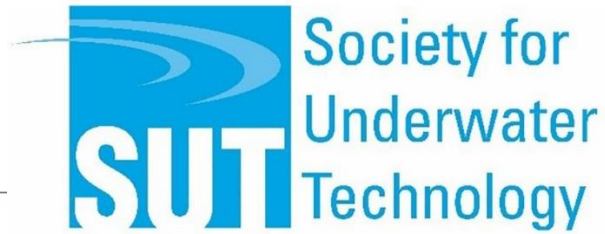




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## Competency Standards

CMarTech

RMarTech

MarTech

# CMarTech

## Competence

**All Candidates for registry must have at minimum of five (5) years of experience in their professional field.** The following table details the generic competencies that must be demonstrated in order to achieve registration as a Chartered Marine Technologist. Given the diverse nature of technological practice, achieving the required level for these professional competencies will involve a broad range of activities. Candidates who believe they meet these or who wish to work towards them, should approach the MTS or SUT to obtain further details on how to apply for registration. Chartered Marine Technologists must be competent throughout their professional lives using a combination of their knowledge, training and experience to be able to:

<p><b>The Competence and Commitment Standard for Chartered Marine Technologists.</b></p> <p>Chartered Marine Technologists must be competent throughout their working life, by virtue of their education, training and experience, to:</p>	<p>Guidance – These are examples of activities which could demonstrate that you have achieved the CMarTech criteria.</p>
<p><b>A. Use a combination of general and specialist knowledge and understanding to optimize the application of existing and emerging technology.</b></p>	
<p>A1. Maintain and extend a sound theoretical approach in enabling the introduction and exploitation of new and advancing technology and other relevant developments. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Identify the limits of own personal knowledge and skills</li> <li>• Strive to extend own technological capability</li> <li>• Broaden and deepen own knowledge base through research and experimentation.</li> </ul>	<p>Engage in formal post-graduate academic study. Learn and develop new relevant theories and techniques in the workplace. Broaden your knowledge of appropriate codes, standards and specifications.</p>
<p>A2. Engage in the creative and innovative development of systems, processes and products and continuous improvement systems. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Establish users’ needs</li> <li>• Assess marketing needs and contribute to marketing strategies Identify constraints and exploit opportunities for the development and transfer of technology within own chosen field</li> <li>• Define and promote new applications when appropriate</li> <li>• Secure the necessary intellectual property rights</li> <li>• Develop and evaluate continuous improvement systems.</li> </ul>	<p>Lead/manage market research, and product and process research and development. Cross-disciplinary working involving complex projects.</p> <p>Conduct statistically sound appraisal of data. Use evidence from best practice to improve effectiveness.</p>
<p><b>B. Apply appropriate theoretical and practical methods to the analysis and solution of problems.</b></p>	
<p>B1. Identify potential projects and opportunities. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Explore the territory within own responsibility for new opportunities</li> </ul>	<p>Involvement in the marketing of and tendering for new products, processes and systems.</p> <p>Involvement in the specification and procurement of new products, processes and systems. Set targets, and draft programs and action plans.</p>

