	Marine (Merchant Navy Training Board)
292	MAINTENANCE MARINE	Contribute to Maintenance of Vessel Mechanical Equipment	1	Marine (Merchant Navy Training Board)
293	MAINTENANCE MARINE	Develop Maintenance Plans for Vessel Engineering Systems	1	Marine (Merchant Navy Training Board)
294	MAINTENANCE MARINE	Maintain steelwork and deck equipment on board a vessel	1	Marine (Merchant Navy Training Board)
295	MAINTENANCE MARINE	Manage Maintenance of Vessel Instrumentation and Control Systems	1	Marine (Merchant Navy Training Board)
296	MAINTENANCE MARINE	Manage the Safety of Vessel High Voltage Electrical Systems	1	Marine (Merchant Navy Training Board)
297	MAINTENANCE MARINE	Plan and organise the maintenance of a vessel's structure, fittings and equipment	1	Marine (Merchant Navy Training Board)
298	MAINTENANCE MARINE	Plan Maintenance for Vessel Engineering Systems	1	Marine (Merchant Navy Training Board)
299	MAINTENANCE PLANT	Carry Out Basic Maintenance on Plant and Equipment	1	Plant Maintenance (Construction) (ConstructionSkills
	MAINTENANCE, CONSTRUCTION			– CITB)
300	MAINTENANCE PLANT	Carry Out Servicing and Maintenance of Plant and Equipment	1	Plant Maintenance (Construction) (ConstructionSkills
	MAINTENANCE, CONSTRUCTION			– CITB)
301	MAINTENANCE PLANT	Contribute to a Safe Working Environment	1	Plant Maintenance (Construction) (ConstructionSkills
	MAINTENANCE, CONSTRUCTION			– CITB)
302	MAINTENANCE PLANT	Control the Use of Allocated Resources for Plant Maintenance and Repair	1	Plant Maintenance (Construction) (ConstructionSkills
	MAINTENANCE, CONSTRUCTION	Activities		– CITB)
303	MAINTENANCE PLANT	Co-ordinate Plant Maintenance Work Activities	1	Plant Maintenance (Construction) (ConstructionSkills
	MAINTENANCE, CONSTRUCTION			– CITB)
304	MAINTENANCE PLANT	Maintain the Work Area	1	Plant Maintenance (Construction) (ConstructionSkills
0.05	MAINTENANCE, CONSTRUCTION			
305	MAINTENANCE PLANT	Move Standard Loads	1	Plant Maintenance (Construction) (ConstructionSkills
000	MAINTENANCE, CONSTRUCTION	Des dues Os s off Osmer en entriet. Assist Diset and Environment Astivities	4	– CITB)
306	MAINTENANCE PLANT MAINTENANCE, CONSTRUCTION	Produce One-off Components to Assist Plant and Equipment Activities	1	Plant Maintenance (Construction) (ConstructionSkills - CITB)
307	MAINTENANCE, CONSTRUCTION MAINTENANCE PLANT	Service and Maintain the Condition of Plant and Equipment	1	Plant Maintenance (Construction) (ConstructionSkills
307	MAINTENANCE, CONSTRUCTION	Service and Maintain the Condition of Plant and Equipment	I	– CITB)
308	MAINTENANCE, ELECTRICITY	Carry out maintenance on distribution and transmission overhead lines	1	Electricity System Technology Engineering Support.
300	SYSTEM TECHNOLOGY	equipment		(E&U Skills)
	ENGINEERING SUPPORT	equipment		(Ead Skills)
309	MAINTENANCE, ELECTRICITY	Carry out planned preventative maintenance on distribution and transmission	1	Electricity System Technology Engineering Support.
000	SYSTEM TECHNOLOGY	substation equipment	'	(E&U Skills)
	ENGINEERING SUPPORT			()
310	MAINTENANCE, ELECTRICITY	Implement, monitor and maintain administrative services (CfA)	1	Electricity System Technology Engineering Support.
	SYSTEM TECHNOLOGY	(***)		(E&U Skills)
	ENGINEERING SUPPORT			

311	MAINTENANCE, ENGINEERING LEADERSHIP	Conduct Risk Analysis on Engineering Activities	1	Engineering Leadership (SEMTA)
312	MAINTENANCE, ENGINEERING LEADERSHIP	Implement Engineering Processes	1	Engineering Leadership (SEMTA)
313	MAINTENANCE, ENGINEERING LEADERSHIP	Obtain Resources For Engineering Activities	1	Engineering Leadership (SEMTA)
314	MAINTENANCE, ENGINEERING LEADERSHIP	Produce Detailed Drawings	1	Engineering Leadership (SEMTA)
315	MAINTENANCE, ENGINEERING LEADERSHIP	Rectify Engineering Problems	1	Engineering Leadership (SEMTA)
316	MAINTENANCE, ENGINEERING LEADERSHIP	Schedule Engineering Activities	1	Engineering Leadership (SEMTA)
317	MAINTENANCE, ENGINEERING MANAGEMENT	Determine the Requirements for Engineering Activities	1	Engineering Management (SEMTA)
318	MAINTENANCE, ENGINEERING MANAGEMENT	Implement Engineering Processes	1	Engineering Management (SEMTA)
319	MAINTENANCE, ENGINEERING MANAGEMENT	Implement Quality Assurance Methods and Procedures	1	Engineering Management (SEMTA)
320	MAINTENANCE, ENGINEERING MANAGEMENT	Implement Quality Assurance Processes	1	Engineering Management (SEMTA)
321	MAINTENANCE, ENGINEERING MANAGEMENT	Improve the Quality of Engineering Products or Processes	1	Engineering Management (SEMTA)
322	MAINTENANCE, ENGINEERING MANAGEMENT	Monitor and Evaluate Engineering Processes	1	Engineering Management (SEMTA)
323	MAINTENANCE, ENGINEERING MANAGEMENT	Obtain Resources for the Implementation of Engineering Activities	1	Engineering Management (SEMTA)
324	MAINTENANCE, ENGINEERING MANAGEMENT	Schedule Activities for Engineering Methods and Procedures	1	Engineering Management (SEMTA)
325	MAINTENANCE, ENGINEERING MANAGEMENT	Solve Engineering Problems	1	Engineering Management (SEMTA)
326	MAINTENANCE, FPSO	Contribute to Tank Entry, Inspection and Maintenance Activities	1	FPSO (Cogent)
327	MAINTENANCE, FPSO	Control Tank Entry, Inspection and Maintenance	1	FPSO (Cogent)
328	MAINTENANCE, FPSO	Prepare and Isolate for the Maintenance of FPSO/FSU Plant and Equipment	1	FPSO (Cogent)
329	MAINTENANCE, FPSO	Reinstate FPSO/FSU Plant and Equipment after Maintenance	1	FPSO (Cogent)
330	MAINTENANCE, HARBOUR MASTER	Communicating with external interests	1	Harbour Masters (Ports Skills and Safety Ltd)
331	MAINTENANCE, HARBOUR MASTER	Managing harbour staff, finances and marine assets	1	Harbour Masters (Ports Skills and Safety Ltd)
332	MARINE	Application of nautical knowledge	1	Vessel Traffic Services Operations (Ports Skills and Safety Ltd)
333	MARINE	Applying Fairing, Filling and Specialist Protective Coatings to Marine Components	1	Marine Engineering (SEMTA)
334	MARINE	Applying Marine Coatings Manually	1	Marine Engineering (SEMTA)
335	MARINE	Applying Marine Coatings using Spray Methods	1	Marine Engineering (SEMTA)
336	MARINE	Applying Specialist Finishes to Marine Components	1	Marine Engineering (SEMTA)
337	MARINE	Applying Surface Treatments to Marine Wooden Assemblies	1	Marine Engineering (SEMTA)
338	MARINE	Assembling Fabricated Components to Produce Marine Sub-Assemblies	1	Marine Engineering (SEMTA)

339	MARINE	Assembling Ferrous Marine Pipework by Mechanical Means	1	Marine Engineering (SEMTA)
340	MARINE	Assembling Marine Composite Components	1	Marine Engineering (SEMTA)
341	MARINE	Assembling Marine Sheet Metal Components	1	Marine Engineering (SEMTA)
342	MARINE	Assembling Marine Wooden Components	1	Marine Engineering (SEMTA)
343	MARINE	Assembling Non-Ferrous Marine Pipework	1	Marine Engineering (SEMTA)
344	MARINE	Assembling Non-Metallic Marine Pipework	1	Marine Engineering (SEMTA)
345	MARINE	Assembling Sub-Assemblies and Components to Produce Major Marine Structural Assemblies	1	Marine Engineering (SEMTA)
346	MARINE	Assisting in the Assembly of Marine Steelwork Components	1	Marine Engineering (SEMTA)
347	MARINE	Assisting in the Installation of Marine Electrical Equipment	1	Marine Engineering (SEMTA)
348	MARINE	Assisting in the Installation of Marine Mechanical Equipment	1	Marine Engineering (SEMTA)
349	MARINE	Assisting in the Installation of Marine Pipework and Components	1	Marine Engineering (SEMTA)
350	MARINE	Assisting in the Installation of Marine Sheet Metal Components/Assemblies	1	Marine Engineering (SEMTA)
351	MARINE	Assisting in the Preparation of Docks and Slips for Vessel Operations	1	Marine Engineering (SEMTA)
352	MARINE	Assisting in the Testing of Marine Pipework Systems	1	Marine Engineering (SEMTA)
353	MARINE	Bending and Forming Marine Pipe using Bending Machines	1	Marine Engineering (SEMTA)
354	MARINE	Bending and Forming Marine Pipe using Hand Methods	1	Marine Engineering (SEMTA)
355	MARINE	Bending and Forming Marine Sheet Metal using Hand and Machine Tools	1	Marine Engineering (SEMTA)
356	MARINE	Bending and Straightening Materials using the Heat-Line Method	1	Marine Engineering (SEMTA)
357	MARINE	Bonding Marine Composite Components	1	Marine Engineering (SEMTA)
358	MARINE	Bonding Marine Materials and Components using Adhesives	1	Marine Engineering (SEMTA)
359	MARINE	Carry Out Maintenance of Vessel Electrical Machinery and Systems	1	Marine (Merchant Navy Training Board)
360	MARINE	Carry Out Maintenance of Vessel Electrical Machinery and Systems	1	Marine (Merchant Navy Training Board)
361	MARINE	Carrying Out Bonding Operations on Marine Composite Components	1	Marine Engineering (SEMTA)
362	MARINE	Carrying Out Condition Monitoring on Marine Mechanical Equipment	1	Marine Engineering (SEMTA)
363	MARINE	Carrying Out Maintenance on Marine Ancillary Plant and Equipment	1	Marine Engineering (SEMTA)
364	MARINE	Carrying Out Maintenance on Marine Auxiliary Power for Electrical Power Generation	1	Marine Engineering (SEMTA)
365	MARINE	Carrying Out Maintenance on Marine Fire Main Systems and Equipment	1	Marine Engineering (SEMTA)
366	MARINE	Carrying Out Maintenance on Marine Fuel Systems and Equipment	1	Marine Engineering (SEMTA)
367	MARINE	Carrying Out Maintenance on Marine Lifting Equipment	1	Marine Engineering (SEMTA)
368	MARINE	Carrying Out Maintenance on Marine Liquid Ballast Systems	1	Marine Engineering (SEMTA)
369	MARINE	Carrying Out Maintenance on Marine Mechanical Control Equipment and Systems	1	Marine Engineering (SEMTA)
370	MARINE	Carrying Out Maintenance on Marine Pantry and Galley Equipment	1	Marine Engineering (SEMTA)
371	MARINE	Carrying Out Maintenance on Marine Pneumatic Systems and Equipment	1	Marine Engineering (SEMTA)
372	MARINE	Carrying Out Maintenance on Marine Steam Plant and Equipment	1	Marine Engineering (SEMTA)
373	MARINE	Carrying Out Maintenance on Marine Steering Gear, Control Systems and Equipment	1	Marine Engineering (SEMTA)
374	MARINE	Carrying Out Manual Torch Brazing and Soldering of Marine Pipework	1	Marine Engineering (SEMTA)
375	MARINE	Carrying Out Modifications and Rewiring of Marine Electrical Circuits	1	Marine Engineering (SEMTA)
376	MARINE	Carrying Out Patch Preparation of Material Surfaces using Hand and Mechanical Tools	1	Marine Engineering (SEMTA)
377	MARINE	Carrying Out Pattern Development for Marine Applications		Marine Engineering (SEMTA)

378	MARINE	Carrying Out Planned Maintenance Activities on Marine Mechanical Equipment	1	Marine Engineering (SEMTA)
379	MARINE	Carrying Out Preparations for Rigging Activities	1	Marine Engineering (SEMTA)
380	MARINE	Carrying Out Repairs to Marine Composite Mouldings	1	Marine Engineering (SEMTA)
381	MARINE	Carrying Out Scheduled Maintenance on Marine Electrical Equipment	1	Marine Engineering (SEMTA)
382	MARINE	Carrying Out Scheduled Maintenance on Marine Mechanical Equipment	1	Marine Engineering (SEMTA)
383	MARINE	Carrying Out Tests on Marine Electrical Equipment and Circuits	1	Marine Engineering (SEMTA)
384	MARINE	Carrying Out the Application of Marine Coatings using Spray Methods	1	Marine Engineering (SEMTA)
385	MARINE	Carrying Out the Installation of Cable Runs and Circuits in Marine Structures	1	Marine Engineering (SEMTA)
386	MARINE	Carrying Out the Manual Application of Marine Coatings	1	Marine Engineering (SEMTA)
387	MARINE	Carrying Out the Preparation of Material Surfaces by Abrasive Blasting	1	Marine Engineering (SEMTA)
388	MARINE	Carrying Out Trimming Operations on Marine Composite Mouldings	1	Marine Engineering (SEMTA)
389	MARINE	Checking Marine Composite Components/Mouldings for Defects	1	Marine Engineering (SEMTA)
390	MARINE	Checking Marine Fabrications for Quality and Dimensional Accuracy	1	Marine Engineering (SEMTA)
391	MARINE	Communicating with external interests	1	Harbour Masters (Ports Skills and Safety Ltd)
392	MARINE	Conform to the Statutory, General Health and Safety Requirements for FPSO/FSU's	1	FPSO (Cogent)
393	MARINE	Contribute to Monitoring and Operation of Marine and Storage Systems	1	FPSO (Cogent)
394	MARINE	Contribute to Start Up of Marine and Storage Systems	1	FPSO (Cogent)
395	MARINE	Contribute to Tank Entry, Inspection and Maintenance Activities	1	FPSO (Cogent)
396	MARINE	Contribute to the Preparation to Start Up Marine and Storage Systems	1	FPSO (Cogent)
397	MARINE	Contribute to the Shutdown of the Marine and Storage Systems	1	FPSO (Cogent)
398	MARINE	Control Tank Entry, Inspection and Maintenance	1	FPSO (Cogent)
399	MARINE	Cutting and Shaping Marine Sheet Metal using Hand and Machine Tools	1	Marine Engineering (SEMTA)
400	MARINE	Cutting and Shaping Marine Soft Furnishings	1	Marine Engineering (SEMTA)
401	MARINE	Cutting and Shaping Marine Steelwork using Gas Cutting Machines	1	Marine Engineering (SEMTA)
402	MARINE	Cutting and Shaping Materials using Portable Thermal Cutting Equipment	1	Marine Engineering (SEMTA)
403	MARINE	Cutting Marine Steelwork using Handheld Thermal Cutting Equipment	1	Marine Engineering (SEMTA)
404	MARINE	Cutting Marine Steelwork using Saws and Abrasive Discs	1	Marine Engineering (SEMTA)
405	MARINE	Cutting Marine Steelwork using Shearing Machines	1	Marine Engineering (SEMTA)
406	MARINE	Cutting Sheet Metal to Shape using Hand and Machine Tools	1	Marine Engineering (SEMTA)
407	MARINE	Diagnose the Causes of Variations in Vessel Mechanical Systems	1	Marine (Merchant Navy Training Board)
408	MARINE	Diagnosing Faults on Marine Electrical Equipment and Circuits	1	Marine Engineering (SEMTA)
409	MARINE	Diagnosing Faults on Marine Mechanical Equipment	1	Marine Engineering (SEMTA)
410	MARINE	Direct Vessel Engineering Operations	1	Marine (Merchant Navy Training Board)
411	MARINE	Discharging statutory duties	1	Harbour Masters (Ports Skills and Safety Ltd)
412	MARINE	Disconnecting and Removing Marine Electrical Equipment	1	Marine Engineering (SEMTA)
413	MARINE	Disconnecting and Removing Marine Mechanical Equipment	1	Marine Engineering (SEMTA)
414	MARINE	Dismantling and Removing Marine Access Structures	1	Marine Engineering (SEMTA)
415	MARINE	Dismantling and Removing Marine Electrical Equipment	1	Marine Engineering (SEMTA)
416	MARINE	Dismantling and Removing Marine Mechanical equipment	1	Marine Engineering (SEMTA)
417	MARINE	Drilling and Finishing Holes in Marine Steelwork	1	Marine Engineering (SEMTA)
418	MARINE	Finishing Marine Wooden Assemblies by Applying Surface Treatments	1	Marine Engineering (SEMTA)
419	MARINE	Fitting Marine Composite Components to the Vessel, Craft or Structure	1	Marine Engineering (SEMTA)
420	MARINE	Fitting Marine Interior Panels and Soft Furnishings	1	Marine Engineering (SEMTA)
421	MARINE	Fitting Marine Seating and Furniture	1	Marine Engineering (SEMTA)

