

CANDIDATE HANDBOOK



CHARTERED MARINE TECHNOLOGIST

THIS VERSION UPDATED FEBRUARY 4TH 2020 BY STEVE HALL, CEO SUT

INTRODUCTION

The Society for Underwater Technology (SUT) is a multidisciplinary learned society that brings together organisations and individuals with a common interest in underwater technology, ocean science and offshore engineering. SUT was founded in 1966 and has members from more than 40 countries, including engineers, scientists, other professionals and students working in these areas. SUT has self-governing branches in Australia, Brazil, Canada, China, Malaysia, Nigeria, Norway, Singapore & USA in addition to the original UK branch.

The Marine Technology Society (MTS) promotes awareness, understanding, and the advancement and application of marine technology. Incorporated in 1963, MTS brings together businesses, institutions, professionals, academics, and students who are ocean engineers, technologists, policy makers, and educators. MTS has global membership, with a large Japan branch but is mostly based in the USA.

Both Societies have similar missions to facilitate a broader understanding of the relevance of marine technology to wider global issues by enhancing the dissemination of marine technology information; promote and improve marine technology and related educational programs; and advance the development of the tools and procedures required to explore, study and further the responsible and sustainable use of the oceans.

To that end, the Marine Technology Society & Society for Underwater Technology, through a partnership with the Institute of Marine Engineering, Science & Technology (IMarEST), now offer marine technology professionals the opportunity to seek the title of Chartered Marine Technologist (CMarTech).

CHARTERED MARINE TECHNOLOGIST (CMARTECH)

Chartered Marine Technologists are professionals, who harness, exploit, manage, use or apply marine technology in the pursuit of wealth creation and/or the provision of services in the marine sector. Chartered Marine Technologists are characterized by their ability to deal with complex issues, both systematically and creatively and can make sound judgements in the absence of complete data to develop solutions to problems and communicate their conclusions clearly to specialist and non-specialist audiences.

Chartered Marine Technologists continue to advance their knowledge, understanding and competence to a high level and are bound by the codes of conduct of MTS and SUT.

Typically, Chartered Marine Technologists will be professionals from disciplines such as: Fleet Managers, Hydrographers, Marine Superintendents (Deck), Meteorologists, Pilots, ROV pilots, AUV technicians, Marine Logisticians, Deck Officers and Ratings, Marine Surveyors, Shipping Professionals, Harbourmasters, University faculty, Navigators, Radar/Sonar Maintenance Experts, Warfare Officers and Ratings and Naval Officers and Ratings, Instrumentation and Platform Designers and Developers, & Offshore oil, gas & Renewables practitioners.

Applicants seeking professional registration as a Chartered Marine Technologist will need to demonstrate through their professional education/training and experience in roles directly related to the use or management of marine technology that they are eligible for Chartered Marine Technologist Registration.

BENEFITS OF CMARTECH REGISTRATION

The Chartered Marine Technologist designation has many benefits for individuals, employers and the public as a whole. CMarTech ensures high and improving standards across all technological disciplines; it reflects best practice and is set at an internationally recognized benchmark level. CMarTech encompasses high calibre professionals in the practice, research, application and teaching of technology, and recognises the increasing focus on transdisciplinary skills for the future of science, engineering and technology. Furthermore, CMarTech registration provides employers with additional assurance of the quality of their workforce. It is of benefit to:

Society, which will be more confident in the competence of an individual and need no longer be confused by a platform of letters and descriptions.

Individual practitioners, by identification as a professional that sets them at the forefront of their profession and offers a passport to job mobility.

Employers, with confirmation, through the designation, of the quality of a job applicant's qualifications.

Government offices, seeking to hire or appoint permanent staff, advisers, or consultants would have an assurance about the level of an individual's expertise.

Professional societies and organisations, by providing additional opportunities to benchmark their qualifications.

Higher education, which will be better able to set and monitor benchmarks for their technology courses, and to promote programs of study to meet the high standards required of a Chartered Marine Technologist.