<ul style="list-style-type: none"> <li>• Review the potential for enhancing products, processes, systems, and services.</li> <li>• Use own knowledge of the employer’s position to assess the viability of opportunities.</li> </ul>	Schedule activities.
<p>B2. Conduct appropriate research and undertake design and development of solutions.</p> <p>This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Identify and agree appropriate research methodologies</li> <li>• Assemble the necessary resources</li> <li>• Carry out the necessary tests</li> <li>• Collect, analyze and evaluate the relevant data</li> <li>• Draft, present and agree design results and recommendations, taking account of cost, quality, safety, reliability, appearance, fitness for purpose and environmental impact</li> <li>• Undertake design.</li> </ul>	Carry out formal theoretical research. Carry out basic and/or applied research on the job. Lead/manage value and whole life costing. Lead design teams. Draft specifications. Develop and test options. Identify resources and costs of options. Produce concept designs and develop these into detailed designs.
<p>B3. Implement design solutions and evaluate their effectiveness.</p> <p>This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Ensure that the application of the design results in the appropriate practical outcome</li> <li>• Implement design solutions, taking account of critical constraints</li> <li>• Determine the criteria for evaluating the design solutions</li> <li>• Evaluate the outcome against the original specification</li> <li>• Actively learn from feedback on results to improve future design solutions and build best practice.</li> </ul>	Follow the design process through into product or service realization and its evaluation. Prepare and present reports on the evaluation of the effectiveness of the designs. Manage product improvement. Interpret and analyze performance. Determine critical success factors.
<p><b>C. Provide technical and commercial leadership.</b></p>	
<p>C1. Plan for effective project implementation.</p> <p>This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Identify the factors affecting the project implementation</li> <li>• Lead on preparing and agreeing implementation plans and method statements</li> <li>• Ensure that the necessary resources are secured and brief the project team</li> <li>• Negotiate the necessary contractual arrangements with other stakeholders (client, subcontractors, suppliers, etc.).</li> </ul>	Lead/manage project planning activities. Produce and implement procurement plans. Carry out project risk assessments. Collaborate with key stakeholders and negotiate agreement to the plans. Plan programs and delivery of tasks. Identify resources and costs. Negotiate and agree contracts/work orders.
<p>C2. Plan, budget, organize, direct and control tasks, people and resources.</p> <p>This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Set up appropriate management systems</li> <li>• Agree on quality standards, program and budget within legal and statutory requirements</li> <li>• Organize and lead work teams, coordinating project activities</li> <li>• Ensure that variations from quality standards, program and budgets are identified, and that corrective action is taken</li> </ul>	Take responsibility for and control project operations. Manage the balance between quality, cost and time. Manage contingency systems. Manage project funding, payments and recovery. Satisfy legal and statutory obligations. Lead/manage tasks within identified financial, commercial and regulatory constraints.

<ul style="list-style-type: none"> <li>Gather and evaluate feedback and recommend improvements.</li> </ul>	
<p>C3. Lead teams and develop staff to meet changing technical and managerial needs. This could include an ability to:</p> <ul style="list-style-type: none"> <li>Agree objectives and work plans with teams and individuals</li> <li>Identify team and individual needs, and plan for their development</li> <li>Lead and support team and individual development</li> <li>Assess team and individual performance and provide feedback.</li> </ul>	<p>Carry out/contribute to staff appraisals. Plan/contribute to the training and development of staff. Gather evidence from colleagues of the management, assessment and feedback that you have provided. Carry out/contribute to disciplinary procedures.</p>
<p>C4. Bring about continuous improvement through quality management. This could include an ability to:</p> <ul style="list-style-type: none"> <li>Promote quality throughout the organization and its customer and supplier networks</li> <li>Develop and maintain operations to meet quality standards</li> <li>Direct project evaluation and propose recommendations for improvement.</li> </ul>	<p>Plan and implement best practice methods of continuous improvement, e.g. ISO 9000, EFQM, balanced scorecard. Carry out quality audits.</p> <p>Monitor, maintain and improve delivery. Identify, implement and evaluate changes to meet quality objectives.</p>
<p><b>D. Demonstrate effective interpersonal skills.</b></p>	
<p>D1. Communicate in English with others at all levels. This could include an ability to:</p> <ul style="list-style-type: none"> <li>Contribute to, chair and record meetings and discussions</li> <li>Prepare letters, documents and reports on complex matters</li> <li>Exchange information and provide advice to technical and non-technical colleagues.</li> </ul>	<p>Reports, minutes of meetings, letters, programs, drawings, specifications.</p>
<p>D2. Present and discuss proposals. This could include an ability to:</p> <ul style="list-style-type: none"> <li>Prepare and deliver presentations on strategic matters</li> <li>Lead and sustain debates with audiences</li> <li>Feed the results back to improve the proposals.</li> </ul>	<p>Presentations, records of discussions and their outcomes.</p>
<p>D3. Demonstrate personal and social skills. This could include an ability to:</p> <ul style="list-style-type: none"> <li>Know and manage own emotions, strengths and weaknesses</li> <li>Be aware of the needs and concerns of others</li> <li>Be confident and flexible in dealing with new and changing interpersonal situations</li> <li>Identify, agree and lead work towards collective goals</li> <li>Create, maintain and enhance productive working relationships, and resolve conflicts.</li> </ul>	<p>Records of meetings. Evidence from colleagues of your personal and social skills.</p> <p>Take responsibility for productive working relationships. Apply diversity and antidiscrimination legislation.</p>