423 1 424 1 425 1 425 1 426 1 427 1 428 1 429 1 430 1 431 1 433 1 433 1 433 1 433 1	MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE	Forming Marine Components by Acrylic Moulding Forming Marine Components using a Power Press Forming Marine Components using Power Rolling Machines Forming Marine Sheet Metal Components using Hand and Machine Tools Heat Treating Materials for Marine Fabrication Activities Identifying Defects in Marine Composite Components and Assemblies Inspecting Marine Coatings Installing Cable Runs and Circuits in Marine Structures Installing Marine Ancillary Plant and Equipment Installing Marine Communication Equipment and Systems Installing Marine Composite Components Installing Marine Composite Components	1 1 1 1 1 1 1 1 1 1 1 1	Marine Engineering (SEMTA) Marine Engineering (SEMTA)
424 1 425 1 426 1 427 1 428 1 429 1 430 1 431 1 433 1 433 1 433 1 433 1	MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE	Forming Marine Components using Power Rolling Machines Forming Marine Sheet Metal Components using Hand and Machine Tools Heat Treating Materials for Marine Fabrication Activities Identifying Defects in Marine Composite Components and Assemblies Inspecting Marine Coatings Installing Cable Runs and Circuits in Marine Structures Installing Marine Ancillary Plant and Equipment Installing Marine Auxiliary Power Units for Electrical Power Generation Installing Marine Communication Equipment and Systems Installing Marine Composite Components	1 1 1 1 1 1 1 1 1 1 1 1	Marine Engineering (SEMTA)
425 M 426 M 427 M 428 M 429 M 430 M 431 M 432 M 433 M 434 M 435 M	MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE	Forming Marine Sheet Metal Components using Hand and Machine Tools Heat Treating Materials for Marine Fabrication Activities Identifying Defects in Marine Composite Components and Assemblies Inspecting Marine Coatings Installing Cable Runs and Circuits in Marine Structures Installing Marine Ancillary Plant and Equipment Installing Marine Anxiliary Power Units for Electrical Power Generation Installing Marine Communication Equipment and Systems Installing Marine Composite Components	1 1 1 1 1 1 1 1 1	Marine Engineering (SEMTA)
426 M 427 M 428 M 429 M 430 M 431 M 432 M 433 M 434 M 435 M	MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE	Heat Treating Materials for Marine Fabrication Activities Identifying Defects in Marine Composite Components and Assemblies Inspecting Marine Coatings Installing Cable Runs and Circuits in Marine Structures Installing Marine Ancillary Plant and Equipment Installing Marine Auxiliary Power Units for Electrical Power Generation Installing Marine Communication Equipment and Systems Installing Marine Composite Components	1 1 1 1 1 1 1 1 1	Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA)
427 M 428 M 429 M 430 M 431 M 432 M 433 M 434 M 435 M	MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE	Identifying Defects in Marine Composite Components and Assemblies Inspecting Marine Coatings Installing Cable Runs and Circuits in Marine Structures Installing Marine Ancillary Plant and Equipment Installing Marine Auxiliary Power Units for Electrical Power Generation Installing Marine Communication Equipment and Systems Installing Marine Composite Components	1 1 1 1 1 1 1	Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA)
428 1 429 1 430 1 431 1 432 1 433 1 433 1 434 1 435 1	MARINE MARINE MARINE MARINE MARINE MARINE MARINE MARINE	Inspecting Marine Coatings Installing Cable Runs and Circuits in Marine Structures Installing Marine Ancillary Plant and Equipment Installing Marine Auxiliary Power Units for Electrical Power Generation Installing Marine Communication Equipment and Systems Installing Marine Composite Components	1 1 1 1 1 1	Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA)
429 M 430 M 431 M 432 M 433 M 434 M 435 M	MARINE MARINE MARINE MARINE MARINE MARINE MARINE	Installing Cable Runs and Circuits in Marine Structures Installing Marine Ancillary Plant and Equipment Installing Marine Auxiliary Power Units for Electrical Power Generation Installing Marine Communication Equipment and Systems Installing Marine Composite Components	1 1 1 1	Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA)
430 M 431 M 432 M 433 M 434 M 435 M	MARINE MARINE MARINE MARINE MARINE MARINE	Installing Marine Ancillary Plant and Equipment Installing Marine Auxiliary Power Units for Electrical Power Generation Installing Marine Communication Equipment and Systems Installing Marine Composite Components	1 1 1 1	Marine Engineering (SEMTA) Marine Engineering (SEMTA) Marine Engineering (SEMTA)
431 M 432 M 433 M 434 M 435 M	MARINE MARINE MARINE MARINE MARINE	Installing Marine Auxiliary Power Units for Electrical Power Generation Installing Marine Communication Equipment and Systems Installing Marine Composite Components	1	Marine Engineering (SEMTA) Marine Engineering (SEMTA)
432 M 433 M 434 M 435 M	MARINE MARINE MARINE MARINE	Installing Marine Communication Equipment and Systems Installing Marine Composite Components	1	Marine Engineering (SEMTA)
433 M 434 M 435 M	MARINE MARINE MARINE	Installing Marine Composite Components	1	
434 M 435 M	MARINE MARINE		-	
435 N	MARINE		1	Marine Engineering (SEMTA)
		Installing Marine Electrical Rotating Machines and Domestic Equipment	1	Marine Engineering (SEMTA)
436 I		Installing Marine Fire Main Systems and Equipment	1	Marine Engineering (SEMTA)
	MARINE	Installing Marine Fuel Systems and Equipment	1	Marine Engineering (SEMTA)
	MARINE	Installing Marine Hydraulic Systems and Equipment	1	Marine Engineering (SEMTA)
	MARINE	Installing Marine Interior Panels and Soft Furnishings	1	Marine Engineering (SEMTA)
	MARINE	Installing Marine Lifting Equipment	1	Marine Engineering (SEMTA)
	MARINE	Installing Marine Lighting, Alarm, Detection and Monitoring Equipment and	1	Marine Engineering (SEMTA)
441 1		Systems	I	
442 I	MARINE	Installing Marine Liquid Ballast Arrangements	1	Marine Engineering (SEMTA)
	MARINE	Installing Marine Mechanical Control Systems and Equipment	1	Marine Engineering (SEMTA)
444 N	MARINE	Installing Marine Navigational Equipment and Systems	1	Marine Engineering (SEMTA)
445 N	MARINE	Installing Marine Pantry and Galley Equipment and Services	1	Marine Engineering (SEMTA)
446 N	MARINE	Installing Marine Pipework and Components	1	Marine Engineering (SEMTA)
447 N	MARINE	Installing Marine Pneumatic Systems and Equipment	1	Marine Engineering (SEMTA)
448 N	MARINE	Installing Marine Power Generation and Distribution Equipment and Systems	1	Marine Engineering (SEMTA)
449 N	MARINE	Installing Marine Power Transmission Systems and Equipment	1	Marine Engineering (SEMTA)
	MARINE	Installing Marine Propulsion Systems and Equipment	1	Marine Engineering (SEMTA)
451 N	MARINE	Installing Marine Refrigeration and Air Conditioning Equipment	1	Marine Engineering (SEMTA)
452 I	MARINE	Installing Marine Seating and Furniture	1	Marine Engineering (SEMTA)
453 N	MARINE	Installing Marine Sensor Equipment and Systems	1	Marine Engineering (SEMTA)
454 N	MARINE	Installing Marine Sheet Metal Components and Assemblies	1	Marine Engineering (SEMTA)
	MARINE	Installing Marine Steam Plant and Equipment	1	Marine Engineering (SEMTA)
456 N	MARINE	Installing Marine Steering Gear, Control Systems and Equipment	1	Marine Engineering (SEMTA)
	MARINE	Installing Marine Weapons Equipment and Systems	1	Marine Engineering (SEMTA)
	MARINE	Installing Marine Wooden Components	1	Marine Engineering (SEMTA)
	MARINE	Joining Ferrous Marine Pipework by Mechanical Means	1	Marine Engineering (SEMTA)
	MARINE	Joining Marine Materials and Components using Adhesives	1	Marine Engineering (SEMTA)
	MARINE	Joining Marine Materials by Manual Torch Brazing and Soldering	1	Marine Engineering (SEMTA)
	MARINE	Joining Marine Materials/Structures using Manual MIG/MAG and other Continuous Wire Processes	1	Marine Engineering (SEMTA)
463 N	MARINE	Joining Marine Materials/Structures using Manual TIG and Plasma-Arc Welding Processes	1	Marine Engineering (SEMTA)
464 N	MARINE	Joining Marine Materials/Structures using the Manual Gas Welding Process	1	Marine Engineering (SEMTA)

465	MARINE	Joining Marine Materials/Structures using the Manual Metal Arc (MMA) Welding Process	1	Marine Engineering (SEMTA)
466	MARINE	Joining Marine Pipework by Manual Torch Brazing and Soldering	1	Marine Engineering (SEMTA)
167	MARINE	Joining Marine Sheet Metal Components using Mechanical Fasteners	1	Marine Engineering (SEMTA)
-68	MARINE	Joining Marine Sheet Metal Materials using Resistance Spot Welding	1	Marine Engineering (SEMTA)
169	MARINE	Joining Materials using Manual Torch Brazing and Soldering	1	Marine Engineering (SEMTA)
170	MARINE	Joining Non-Ferrous Marine Pipework	1	Marine Engineering (SEMTA)
171	MARINE	Joining Non-Metallic Marine Pipework	1	Marine Engineering (SEMTA)
172	MARINE	Liaising and communicating within the port	1	Marine Pilots (Ports Skills and Safety Ltd)
173	MARINE	Lining Off for Assembly and Erection of Marine Steelwork and Components	1	Marine Engineering (SEMTA)
174	MARINE	Locating Faults in Marine Electrical Equipment and Circuits	1	Marine Engineering (SEMTA)
475	MARINE	Locating Faults in Marine Mechanical Equipment	1	Marine Engineering (SEMTA)
476	MARINE	Maintain a legal and safe working environment on board ship	1	Marine Vessel Operations & Marine Engineering Operations – Management and Safety (Merchant Navy Training Board)
177	MARINE	Maintain marine equipment	1	Port Operations (Ports Skills and Safety Ltd)
78	MARINE	Maintaining and testing instrumentation devices	1	Performing Engineering Operations (SEMTA)
79	MARINE	Maintaining Marine Ancillary Plant and Equipment	1	Marine Engineering (SEMTA)
80	MARINE	Maintaining Marine Auxiliary Power Units.	1	Marine Engineering (SEMTA)
81	MARINE	Maintaining Marine Communication Equipment and Systems	1	Marine Engineering (SEMTA)
.82	MARINE	Maintaining Marine Computer Equipment and Systems	1	Marine Engineering (SEMTA)
83	MARINE	Maintaining Marine Electrical Power Generation and Distribution Equipment and Systems	1	Marine Engineering (SEMTA)
184	MARINE	Maintaining Marine Electrical Rotating Machines and Domestic Equipment	1	Marine Engineering (SEMTA)
85	MARINE	Maintaining Marine Fire Main Systems and Equipment	1	Marine Engineering (SEMTA)
86	MARINE	Maintaining Marine Fuel Systems and Equipment	1	Marine Engineering (SEMTA)
87	MARINE	Maintaining Marine Hydraulic Systems and Equipment	1	Marine Engineering (SEMTA)
88	MARINE	Maintaining Marine Lifting Equipment	1	Marine Engineering (SEMTA)
89	MARINE	Maintaining Marine Lighting, Alarm, Detection and Monitoring Equipment and Systems	1	Marine Engineering (SEMTA)
90	MARINE	Maintaining Marine Liquid Ballast Arrangements	1	Marine Engineering (SEMTA)
91	MARINE	Maintaining Marine Mechanical Control Equipment and Systems	1	Marine Engineering (SEMTA)
92	MARINE	Maintaining Marine Navigational Equipment and Systems	1	Marine Engineering (SEMTA)
93	MARINE	Maintaining Marine Pantry and Galley Equipment and Services	1	Marine Engineering (SEMTA)
94	MARINE	Maintaining Marine Pneumatic Systems and Equipment	1	Marine Engineering (SEMTA)
95	MARINE	Maintaining Marine Power Transmission Systems	1	Marine Engineering (SEMTA)
196	MARINE	Maintaining Marine Propulsion Systems	1	Marine Engineering (SEMTA)
197	MARINE	Maintaining Marine Refrigeration and Air Conditioning Equipment	1	Marine Engineering (SEMTA)
98	MARINE	Maintaining Marine Sensor Equipment and Systems	1	Marine Engineering (SEMTA)
99	MARINE	Maintaining Marine Steam Plant and Equipment	1	Marine Engineering (SEMTA)
500	MARINE	Maintaining Marine Steering Gear, Control Systems and Equipment	1	Marine Engineering (SEMTA)
i00	MARINE	Maintaining Marine Weapons Equipment and Systems	1	Marine Engineering (SEMTA)
502	MARINE	Maintaining Marine weapons Equipment and Systems Manage the Operation of Vessel Auxiliaries, Auxiliary Boilers and Service Machinery	1	Marine Engineering (SEMTA) Marine (Merchant Navy Training Board)
503	MARINE	Manage the Operation of Vessel Propulsion Machinery and Ancillary Systems	1	Marine (Merchant Navy Training Board)
504	MARINE	Managing harbour staff, finances and marine assets	1	Harbour Masters (Ports Skills and Safety Ltd)

505	MARINE	Managing port marine operations	1	Harbour Masters (Ports Skills and Safety Ltd)
506	MARINE	Managing the marine environment	1	Harbour Masters (Ports Skills and Safety Ltd)
507	MARINE	Marking Off for the Manufacture of Marine Steelwork Components	1	Marine Engineering (SEMTA)
508	MARINE	Marking Off Marine Structural Steelwork Components	1	Marine Engineering (SEMTA)
509	MARINE	Marking Out for Fabrication and Assembly of Marine Sheet Metalwork	1	Marine Engineering (SEMTA)
510	MARINE	Marking Out for Manufacture and Assembly of Marine Wooden Components	1	Marine Engineering (SEMTA)
511	MARINE	Marking Out for the Installation of Marine Wooden Assemblies	1	Marine Engineering (SEMTA)
512	MARINE	Marking Out for the Manufacture and Assembly of Marine Wooden	1	Marine Engineering (SEMTA)
0.2		Components		
513	MARINE	Marking Out Marine Sheet Metalwork	1	Marine Engineering (SEMTA)
514	MARINE	Modifying and Rewiring Marine Electrical Circuits	1	Marine Engineering (SEMTA)
515	MARINE	Monitor and Control the FPSO/FSU Marine Systems	1	FPSO (Cogent)
516	MARINE	Monitor and Maintain FPSO/FSU Environmental Control Measures	1	FPSO (Cogent)
517	MARINE	Monitor and Maintain the Health and Safety of Personnel on FPSO/FSU's	1	FPSO (Cogent)
518	MARINE	Monitor and Operate Engine Room Machinery	1	Marine (Merchant Navy Training Board)
519	MARINE	Moving Materials and Components in a Marine Environment	1	Marine Engineering (SEMTA)
520	MARINE	Operate marine radar equipment	1	Port Operations (Ports Skills and Safety Ltd)
520	MARINE	Outfitting Marine Steelwork	1	Marine Engineering (SEMTA)
522	MARINE	Overhauling Marine Ancillary Plant and Equipment	1	Marine Engineering (SEMTA)
523	MARINE	Overhauling Marine Auditary Plant and Equipment	1	Marine Engineering (SEMTA)
523	MARINE	Overhauling Marine Communication Equipment and Systems	1	Marine Engineering (SEMTA)
525	MARINE	Overhauling Marine Electrical Power Generation and Distribution Equipment	1	Marine Engineering (SEMTA)
525	MARINE	and Systems	1	
526	MARINE	Overhauling Marine Electrical Rotating Machines and Domestic Equipment	1	Marine Engineering (SEMTA)
527	MARINE	Overhauling Marine Fire Main Systems and Equipment	1	Marine Engineering (SEMTA)
528	MARINE	Overhauling Marine Fuel Systems and Equipment	1	Marine Engineering (SEMTA)
529	MARINE	Overhauling Marine Hydraulic Systems and Equipment	1	Marine Engineering (SEMTA)
530	MARINE	Overhauling Marine Lifting Equipment	1	Marine Engineering (SEMTA)
531	MARINE	Overhauling Marine Liquid Ballast Arrangements	1	Marine Engineering (SEMTA)
532	MARINE	Overhauling Marine Mechanical Control Equipment and Systems	1	Marine Engineering (SEMTA)
533	MARINE	Overhauling Marine Navigational Equipment and Systems	1	Marine Engineering (SEMTA)
534	MARINE	Overhauling Marine Pantry and Galley Equipment	1	Marine Engineering (SEMTA)
535	MARINE	Overhauling Marine Pneumatic Systems and Equipment	1	Marine Engineering (SEMTA)
536	MARINE	Overhauling Marine Power Transmission Systems	1	Marine Engineering (SEMTA)
537	MARINE	Overhauling Marine Propulsion Systems	1	Marine Engineering (SEMTA)
538	MARINE	Overhauling Marine Refrigeration and Air Conditioning Equipment	1	Marine Engineering (SEMTA)
539	MARINE	Overhauling Marine Steam Plant and Equipment	1	Marine Engineering (SEMTA)
540	MARINE	Overhauling Marine Steering Gear, Control Systems and Equipment	1	Marine Engineering (SEMTA)
541	MARINE	Overhauling Marine Weapons Equipment and Systems	1	Marine Engineering (SEMTA)
542	MARINE	Perform Shutdown Activities for Marine Operations	1	FPSO (Cogent)
543	MARINE	Plan and direct vessel operations	1	Marine Vessel Operations & Marine Engineering
0.0				Operations – Marine Vessel Operations (Merchant
				Navy Training Board)
544	MARINE	Plan and direct vessel operations	1	Marine (Merchant Navy Training Board)
545	MARINE	Plan and Prepare for FPSO/FSU Marine Operations	1	FPSO (Cogent)
546	MARINE	Plan and Schedule Vessel Engineering Operations	1	Marine (Merchant Navy Training Board)