Regulatory Authorities, who could be confident in specifying the designation in legislation and regulations.

Legal credibility, enabling expert witness participation at a defined standard.

Professional standing, recognising equality of excellence across the technology professions.

REQUIRED LEVEL OF KNOWLEDGE & COMPETENCE

Chartered Marine Technologist is open to everyone, who can demonstrate the required high-level knowledge, understanding and professional competence. There are many routes that can be measured to meet this standard, including a combination of academic awards, vocational qualifications and experiential learning through work. Competence includes the knowledge, understanding and skills that underpin performance.

Chartered Marine Technologists **are required to maintain their professional competence**, working within professional codes of conduct and participate actively within their profession. This leads to an ongoing requirement for continuing professional development & the keeping of records of training undertaken & experience gained.

ASSESSMENT OF KNOWLEDGE & COMPETENCE

To become registered as a Chartered Marine Technologist, applicants must have their competence assessed by the Society (SUT or MTS) as being suitable for CMarTech.

The process of assessment starts with a written application. Claims to qualifications, experience and training will require formal documented evidence. In giving details of experience, applicants will need to show how this relates to the required competencies for CMarTech.

Following a review of the documented evidence, the applicant will be required to undertake a professional review interview (PRI). The Society will inform the candidate of the necessary procedures. If deficiencies in the application emerge, the registrar will usually be able to suggest ways in which they can be addressed (this may involve further learning, training or additional experience). If a candidate receives a positive decision on their application for CMarTech, they will become registered as a Chartered Marine Technologist and their details will be included on the Society's Register of Chartered Marine Technologists. Retention of the designation will require continued membership in the Society and payment of the required annual dues and credential subscription. Candidates may elect to purchase membership in either or both societies, according to their preference.

Additional information on assessment of knowledge and competence is available below.

Competence

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 SUT or MTS to obtain further details on how to apply for registration.

<p>The Competence and Commitment Standard for Chartered Marine Technologists.</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>A. Use a combination of general and specialist knowledge and understanding to optimise the application of existing and emerging technology.</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"> • Identify the limits of own personal knowledge and skills • Strive to extend own technological capability • Broaden and deepen own knowledge base through research and experimentation. 	<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. Record your hands-on experience gained in the field.</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"> • Establish users' needs • Assess marketing needs and contribute to marketing strategies Identify constraints and exploit opportunities for the development and transfer of technology within own chosen field • Define and promote new applications when appropriate • Secure the necessary intellectual property rights • Develop and evaluate continuous improvement systems. 	<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. Apply appropriate theoretical and practical methods to the analysis and solution of problems.</p>	
<p>B1. Identify potential projects and opportunities. This could include an ability to:</p> <ul style="list-style-type: none"> • Explore the territory within own responsibility for new opportunities • Review the potential for enhancing products, processes, systems, and services. • Use own knowledge of the employer's position to assess the viability of opportunities. 	<p>Involvement in the marketing of and tendering for new products, processes and systems. Involvement in the specification and procurement of new products, processes and systems. Set targets, and draft programs and action plans. Schedule activities.</p>

<p>B2. Conduct appropriate research and undertake design and development of solutions. This could include an ability to:</p> <ul style="list-style-type: none"> • Identify and agree appropriate research methodologies • Assemble the necessary resources • Carry out the necessary tests • Collect, analyse and evaluate the relevant data • Draft, present and agree design results and recommendations, taking account of cost, quality, safety, reliability, appearance, fitness for purpose and environmental impact • Undertake design. 	<p>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>
<p>B3. Implement design solutions and evaluate their effectiveness. This could include an ability to:</p> <ul style="list-style-type: none"> • Ensure that the application of the design results in the appropriate practical outcome • Implement design solutions, taking account of critical constraints • Determine the criteria for evaluating the design solutions • Evaluate the outcome against the original specification • Actively learn from feedback on results to improve future design solutions and build best practice. 	<p>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>
<p>C. Provide technical and commercial leadership.</p>	
<p>C1. Plan for effective project implementation. This could include an ability to:</p> <ul style="list-style-type: none"> • Identify the factors affecting the project implementation • Lead on preparing and agreeing implementation plans and method statements • Ensure that the necessary resources are secured and brief the project team • Negotiate the necessary contractual arrangements with other stakeholders (client, subcontractors, suppliers, etc.). 	<p>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>
<p>C2. Plan, budget, organize, direct and control tasks, people and resources. This could include an ability to:</p> <ul style="list-style-type: none"> • Set up appropriate management systems • Agree on quality standards, program and budget within legal and statutory requirements • Organize and lead work teams, coordinating project activities • Ensure that variations from quality standards, program and budgets are identified, and that corrective action is taken • Gather and evaluate feedback and recommend improvements. 	<p>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.</p>