<p><b>E. Demonstrate a personal commitment to professional standards, recognizing obligations to society, the profession and the environment.</b></p>	
<p>E1. Comply with relevant codes of conduct. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Comply with the rules of professional conduct of MTS and/or SUT</li> <li>• Lead work within all relevant legislation and regulatory frameworks, including social and employment legislation.</li> </ul>	<p>Work with a variety of conditions of contract. Demonstrate initiative in and commitment to the affairs of MTS and/or SUT.</p>
<p>E2. Manage and apply safe systems of work. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Identify and take responsibility for own obligations for health, safety and welfare issues</li> <li>• Ensure that systems satisfy health, safety and welfare requirements</li> <li>• Develop and implement appropriate hazard identification and risk management systems</li> <li>• Manage, evaluate and improve these systems.</li> </ul>	<p>Undertake formal health and safety (H&amp;S) training. Work with H&amp;S legislation and best practice and company safety policies. Carry out safety audits. Identify and minimize hazards. Assess and control risks.</p> <p>Evaluate the costs and benefits of safe working. Deliver strategic H&amp;S briefings and inductions.</p>
<p>E3. Undertake activities in a way that contributes to sustainable development. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Operate and act responsibly, taking account of the need to progress environmental, social and economic outcomes simultaneously</li> <li>• Use imagination, creativity and innovation to provide products and services which maintain and enhance the quality of the environment and community, and meet financial objectives</li> <li>• Understand and secure stakeholder involvement in sustainable development.</li> </ul>	<p>Carry out environmental impact assessments.</p> <p>Carry out environmental risk assessments.</p> <p>Plan and implement best practice environmental management systems, e.g. ISO 14000. Work within environmental legislation.</p> <p>Adopt sustainable practices. Achieve “triple bottom line” (i.e. social, economic and environmental) outcomes.</p>
<p>E4. Carry out continuing professional development (CPD) necessary to maintain and enhance competence in own area of practice. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Undertake reviews of own development needs</li> <li>• Prepare action plans to meet personal and organizational objectives</li> <li>• Carry out planned (and unplanned) CPD activities</li> <li>• Maintain evidence of competence development</li> <li>• Evaluate CPD outcomes against the action plans</li> <li>• Assist others with their own CPD.</li> </ul>	<p>Keep up to date with relevant national and international issues. Maintain CPD plans and records. Involvement with the affairs of MTS and/or SUT. Evidence of your development through on-the-job learning, private study, inhouse courses, external courses and conferences.</p>

## Education

Normally, a formal education is an essential pre-requisite for registration as it demonstrates the underpinning knowledge and understanding for professional competence. The following qualifications exemplify the required knowledge and understanding for Chartered Marine Technologist Registration:

An accredited Master’s degree

or

An accredited Bachelor’s degree, plus either an appropriate accredited Master’s degree, or appropriate further learning to Masters level.

If an accredited Master's level qualification is not presented, it is possible to demonstrate Masters level achievement through a combination of academic awards and/or appropriate experiential learning. Candidates applying through this route must clearly demonstrate that they have achieved the same level of knowledge and understanding, as those with the accredited qualifications. For example, a Bachelor's qualification supported by appropriate professional experience may be sufficient to demonstrate a Masters level knowledge. Candidates must respond to each of the Competency Standards with specific examples of how they have met each standard through experiential learning. Candidates should be careful to explain what was learned from each experience.

### Professional Development

Professional development is a key part of developing the competence required to achieve the standard for Chartered Marine Technologist registration. Aspiring Chartered Marine Technologists learn to apply their knowledge and understanding and apply professional judgement through professional development. Candidates may rely on professional development opportunities offered via MTS or SUT events, university training, workplace training, accredited professional development schemes, or other high-level professional development opportunities. For candidates seeking additional information about professional development, the Registrar will be able to provide information and guidance necessary, and may be able to put them in touch with a mentor to assist them through the process and help to identify any skills gaps in their development.

Anyone seeking registration as a Chartered Marine Technologist should maintain a detailed record of their development, responsibilities and experience, verified by referees, in order to be best prepared to provide the evidence of professional competence commensurate for CMarTech registration.

### Maintaining Competence & Demonstrating a Commitment to CPD

Once CMarTech registration has been achieved, Chartered Marine Technologists have an obligation to maintain professional competence. MTS and SUT are actively developing an online tracking system for professional development units, which will be made available to those registered if the pilot program is continued.