547	MARINE	Positioning and Securing Marine Access Structures	1	Marine Engineering (SEMTA)
548	MARINE	Prepare and Operate Vessel Propulsion Machinery and Ancillary Systems	1	Marine (Merchant Navy Training Board)
549	MARINE	Preparing and Testing Marine Pipework Systems	1	Marine Engineering (SEMTA)
550	MARINE	Preparing Docks and Slips for Vessel Operations	1	Marine Engineering (SEMTA)
551	MARINE	Preparing for Rigging Activities	1	Marine Engineering (SEMTA)
552	MARINE	Preparing Loads for Moving	1	Marine Engineering (SEMTA)
553	MARINE	Preparing Marine Coating Materials for Application	1	Marine Engineering (SEMTA)
554	MARINE	Preparing Marine Coatings for Application	1	Marine Engineering (SEMTA)
555	MARINE	Preparing Marine Material Surfaces using Hand and Mechanical Tools	1	Marine Engineering (SEMTA)
556	MARINE	Preparing Material Surfaces by Abrasive Blasting	1	Marine Engineering (SEMTA)
557	MARINE	Producing Assemblies of Marine Wooden Components	1	Marine Engineering (SEMTA)
558	MARINE	Producing Fillet Welded Joints using a Manual Welding Process	1	Marine Engineering (SEMTA)
559	MARINE	Producing Marine Components by Acrylic Moulding	1	Marine Engineering (SEMTA)
560	MARINE	Producing Marine Composite Assemblies	1	Marine Engineering (SEMTA)
561	MARINE	Producing Marine Composite Components using Pre-Preg Laminating	1	Marine Engineering (SEMTA)
		Techniques		
562	MARINE	Producing Marine Composite Components using Wet Lay-Up Techniques	1	Marine Engineering (SEMTA)
563	MARINE	Producing Marine Sheet Metal Assemblies	1	Marine Engineering (SEMTA)
564	MARINE	Producing Marine Soft Furnishings	1	Marine Engineering (SEMTA)
565	MARINE	Producing Marine Wooden Components using Hand Tools	1	Marine Engineering (SEMTA)
566	MARINE	Producing Marine Wooden Components using Machines	1	Marine Engineering (SEMTA)
567	MARINE	Producing Replacement Components for Marine Maintenance Activities	1	Marine Engineering (SEMTA)
568	MARINE	Producing Socket and Flange Fillet Welded Joints in Low Pressure Marine	1	Marine Engineering (SEMTA)
000		Pipework using a Manual Welding Process		
569	MARINE	Rectifying Metallic Surfaces using Hand and Power Tools	1	Marine Engineering (SEMTA)
570	MARINE	Removing Marine Access Structures	1	Marine Engineering (SEMTA)
571	MARINE	Repairing Marine Composite Components and Assemblies	1	Marine Engineering (SEMTA)
572	MARINE	Repairing Marine Mechanical Components	1	Marine Engineering (SEMTA)
573	MARINE	Restoring Marine Mechanical Components to Usable Condition by Repair	1	Marine Engineering (SEMTA)
574	MARINE	Setting to Work and Testing Marine Ancillary Plant and Equipment	1	Marine Engineering (SEMTA)
575	MARINE	Setting to Work and Testing Marine Auxiliary Power for Electrical Power	1	Marine Engineering (SEMTA)
010		Generation		
576	MARINE	Setting to Work and Testing Marine Fire Main Systems and Equipment	1	Marine Engineering (SEMTA)
577	MARINE	Setting to Work and Testing Marine Fuel Systems and Equipment	1	Marine Engineering (SEMTA)
578	MARINE	Setting to Work and Testing Marine Hydraulic Systems and Equipment	1	Marine Engineering (SEMTA)
579	MARINE	Setting to Work and Testing Marine Lifting Equipment	1	Marine Engineering (SEMTA)
580	MARINE	Setting to Work and Testing Marine Liquid Ballast Arrangements	1	Marine Engineering (SEMTA)
581	MARINE	Setting to Work and Testing Marine Mechanical Control Equipment and	1	Marine Engineering (SEMTA)
001		Systems		
582	MARINE	Setting to Work and Testing Marine Pantry and Galley Equipment and	1	Marine Engineering (SEMTA)
302		Services	'	
583	MARINE	Setting to Work and Testing Marine Pneumatic Systems and Equipment	1	Marine Engineering (SEMTA)
584	MARINE	Setting to Work and Testing Marine Power Transmission Systems and	1	Marine Engineering (SEMTA)
504		Equipment	'	
585	MARINE	Setting to Work and Testing Marine Propulsion Systems and Equipment	1	Marine Engineering (SEMTA)
586	MARINE	Setting to Work and Testing Marine Refrigeration and Air Conditioning	1	Marine Engineering (SEMTA)

587	MARINE	Setting to Work and Testing Marine Steam Plant and Equipment	1	Marine Engineering (SEMTA)
588	MARINE	Setting to Work and Testing Marine Steering Gear, Control Equipment and Systems	1	Marine Engineering (SEMTA)
589	MARINE	Setting to Work, Testing and Trialling Marine Communication Equipment and Systems	1	Marine Engineering (SEMTA)
590	MARINE	Setting to Work, Testing and Trialling Marine Computer Equipment and Systems	1	Marine Engineering (SEMTA)
591	MARINE	Setting to Work, Testing and Trialling Marine Electrical Power Generation and Distribution Equipment and Systems	1	Marine Engineering (SEMTA)
592	MARINE	Setting to Work, Testing and Trialling Marine Electrical Rotating Machines and Domestic Equipment	1	Marine Engineering (SEMTA)
593	MARINE	Setting to Work, Testing and Trialling Marine Lighting, Alarm, Detection and Monitoring Equipment and Systems	1	Marine Engineering (SEMTA)
594	MARINE	Setting to Work, Testing and Trialling Marine Navigational Equipment and Systems	1	Marine Engineering (SEMTA)
595	MARINE	Setting to Work, Testing and Trialling Marine Sensor Equipment and Systems	1	Marine Engineering (SEMTA)
596	MARINE	Setting to Work, Testing and Trialling Marine Weapons Equipment and Systems	1	Marine Engineering (SEMTA)
597	MARINE	Setting Up and Preparing Loads for Moving	1	Marine Engineering (SEMTA)
598	MARINE	Setting Up and Securing Marine Access Structures	1	Marine Engineering (SEMTA)
599	MARINE	Shaping Marine Steelwork using a Power Press	1	Marine Engineering (SEMTA)
600	MARINE	Shaping Marine Steelwork using Power Rolling Machines	1	Marine Engineering (SEMTA)
601	MARINE	Shaping Marine Wooden Components using Hand Tools	1	Marine Engineering (SEMTA)
602	MARINE	Shaping Marine Wooden Components using Machines	1	Marine Engineering (SEMTA)
603	MARINE	Siting and Leveling for the Assembly of Marine Structures	1	Marine Engineering (SEMTA)
604	MARINE	Slinging, Lifting and Moving Materials, Machinery and Components in a Marine Environment	1	Marine Engineering (SEMTA)
605	MARINE	Start Up Marine Operations	1	FPSO (Cogent)
606	MARINE	Surveying Marine Pipework Systems	1	Marine Engineering (SEMTA)
607	MARINE	Tack Welding Fillet Joints in Marine Steelwork	1	Marine Engineering (SEMTA)
608	MARINE	Tack Welding Marine Plate using A Manual Welding Process	1	Marine Engineering (SEMTA)
609	MARINE	Testing Marine Electrical Equipment and Circuits	1	Marine Engineering (SEMTA)
610	MARINE	Trimming Marine Composite Mouldings	1	Marine Engineering (SEMTA)
611	MARINE	Undertake responsible fishing	1	Marine Vessel Operations & Marine Engineering Operations – Marine Vessel Operations (Merchant Navy Training Board)
612	MARINE	Undertake responsible fishing	1	Marine (Merchant Navy Training Board)
613	MARINE	Use radar and tracking systems safely	1	Vessel Traffic Services Operations (Ports Skills and Safety Ltd)
614	MARINE	Using Bending Machines to Form Marine Pipe	1	Marine Engineering (SEMTA)
615	MARINE	Using Hand Methods to Bend and Form Marine Pipe	1	Marine Engineering (SEMTA)
616	MARINE	Using Mechanical Fasteners to Join Marine Sheet Metal Components	1	Marine Engineering (SEMTA)
617	MARINE	Using Pre-Preg Laminating Techniques to Produce Marine Composite Components	1	Marine Engineering (SEMTA)
618	MARINE	Using Resistance Spot Welding to Join Marine Sheet Metal Materials	1	Marine Engineering (SEMTA)
619	MARINE	Using Wet Lay-Up Techniques to Produce Marine Composite Components	1	Marine Engineering (SEMTA)

620	MARINE	Vacuum Forming Marine Composite Materials	1	Marine Engineering (SEMTA)
621	MARINE	Welding Marine Materials and Structures using Manual MIG/MAG and other Continuous Wire Processes	1	Marine Engineering (SEMTA)
622	MARINE	Welding Marine Materials and Structures using Manual TIG and Plasma Arc Welding Processes	1	Marine Engineering (SEMTA)
623	MARINE	Welding Marine Materials and Structures using the Manual Gas Welding Process	1	Marine Engineering (SEMTA)
624	MARINE	Welding Marine Materials and Structures using the Manual Metal Arc Process	1	Marine Engineering (SEMTA)
625	MARINE	Welding Marine Pipe/Tube using Multiple Manual Arc Welding Processes	1	Marine Engineering (SEMTA)
626	MARINE	Welding Marine Plate and Structures using Multiple Manual Arc Welding Processes	1	Marine Engineering (SEMTA)
627	NUCLEAR DECOMMISSIONING	Adjust equipment used in nuclear decommissioning to meet operational requirements	1	Nuclear Decommissioning (Cogent)
628	NUCLEAR DECOMMISSIONING	Carry out planned preventative maintenance procedures on equipment used in nuclear decommissioning	1	Nuclear Decommissioning (Cogent)
629	NUCLEAR DECOMMISSIONING	Dismantle contaminated plant, structures and equipment used within nuclear facilities	1	Nuclear Decommissioning (Cogent)
630	NUCLEAR DECOMMISSIONING	Keep radiological monitoring instruments and equipment in good order	1	Nuclear Decommissioning (Cogent)
631	PROCESS ENGINEERING MAINTENANCE	Adjust electrical plant and equipment to meet operational requirements	1	Process Engineering Maintenance Electrical (Cogent)
632	PROCESS ENGINEERING MAINTENANCE	Adjust instrument and control systems to meet operational requirements	1	Process Engineering Maintenance Instrument (Cogent)
633	PROCESS ENGINEERING MAINTENANCE	Carry out planned maintenance procedures on electrical plant and equipment	1	Process Engineering Maintenance Electrical (Cogent)
634	PROCESS ENGINEERING MAINTENANCE	Carry out planned maintenance procedures on electrical process plant and equipment	1	Process Engineering Maintenance Electrical (Cogent)
635	PROCESS ENGINEERING MAINTENANCE	Contribute to effective working relationships in process engineering maintenance	1	Process Engineering Maintenance Electrical (Cogent)
636	PROCESS ENGINEERING MAINTENANCE	Prepare equipment in support of electrical engineering activities	1	Process Engineering Maintenance Electrical (Cogent)
637	PROCESS ENGINEERING MAINTENANCE	Prepare materials for the maintenance of electrical plant and equipment	1	Process Engineering Maintenance Electrical (Cogent)
638	PROCESS ENGINEERING MAINTENANCE	Prepare materials for the maintenance of electrical process plant and equipment	1	Process Engineering Maintenance Electrical (Cogent)
639	PROCESS ENGINEERING MAINTENANCE	Prepare process plant and equipment in support of electrical engineering activities	1	Process Engineering Maintenance Electrical (Cogent)
640	PROCESS ENGINEERING MAINTENANCE	Prepare work areas for the maintenance of process engineering plant and equipment	1	Process Engineering Maintenance Electrical (Cogent)
641	PROCESS ENGINEERING MAINTENANCE	Prepare work areas for the maintenance of process plant and equipment	1	Process Engineering Maintenance Electrical (Cogent)
642	PROCESS ENGINEERING MAINTENANCE	Read and extract information from electrical engineering drawings and specifications	1	Process Engineering Maintenance Electrical (Cogent)
643	PROCESS ENGINEERING MAINTENANCE	Reinstate the work area after completing the maintenance of process engineering plant and equipment	1	Process Engineering Maintenance Electrical (Cogent)
644	PROCESS ENGINEERING MAINTENANCE	Reinstate the work area after completing the maintenance of process plant and equipment	1	Process Engineering Maintenance Electrical (Cogent)

645	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Adjust mechanical plant and equipment to meet operational requirements	1	Process Engineering Maintenance Mechanical (Cogent)
646	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Carry out planned maintenance procedures on instrument and control plant and equipment	1	Process Engineering Maintenance Instrument (Cogent)
647	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Carry out planned maintenance procedures on instrument and control systems	1	Process Engineering Maintenance Instrument (Cogent)
648	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Carry out planned maintenance procedures on mechanical plant and equipment	1	Process Engineering Maintenance Mechanical (Cogent)
649	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Carry out planned maintenance procedures on mechanical process plant and equipment	1	Process Engineering Maintenance Mechanical (Cogent)
650	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Contribute to effective working relationships in process engineering maintenance	1	Process Engineering Maintenance Instrument (Cogent)
651	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Contribute to effective working relationships in process engineering maintenance	1	Process Engineering Maintenance Mechanical (Cogent)
652	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Establish that an engineering maintenance process has been completed to specification	1	Process Engineering Maintenance Instrument (Cogent)
653	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Establish that an engineering maintenance process has been completed to specification	1	Process Engineering Maintenance Mechanical (Cogent)
654	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare equipment in support of engineering activities	1	Process Engineering Maintenance Mechanical (Cogent)
655	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare equipment required for maintaining instrument and control systems	1	Process Engineering Maintenance Instrument (Cogent)
656	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare materials for the maintenance of instrument and control process plant and equipment	1	Process Engineering Maintenance Instrument (Cogent)
657	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare materials for the maintenance of mechanical plant and equipment	1	Process Engineering Maintenance Mechanical (Cogent)
658	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare materials for the maintenance of mechanical process plant and equipment	1	Process Engineering Maintenance Mechanical (Cogent)
659	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare materials required for maintaining instrument and control systems	1	Process Engineering Maintenance Instrument (Cogent)
660	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare process plant and equipment in support of instrument and control engineering activities	1	Process Engineering Maintenance Instrument (Cogent)

661	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare process plant and equipment in support of mechanical engineering activities	1	Process Engineering Maintenance Mechanical (Cogent)
662	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare work areas for the maintenance of process engineering plant and equipment	1	Process Engineering Maintenance Instrument (Cogent)
663	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare work areas for the maintenance of process engineering plant and equipment	1	Process Engineering Maintenance Mechanical (Cogent)
664	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare work areas for the maintenance of process plant and equipment	1	Process Engineering Maintenance Instrument (Cogent)
665	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Prepare work areas for the maintenance of process plant and equipment	1	Process Engineering Maintenance Mechanical (Cogent)
666	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Read and extract information from instrument and control engineering drawings and specifications	1	Process Engineering Maintenance Instrument (Cogent)
667	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Read and extract information from mechanical engineering drawings and specifications	1	Process Engineering Maintenance Mechanical (Cogent)
668	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Reinstate the work area after completing the maintenance of process	1	Process Engineering Maintenance Instrument (Cogent)
669	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Reinstate the work area after completing the maintenance of process engineering plant and equipment	1	Process Engineering Maintenance Mechanical (Cogent)
670	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Reinstate the work area after completing the maintenance of process plant and equipment	1	Process Engineering Maintenance Instrument (Cogent)
671	PROCESS ENGINEERING MAINTENANCE, INSTRUMENT, MECHANICAL	Reinstate the work area after completing the maintenance of process plant and equipment	1	Process Engineering Maintenance Mechanical (Cogent)
672	TECHNICAL SUPPORT	Accept and Confirm Responsibility for Control of Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
673	TECHNICAL SUPPORT	Analyse and Interpret the Results of Engineering Tests.	1	Broadcast Engineering. (Skillset)
674	TECHNICAL SUPPORT	Analyse and Interpret the Results of Engineering Tests.	1	Broadcast Engineering. (Skillset)
675	TECHNICAL SUPPORT	Assess the characteristics of sites.	1	Amenity Horticulture (LANTRA)
676	TECHNICAL SUPPORT	Assess the Performance and Condition of Broadcast Equipment	1	Broadcast Engineering. (Skillset)
677	TECHNICAL SUPPORT	Assets the characteristics of sites	1	Land Based Management (LANTRA)
678	TECHNICAL SUPPORT	Assist Workshop Operations by Providing Technical Support.	1	Diagnostics Technical Standards (Automotive Skills Ltd)
679	TECHNICAL SUPPORT	Carry Out A Technical Support Feasibility Study	1	Technical Support (Skills for Justice)
680	TECHNICAL SUPPORT	Carry Out Planned Maintenance on Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
681	TECHNICAL SUPPORT	Carrying Out Project Management Activities	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
682	TECHNICAL SUPPORT	Carrying out project management activities	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)

683	TECHNICAL SUPPORT	Conduct Interviews.	1	Broadcast Journalism. (Skillset)
684	TECHNICAL SUPPORT	Conduct Specified Testing of Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
685	TECHNICAL SUPPORT	Contribute to a Team Feasibility Review of a New Product Design	1	Lean NPDI (SEMTA)
686	TECHNICAL SUPPORT	Contribute to good working relationships.	1	Broadcast Engineering. (Skillset)
687	TECHNICAL SUPPORT	Contribute to the care, use and understanding of cultural heritage	1	Cultural Heritage (Creative and Cultural Skills)
688	TECHNICAL SUPPORT	Control Allocated Resources to Achieve Requirements.	1	Broadcast Engineering. (Skillset)
689	TECHNICAL SUPPORT	Control personal dose uptake	1	Nuclear Decommissioning (Cogent)
690	TECHNICAL SUPPORT	Co-ordinate Production Paperwork	1	Production (FILM & TV) (Skillset)
691	TECHNICAL SUPPORT	Copy, Edit And Produce Compilations Of Recorded Technical Support Product	1	Technical Support (Skills for Justice)
692	TECHNICAL SUPPORT	Decide if applications for long term insurance are acceptable and rate them by technical underwriting	1	Long Term Insurance (Financial Services Skills Council)
693	TECHNICAL SUPPORT	Develop new or modified food & drink product manufacturing test samples	1	Management of Food & Drink Manufacturing Operations (Improve)
694	TECHNICAL SUPPORT	Develop safety claims for use in nuclear safety case	1	Safety Case Preparation (Cogent)
695	TECHNICAL SUPPORT	Develop Yourself in the Work Role.	1	Broadcast Engineering. (Skillset)
696	TECHNICAL SUPPORT	Diagnose faults with a wide range of causes and support others in the diagnostic process (Technical Fault Diagnosis at level 3)	1	Health Informatics (Skills for Health)
697	TECHNICAL SUPPORT	Ensure your own actions reduce risks to health and safety.	1	Broadcast Engineering. (Skillset)
698	TECHNICAL SUPPORT	Establish Compliance with Specifications.	1	Broadcast Engineering. (Skillset)
699	TECHNICAL SUPPORT	Examine Technical Support Items And Interpret Findings	1	Technical Support (Skills for Justice)
700	TECHNICAL SUPPORT	Gather and submit information that has the potential to support policing objectives	1	Police (Skills for Justice)
701	TECHNICAL SUPPORT	Hand over Broadcast Equipment for the Control of Others.	1	Broadcast Engineering. (Skillset)
702	TECHNICAL SUPPORT	Identify And Evaluate Technical Support Systems And Equipment For Specific Needs	1	Technical Support (Skills for Justice)
703	TECHNICAL SUPPORT	Identify and source business improvement resources	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
704	TECHNICAL SUPPORT	Identify when, and how to access technical support	1	Liquid Transfer NOS 2005 (Cogent)
705	TECHNICAL SUPPORT	Install Technical Support Systems And Associated Equipment	1	Countering E-Crime (Skills for Justice)
706	TECHNICAL SUPPORT	Install Technical Support Systems And Associated Equipment	1	Technical Support (Skills for Justice)
707	TECHNICAL SUPPORT	Lead and improve the work of customer service staff 2000	1	Customer Service 2000 (Institute of Customer Service)
708	TECHNICAL SUPPORT	Lead the work of teams and individuals to improve customer service 2000	1	Customer Service 2000 (Institute of Customer Service)
709	TECHNICAL SUPPORT	Liaise with manufactures on Land-based machinery technical issues	1	Land Based Service Engineering (LANTRA)
710	TECHNICAL SUPPORT	Liaise with Vehicle and Product Manufacturers on Technical Matters	1	Diagnostics Technical Standards (Automotive Skills Ltd)
711	TECHNICAL SUPPORT	Maintain Knowledge Of Trends And Developments In Technical Disciplines	1	Technical Support (Skills for Justice)
712	TECHNICAL SUPPORT	Maintain the diagnostic process and provide specialist support to others (Technical Fault Diagnosis at level 4)	1	Health Informatics (Skills for Health)
713	TECHNICAL SUPPORT	Manage a food & drink production trial	1	Management of Food & Drink Manufacturing Operations (Improve)
714	TECHNICAL SUPPORT	Manage complications of established renal failure.	1	Renal. (Skills for Health)
715	TECHNICAL SUPPORT	Manage the operation of telecommunications facilities for call handling activities (e-skills) 2000	1	Customer Service 2000 (Institute of Customer Service)
716	TECHNICAL SUPPORT	Manage the post-production process	1	Senior Producers (Skillset)