### Code of Professional Conduct

All successful candidates are required to make a personal commitment to live by the appropriate codes of professional conduct, recognizing their obligations to society, the marine professions and the environment. The MTS code of conduct is available online here: <http://www.mtsociety.org/wp-content/uploads/2019/01/3200-Member-Conduct-Policy-2012.pdf>. The SUT code of conduct is available online here: [https://www.sut.org/wp-content/uploads/2014/06/SUTethics\\_December2019-1.docx](https://www.sut.org/wp-content/uploads/2014/06/SUTethics_December2019-1.docx)

## RMarTech

**All Candidates for registry must have at minimum of five (5) years of experience in their professional field.** The following table details the generic competences that must be demonstrated in order to achieve registration as a Registered Marine Technologist. Given the diverse nature of technological practice, achieving the required level for these professional competencies will involve a broad range of activities. Candidates who believe they meet these or who wish to work towards them, should approach MTS or SUT to obtain further details on how to apply for registration.

### Competence

Registered Marine Technologists must be competent throughout their professional lives using a combination of their knowledge, training and experience to be able to:

The Competence and Commitment Standard for Registered Marine Technologists. Registered Marine Technologists must be competent throughout their working life, by virtue of their education, training and experience, to:	Guidance – These are examples of activities which could demonstrate that you have achieved the RMarTech criteria.
<b>A Use a combination of general and specialist knowledge and understanding to apply existing and emerging technology.</b>	
A1 Maintain and extend a sound theoretical approach to the application of technology in practice. This could include an ability to: <ul style="list-style-type: none"> <li>Identify the limits of own personal knowledge and skills</li> <li>Strive to extend own technological capability</li> <li>Broaden and deepen own knowledge base through new applications and techniques.</li> </ul>	Engage in formal learning. Learn new theories and techniques in the workplace, at seminars, etc. Broaden your knowledge of relevant codes, standards and specifications.
A2 Use a sound evidence-based approach to problem-solving and contribute to continuous improvement. This could include an ability to: <ul style="list-style-type: none"> <li>Establish users' requirements for improvement</li> <li>Use market intelligence and knowledge of technological developments to promote and improve the effectiveness of products, systems and services</li> <li>Contribute to the evaluation and development of continuous improvement systems</li> <li>Apply knowledge and experience to investigate and solve problems arising during tasks and implement corrective action.</li> </ul>	Manage/contribute to market research, and product and process research and development. Involvement with cross-disciplinary working. Conduct statistically sound appraisal of data. Use evidence from best practice to improve effectiveness. Apply root cause analysis.
<b>B Apply appropriate theoretical and practical methods to design, develop, manufacture, construct, commission, operate, maintain, decommission and re-cycle processes, systems, services and products.</b>	
B1 Identify, review and select techniques, procedures and methods to undertake tasks. This could include an ability to: <ul style="list-style-type: none"> <li>Select a review methodology</li> </ul>	Contribute to the marketing of and tendering for new products, processes and systems. Contribute to the specification and procurement of new products, processes and systems. Develop decommissioning processes. Set