717	TECHNICAL SUPPORT	Modify, Adapt And Simplify Technical Support Systems And Equipment	1	Technical Support (Skills for Justice)
718	TECHNICAL SUPPORT	Monitor and maintain the brooding and growth of young birds.	1	Livestock Production (LANTRA)
719	TECHNICAL SUPPORT	Monitor and maintain the receipt and selection of eggs for hatching.	1	Livestock Production (LANTRA)
720	TECHNICAL SUPPORT	Monitor And Review The Performance Of Technical Support Systems And Equipment	1	Technical Support (Skills for Justice)
721	TECHNICAL SUPPORT	Monitor personal dose uptake	1	Nuclear Decommissioning (Cogent)
722	TECHNICAL SUPPORT	Monitor the Performance and Condition of Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
723	TECHNICAL SUPPORT	Monitor the Use of Resources to Meet Engineering Requirements.	1	Broadcast Engineering. (Skillset)
724	TECHNICAL SUPPORT	Monitor, store and prepare materials and equipment.	1	Early Years Care & Education (Skills for Care & Development)
725	TECHNICAL SUPPORT	Organise, maintain and deliver reliable customer service 2000	1	Customer Service 2000 (Institute of Customer Service)
726	TECHNICAL SUPPORT	Oversee the application of information technology (IT)) to project control	1	Project Control (ECITB)
727	TECHNICAL SUPPORT	Plan Broadcast Engineering Activities	1	Broadcast Engineering. (Skillset)
728	TECHNICAL SUPPORT	Process Recorded Technical Support Products	1	Technical Support (Skills for Justice)
729	TECHNICAL SUPPORT	Produce and present detailed design proposals.	1	Design. (Creative and Cultural Skills)
730	TECHNICAL SUPPORT	Produce Information to Support the Production of Animations	1	Design for the Moving Image (Skillset)
731	TECHNICAL SUPPORT	Produce One-Off Components.	1	Broadcast Engineering. (Skillset)
732	TECHNICAL SUPPORT	Produce specifications for glass supporting systems.	1	Glass (Proskills)
733	TECHNICAL SUPPORT	Produce specifications for Integrated Logistic Support	1	Integrated Logistic Support (ILS) Management (SEMTA)
734	TECHNICAL SUPPORT	Project manage a business improvement programme	1	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)
735	TECHNICAL SUPPORT	Provide Customers With Information Technology Support	1	Information and Library services (Lifelong Learning UK)
736	TECHNICAL SUPPORT	Provide Diagnostic Equipment and Technical Information System Support.	1	Diagnostics Technical Standards (Automotive Skills Ltd)
737	TECHNICAL SUPPORT	Provide diagnostic equipment and technical system support for Land-based machinery	1	Land Based Service Engineering (LANTRA)
738	TECHNICAL SUPPORT	Provide Land-based machinery technical support and advice to colleagues	1	Land Based Service Engineering (LANTRA)
739	TECHNICAL SUPPORT	Provide Operational Support to Users of Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
740	TECHNICAL SUPPORT	Provide Solutions To, And Advise On, Complex Technical Support Problems	1	Technical Support (Skills for Justice)
741	TECHNICAL SUPPORT	Provide technical guidance and support to others	1	Chemical, Pharmaceutical and Petro-Chemicals Operations (Cogent)
742	TECHNICAL SUPPORT	Provide Technical Information and Advice to Users of Plant and Equipment	1	Plant Maintenance (Construction) (ConstructionSkills – CITB)
743	TECHNICAL SUPPORT	Provide Technical Information in Required Formats.	1	Broadcast Engineering. (Skillset)
744	TECHNICAL SUPPORT	Provide technical input to bulk production.	1	Manufacturing Textile Products (Skillfast-UK)
745	TECHNICAL SUPPORT	Provide technical support	1	Laboratory and Associated Technical Activities (SEMTA)
746	TECHNICAL SUPPORT	Provide technical support	1	Polymer Processing and Related Operations (Cogent)
747	TECHNICAL SUPPORT	Provide technical support	1	Metal Processing and Allied operations (Metals Industry Skills & Performance Ltd)
748	TECHNICAL SUPPORT	Provide technical support for the accommodation of items	1	Cultural Heritage (Creative and Cultural Skills)
749	TECHNICAL SUPPORT	Provide technical support through advice and information.	1	Welding Engineer (ECITB)
750	TECHNICAL SUPPORT	Providing Technical Advice and Guidance on Engineering Activities	1	Engineering Technical Support (SEMTA)

751	TECHNICAL SUPPORT	Providing Technical Guidance to Others.	1	Electrical and Electronic Engineering (SEMTA)
752	TECHNICAL SUPPORT	Providing Technical Sales and Marketing Support for Engineering Activities	1	Engineering Technical Support (SEMTA)
753	TECHNICAL SUPPORT	Recover Technical Support Equipment	1	Countering E-Crime (Skills for Justice)
754	TECHNICAL SUPPORT	Recover Technical Support Equipment	1	Technical Support (Skills for Justice)
755	TECHNICAL SUPPORT	Remote support for products and services	3	Contact Centres (e-skills UK)
756	TECHNICAL SUPPORT	Remote support for products and services	3	Communication Technology Practitioners and Professionals (e-skills UK)
757	TECHNICAL SUPPORT	Remote support for products and services	3	IT Practitioners and Professionals (e-skills UK)
758	TECHNICAL SUPPORT	Remove and Dismantle Broadcast Equipment.	1	Broadcast Engineering. (Skillset)
759	TECHNICAL SUPPORT	Remove and Replace Assembly or Sub-Assembly Components.	1	Broadcast Engineering. (Skillset)
760	TECHNICAL SUPPORT	Select and assemble sound to support visual images.	1	Editing. (Skillset)
761	TECHNICAL SUPPORT	Support and advise on technical issues relating to Fire and Rescue Service activities	1	Emergency Fire Services Specialist Roles (Employers' Organisation for local government)
762	TECHNICAL SUPPORT	Support complex editing sessions.	1	Editing. (Skillset)
763	TECHNICAL SUPPORT	Support individuals in developing their involvement in the management of the organisation.	1	Community Justice (Skills for Justice)
764	TECHNICAL SUPPORT	Support policies, procedures and practice to safeguard children and ensure their inclusion and well-being	1	Children's Care, Learning and Development (Skills for Care & Development)
765	TECHNICAL SUPPORT	Test And Repair Technical Support Systems And Equipment	1	Technical Support (Skills for Justice)
766	TECHNOLOGY MANAGEMENT	Administer a system (System Management at level 3)	1	Health Informatics (Skills for Health)
767	TECHNOLOGY MANAGEMENT	Commission, monitor and evaluate projects to advance knowledge and practice	1	Public Health (Skills for Health)
768	TECHNOLOGY MANAGEMENT	Contact Centre systems and technology	1	Contact Centres (e-skills UK)
769	TECHNOLOGY MANAGEMENT	Contribute to the development of teams and individuals (Management Standards)	1	Animal Technology (LANTRÁ)
770	TECHNOLOGY MANAGEMENT	Contribute to the evaluation and implementation of research and development outcomes	1	Public Health (Skills for Health)
771	TECHNOLOGY MANAGEMENT	Contribute to the evaluation and implementation of research and development outcomes.	1	Community Justice (Skills for Justice)
772	TECHNOLOGY MANAGEMENT	Develop and maintain an overview of developments in knowledge and practice	1	Public Health (Skills for Health)
773	TECHNOLOGY MANAGEMENT	Develop and maintain the effectiveness of the Information Technology working environment	1	Information and Library services (Lifelong Learning UK)
774	TECHNOLOGY MANAGEMENT	Develop, implement and evaluate strategies to advance knowledge and practice	1	Public Health (Skills for Health)
775	TECHNOLOGY MANAGEMENT	Develop, implement and evaluate strategies to advance knowledge and practice.	1	Community Justice (Skills for Justice)
776	TECHNOLOGY MANAGEMENT	Direct the operation of systems (System Management at level 5)	1	Health Informatics (Skills for Health)
777	TECHNOLOGY MANAGEMENT	Document the conservation site	1	Conservation Control (ConstructionSkills – CIC)
778	TECHNOLOGY MANAGEMENT	Enter and find data using a computer	1	Hospitality Supervision (People 1 st)
779	TECHNOLOGY MANAGEMENT	Lead the work of teams and individuals to achieve their objectives (Management Standards)	1	Animal Technology (LANTRA)
780	TECHNOLOGY MANAGEMENT	Manage information, knowledge and communications	1	Animal Care and Management (LANTRA)
781	TECHNOLOGY MANAGEMENT	Manage system operation (System Management at level 4)	1	Health Informatics (Skills for Health)
782	TECHNOLOGY MANAGEMENT	Promote the use of technology within your organisation	1	Management and Leadership (Management Standards Centre)

783	TECHNOLOGY MANAGEMENT	Promote the use of technology within your organisation (MSC)	1	Environmental Conservation Management (LANTRA)
784	TECHNOLOGY MANAGEMENT	Support the efficient use of resources (Management Standards)	1	Animal Technology (LANTRA)
785	TECHNOLOGY MANAGEMENT	Support the use of information and communication technology in the classroom	1	Teaching and Classroom Assistants (Training and Development Agency
786	TECHNOLOGY MANAGEMENT	System management	2	IT Practitioners and Professionals (e-skills UK)
787	TECHNOLOGY MANAGEMENT	System management	2	Communication Technology Practitioners and Professionals (e-skills UK)
788	TECHNOLOGY MANAGEMENT	Unit 328 Administer legal files	1	Business and Administration (Council for Administration)
789	TECHNOLOGY MANAGEMENT	Unit 329 Administer representations	1	Business and Administration (Council for Administration)
790	TECHNOLOGY MANAGEMENT	Unit 330 Administer the appeals process	1	Business and Administration (Council for Administration)
791	TECHNOLOGY MANAGEMENT	Unit 331 Administer case files	1	Business and Administration (Council for Administration)
792	TECHNOLOGY MANAGEMENT	Unit 332 Administer appeals	1	Business and Administration (Council for Administration)

Appendix B

Units selected under the search criterion 'MARINE' (and related areas)

#	SEARCH CRITERION	UNIT TITLE	ORIGINATOR SUITE and SOURCE
1	MAINTENANCE, HARBOUR MASTER	Communicating with external interests	Harbour Masters (Ports Skills and Safety Ltd)
2	MARINE	Communicating with external interests	Harbour Masters (Ports Skills and Safety Ltd)
3	MARINE	Discharging statutory duties	Harbour Masters (Ports Skills and Safety Ltd)
4	MARINE	Managing harbour staff, finances and marine assets	Harbour Masters (Ports Skills and Safety Ltd)
5	MAINTENANCE, HARBOUR MASTER	Managing harbour staff, finances and marine assets	Harbour Masters (Ports Skills and Safety Ltd)
6	MARINE	Managing port marine operations	Harbour Masters (Ports Skills and Safety Ltd)
7	MARINE	Managing the marine environment	Harbour Masters (Ports Skills and Safety Ltd)
8	MARINE	Carry Out Maintenance of Vessel Electrical Machinery and Systems	Marine (Merchant Navy Training Board)
9	MARINE	Carry Out Maintenance of Vessel Electrical Machinery and Systems	Marine (Merchant Navy Training Board)
10	MAINTENANCE MARINE	Carry Out Maintenance of Vessel Instrumentation and Control Systems	Marine (Merchant Navy Training Board)
11	MAINTENANCE MARINE	Carry Out Maintenance of Vessel Mechanical Machinery and Systems	Marine (Merchant Navy Training Board)
12	MAINTENANCE MARINE	Carry Out Maintenance of Vessel Telecommunication and Navigation Systems	Marine (Merchant Navy Training Board)
13	MAINTENANCE MARINE	Contribute to Maintenance of Vessel Electrical Equipment	Marine (Merchant Navy Training Board)
14	MAINTENANCE MARINE	Contribute to Maintenance of Vessel Mechanical Equipment	Marine (Merchant Navy Training Board)
15	ENGINEERING MANAGEMENT	Develop Maintenance Plans for Vessel Engineering Systems	Marine (Merchant Navy Training Board)
16	MARINE	Diagnose the Causes of Variations in Vessel Mechanical Systems	Marine (Merchant Navy Training Board)
17	ENGINEERING MANAGEMENT	Direct Vessel Engineering Operations	Marine (Merchant Navy Training Board)
18	MARINE	Direct Vessel Engineering Operations	Marine (Merchant Navy Training Board)
19	MAINTENANCE MARINE	Maintain steelwork and deck equipment on board a vessel	Marine (Merchant Navy Training Board)
20	MAINTENANCE MARINE	Manage Maintenance of Vessel Instrumentation and Control Systems	Marine (Merchant Navy Training Board)
21	MARINE	Manage the Operation of Vessel Auxiliaries, Auxiliary Boilers and Service Machinery	Marine (Merchant Navy Training Board)
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22	MARINE	Manage the Operation of Vessel Propulsion Machinery and Ancillary Systems	Marine (Merchant Navy Training Board)
23	MAINTENANCE MARINE	Manage the Safety of Vessel High Voltage Electrical Systems	Marine (Merchant Navy Training Board)
24	MARINE	Monitor and Operate Engine Room Machinery	Marine (Merchant Navy Training Board)
25	MARINE	Plan and direct vessel operations	Marine (Merchant Navy Training Board)
26	MAINTENANCE MARINE	Plan and organise the maintenance of a vessel's structure, fittings and equipment	Marine (Merchant Navy Training Board)
27	ENGINEERING MANAGEMENT	Plan and Schedule Vessel Engineering Operations	Marine (Merchant Navy Training Board)
28	MARINE	Plan and Schedule Vessel Engineering Operations	Marine (Merchant Navy Training Board)
29	ENGINEERING MANAGEMENT	Plan Maintenance for Vessel Engineering Systems	Marine (Merchant Navy Training Board)
30	MAINTENANCE MARINE	Plan Maintenance for Vessel Engineering Systems	Marine (Merchant Navy Training Board)
31	MARINE	Prepare and Operate Vessel Propulsion Machinery and Ancillary Systems	Marine (Merchant Navy Training Board)
32	ENGINEERING MANAGEMENT	Prepare Vessel Response Plans for Engineering Contingency Situations	Marine (Merchant Navy Training Board)
33	MARINE	Undertake responsible fishing	Marine (Merchant Navy Training Board)
34	MARINE	Applying Fairing, Filling and Specialist Protective Coatings to Marine Components	Marine Engineering (SEMTA)
35	MARINE	Applying Marine Coatings Manually	Marine Engineering (SEMTA)
36	MARINE	Applying Marine Coatings using Spray Methods	Marine Engineering (SEMTA)
37	MARINE	Applying Specialist Finishes to Marine Components	Marine Engineering (SEMTA)
38	MARINE	Applying Surface Treatments to Marine Wooden Assemblies	Marine Engineering (SEMTA)
39	MARINE	Assembling Fabricated Components to Produce Marine Sub- Assemblies	Marine Engineering (SEMTA)
40	MARINE	Assembling Ferrous Marine Pipework by Mechanical Means	Marine Engineering (SEMTA)
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41	MARINE	Assembling Marine Composite Components	Marine Engineering (SEMTA)
42	MARINE	Assembling Marine Sheet Metal Components	Marine Engineering (SEMTA)
43	MARINE	Assembling Marine Wooden Components	Marine Engineering (SEMTA)
44	MARINE	Assembling Non-Ferrous Marine Pipework	Marine Engineering (SEMTA)
45	MARINE	Assembling Non-Metallic Marine Pipework	Marine Engineering (SEMTA)
46	MARINE	Assembling Sub-Assemblies and Components to Produce Major Marine Structural Assemblies	Marine Engineering (SEMTA)
47	ELECTRICAL AND ELECTRONIC SERVICING	Assisting in Modifying and Adding Electrical Circuits in Yachts and Boats	Marine Engineering (SEMTA)
48	MARINE	Assisting in the Assembly of Marine Steelwork Components	Marine Engineering (SEMTA)
49	ELECTRICAL AND ELECTRONIC SERVICING	Assisting in the Disconnection and Removal of Yacht and Boat Electrical/Electronic Equipment	Marine Engineering (SEMTA)
50	ELECTRICAL AND ELECTRONIC SERVICING	Assisting in the Installation of Domestic Equipment in Yachts and Boats	Marine Engineering (SEMTA)
51	ELECTRICAL AND ELECTRONIC SERVICING	Assisting in the Installation of Electrical/Electronic Equipment in Yachts and Boats	Marine Engineering (SEMTA)
52	ELECTRICAL AND ELECTRONIC SERVICING	Assisting in the Installation of Engine/Propulsion Systems in Yachts and Boats	Marine Engineering (SEMTA)
53	MARINE	Assisting in the Installation of Marine Electrical Equipment	Marine Engineering (SEMTA)
54	MARINE	Assisting in the Installation of Marine Mechanical Equipment	Marine Engineering (SEMTA)
55	MARINE	Assisting in the Installation of Marine Pipework and Components	Marine Engineering (SEMTA)
56	MARINE	Assisting in the Installation of Marine Sheet Metal Components/Assemblies	Marine Engineering (SEMTA)
57	MARINE	Assisting in the Preparation of Docks and Slips for Vessel Operations	Marine Engineering (SEMTA)
58	MARINE	Assisting in the Testing of Marine Pipework Systems	Marine Engineering (SEMTA)
59	MARINE	Bending and Forming Marine Pipe using Bending Machines	Marine Engineering (SEMTA)
60	MARINE	Bending and Forming Marine Pipe using Hand Methods	Marine Engineering (SEMTA)

61	MARINE	Bending and Forming Marine Sheet Metal using Hand and Machine Tools	Marine Engineering (SEMTA)
62	MARINE	Bending and Straightening Materials using the Heat-Line Method	Marine Engineering (SEMTA)
63	MARINE	Bonding Marine Composite Components	Marine Engineering (SEMTA)
64	MARINE	Bonding Marine Materials and Components using Adhesives	Marine Engineering (SEMTA)
65	MARINE	Carrying Out Bonding Operations on Marine Composite Components	Marine Engineering (SEMTA)
66	MARINE	Carrying Out Condition Monitoring on Marine Mechanical Equipment	Marine Engineering (SEMTA)
67	MARINE	Carrying Out Maintenance on Marine Ancillary Plant and Equipment	Marine Engineering (SEMTA)
68	MARINE	Carrying Out Maintenance on Marine Auxiliary Power s for Electrical Power Generation	Marine Engineering (SEMTA)
69	MARINE	Carrying Out Maintenance on Marine Fire Main Systems and Equipment	Marine Engineering (SEMTA)
70	MARINE	Carrying Out Maintenance on Marine Fuel Systems and Equipment	Marine Engineering (SEMTA)
71	MARINE	Carrying Out Maintenance on Marine Lifting Equipment	Marine Engineering (SEMTA)
72	MARINE	Carrying Out Maintenance on Marine Liquid Ballast Systems	Marine Engineering (SEMTA)
73	MARINE	Carrying Out Maintenance on Marine Mechanical Control Equipment and Systems	Marine Engineering (SEMTA)
74	MARINE	Carrying Out Maintenance on Marine Pantry and Galley Equipment	Marine Engineering (SEMTA)
75	MARINE	Carrying Out Maintenance on Marine Pneumatic Systems and Equipment	Marine Engineering (SEMTA)
76	MARINE	Carrying Out Maintenance on Marine Steam Plant and Equipment	Marine Engineering (SEMTA)
77	MARINE	Carrying Out Maintenance on Marine Steering Gear, Control Systems and Equipment	Marine Engineering (SEMTA)
78	MARINE	Carrying Out Manual Torch Brazing and Soldering of Marine Pipework	Marine Engineering (SEMTA)
79	MARINE	Carrying Out Modifications and Rewiring of Marine Electrical Circuits	Marine Engineering (SEMTA)
80	MARINE	Carrying Out Patch Preparation of Material Surfaces using Hand and Mechanical Tools	Marine Engineering (SEMTA)
81	MARINE	Carrying Out Pattern Development for Marine Applications	Marine Engineering (SEMTA)
82	MARINE	Carrying Out Planned Maintenance Activities on Marine Mechanical Equipment	Marine Engineering (SEMTA)

83	MARINE	Carrying Out Preparations for Rigging Activities	Marine Engineering (SEMTA)
84	MARINE	Carrying Out Repairs to Marine Composite Mouldings	Marine Engineering (SEMTA)
85	ELECTRICAL AND ELECTRONIC SERVICING	Carrying out Routine Servicing of Yacht and Boat Electrical/Electronic	Marine Engineering (SEMTA)
86	MARINE	Carrying Out Scheduled Maintenance on Marine Electrical Equipment	Marine Engineering (SEMTA)
87	MARINE	Carrying Out Scheduled Maintenance on Marine Mechanical Equipment	Marine Engineering (SEMTA)
88	MARINE	Carrying Out Tests on Marine Electrical Equipment and Circuits	Marine Engineering (SEMTA)
89	MARINE	Carrying Out the Application of Marine Coatings using Spray Methods	Marine Engineering (SEMTA)
90	MARINE	Carrying Out the Installation of Cable Runs and Circuits in Marine Structures	Marine Engineering (SEMTA)
91	ELECTRICAL AND ELECTRONIC SERVICING	Carrying out the Installation of Cable Runs and Circuits in Yachts and Boats	Marine Engineering (SEMTA)
92	MARINE	Carrying Out the Manual Application of Marine Coatings	Marine Engineering (SEMTA)
93	MARINE	Carrying Out the Preparation of Material Surfaces by Abrasive Blasting	Marine Engineering (SEMTA)
94	MARINE	Carrying Out Trimming Operations on Marine Composite Mouldings	Marine Engineering (SEMTA)
95	MARINE	Checking Marine Composite Components/Mouldings for Defects	Marine Engineering (SEMTA)
96	MARINE	Checking Marine Fabrications for Quality and Dimensional Accuracy	Marine Engineering (SEMTA)
97	MARINE	Cutting and Shaping Marine Sheet Metal using Hand and Machine Tools	Marine Engineering (SEMTA)
98	MARINE	Cutting and Shaping Marine Soft Furnishings	Marine Engineering (SEMTA)
99	MARINE	Cutting and Shaping Marine Steelwork using Gas Cutting Machines	Marine Engineering (SEMTA)
100	MARINE	Cutting and Shaping Materials using Portable Thermal Cutting Equipment	Marine Engineering (SEMTA)
101	MARINE	Cutting Marine Steelwork using Handheld Thermal Cutting Equipment	Marine Engineering (SEMTA)
102	MARINE	Cutting Marine Steelwork using Saws and Abrasive Discs	Marine Engineering (SEMTA)
103	MARINE	Cutting Marine Steelwork using Shearing Machines	Marine Engineering (SEMTA)

104	MARINE	Cutting Sheet Metal to Shape using Hand and Machine Tools	Marine Engineering (SEMTA)
105	MARINE	Diagnosing Faults on Marine Electrical Equipment and Circuits	Marine Engineering (SEMTA)
106	MARINE	Diagnosing Faults on Marine Mechanical Equipment	Marine Engineering (SEMTA)
107	MARINE	Disconnecting and Removing Marine Electrical Equipment	Marine Engineering (SEMTA)
108	MARINE	Disconnecting and Removing Marine Mechanical Equipment	Marine Engineering (SEMTA)
109	MARINE	Dismantling and Removing Marine Access Structures	Marine Engineering (SEMTA)
110	MARINE	Dismantling and Removing Marine Electrical Equipment	Marine Engineering (SEMTA)
111	MARINE	Dismantling and Removing Marine Mechanical equipment	Marine Engineering (SEMTA)
112	MARINE	Drilling and Finishing Holes in Marine Steelwork	Marine Engineering (SEMTA)
113	MARINE	Finishing Marine Wooden Assemblies by Applying Surface Treatments	Marine Engineering (SEMTA)
114	MARINE	Fitting Marine Composite Components to the Vessel, Craft or Structure	Marine Engineering (SEMTA)
115	MARINE	Fitting Marine Interior Panels and Soft Furnishings	Marine Engineering (SEMTA)
116	MARINE	Fitting Marine Seating and Furniture	Marine Engineering (SEMTA)
117	MARINE	Forming Marine Components by Acrylic Moulding	Marine Engineering (SEMTA)
118	MARINE	Forming Marine Components using a Power Press	Marine Engineering (SEMTA)
119	MARINE	Forming Marine Components using Power Rolling Machines	Marine Engineering (SEMTA)
120	MARINE	Forming Marine Sheet Metal Components using Hand and Machine Tools	Marine Engineering (SEMTA)
121	MARINE	Heat Treating Materials for Marine Fabrication Activities	Marine Engineering (SEMTA)
122	MARINE	Identifying Defects in Marine Composite Components and Assemblies	Marine Engineering (SEMTA)
123	MARINE	Inspecting Marine Coatings	Marine Engineering (SEMTA)
124	MARINE	Installing Cable Runs and Circuits in Marine Structures	Marine Engineering (SEMTA)
125	MARINE	Installing Marine Ancillary Plant and Equipment	Marine Engineering (SEMTA)
126	MARINE	Installing Marine Auxiliary Power Units for Electrical Power Generation	Marine Engineering (SEMTA)

127	MARINE	Installing Marine Communication Equipment and Systems	Marine Engineering (SEMTA)
128	MARINE	Installing Marine Composite Components	Marine Engineering (SEMTA)
129	MARINE	Installing Marine Computer Equipment and Systems	Marine Engineering (SEMTA)
130	MARINE	Installing Marine Electrical Rotating Machines and Domestic Equipment	Marine Engineering (SEMTA)
131	MARINE	Installing Marine Fire Main Systems and Equipment	Marine Engineering (SEMTA)
132	MARINE	Installing Marine Fuel Systems and Equipment	Marine Engineering (SEMTA)
133	MARINE	Installing Marine Hydraulic Systems and Equipment	Marine Engineering (SEMTA)
134	MARINE	Installing Marine Interior Panels and Soft Furnishings	Marine Engineering (SEMTA)
135	MARINE	Installing Marine Lifting Equipment	Marine Engineering (SEMTA)
136	MARINE	Installing Marine Lighting, Alarm, Detection and Monitoring Equipment and Systems	Marine Engineering (SEMTA)
137	MARINE	Installing Marine Liquid Ballast Arrangements	Marine Engineering (SEMTA)
138	MARINE	Installing Marine Mechanical Control Systems and Equipment	Marine Engineering (SEMTA)
139	MARINE	Installing Marine Navigational Equipment and Systems	Marine Engineering (SEMTA)
140	MARINE	Installing Marine Pantry and Galley Equipment and Services	Marine Engineering (SEMTA)
141	MARINE	Installing Marine Pipework and Components	Marine Engineering (SEMTA)
142	MARINE	Installing Marine Pneumatic Systems and Equipment	Marine Engineering (SEMTA)
143	MARINE	Installing Marine Power Generation and Distribution Equipment and Systems	Marine Engineering (SEMTA)
144	MARINE	Installing Marine Power Transmission Systems and Equipment	Marine Engineering (SEMTA)
145	MARINE	Installing Marine Propulsion Systems and Equipment	Marine Engineering (SEMTA)
146	MARINE	Installing Marine Refrigeration and Air Conditioning Equipment	Marine Engineering (SEMTA)
147	MARINE	Installing Marine Seating and Furniture	Marine Engineering (SEMTA)
148	MARINE	Installing Marine Sensor Equipment and Systems	Marine Engineering (SEMTA)

149	MARINE	Installing Marine Sheet Metal Components and Assemblies	Marine Engineering (SEMTA)
150	MARINE	Installing Marine Steam Plant and Equipment	Marine Engineering (SEMTA)
151	MARINE	Installing Marine Steering Gear, Control Systems and Equipment	Marine Engineering (SEMTA)
152	MARINE	Installing Marine Weapons Equipment and Systems	Marine Engineering (SEMTA)
153	MARINE	Installing Marine Wooden Components	Marine Engineering (SEMTA)
154	MARINE	Joining Ferrous Marine Pipework by Mechanical Means	Marine Engineering (SEMTA)
155	MARINE	Joining Marine Materials and Components using Adhesives	Marine Engineering (SEMTA)
156	MARINE	Joining Marine Materials by Manual Torch Brazing and Soldering	Marine Engineering (SEMTA)
157	MARINE	Joining Marine Materials/Structures using Manual MIG/MAG and other Continuous Wire Processes	Marine Engineering (SEMTA)
158	MARINE	Joining Marine Materials/Structures using Manual TIG and Plasma-Arc Welding Processes	Marine Engineering (SEMTA)
159	MARINE	Joining Marine Materials/Structures using the Manual Gas Welding Process	Marine Engineering (SEMTA)
160	MARINE	Joining Marine Materials/Structures using the Manual Metal Arc (MMA) Welding Process	Marine Engineering (SEMTA)
161	MARINE	Joining Marine Pipework by Manual Torch Brazing and Soldering	Marine Engineering (SEMTA)
162	MARINE	Joining Marine Sheet Metal Components using Mechanical Fasteners	Marine Engineering (SEMTA)
163	MARINE	Joining Marine Sheet Metal Materials using Resistance Spot Welding	Marine Engineering (SEMTA)
164	MARINE	Joining Materials using Manual Torch Brazing and Soldering	Marine Engineering (SEMTA)
165	MARINE	Joining Non-Ferrous Marine Pipework	Marine Engineering (SEMTA)
166	MARINE	Joining Non-Metallic Marine Pipework	Marine Engineering (SEMTA)
167	MARINE	Lining Off for Assembly and Erection of Marine Steelwork and Components	Marine Engineering (SEMTA)
168	MARINE	Locating Faults in Marine Electrical Equipment and Circuits	Marine Engineering (SEMTA)
169	MARINE	Locating Faults in Marine Mechanical Equipment	Marine Engineering (SEMTA)

170	MARINE	Maintaining Marine Ancillary Plant and Equipment	Marine Engineering (SEMTA)
171	MARINE	Maintaining Marine Auxiliary Power Units.	Marine Engineering (SEMTA)
172	MARINE	Maintaining Marine Communication Equipment and Systems	Marine Engineering (SEMTA)
173	MARINE	Maintaining Marine Computer Equipment and Systems	Marine Engineering (SEMTA)
174	MARINE	Maintaining Marine Electrical Power Generation and Distribution Equipment and Systems	Marine Engineering (SEMTA)
175	MARINE	Maintaining Marine Electrical Rotating Machines and Domestic Equipment	Marine Engineering (SEMTA)
176	MARINE	Maintaining Marine Fire Main Systems and Equipment	Marine Engineering (SEMTA)
177	MARINE	Maintaining Marine Fuel Systems and Equipment	Marine Engineering (SEMTA)
178	MARINE	Maintaining Marine Hydraulic Systems and Equipment	Marine Engineering (SEMTA)
179	MARINE	Maintaining Marine Lifting Equipment	Marine Engineering (SEMTA)
180	MARINE	Maintaining Marine Lighting, Alarm, Detection and Monitoring Equipment and Systems	Marine Engineering (SEMTA)
181	MARINE	Maintaining Marine Liquid Ballast Arrangements	Marine Engineering (SEMTA)
182	MARINE	Maintaining Marine Mechanical Control Equipment and Systems	Marine Engineering (SEMTA)
183	MARINE	Maintaining Marine Navigational Equipment and Systems	Marine Engineering (SEMTA)
184	MARINE	Maintaining Marine Pantry and Galley Equipment and Services	Marine Engineering (SEMTA)
185	MARINE	Maintaining Marine Pneumatic Systems and Equipment	Marine Engineering (SEMTA)
186	MARINE	Maintaining Marine Power Transmission Systems	Marine Engineering (SEMTA)
187	MARINE	Maintaining Marine Propulsion Systems	Marine Engineering (SEMTA)
188	MARINE	Maintaining Marine Refrigeration and Air Conditioning Equipment	Marine Engineering (SEMTA)
189	MARINE	Maintaining Marine Sensor Equipment and Systems	Marine Engineering (SEMTA)
190	MARINE	Maintaining Marine Steam Plant and Equipment	Marine Engineering (SEMTA)
191	MARINE	Maintaining Marine Steering Gear, Control Systems and Equipment	Marine Engineering (SEMTA)
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192	MARINE	Maintaining Marine Weapons Equipment and Systems	Marine Engineering (SEMTA)
193	MARINE	Marking Off for the Manufacture of Marine Steelwork Components	Marine Engineering (SEMTA)
194	MARINE	Marking Off Marine Structural Steelwork Components	Marine Engineering (SEMTA)
195	MARINE	Marking Out for Fabrication and Assembly of Marine Sheet Metalwork	Marine Engineering (SEMTA)
196	MARINE	Marking Out for Manufacture and Assembly of Marine Wooden Components	Marine Engineering (SEMTA)
197	MARINE	Marking Out for the Installation of Marine Wooden Assemblies	Marine Engineering (SEMTA)
198	MARINE	Marking Out for the Manufacture and Assembly of Marine Wooden Components	Marine Engineering (SEMTA)
199	MARINE	Marking Out Marine Sheet Metalwork	Marine Engineering (SEMTA)
200	MARINE	Modifying and Rewiring Marine Electrical Circuits	Marine Engineering (SEMTA)
201	MARINE	Moving Materials and Components in a Marine Environment	Marine Engineering (SEMTA)
202	MARINE	Outfitting Marine Steelwork	Marine Engineering (SEMTA)
203	MARINE	Overhauling Marine Ancillary Plant and Equipment	Marine Engineering (SEMTA)
204	MARINE	Overhauling Marine Auxiliary Power Units.	Marine Engineering (SEMTA)
205	MARINE	Overhauling Marine Communication Equipment and Systems	Marine Engineering (SEMTA)
206	MARINE	Overhauling Marine Electrical Power Generation and Distribution Equipment and Systems	Marine Engineering (SEMTA)
207	MARINE	Overhauling Marine Electrical Rotating Machines and Domestic Equipment	Marine Engineering (SEMTA)
208	MARINE	Overhauling Marine Fire Main Systems and Equipment	Marine Engineering (SEMTA)
209	MARINE	Overhauling Marine Fuel Systems and Equipment	Marine Engineering (SEMTA)
210	MARINE	Overhauling Marine Hydraulic Systems and Equipment	Marine Engineering (SEMTA)
211	MARINE	Overhauling Marine Lifting Equipment	Marine Engineering (SEMTA)
212	MARINE	Overhauling Marine Liquid Ballast Arrangements	Marine Engineering (SEMTA)
213	MARINE	Overhauling Marine Mechanical Control Equipment and Systems	Marine Engineering (SEMTA)
214	MARINE	Overhauling Marine Navigational Equipment and Systems	Marine Engineering (SEMTA)