<ul style="list-style-type: none"> <li>• Review the potential for enhancing products, processes, systems and services, using evidence from best practice</li> <li>• Establish an action plan to implement the results of the review.</li> </ul>	<p>targets, and draft programmes and action plans. Schedule activities.</p>
<p>B2 Contribute to the design and development of solutions. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Contribute to the identification and specification of design and development requirements for products, processes, systems and services</li> <li>• Identify potential operational problems and evaluate possible solutions, taking account of cost, quality, safety, reliability, appearance, fitness for purpose and environmental impact</li> <li>• Contribute to the design of solutions.</li> </ul>	<p>Contribute to theoretical and applied research. Manage/contribute to value and whole life costing. Work in design teams. Draft specifications. Develop and test options. Identify resources and costs of options. Produce detailed designs.</p>
<p>B3 Implement design solutions and contribute to their evaluation. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Secure the resources required for implementation</li> <li>• Implement design solutions, taking account of critical constraints</li> <li>• Identify problems during implementation and take corrective action</li> <li>• Contribute to the evaluation of design solutions</li> <li>• Contribute to recommendations for improvement and actively learn from feedback on results.</li> </ul>	<p>Follow the design process through into product manufacture. Operate and maintain processes, systems etc. Contribute to reports on the evaluation of the effectiveness of the designs. Contribute to product improvement. Interpret and analyse performance. Contribute to determining critical success factors.</p>
<p><b>C Provide technical and commercial management.</b></p>	
<p>C1 Plan for effective project implementation. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Identify the factors affecting the project implementation</li> <li>• Prepare and agree implementation plans and method statements</li> <li>• Secure the necessary resources and confirm roles in project team</li> <li>• Apply the necessary contractual arrangements with other stakeholders (client, subcontractors, suppliers, etc.).</li> </ul>	<p>Manage/contribute to project planning activities. Produce and implement procurement plans. Contribute to project risk assessments. Collaborate with key stakeholders. Plan programmes and delivery of tasks. Identify resources and costs. Prepare and agree contracts/work orders.</p>
<p>C2 Manage the planning, budgeting and organisation of tasks, people and resources. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Operate appropriate management systems</li> <li>• Work to the agreed quality standards, programme and budget, within legal and statutory requirements</li> <li>• Manage work teams, coordinating project activities</li> <li>• Identify variations from quality standards, programme and budgets, and take corrective action.</li> </ul>	<p>Manage/contribute to project operations. Manage the balance between quality, cost and time. Manage contingency processes. Contribute to the management of project funding, payments and recovery. Satisfy legal and statutory obligations. Manage tasks within identified financial, commercial and regulatory constraints.</p>



<ul style="list-style-type: none"> <li>Evaluate performance and recommend improvements.</li> </ul>	
<p>C3 Manage teams and develop staff to meet changing technical and managerial needs. This could include an ability to:</p> <ul style="list-style-type: none"> <li>Agree objectives and work plans with teams and individuals</li> <li>Identify team and individual needs, and plan for their development</li> <li>Manage and support team and individual development</li> <li>Assess team and individual performance, and provide feedback.</li> </ul>	<p>Carry out/contribute to staff appraisals. Plan/contribute to the training and development of staff. Gather evidence from colleagues of the management, assessment and feedback that you have provided. Carry out/contribute to disciplinary procedures.</p>
<p>C4 Manage continuous quality improvement. This could include an ability to:</p> <ul style="list-style-type: none"> <li>Ensure the application of quality management principles by team members and colleagues</li> <li>Manage operations to maintain quality standards</li> <li>Evaluate projects and make recommendations for improvement.</li> </ul>	<p>Promote quality. Manage/contribute to best practice methods of continuous improvement, e.g. ISO 9000, EFQM, balanced scorecard. Carry out/contribute to quality audits. Monitor, maintain and improve delivery. Identify, implement and evaluate changes to meet quality objectives.</p>
<p><b>D Demonstrate effective interpersonal skills.</b></p>	
<p>D1 Communicate in English with others at all levels. This could include an ability to:</p> <ul style="list-style-type: none"> <li>Contribute to, chair and record meetings and discussions</li> <li>Prepare letters, documents and reports on technical matters</li> <li>Exchange information and provide advice to technical and non-technical colleagues.</li> </ul>	<p>Reports, minutes of meetings, letters, programmes, drawings, specifications.</p>
<p>D2 Present and discuss proposals. This could include an ability to:</p> <ul style="list-style-type: none"> <li>Prepare and deliver appropriate presentations</li> <li>Manage debates with audiences</li> <li>Feed the results back to improve the proposals.</li> </ul>	<p>Presentations, records of discussions and their outcomes.</p>
<p>D3 Demonstrate personal and social skills. This could include an ability to:</p> <ul style="list-style-type: none"> <li>Know and manage own emotions, strengths and weaknesses</li> <li>Be aware of the needs and concerns of others</li> </ul>	<p>Records of meetings. Evidence from colleagues of your personal and social skills. Contribute to productive working relationships. Apply diversity and anti-discrimination legislation.</p>

<ul style="list-style-type: none"> <li>• Be confident and flexible in dealing with new and changing interpersonal situations</li> <li>• Identify, agree and work towards collective goals</li> <li>• Create, maintain and enhance productive working relationships, and resolve conflicts.</li> </ul>	
<b>E Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.</b>	
<p>E1 Comply with relevant codes of conduct. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Comply with the relevant rules of professional conduct of own professional body</li> <li>• Manage work within all relevant legislation and regulatory frameworks, including social and employment legislation.</li> </ul>	<p>Contribute to the affairs of the IMarEST. Work with a variety of conditions of contract.</p>
<p>E2 Manage and apply safe systems of work. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Identify and take responsibility for own obligations for health, safety and welfare issues</li> <li>• Manage systems that satisfy health, safety and welfare requirements</li> <li>• Develop and implement appropriate hazard identification and risk management systems</li> <li>• Manage, evaluate and improve these systems.</li> </ul>	<p>Undertake formal H&amp;S training. Work with H&amp;S legislation and best practice, e.g. HASAW 1974, CDM regs, OHSAS 18001:2007 and company safety policies. Carry out safety audits. Identify and minimise hazards. Assess and control risks. Deliver H&amp;S briefings &amp; inductions.</p>
<p>E3 Undertake activities in a way that contributes to sustainable development. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Operate and act responsibly, taking account of the need to progress environmental, social and economic outcomes simultaneously</li> <li>• Provide products and services which maintain and enhance the quality of the environment and community, and meet financial objectives</li> <li>• Understand and encourage stakeholder involvement in sustainable development.</li> </ul>	<p>Carry out/contribute to environmental impact assessments. Carry out/contribute to environmental risk assessments. Manage best practice environmental management systems, e.g. ISO 14000. Work within environmental legislation. Adopt sustainable practices. Contribute to “triple bottom line” (i.e. social, economic and environmental) outcomes.</p>
<p>E4 Carry out continuing professional development necessary to maintain and enhance competence in own area of practice. This could include an ability to:</p> <ul style="list-style-type: none"> <li>• Undertake reviews of own development needs</li> <li>• Prepare action plans to meet personal and organisational objectives</li> <li>• Carry out planned (and unplanned) CPD activities</li> <li>• Maintain evidence of competence development</li> <li>• Evaluate CPD outcomes against the action plans</li> <li>• Assist others with their own CPD.</li> </ul>	<p>Keep up to date with relevant national and international issues. Maintain CPD plans and records. Involvement with the affairs of MTS and/or SUT. Evidence of your development through on-the-job learning, private study, in-house courses, external courses and conferences.</p>

## Education

Normally, formal education is an essential pre-requisite for registration, as it demonstrates the underpinning knowledge and understanding for professional competence. The following qualifications exemplify the required knowledge and understanding for Registered Marine Technologist registration.

An accredited Bachelor's degree

Or

A Higher National Certificate or Diploma or Foundation Degree, plus appropriate further learning to degree level.

Or

An NVQ4 or SVQ4 which has been approved for the purpose by the IMarEST

If an accredited Bachelor ordinary degree level qualification is not present, it is possible to demonstrate Bachelor ordinary degree level achievement through a combination of academic awards and/or appropriate experiential learning. Candidates applying through this route must clearly demonstrate that they have achieved the same level of knowledge and understanding as those with the accredited qualifications. For example, a HND (or other Associate's level or Vocational training) qualification supported by appropriate professional experience may be sufficient to demonstrate a Bachelor level knowledge. Candidates must respond to each of the Competency Standards with specific examples of how they have met each standard through experiential learning. Candidates should be careful to explain what was learned from each experience.

## Professional Development

Professional development is a key part of developing the competence required to achieve the standard for Registered Marine Technologist registration. Aspiring Registered Marine Technologists learn to apply their knowledge and understanding and apply professional judgement through professional development. Candidates may rely on professional development opportunities offered via MTS or SUT events, university training, workplace training, accredited professional development schemes, or other high-level professional development opportunities. For candidates seeking additional information about professional development, the Registrar will be able to provide information and guidance necessary and may be able to put them in touch with a mentor to assist them through the process and help to identify any skills gaps in their development.

Anyone seeking registration as a Registered Marine Technologist should maintain a detailed record of their development, responsibilities and experience, verified by referees, in order to be best prepared to provide the evidence of professional competence commensurate for RMarTech registration.

## Maintaining Competence & Demonstrating a Commitment to CPD

Once RMarTech registration has been achieved, Registered Marine Technologists have an obligation to maintain professional competence. MTS and SUT are actively developing an online tracking system for professional development units, which will be made available to those registered if the pilot program is continued.