215	MARINE	Overhauling Marine Pantry and Galley Equipment	Marine Engineering (SEMTA)
216	MARINE	Overhauling Marine Pneumatic Systems and Equipment	Marine Engineering (SEMTA)
217	MARINE	Overhauling Marine Power Transmission Systems	Marine Engineering (SEMTA)
218	MARINE	Overhauling Marine Propulsion Systems	Marine Engineering (SEMTA)
219	MARINE	Overhauling Marine Refrigeration and Air Conditioning Equipment	Marine Engineering (SEMTA)
220	MARINE	Overhauling Marine Steam Plant and Equipment	Marine Engineering (SEMTA)
221	MARINE	Overhauling Marine Steering Gear, Control Systems and Equipment	Marine Engineering (SEMTA)
222	MARINE	Overhauling Marine Weapons Equipment and Systems	Marine Engineering (SEMTA)
223	MARINE	Positioning and Securing Marine Access Structures	Marine Engineering (SEMTA)
224	MARINE	Preparing and Testing Marine Pipework Systems	Marine Engineering (SEMTA)
225	MARINE	Preparing Docks and Slips for Vessel Operations	Marine Engineering (SEMTA)
226	MARINE	Preparing for Rigging Activities	Marine Engineering (SEMTA)
227	MARINE	Preparing Loads for Moving	Marine Engineering (SEMTA)
228	MARINE	Preparing Marine Coating Materials for Application	Marine Engineering (SEMTA)
229	MARINE	Preparing Marine Coatings for Application	Marine Engineering (SEMTA)
230	MARINE	Preparing Marine Material Surfaces using Hand and Mechanical Tools	Marine Engineering (SEMTA)
231	MARINE	Preparing Material Surfaces by Abrasive Blasting	Marine Engineering (SEMTA)
232	MARINE	Producing Assemblies of Marine Wooden Components	Marine Engineering (SEMTA)
233	MARINE	Producing Fillet Welded Joints using a Manual Welding Process	Marine Engineering (SEMTA)
234	MARINE	Producing Marine Components by Acrylic Moulding	Marine Engineering (SEMTA)
235	MARINE	Producing Marine Composite Assemblies	Marine Engineering (SEMTA)
236	MARINE	Producing Marine Composite Components using Pre-Preg Laminating Techniques	Marine Engineering (SEMTA)
237	MARINE	Producing Marine Composite Components using Wet Lay-Up Techniques	Marine Engineering (SEMTA)

MARINE	Producing Marine Sheet Metal Assemblies	Marine Engineering (SEMTA)
MARINE	Producing Marine Soft Furnishings	Marine Engineering (SEMTA)
MARINE	Producing Marine Wooden Components using Hand Tools	Marine Engineering (SEMTA)
MARINE	Producing Marine Wooden Components using Machines	Marine Engineering (SEMTA)
MARINE	Producing Replacement Components for Marine Maintenance Activities	Marine Engineering (SEMTA)
MARINE	Producing Socket and Flange Fillet Welded Joints in Low Pressure Marine Pipework using a Manual Welding Process	Marine Engineering (SEMTA)
MARINE	Rectifying Metallic Surfaces using Hand and Power Tools	Marine Engineering (SEMTA)
MARINE	Removing Marine Access Structures	Marine Engineering (SEMTA)
MARINE	Repairing Marine Composite Components and Assemblies	Marine Engineering (SEMTA)
MARINE	Repairing Marine Mechanical Components	Marine Engineering (SEMTA)
MARINE	Restoring Marine Mechanical Components to Usable Condition by Repair	Marine Engineering (SEMTA)
MARINE	Setting to Work and Testing Marine Ancillary Plant and Equipment	Marine Engineering (SEMTA)
MARINE	Setting to Work and Testing Marine Auxiliary Power for Electrical Power Generation	Marine Engineering (SEMTA)
MARINE	Setting to Work and Testing Marine Fire Main Systems and Equipment	Marine Engineering (SEMTA)
MARINE	Setting to Work and Testing Marine Fuel Systems and Equipment	Marine Engineering (SEMTA)
MARINE	Setting to Work and Testing Marine Hydraulic Systems and Equipment	Marine Engineering (SEMTA)
MARINE	Setting to Work and Testing Marine Lifting Equipment	Marine Engineering (SEMTA)
MARINE	Setting to Work and Testing Marine Liquid Ballast Arrangements	Marine Engineering (SEMTA)
MARINE	Setting to Work and Testing Marine Mechanical Control Equipment and Systems	Marine Engineering (SEMTA)
MARINE	Setting to Work and Testing Marine Pantry and Galley Equipment and Services	Marine Engineering (SEMTA)
MARINE	Setting to Work and Testing Marine Pneumatic Systems and Equipment	Marine Engineering (SEMTA)
	MARINE	MARINE Producing Marine Soft Furnishings MARINE Producing Marine Wooden Components using Hand Tools MARINE Producing Replacement Components using Machines MARINE Producing Replacement Components for Marine Maintenance Activities MARINE Producing Socket and Flange Fillet Welded Joints in Low Pressure Marine Pipework using a Manual Welding Process MARINE Rectifying Metallic Surfaces using Hand and Power Tools MARINE Rectifying Metallic Surfaces using Hand and Power Tools MARINE Rectifying Metallic Surfaces using Hand and Power Tools MARINE Repairing Marine Access Structures MARINE Repairing Marine Composite Components and Assemblies MARINE Repairing Marine Mechanical Components MARINE Repairing Marine Mechanical Components MARINE Resting to Work and Testing Marine Auxiliary Power for Electrical Power Generation MARINE Setting to Work and Testing Marine Fire Main Systems and Equipment MARINE Setting to Work and Testing Marine Hydraulic Systems and Equipment MARINE Setting to Work and Testing Marine Hydraulic Systems and Equipment MARINE Setting to Work and Testing Marine Hydraulic Systems and Equipment MARIN

259	MARINE	Setting to Work and Testing Marine Power Transmission Systems and Equipment	Marine Engineering (SEMTA)
260	MARINE	Setting to Work and Testing Marine Propulsion Systems and Equipment	Marine Engineering (SEMTA)
261	MARINE	Setting to Work and Testing Marine Refrigeration and Air Conditioning Equipment	Marine Engineering (SEMTA)
262	MARINE	Setting to Work and Testing Marine Steam Plant and Equipment	Marine Engineering (SEMTA)
263	MARINE	Setting to Work and Testing Marine Steering Gear, Control Equipment and Systems	Marine Engineering (SEMTA)
264	MARINE	Setting to Work, Testing and Trialling Marine Communication Equipment and Systems	Marine Engineering (SEMTA)
265	MARINE	Setting to Work, Testing and Trialling Marine Computer Equipment and Systems	Marine Engineering (SEMTA)
266	MARINE	Setting to Work, Testing and Trialling Marine Electrical Power Generation and Distribution Equipment and Systems	Marine Engineering (SEMTA)
267	MARINE	Setting to Work, Testing and Trialling Marine Electrical Rotating Machines and Domestic Equipment	Marine Engineering (SEMTA)
268	MARINE	Setting to Work, Testing and Trialling Marine Lighting, Alarm, Detection and Monitoring Equipment and Systems	Marine Engineering (SEMTA)
269	MARINE	Setting to Work, Testing and Trialling Marine Navigational Equipment and Systems	Marine Engineering (SEMTA)
270	MARINE	Setting to Work, Testing and Trialling Marine Sensor Equipment and Systems	Marine Engineering (SEMTA)
271	MARINE	Setting to Work, Testing and Trialling Marine Weapons Equipment and Systems	Marine Engineering (SEMTA)
272	MARINE	Setting Up and Preparing Loads for Moving	Marine Engineering (SEMTA)
273	MARINE	Setting Up and Securing Marine Access Structures	Marine Engineering (SEMTA)
274	MARINE	Shaping Marine Steelwork using a Power Press	Marine Engineering (SEMTA)
275	MARINE	Shaping Marine Steelwork using Power Rolling Machines	Marine Engineering (SEMTA)
276	MARINE	Shaping Marine Wooden Components using Hand Tools	Marine Engineering (SEMTA)
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277	MARINE	Shaping Marine Wooden Components using Machines	Marine Engineering (SEMTA)
278	MARINE	Siting and Leveling for the Assembly of Marine Structures	Marine Engineering (SEMTA)
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279	MARINE	Slinging, Lifting and Moving Materials, Machinery and Components in a Marine Environment	Marine Engineering (SEMTA)
280	MARINE	Surveying Marine Pipework Systems	Marine Engineering (SEMTA)
281	MARINE	Tack Welding Fillet Joints in Marine Steelwork	Marine Engineering (SEMTA)
282	MARINE	Tack Welding Marine Plate using A Manual Welding Process	Marine Engineering (SEMTA)
283	MARINE	Testing Marine Electrical Equipment and Circuits	Marine Engineering (SEMTA)
284	MARINE	Trimming Marine Composite Mouldings	Marine Engineering (SEMTA)
285	MARINE	Using Bending Machines to Form Marine Pipe	Marine Engineering (SEMTA)
286	MARINE	Using Hand Methods to Bend and Form Marine Pipe	Marine Engineering (SEMTA)
287	MARINE	Using Mechanical Fasteners to Join Marine Sheet Metal Components	Marine Engineering (SEMTA)
288	MARINE	Using Pre-Preg Laminating Techniques to Produce Marine Composite Components	Marine Engineering (SEMTA)
289	MARINE	Using Resistance Spot Welding to Join Marine Sheet Metal Materials	Marine Engineering (SEMTA)
290	MARINE	Using Wet Lay-Up Techniques to Produce Marine Composite Components	Marine Engineering (SEMTA)
291	MARINE	Vacuum Forming Marine Composite Materials	Marine Engineering (SEMTA)
292	MARINE	Welding Marine Materials and Structures using Manual MIG/MAG and other Continuous Wire Processes	Marine Engineering (SEMTA)
293	MARINE	Welding Marine Materials and Structures using Manual TIG and Plasma Arc Welding Processes	Marine Engineering (SEMTA)
294	MARINE	Welding Marine Materials and Structures using the Manual Gas Welding Process	Marine Engineering (SEMTA)
295	MARINE	Welding Marine Materials and Structures using the Manual Metal Arc Process	Marine Engineering (SEMTA)
296	MARINE	Welding Marine Pipe/Tube using Multiple Manual Arc Welding Processes	Marine Engineering (SEMTA)
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297	MARINE	Welding Marine Plate and Structures using Multiple Manual Arc Welding Processes	Marine Engineering (SEMTA)
298	MARINE	Liaising and communicating within the port	Marine Pilots (Ports Skills and Safety Ltd)
299	MARINE	Maintain a legal and safe working environment on board ship	Marine Vessel Operations & Marine Engineering Operations - Management and Safety (Merchant Navy Training Board)
300	MARINE	Plan and direct vessel operations	Marine Vessel Operations & Marine Engineering Operations - Marine Vessel Operations (Merchant Navy Training Board)
301	MARINE	Undertake responsible fishing	Marine Vessel Operations & Marine Engineering Operations - Marine Vessel Operations (Merchant Navy Training Board)
302	MARINE	Maintain marine equipment	Port Operations (Ports Skills and Safety Ltd)
303	MARINE	Operate marine radar equipment	Port Operations (Ports Skills and Safety Ltd)
304	MARINE	Application of nautical knowledge	Vessel Traffic Services Operations (Ports Skills and Safety Ltd)
305	MARINE	Use radar and tracking systems safely	Vessel Traffic Services Operations (Ports Skills and Safety Ltd)

Appendix C

Selection of NOS Units and Suites from the SSDA Database for On-Shore Maritime Engineering functions Note: Units are listed alphabetically by Unit Title. The URL reference is for accessing the complete document in pdf format from the SSDA database

#	UNIT TITLE	ORIGINATOR SUITE and SOURCE	Unit Overview (SSC/SSB)
1	Application of Electrotechnical Technology <u>054NETPM201.pdf</u> Note: Unit deals primarily with building services engineering.	Electrotechnical Services - Electrotechnical Technology & Project Management (SummitSkills)	This is the electrotechnical knowledge required of those at level 4 in the electrotechnical industry. This unit contains the essential knowledge requirements all of which underpin the occupational standards developed for those working at this level in the electrotechnical industry. At this level it is expected that you will have autonomous or, at least, semi-autonomous responsibility for complex electrotechnical projects, and that you will be operating within a technical and/or supervisory role in one or more of the key electrotechnical occupational areas which include buildings installation, maintenance, panel building, electrical machine repair and rewind, installation of public lighting systems and equipment and installation of instrumentation and associated equipment.
2	Applying continuous improvement techniques (Kaizen) <u>O45NBIT234_05.pdf</u>	Business Improvement Techniques (SEMTA)	This unit covers the competencies required for applying continuous improvement techniques (Kaizen) to your work activities. It involves benchmarking the process before and after the Kaizen activity in order to set quantifiable objectives and targets for the improvement activity. The activities undertaken will include the identification of all forms of waste, and problems or conditions within the work area or activity where improvements can be made. You will need to focus on improvements which would give: business benefits such as reduced product cost, increased capacity and/or flexibility, improved safety, improved regulatory compliance, improved quality, improved customer service, improvements to working practices and procedures, reduction in lead time and reduction/elimination of waste. You will also be required to produce and/or contribute to improving existing Standard Operating Procedures (SOPs), which could include, cleaning of equipment, maintenance of equipment, health and safety practices and procedures, process procedures, and quality improvements.
3	Applying Total Productive Maintenance (TPM) <u>O45NBIT234-12.pdf</u>	Business Improvement Techniques (SEMTA)	This unit covers the competencies required to apply Total Productive Maintenance (TPM) principles to equipment and processes and aims to prevent equipment problems by identifying potential causes and not waiting for the problem to occur. It involves the measurement of the six classic hidden losses, assessment of potential and priorities for loss reduction. It covers the application of the TPM principles and processes to resources such as plant and equipment, machines, office equipment, service equipment and utilities. It also concerns assessment of the equipment/process condition, the steps required to restore the equipment/process to good working order, and then to set a robust asset care regime to maintain this condition.
4	Applying Value Management (Value Engineering and Value Analysis) <u>045NBIT17.pdf</u>	Business Improvement Techniques (SEMTA)	This unit covers the competencies required for applying Value Management (Value Engineering and Value Analysis). It involves applying the principles and processes of Value Management (VM) on the chosen product or process. You will be expected to identify what the customer requires from the product or the process and to set quantifiable objectives and targets to achieve this. You will need to analyse the functions of the process, identify and allocate costs of each of these functions and identify the added and non-value added activities within the process. You will also be expected to identify the most appropriate alternatives, carry out a risk assessment of the alternatives, prioritise and rank the alternatives, identify the expected benefits. You will need to develop these alternatives into detailed proposals that will improve the value of the product or process and provide costing recommendations for management approval.

#	UNIT TITLE	ORIGINATOR SUITE and SOURCE	Unit Overview (SSC/SSB)
5	Applying Workplace Organisation Techniques <u>045NBIT234-04.pdf</u>	Business Improvement Techniques (SEMTA)	This unit covers the competencies required to apply the principles of workplace organisation in a continuous improvement environment. It involves applying the principles and techniques of workplace organisation to your work area and establishing an area score. You will need to consider the work area and its activity and determine where information, tools and/or equipment are missing and where improvements to the area or activity could be made. You will also be expected to produce and/or contribute to improving existing standard operating procedures and visual controls for the work area, which could cover such things as; producing shadow boards to standardise the storage and location of area equipment, colour coding of equipment, cleaning and maintenance of equipment, production operations and health and safety. The overall objective of the activity will be to increase the area 5S/5C score where this is possible.
6	Carrying Out Project Management Activities <u>045NBIT234-35.pdf</u>	Business Improvement Techniques (SEMTA)	This unit covers the competencies required to carry out Project Management involved with continuous improvement activities. It involves identifying the need for a project and determining its scope and then developing this into a fully detailed project plan. You will be required to form a suitable project team taking into account the technicalities within the project and the individual skills and abilities of the team members. You will also be expected to determine and agree the individual roles and responsibilities of the team members and to set realistic and achievable goals for both the individuals within the team and the team as a whole. Obtaining appropriate authority and support for the release of resources to carry out the project is also included and this will include people, work space/work area, documentation and information. Monitoring the performance of the project to ensure that it meets the identified objectives also features in this unit.
7	Conduct Risk Analysis on Engineering Activities <u>O45NEL3.09.pdf</u>	Engineering Leadership (SEMTA)	This unit identifies the competencies you need to perform a risk analysis, in accordance with approved procedures within your organisation. You will be expected to obtain appropriate authorisation to carry out a risk analysis, for conducting the analysis and for making recommendations to management or other appropriate authority.
8	Determine the Requirements for Engineering Activities <u>O45NEM4.14.pdf</u>	Engineering Management (SEMTA)	This unit identifies the competencies you need to determine the requirements for engineering activities, in accordance with approved procedures. You will be required to interpret the requirements, specify the quality criteria and facilitate any necessary changes to the engineering activities. These could include installation, production, operation, maintenance or other engineering activities such as performance measurement or monitoring.
9	Establish Compliance with Specifications <u>052NBMT13.pdf</u> NOTE: See also OSCEng ECRS Unit 8.04	Broadcast Engineering. (Skillset)	This unit identifies the competencies you need to test the compliance of broadcast equipment, in accordance with approved procedures, and to deliver the results in an appropriate format. You will be required to undertake specific examples of the general tests laid out in this document, to obtain and analyse the test results, and to present your conclusions and recommendations, based on the results. You will understand the safety precautions required when carrying out the compliance testing activities, especially those for isolating the equipment. You will also understand your responsibilities for safety and the importance of taking the necessary safeguards to protect yourself and others in the workplace. Your responsibilities will require you to comply with organisational policy and procedures for the checks undertaken, and to report any problems with these checks, or the test equipment, to the relevant authority. You will be expected to work with minimum supervision, taking full responsibility for your own actions and for the quality and accuracy of the work you produce. Your underpinning knowledge will provide a good understanding of your work and will provide an informed approach to applying the test procedures. You will understand the equipment to be tested and its application and will know about the performance requirements of the equipment, in adequate depth, to provide a sound basis for carrying out the maintenance activities to the required specification.