## Code of Professional Conduct

All successful candidates are required to make a personal commitment to live by the appropriate codes of professional conduct, recognizing their obligations to society, the marine professions and the environment. The MTS code of conduct is available online here: <http://www.mtsociety.org/wp-content/uploads/2019/01/3200-Member-Conduct-Policy-2012.pdf>. The SUT code of conduct is available online here: [https://www.sut.org/wp-content/uploads/2014/06/SUTethics\\_December2019-1.docx](https://www.sut.org/wp-content/uploads/2014/06/SUTethics_December2019-1.docx)

## MarTech

**All Candidates for registry must have at minimum of five (5) years of experience in their professional field.** The following table details the generic competences that must be demonstrated in order to achieve registration as a Marine Technician. Given the diverse nature of scientific and technological practice, achieving the required level for these professional competencies will involve a broad range of activities. Candidates, who believe they meet these or who wish to work towards them, should approach MTS or SUT to obtain further details on how to apply for registration.

### Individual Route

Many potential professional Marine Technicians will not have had the advantage of formal training and will need to demonstrate they have acquired the necessary competences through extended experience, some of this supervised. Experienced, practicing professional Marine Technicians are often found to have gained the necessary knowledge and skills for their job through working closely with other skilled colleagues over a number of years. Thus, individuals without the types of qualifications listed above may apply for an Individual Route assessment. This separate procedure, administered by MTS and SUT, involves an in-depth appraisal of the applicant's competence. Evidence of employer recognition of competences and relevant skills will assist in achieving registration. MTS or SUT may be able to provide a mentor to help applicants to address any gaps in their training and experience portfolio.

If one of these approved qualifications is not offered, it is possible to demonstrate the appropriate level of achievement through a combination of academic awards and/or appropriate experiential learning. Candidates applying through this route must clearly demonstrate that they have achieved the same level of knowledge and understanding as those with the accredited qualifications. Candidates must respond to each of the Competency Standards with specific examples of how they have met each standard through experiential learning. Candidates should be careful to explain what was learned from each experience.

### Competence

Marine Technicians must be competent throughout their professional lives using a combination of their knowledge, training and experience to be able to:

<b>MarTech</b>	
The Competence and Commitment Standards for Marine Technicians. Marine Technicians must be competent throughout their working life, by virtue of their education, training and experience, to:	Guidance – These are examples of activities which could demonstrate that you have achieved the MarTech criteria.
<b>A Use appropriate knowledge and understanding to apply technical and practical skills. This includes the ability to:</b>	<b>The reviewers will be looking for evidence that you have the know-how to do the job, and were able to go beyond the immediate requirements and use your initiative and experience to solve a problem or improve a process.</b>
A1 review and select appropriate techniques, procedures and methods to undertake tasks	Describe something in your work you were involved in which didn't quite work and explain why.
A2 use appropriate principles.	Drawing from your direct experience, this might be an explanation of how a piece of equipment, system or mechanism works.
<b>B Contribute to the design, development, manufacture, construction, commissioning, operation or maintenance of products, equipment, processes, systems or services.</b>	<b>Explain how you contribute to one or more of these activities.</b>
B1 identify problems and apply diagnostic methods to identify causes and achieve satisfactory solutions	Show an example of how you have used measurement, monitoring and assessment to identify the source of a problem or to identify an opportunity.
B2 identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety and environmental impact.	Illustrate how you make decisions about what material, component, people or plant to use or how to introduce a new method of working.

<b>C Accept and exercise personal responsibility.</b>	<b>Describe an experience or instance where you have had to accept personal responsibility for seeing a process through to completion within agreed targets.</b>
C1 work reliably and effectively without close supervision, to the appropriate codes of practice	Your evidence should show how you personally identified and agreed with what had to be done and to what standards on a typical project.
C2 accept responsibility for work of self and others	Minutes of meetings; site notes and instructions; Variation Orders; programmes of work; specifications, drawing and reports; appraisals. Activity not associated with your job can contribute evidence.
C3 accept, allocate and supervise technical and other tasks.	Minutes of meetings; site notes and instructions; Variation Orders; programmes of work; specifications, drawing and reports; appraisals. Activity not associated with your job can contribute evidence.
<b>D Use effective communication and interpersonal skills.</b>	<b>You will need to show you can: contribute to discussions; make a presentation; read and synthesise information; write different types of documents.</b>
D1 use oral, written and electronic methods for the communication in English of technical and other information	Letters, reports, drawings, advice, minutes, including progress meetings, appraisals, work instructions, and other task planning and organising documents certificated by colleagues, clients, customers or management. Your application itself will be relevant.
D2 work effectively with colleagues, clients, suppliers and the public.	Examples of how this has occurred, and your role at the time.
<b>E Make a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment. In order to satisfy this commitment, they must:</b>	<b>Your commitment will be to become part of the profession and uphold the standards to which all members subscribe. You need to show that you have read and understood the MTS and/or SUT Code of Conduct.</b>
E1 Comply with the relevant Codes of Conduct	You will need to sign a personal undertaking. The professional review involves demonstration of, or discussion of, your position on typical ethical challenges.
E2 manage and apply safe systems of work	Evidence of applying current safety requirements, such as examples of good practice you adopt in your work. You will need to show that you have received a formal safety instruction relating to your workplace, such as a CSCS safety test, or an update on statutory regulations such as COSHH requirements.
E3 undertake work in a way that contributes to sustainable development	Examples of methodical assessment of risk in specific projects; actions taken to minimise risk to health, safety, society or the environment.
E4 carry out continuing professional development, including opportunities for this offered by MTS and/or SUT, to ensure competence in areas and at the level of future intended practice.	This means demonstrating that you have actively sought to keep yourself up to date, perhaps by studying new standards or techniques, or made use of magazines, Branch meetings and other opportunities to network in order to keep abreast of change.

## Education

Normally, formal education is a pre-requisite for registration, as it demonstrates the underpinning knowledge and understanding for professional competence. The following qualifications exemplify the required knowledge and understanding for Marine Technician registration.

### Standard Route

Integrated training and experience such as is provided by many Advanced Apprenticeships can provide most, or all, of the knowledge and experience necessary, and may lead directly to Marine Technician registration. Other qualifications can provide a straightforward way of demonstrating that part of the necessary competence has been acquired. The following are examples of qualifications which an applicant for Marine Technician registration might hold:

- An approved National Certificate (UK), Certificate (US), National Diploma (UK), or Diploma (US)
- An approved qualification at level 6 in the Scottish Qualifications and Credit Framework
- A City & Guilds Higher Professional Diploma (UK)
- A technical certificate as part of an Advanced Apprenticeship Program
- An NVQ3 or SVQ3, which has been approved for the purpose by the IMarEST
- A work-based learning route approved by the IMarEST
- Qualifications in similar areas providing they are assessed as equivalent by MTS or SUT
- An accredited Associate's Degree program.

Qualifications at this level are subject to change as a result of policy developments. Please consult MTS or SUT for details of any changes or additions to this list.

## Professional Development

Professional development is a key part of developing the competence required to achieve the standard for Marine Technician registration. Aspiring Marine Technicians learn to apply their knowledge and understanding and apply professional judgement through professional development. Candidates may rely on professional development opportunities offered via MTS or SUT events, university training, workplace training, accredited professional development schemes, or other high-level professional development opportunities. For candidates seeking additional information about professional development, the Registrar will be able to provide information and guidance necessary, and may be able to put them in touch with a mentor to assist them through the process and help to identify any skills gaps in their development.

Anyone seeking registration as a Marine Technician should maintain a detailed record of their development, responsibilities and experience, verified by referees, in order to be best prepared to provide the evidence of professional competence commensurate for MarTech registration.

## Maintaining Competence & Demonstrating a Commitment to CPD

Once MarTech registration has been achieved, Marine Technicians have an obligation to maintain professional competence. MTS and SUT are actively developing an online tracking system for professional development units, which will be made available to those registered if the pilot program is continued.

## Code of Professional Conduct

All successful candidates are required to make a personal commitment to live by the appropriate codes of professional conduct, recognizing their obligations to society, the marine professions and the environment. The MTS code of conduct is available online here: <http://www.mtsociety.org/wp-content/uploads/2019/01/3200-Member-Conduct-Policy-2012.pdf>. The SUT code of conduct is available online here: [https://www.sut.org/wp-content/uploads/2014/06/SUTethics\\_December2019-1.docx](https://www.sut.org/wp-content/uploads/2014/06/SUTethics_December2019-1.docx)