#	UNIT TITLE	ORIGINATOR SUITE and SOURCE	Unit Overview (SSC/SSB)
10	Identify and source business improvement resources <u>O45NBIT5_06.pdf</u>	Business Improvement Techniques (SEMTA)	This unit covers the competences required to identify suitable resources, both internal and external, to support the business improvement plan. You will be required to evaluate the resources in terms of technical expertise, customer support and supplier expertise, and the need for contractors, trainers and temporary labour. You will also be required to evaluate the need for key resources, such as moving/lifting equipment. Identifying and sourcing assets, such as finished goods and buffer stocks, will also be an important part of your evaluation.
11	Implement Engineering Processes <u>O45NEL3.06.pdf</u>	Engineering Leadership (SEMTA)	This unit identifies the competencies you need to implement engineering processes, in accordance with approved procedures. You will be required to apply appropriate methods and procedures to ensure that the resources and systems available to you are used effectively and efficiently. You will also be required to identify any opportunities to improve the engineering processes during implementation.
12	Implement Engineering Processes <u>045NEM4.18.pdf</u>	Engineering Management (SEMTA)	This unit identifies the competencies you need to implement engineering processes, in accordance with approved organisational procedures. The range of engineering processes could include installation, production, operation, maintenance or other activities, such as performance measurement or monitoring. You will be required to apply appropriate methods to confirm that conditions are suitable for the implementation of engineering processes, and to ensure that clear instructions are given to the relevant people. During the implementation of the engineering processes, you will be required to ensure that quality assurance and engineering support systems are operating correctly, and that the necessary resources are available.
13	Implement Quality Assurance Methods and Procedures <u>O45NEM4.29.pdf</u>	Engineering Management (SEMTA)	This unit identifies the competencies you need to assure the quality of engineering products and processes, in accordance with approved procedures. The scope of the unit covers all aspects of quality assurance, including manufacturing, installation, production and maintenance processes. You will be required to investigate quality assurance issues, obtaining all the necessary information to enable you to evaluate the possible solutions and their effects on both the engineering product and the processes involved. You will also be expected to decide and communicate quality assurance recommendations to all relevant people associated with the engineering product or process.
14	Implement Quality Assurance Processes <u>045NEM5.14.pdf</u>	Engineering Management (SEMTA)	This unit identifies the competencies you need to implement or improve quality assurance processes for engineering activities, in accordance with approved procedures. The scope of the unit covers all aspects of quality assurance including, manufacturing, installation, production, and maintenance processes, etc. You will be required to plan and implement new and revised quality assurance processes, obtaining all the necessary information to enable you to evaluate and provide solutions to problems, and their effects, on both the engineering product and on the processes involved. You will also be expected to control resources and to ensure effective implementation of quality assurance processes. In addition, you will keep all the relevant people associated with the engineering process informed of the implementation as it progresses.
15	Implement Quality Assurance Systems <u>O45NEL3.10.pdf</u>	Engineering Leadership (SEMTA)	This unit identifies the competencies you need to implement quality assurance systems, in accordance with approved procedures. You will be required to establish precise criteria to enable you to assess the quality of engineering products or processes. You will also be expected to decide and communicate the quality assurance recommendations to all relevant people.
16	Maintain a Healthy, Safe and Productive Work Environment <u>O45NEL3.01.pdf</u>	Engineering Leadership (SEMTA)	This unit identifies the competencies you need to maintain a healthy, safe and productive work environment, in accordance with approved procedures. You will be required to ensure that adequate information and support is given to all appropriate people, and to ensure that the work environment under your control conforms to organisational and legal requirements. You will also be required to recommend and implement health and safety improvements to the workplace in which you operate.

#	UNIT TITLE	ORIGINATOR SUITE and SOURCE	Unit Overview (SSC/SSB)
17	Maintain and Develop Engineering Expertise <u>O52NBEL4.27.pdf</u> See also OSCEng ECRS Unit 11.01	Broadcast Engineering. (Skillset)	This unit identifies the competencies you need to maintain and develop the engineering expertise of yourself and others, in accordance with approved procedures. You will be required to identify the activities to be carried out in your work role, and the expertise required to complete them. You will need to identify development requirements of yourself and others, and be able to select and implement appropriate development activities. Your responsibilities will require you to comply with organisational policy and procedures for the development activities undertaken, and to report any problems in achieving your development objectives to the relevant authority. You will be expected to work unsupervised, either on your own or as part of a team, which you may lead or direct, taking full responsibility for your actions and, possibly, for the work of colleagues or subordinates.
18	Monitor and Evaluate Engineering Processes O45NEM4.20.pdf	Engineering Management (SEMTA)	This unit identifies the competencies you need to monitor and evaluate engineering processes, in accordance with approved procedures. The range of engineering processes could include installation, production, operation, maintenance or other activities, such as performance measurement. You will be required to apply appropriate methods and techniques to monitor and evaluate process outputs and the utilisation of resources. During the monitoring process, you will be required to highlight any deviation from agreed specifications, and to recommend appropriate corrective actions.
19	Monitor Engineering Activities <u>O45NEL3.08.pdf</u>	Engineering Leadership (SEMTA)	This unit identifies the competencies you need to monitor engineering activities, in accordance with approved procedures. You will be required to monitor engineering processes and the supply and use of resources, at suitable intervals. During the monitoring process, you will be required to confirm that the engineering methods used are appropriate, and that the outputs and materials used are within the required specification.
20	Obtain Resources For Engineering Activities O45NEL3.05.pdf	Engineering Leadership (SEMTA)	This unit identifies the competencies you need to obtain resources for the implementation of engineering activities, in accordance with approved procedures. You will be required to apply appropriate methods and approaches for specifying and obtaining resources. You will also be required to highlight any deviations from agreed schedules to the relevant people.
21	Obtain Resources for the Implementation of Engineering Activities <u>045NEM4.17.pdf</u>	Engineering Management (SEMTA)	This unit identifies the competencies you need to obtain resources for the implementation of engineering activities, in accordance with approved procedures. The range of engineering activities could include installation, production, operation or maintenance. You will be required to apply appropriate methods for the identification and obtaining of resources, and will be expected to resolve any issues relating to the resources in the appropriate manner.
22	Project manage a business improvement programme <u>O45NBIT5_07.pdf</u>	BUSINESS IMPROVEMENT TECHNIQUES (SEMTA)	This unit covers the competences required to project manage a business improvement programme. You will be required to form project teams, taking into account the technicalities within the business improvement programme and the individual skills and abilities of the team members. You will also be expected to determine and agree the individual roles and responsibilities with project team leaders, and to set realistic and achievable goals for both the individuals within the team and the team as a whole. Obtaining appropriate authority and support for the release of resources to carry out the projects is also essential, and this will include people, work space/work area, documentation and information. Monitoring the performance of project teams to ensure that they meet the identified business improvement objectives is also required. You will also be required to identify any problems outside your control and to propose appropriate actions for dealing with them.

#	UNIT TITLE	ORIGINATOR SUITE and	Unit Overview (SSC/SSB)
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23	Rectify Engineering Problems <u>O45NEL3.07.pdf</u>	Engineering Leadership (SEMTA)	This unit identifies the competencies you need to rectify engineering problems, in accordance with approved procedures. You will be required to investigate the problems, obtaining all the necessary information from the relevant sources to enable you to establish a clear picture of the situation, to identify and evaluate potential corrective actions, and to select the most appropriate and effective solution. Your proposed solution will take into account the effects on both the engineering process and on the people involved.
24	Schedule Activities for Engineering Methods and Procedures <u>O45NEM4.16.pdf</u>	Engineering Management (SEMTA)	This unit identifies the competencies you need to schedule engineering activities, in accordance with approved procedures. The range of engineering activities could include installation, production, operation, maintenance or others, such as performance measurement or monitoring. You will be expected to identify relevant methods, processes, procedures and resources, and to issue engineering schedules. You will also be able to demonstrate how to deal with any scheduling difficulties that arise.
25	Schedule Engineering Activities <u>045NEL3.04.pdf</u>	Engineering Leadership (SEMTA)	This unit identifies the competencies you need to schedule engineering activities, time and resources, in accordance with approved procedures. You will be required to ensure that the scheduled activities are capable of meeting the engineering requirements, and that the new schedules effectively integrate with existing processes.
26	Solve Engineering Problems O45NEM4.19.pdf	Engineering Management (SEMTA)	This unit identifies the competencies you need to solve engineering problems, in accordance with approved procedures. Problems could occur in any aspect of engineering, including manufacturing, installation, production, maintenance and quality control. You will be expected to take prompt and appropriate action to rectify the problem.
27	Accept and confirm responsibility for the control of mechanical plant and equipment	Maintaining Plant & Systems - Mechanical (ECITB)	Derived from ECS 7.02 (now ECRS 9.03)
28	Adjust electrical plant and equipment to meet operating requirements O15NMPSE4.pdf	Maintaining Plant & Systems - Electrical (ECITB)	This unit includes the following areas: • working safely at all times, complying with health and safety and other relevant regulations and guidelines • following the appropriate operating specifications for the equipment being • maintained • carrying out adjustments within the limits of your personal authority • making the required adjustments in the specified sequence and in an agreed time scale • confirming that the adjusted equipment meets the required operating specification • reporting any instances where the equipment fails to meet the required performance after adjustments or where there are identified defects outside the required adjustments • maintaining documentation in accordance with organisational requirements.
29	Adjust electrical plant and equipment to meet operational requirements O11NPEMEE3.6.pdf	Process Engineering Maintenance Electrical (Cogent)	This unit is about your competence in adjusting Electrical equipment in line with the manufacturers and organisations parameters. You will be required to identify the equipment to be adjusted, carryout the adjustment and complete the appropriate documentation. You will be following your organisations safe working practices and working within the work permit procedures.

#	UNIT TITLE	ORIGINATOR SUITE and SOURCE	Unit Overview (SSC/SSB)
30	Adjust instrument and control systems to meet operating requirements O15NMPSI4.pdf	Maintaining Plant & Systems - Instrument & Controls (ECITB)	This unit includes the following areas: • working safely at all times, complying with health and safety and other relevant regulations and guidelines • following the appropriate operating specifications for the equipment being maintained • carrying out adjustments within the limits of your personal authority • making the required adjustments in the specified sequence and in an agreed time scale • confirming that the adjusted equipment meets the required operating specification • reporting any instances where the equipment fails to meet the required performance after adjustments or where there are identified defects outside the required adjustments • maintaining documentation in accordance with organisational requirements.
31	Adjust instrument and control systems to meet operational requirements O11NPEMII3.6.pdf	Process Engineering Maintenance Instrument (Cogent)	This unit is about your competence in adjusting instrument and control equipment in line with the manufacturers and organisations parameters. You will be required to identify the equipment to be adjusted, carryout the adjustment and complete the appropriate documentation. You will be following your organisations safe working practices and working within the work permit procedures.
32	Adjust mechanical plant and equipment to meet operational requirements	Process Engineering Maintenance Mechanical (Cogent)	Derived from OSCEng ECS 5.02 (now ECRS 7.02)
33	Assisting in the Installation of Mechanical Equipment <u>O45NEMI47.pdf</u>	Engineering Maintenance and Installation (SEMTA)	This unit identifies the competences you need to assist in the installation of mechanical equipment, in accordance with approved procedures. You will be required to assist in the installation of a range of mechanical equipment such as machine tools, conveyors, elevators, processing plant, engines, lifting and handling equipment, and structures like hoppers and large storage vessels. This unit does not involve maintenance/repair type activities, such as removal and replacement of existing equipment. You will be required to use the specified tools and equipment throughout the installation, and to apply a range of installation methods and techniques, such as marking out, drilling and hole preparation, positioning equipment, shimming and packing, levelling and aligning equipment, and making the required connections. The installation activities will include making checks and adjustments, in line with your permitted authority, and assisting others to ensure that the installed equipment functions to the required specification.
34	Carry out planned maintenance procedures on electrical plant and equipment <u>O11NPEMEE3.1.pdf</u>	Process Engineering Maintenance Electrical (Cogent)	This unit is about your competence in maintaining electrical equipment in line with the manufacturers and organisational practices and procedures. You will be required to complete the maintenance procedures in a timely manner, follow procedures and finally complete the appropriate documentation. You will be following your organisations safe working practices at all times and working within the work permit procedures.

#	UNIT TITLE	ORIGINATOR SUITE and SOURCE	Unit Overview (SSC/SSB)
35	Carrying Out Project Management of Engineering Activities <u>O45NETS57.pdf</u>	Engineering Technical Support (SEMTA)	This unit identifies the competences you need to project manage various engineering activities, time and resources, in accordance with approved procedures. The scope of the unit requires you to produce project plans for significant engineering activities with multifaceted requirements, having multiple operations and resources, and these plans will cover such things as component/product manufacturing, installation and commissioning, testing and trialling, planned maintenance, and plans for capability studies or equipment replacement programs. In producing the project plans, you will need to clearly identify the aims and objectives of the project, the milestones that must be met and the resources and processes required to achieve this, along with the estimated timescales and costs involved, the quality control requirements, and how the project will be monitored to ensure it meets its aims. You will also be required to ensure that the project management plans effectively integrate with existing processes.
36	Contribute to a Safe Working Environment <u>012NPM01.pdf</u> Note: this is one of about 50 similar Units dealing with safe working environments developed by a range of SSCs and SSBs for their sector- specific requirements	Plant Maintenance (Construction) (ConstructionSkills – CITB)	This unit covers your basic responsibilities for health and safety in a plant maintenance working environment. It is about being able to identify and deal correctly with hazards that may arise, both in your workplace, on site or when working on a client's/hirer's premises. It also covers how you should respond appropriately to emergency situations (e.g. accidents, injury, fire) and deals with re-instating work areas to clean, tidy and safe conditions following plant maintenance activities.
37	Contribute to effective working relationships <u>O15NMPSECO1.pdf</u> Note: this Unit is used in several ECITB suites; and there are some 60 similar Units developed for sector- specific requirements by SSCs and SSBs.	Maintaining Plant & Systems – Electrical <u>(ECITB)</u>	 This unit includes the following areas: establishing and maintaining productive working relationships dealing with disagreements in an amicable and constructive way so that good relationships are maintained keeping others informed about work plans or activities which affect them seeking assistance from others in a polite and courteous way without causing undue disruption to normal work activities responding in a timely and positive way when others ask for help or information.
38	Control allocated resource to achieve requirements	OSCEng	ECRS 5.04: has been used to develop sector-specific Units

#	UNIT TITLE	ORIGINATOR SUITE and SOURCE	Unit Overview (SSC/SSB)
39	Develop Yourself in the Work Role <u>O52BEL3.22.pdf</u>	Broadcast Engineering. (Skillset)	Derived from ECRS 11.03. Unit descriptor deals with Broadcast Engineering: This unit identifies the competencies you need to develop yourself in the role of broadcast engineer. You will understand the role of the broadcast engineer, and how it fits into the organisation. You will be expected to review your performance on a regular basis, and to seek feedback from others around you, including colleagues and line management. You will actively seek to identify areas for improvement in your current performance and ways in which you can further develop your technical, social and leadership skills. Your underpinning knowledge will provide a good understanding and an informed approach to identifying areas for your development. You will be expected to put together a rolling development plan with your line management and to agree the required time and resources needed to achieve it.
40	Ensure your own actions reduce risks to health and safety <u>O16NA.pdf</u> See also OSCEng ECRS Units 10.01 to 10.09 inclusive.	ENTO (Employment NTO)	The Units is for everyone at work and is about having an appreciation of significant risks in the workplace and knowing how to identify them and deal with them. A full risk assessment is not required to be undertaken.
41	Handing Over and Confirming Completion of Maintenance or Installation Activities <u>O45NEMI4.pdf</u>	Engineering Maintenance and Installation (SEMTA)	This unit identifies the competences you need to hand over maintained and/or installed equipment, and to confirm that the equipment is now ready to run. Following the maintenance and/or installation activity, you will be required to ensure that the equipment is in a safe and operable condition. This will involve checking that all guards/covers and safety devices have been fitted, and that the equipment functions to the required specification. On handing over the equipment, you will be expected to highlight any new, current or changed operating features of the equipment, and to inform the appropriate person of any future maintenance requirements. You must also ensure that you receive confirmation that everyone involved in the handover accepts that the maintained and/or installed equipment functions to the agreed specification.
42	Handing Over and Exchanging Responsibility for Control of Engineering <u>O45NETS59.pdf</u>	Engineering Technical Support (SEMTA)	This unit identifies the competences you need to hand over responsibility and control of an engineering activity to the appropriate person, in accordance with approved procedures. This will involve handing over responsibility for engineering activities, such as those requiring equipment or processes to be set up or changed over, where maintenance or modification needs to be carried out or is completed, on the completion of installation or commissioning activities, and for such things as business improvement or risk assessment activities to take place. This will involve checking that all safety, environmental and, where applicable, contractual arrangements, have been met before final handover to the appropriate person. On handing over the responsibility, you will be expected to highlight any project or process modifications, changed or unusual features, or areas of high risk that may be present in the activities. You must also ensure that you receive documented confirmation that everyone involved in the handover accepts that the activity has been handed over satisfactorily.
43	Implement Engineering Processes <u>O45NEL3.06.pdf</u>	Engineering Leadership (SEMTA)	This unit identifies the competencies you need to implement engineering processes, in accordance with approved procedures. You will be required to apply appropriate methods and procedures to ensure that the resources and systems available to you are used effectively and efficiently. You will also be required to identify any opportunities to improve the engineering processes during implementation.

#		ORIGINATOR SUITE and SOURCE	Unit Overview (SSC/SSB)
44	Improve the Quality of Engineering Products or Processes <u>045NEM4.30.pdf</u>	Engineering Management (SEMTA)	This unit identifies the competencies you need to implement quality improvements to engineering products or processes, in accordance with approved procedures. The scope of the unit covers all aspects of quality improvements that apply to manufacturing, installation, production and maintenance processes, etc. You will be required to plan and implement quality improvements, obtaining all the necessary information to enable you to evaluate and provide solutions to problems, and to assess their effects on both the engineering product and the processes involved. You will also be expected to control resources and ensure effective implementation of quality improvements. In addition, you will keep all the relevant people associated with the engineering process informed of the quality improvements as they are implemented.
45	Planning Engineering Activities <u>045NETS44.pdf</u>	Engineering Technical Support (SEMTA)	This unit identifies the competences you need to plan engineering activities, in accordance with approved procedures. You will need to produce plans for significant engineering activities requiring multiple stages in their execution, and this will cover such things as component/product manufacturing, assembly activities, installation, materials processing and finishing, testing and trialling, commissioning, planned maintenance, lifting, moving and transporting of goods or materials, and plans for capability studies or equipment replacement programs. You will also be required to establish the activities that must be carried out, the methods and resources to be used, and to produce a detailed plan of operation. You will be required to complete the work within agreed timescales, whilst ensuring that the activities within your control conform to organisational and legal requirements. Your responsibilities will require you to comply with organisational policy and procedures for planning the engineering activities, and to report any problems with the activities that you cannot personally resolve, or that are outside your permitted authority, to the relevant people. You will be expected to work with a minimum of supervision, taking personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.
46	Produce Detailed Drawings 045NEL3.03.pdf	Engineering Leadership (SEMTA)	This unit identifies the competencies you need to create detailed drawings for engineering products or processes, in accordance with approved procedures. You will be required to obtain all information from the high level design and to create drawings that meet the required objectives. In addition, you will be expected to communicate and report changes to the appropriate people.
47	Producing Technical Information for Engineering Activities <u>O45NETS47.pdf</u>	Engineering Technical Support (SEMTA)	This unit identifies the competences you need to produce technical information for engineering activities, in accordance with approved procedures. You will be required to produce the technical information for engineering activities such as machining, assembly, fabrication, materials processing and finishing, maintenance, installation and commissioning, material handling and lifting, and other operational activities. You will need to produce the technical information in the correct form for the specific engineering activities to take place, and to pass them on to the appropriate people, within agreed timescales. You must also ensure that the activities within your control, and the technical information provided, conform to organisational and legal requirements. Your responsibilities will require you to comply with organisational policy and procedures for producing the technical information, and to report any problems that you cannot personally resolve, or that are outside your permitted authority, to the relevant people. You will be expected to work with a minimum of supervision, taking personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.
48	Provide Technical Information and Advice to Users of Plant and Equipment <u>O12NPM24.pdf</u>	Plant Maintenance (Construction) (ConstructionSkills - CITB)	This unit refers to the competence required for the compilation and passing on of existing information procedures and advice to the users of plant machinery and equipment, as well as the seeking out and passing on of information and providing support to suit particular end-user's needs.

#	UNIT TITLE	ORIGINATOR SUITE and SOURCE	Unit Overview (SSC/SSB)
49	Provide Technical Information in Required Formats.	Broadcast Engineering. (Skillset)	See OSCEng ECRS 2.05
50	Providing Technical Advice and Guidance on Engineering Activities <u>045NETS56.pdf</u>	Engineering Technical Support (SEMTA)	This unit identifies the competences you need to advise and guide others in work-related engineering technical matters, in accordance with approved procedures. You will be expected to provide technical advice and guidance to others involved in engineering activities, such as design, installation, manufacturing, production, operational support activities, maintenance, or equipment capability/performance measurement. You will be required to identify suitable opportunities for offering technical guidance, to plan and apply appropriate methods in such guidance, and to keep your methods under review so that you can modify your approach where necessary. Your responsibilities will require you to comply with organisational policy and procedures when providing technical guidance, and to report any problems with these activities that you cannot personally resolve, or that are outside your permitted authority, to the relevant people. You will be expected to work with a minimum of supervision, taking personal responsibility for your own actions and for the quality and accuracy of the guidance you give.
51	Scheduling Engineering Activities <u>045NETS52.pdf</u>	Engineering Technical Support (SEMTA)	This unit identifies the competences you need to schedule engineering activities, time and resources, in accordance with approved procedures. You will be required to ensure that the scheduled activities are capable of meeting the engineering requirements and those of the customer, and that the new schedules effectively integrate with existing processes. You will be expected to produce schedules for significant engineering activities with complex requirements, having multiple operations and resources, and which will cover such things as component/product manufacturing, installation and commissioning, testing and trialling, planned maintenance, lifting, moving and transporting of goods or materials and schedules for capability studies or equipment replacement programs. Your responsibilities will require you to comply with organisational policy and procedures for the scheduling of engineering activities, and to report any problems with the activities that you cannot personally resolve, or are outside your permitted authority, to the relevant people. You will be expected to work with a minimum of supervision, taking personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.

Appendix D

Project Management Standards (ECITB, 2003)

Unit PM 1	Develop strategic objectives for the project
Unit PM 2	Identify and evaluate options for the project
Unit PM 3	Prepare the business case for undertaking a project
Unit PM 4	Prepare a project brief
Unit PM 5	Establish and maintain a culture of risk awareness
Unit PM 6	Identify strategic risk and evaluate options for minimising project risk
Unit PM 7	Review the effectiveness of measures for controlling risk
Unit PM 8	Establish the requirements of the project management team
Unit PM 9	Establish the project team's working methods and monitor performance
Unit PM 10	Develop operational objectives for the project
Unit PM 11	Prepare the specification of requirements
Unit PM 12	Estimate and specify resources required for the project
Unit PM 13	Develop outline programmes or schedules for projects
Unit PM 14	Develop a work breakdown structure for the project
Unit PM 15	Specify activities for project schedules
Unit PM 16	Recommend the means of procuring resources for projects
Unit PM 17	Develop a detailed schedule for the project
Unit PM 18	Monitor risks and review the effectiveness of measure for controlling them
Unit PM 19	Identify perceived risks and evaluate options for their control
Unit PM 20	Monitor risks and review contingency plans and actions
Unit PM 21	Ensure the means of securing the required project resources are in place
Unit PM 22	Select and agree a procurement strategy and procedure(s)
Unit PM 23	Recommend and agree the type and conditions of contract
Unit PM 24	Develop contractual arrangements
Unit PM 25	Review and select tenders
Unit PM 26	Verify contract arrangements are in place
Unit PM 27	Manage the performance of the team D allocating work
Unit PM 28	Manage the performance of the team D agreeing objectives and work plans
Unit PM 29	Manage the performance of the team D assessing performance
Unit PM 30	Manage the performance of the team D providing feedback on the team's performance
Unit PM 31	Identify and establish procedures and responsibilities for the project
Unit PM 32	Review the progress of projects
Unit PM 33	Comply with regulatory requirements
Unit PM 34	Review and monitor the financial control of projects
Unit PM 35	Lead the project team
Unit PM 36	Monitor and adjust activities, resources and plans
Unit PM 37	Develop solutions to project problems
Unit PM 38	Maintain communication with project stakeholders

Project Management Standards (ECITB, 2003)

- Unit PM 39 Co-ordinate, monitor and control project schedules
- Unit PM 40 Monitor income and expenditure
- Unit PM 41 Ensure quality in the implementation of the project
- Unit PM 42 Control hand-over of responsibility for the project
- Unit PM 43 Obtain and evaluate feedback on project performance
- Unit PM 44 Promote and protect planned work
- Unit PM 45 Ensure the completion of project activities
- Unit PM 46 Evaluate projects
- Unit PM 47 Identify and analyse hazards and specify actions to control risks to people, property and the environment
- Unit PM 48 Manage the performance of teams and individuals allocate work to teams and individuals
- Unit PM 49 Manage the performance of teams and individuals agree objectives and work plans with teams and individuals
- Unit PM 50 Manage the performance of teams and individuals assess the performance of teams and individuals
- Unit PM 51 Manage the performance of teams and individual provide feedback to teams and individuals on their performance

Appendix E

MSC Units

Group	Group Heading	Unit Number	Unit Title
A	Managing Self and Personal Skills	A1	Manage your own resources
		A2	Manage your own resources and professional development
		A3	Develop your personal networks
В	Providing Direction	B1	Develop and implement operational plans for your area of responsibility
		B2	Map the environment in which your organisation operates
		B3	Develop a strategic business plan for your organisation
		B4	Put the strategic business plan into action
		B5	Provide leadership for your team
		B6	Provide leadership in your area of responsibility
		B7	Provide leadership for your organisation
		B8	Ensure compliance with legal, regulatory, ethical and social requirements
		B9	Develop the culture of your organisation
		B10	Manage risk
		B11	Promote equality of opportunity and diversity in your area of responsibility
		B12	Promote equality of opportunity in your organisation
С	Facilitating Change	C1	Encourage innovation in your team
		C2	Encourage innovation in your area of responsibility
		C3	Encourage innovation in your organisation
		C4	Lead change
		C5	Plan change
		C6	Implement change
D	Working with people	D1	Develop productive working relationships with colleagues
		D2	Develop productive working relationships with colleagues and stakeholders
		D3	Recruit, select and keep colleagues
		D4	Plan the workforce
		D5	Allocate and check the work of your team
		D6	Allocate and monitor the progress and quality of work in your area of responsibility
		D7	Provide learning opportunities for colleagues
E	Using Resources	E1	Manage a budget
		E2	Manage finance for your area of responsibility
		E3	Obtain additional finance for the organisation
		E4	Promote the use of technology within your organisation
		E5	Ensure your own action reduces risks to health and safety
		E6	Ensure health and safety requirements are met in your area of responsibility
		E7	Ensure an effective organisational approach to health and safety

Appendix F

OSCEng Engineering Competence Reference Standards, ECRS (2006)

ECRS	Subject Groups and Unit Titles
Unit	
Number	
	1 DESIGN AND DEVELOPMENT
1.01	Identify the requirements of clients for engineering products or processes
1.02	Determine engineering requirements for products or processes
1.03	Identify solutions to meet technical requirements
1.04	Establish engineering objectives
1.05	Produce specifications for engineering products or processes
1.06	Identify and define areas of research
1.07	Develop a research methodology
1.08	Propose and specify research into engineering products or processes
1.09	Undertake research into engineering products or processes
1.10	Evaluate the results of research
1.11	Identify factors that impact on engineering design briefs
1.12	Produce an analysis of identified factors in engineering design briefs
1.13	Recommend methods to achieve engineering objectives
1.14	Establish a design brief for engineering products or processes
1.15	Develop a strategy for the design process
1.16	Generate engineering design options
1.17	Evaluate and recommend engineering design options for implementation
1.18	Create designs for engineering products or processes
1.19	Complete designs for engineering products or processes
1.20	Evaluate designs for engineering products or processes
1.21	Identify potential developments to engineering products and assets
1.22	Evaluate and recommend development options

	2 TECHNICAL INFORMATION
2.01	Review technical information to produce detailed engineering drawings
2.02	Produce detailed drawings to support engineering activities
2.03	Interpret detailed information from technical sources
2.04	Read and extract information from engineering drawings and specifications
2.05	Provide technical information in required formats
2.06	Provide technical information on engineering products or assets
2.07	Provide technical information on the use of engineering products or assets
	3 PLANNING
3.01	Review an engineering activity to determine its technical requirements
3.02	Specify technical requirements for engineering activities
3.03	Determine technical requirements to achieve objectives
3.04	Determine resource requirements to achieve objectives
3.05	Plan engineering activities
3.06	Determine procedures for engineering activities
3.07	Schedule activities to implement engineering methods and procedures
	4 PREPARATION TECHNIQUES AND PROCEDURES
4.01	PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements
4.02	PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces
4.02 4.03	PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools
4.02 4.03 4.04	PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools Mark out to required specification
4.02 4.03 4.04 4.05	4 PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools Mark out to required specification Prepare equipment for modifying or processing of materials
4.02 4.03 4.04 4.05 4.06	4 PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools Mark out to required specification Prepare equipment for modifying or processing of materials Prepare machines to achieve pressure shaping requirements
4.02 4.03 4.04 4.05 4.06 4.07	4 PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools Mark out to required specification Prepare equipment for modifying or processing of materials Prepare machines to achieve pressure shaping requirements Prepare machines to produce cast products
4.02 4.03 4.04 4.05 4.06 4.07 4.08	4 PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools Mark out to required specification Prepare equipment for modifying or processing of materials Prepare machines to achieve pressure shaping requirements Prepare machines to produce cast products Prepare equipment to carry out surface treatment operations
$ \begin{array}{r} 4.02 \\ 4.03 \\ 4.04 \\ 4.05 \\ 4.06 \\ 4.07 \\ 4.08 \\ 4.09 \\ \end{array} $	4 PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools Mark out to required specification Prepare equipment for modifying or processing of materials Prepare machines to achieve pressure shaping requirements Prepare machines to produce cast products Prepare equipment to carry out surface treatment operations Prepare thermal joining machines to produce joined products
$ \begin{array}{r} 4.02 \\ 4.03 \\ 4.04 \\ 4.05 \\ 4.06 \\ 4.07 \\ 4.08 \\ 4.09 \\ 4.10 \\ \end{array} $	4 PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools Mark out to required specification Prepare equipment for modifying or processing of materials Prepare machines to achieve pressure shaping requirements Prepare machines to produce cast products Prepare equipment to carry out surface treatment operations Prepare thermal joining machines to produce joined products Prepare work areas and materials for engineering activities
4.02 4.03 4.04 4.05 4.06 4.07 4.08 4.09 4.10 4.11	4 PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools Mark out to required specification Prepare equipment for modifying or processing of materials Prepare machines to achieve pressure shaping requirements Prepare machines to produce cast products Prepare equipment to carry out surface treatment operations Prepare thermal joining machines to produce joined products Prepare work areas and materials for engineering activities Prepare work areas for engineering activities
$\begin{array}{r} 4.02 \\ 4.03 \\ 4.04 \\ 4.05 \\ 4.06 \\ 4.07 \\ 4.08 \\ 4.09 \\ 4.10 \\ 4.11 \\ 4.12 \end{array}$	4 PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools Mark out to required specification Prepare equipment for modifying or processing of materials Prepare machines to achieve pressure shaping requirements Prepare machines to produce cast products Prepare equipment to carry out surface treatment operations Prepare thermal joining machines to produce joined products Prepare work areas and materials for engineering activities Prepare work areas for engineering activities Prepare materials for engineering activities
$\begin{array}{r} 4.02 \\ 4.03 \\ 4.04 \\ 4.05 \\ 4.06 \\ 4.07 \\ 4.08 \\ 4.09 \\ 4.10 \\ 4.11 \\ 4.12 \\ 4.13 \end{array}$	4 PREPARATION TECHNIQUES AND PROCEDURES Prepare machine tools to achieve material removal requirements Mount and set workholding devices and workpieces Set and adjust machine tools Mark out to required specification Prepare equipment for modifying or processing of materials Prepare machines to achieve pressure shaping requirements Prepare machines to produce cast products Prepare equipment to carry out surface treatment operations Prepare work areas and materials for engineering activities Prepare work areas for engineering activities Prepare materials for engineering activities Prepare equipment for engineering activities
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4.16	Store resources for further use
4.17	Prepare a programmable controlled system for operation
4.18	Check a computer controlled system for operation
	5 PROCESSING AND PRODUCTION
5.01	Determine the requirements of engineering products or processes
5.02	Specify methods and procedures to achieve engineering requirements
5.03	Obtain the resources to implement engineering methods and procedures
5.04	Control allocated resources to achieve requirements
5.05	Implement engineering methods and procedures
5.06	Operate computer controlled engineering assets
5.07	Operate programmable controlled engineering processes
5.08	Shape engineering products by material removal using hand tools
5.09	Shape engineering products by material removal using machine tools
5.10	Produce engineering products by moulding or laying-up
5.11	Produce engineering products by machine-controlled pressure shaping operations
5.12	Produce cast engineering products through manual operations
5.13	Make cast products by machine based operations
5.14	Join materials by manually-controlled thermal processes
5.15	Join materials by machine-controlled thermal processes
5.16	Join materials by bonding
5.17	Assemble components to meet specifications
5.18	Produce one-off components
5.19	Finish engineering products by applying surface treatments
5.20	Process materials to alter their properties
5.21	Shape engineering materials by manually-applied pressure
5.22	Solve engineering problems with engineering solutions
5.23	Monitor engineering processes
5.24	Evaluate engineering processes

	6 INSTALLATION AND DISMANTLING
6.01	Install engineering products or assets
6.02	Plan and configure engineering products or processes
6.03	Configure engineering products or assets
6.04	Commission engineering products or processes
6.05	Position engineering construction elements
6.06	Propose engineering products or processes for decommissioning
6.07	Plan and implement decommissioning methods and procedures
6.08	Dismantle engineering construction elements
6.09	Dismantle engineering assets
	7 MAINTENANCE AND REPAIR
7.01	Carry out planned maintenance procedures
7.02	Adjust engineering assets to meet operating requirements
7.03	Remove components from assemblies or sub-assemblies
7.04	Replace assembly or sub-assembly components
7.05	Determine the feasibility of a component repair
7.06	Restore components to operational condition by repair
7.07	Deal with variations and defects in engineering products or assets
	8 QUALITY AND COMPLIANCE
8.01	Assure the quality of engineering products or processes
8.02	Identify the reasons for quality assurance problems
8.03	Implement improvements to the quality of engineering products or processes
8.04	Establish compliance with specifications
8.05	Conduct specified testing of engineering products or assets
8.06	Analyse and interpret the results of engineering tests
8.07	Monitor the performance and condition of engineering assets
8.08	Assess the performance and condition of engineering assets
8.09	Inspect engineering products or equipment
8.10	Monitor the use of allocated resources
8.11	Diagnose faults in engineering products or assets

	9 ENGINEERING SUPPORT
9.01	Transfer control of engineering products or processes
9.02	Hand over configured engineering products or assets
9.03	Accept and confirm responsibility for the control of engineering products or assets
9.04	Hand over engineering products or assets to the control of others
9.05	Set up and secure access structures
9.06	Dismantle and remove access structures
9.07	Move loads
9.08	Contribute to technical leadership on engineering activities
9.09	Contribute to the organisation of work activities
9.10	Provide operational support to users of engineering products or assets
	10 RISK MANAGEMENT
10.01	Analyse the risks arising from engineering products or processes
10.02	Specify methods and procedures to reduce risks
10.03	Investigate incidents relating to engineering products or processes
10.04	Identify and deal with hazards in the work environment
10.05	Minimise risks to life, property and the environment
10.06	Deal with risks arising from contingencies
10.07	Determine requirements for safe access to work locations
10.08	Implement safe access systems
10.09	Identify and suggest improvements to working practices and procedures
	11 PERSONAL DEVELOPMENT
11.01	Maintain and develop own engineering expertise
11.02	Apply professional ethics and values
11.03	Develop yourself in the work role
11.04	Contribute to effective working relationships