<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"> • Agree objectives and work plans with teams and individuals • Identify team and individual needs, and plan for their development • Lead and support team and individual development • Assess team and individual performance and provide feedback. 	<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"> • Promote quality throughout the organization and its customer and supplier networks • Develop and maintain operations to meet quality standards • Direct project evaluation and propose recommendations for improvement. 	<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>D. Demonstrate effective interpersonal skills.</p>	
<p>D1. Communicate in English with others at all levels. This could include an ability to:</p> <ul style="list-style-type: none"> • Contribute to, chair and record meetings and discussions • Prepare letters, documents and reports on complex matters • Exchange information and provide advice to technical and non-technical colleagues. 	<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"> • Prepare and deliver presentations on strategic matters • Lead and sustain debates with audiences • Feed the results back to improve the proposals. 	<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"> • Know and manage own emotions, strengths and weaknesses • Be aware of the needs and concerns of others • Be confident and flexible in dealing with new and changing interpersonal situations • Identify, agree and lead work towards collective goals • Create, maintain and enhance productive working relationships, and resolve conflicts. 	<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>E. Demonstrate a personal commitment to professional standards, recognizing obligations to society, the profession and the environment.</p>	
<p>E1. Comply with relevant codes of conduct. This could include an ability to:</p> <ul style="list-style-type: none"> • Comply with the rules of professional conduct of MTS and/or SUT • Lead work within all relevant legislation and regulatory frameworks, including social and employment legislation. 	<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"> • Identify and take responsibility for own obligations for health, safety and welfare issues • Ensure that systems satisfy health, safety and welfare requirements • Develop and implement appropriate hazard identification and risk management systems • Manage, evaluate and improve these systems. 	<p>Undertake relevant national and international health and safety training. Work with H&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&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"> • Operate and act responsibly, taking account of the need to progress environmental, social and economic outcomes simultaneously • 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 • Understand and secure stakeholder involvement in sustainable development. 	<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"> • Undertake reviews of own development needs • Prepare action plans to meet personal and organizational objectives • Carry out planned (and unplanned) CPD activities • Maintain evidence of competence development • Evaluate CPD outcomes against the action plans • Assist others with their own CPD. 	<p>Keep up to date with relevant national and international issues. Maintain CPD plans and records. Involvement with the affairs of the IMarEST. 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 accredited¹ Masters degree

or

An accredited Bachelors degree with honors, plus either an appropriate Masters degree, **or appropriate further learning** to Masters level.

If an accredited Masters 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 Bachelors qualification supported by appropriate professional experience may be sufficient to demonstrate a Masters level knowledge.

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.

¹ For US applicants: ABET accreditation is preferred (<https://www.abet.org/>). Regionally accredited programs are also accepted, on a case by case basis. The Registrar may request, at his/her discretion, additional information regarding coursework. For all applicants: Accreditation will be by an established organization or affiliation (as confirmed by the Registrar). The key criterion in accreditation is the learning outcomes achieved by a program's graduates.

THE APPLICATION PROCESS



Initial Application

Please review the evaluation standards in advance of your application. If you think you meet the criteria for CMarTech registration, submit the **Initial Application Form** below.

Your application will consist of:

- A completed application form signed by your referee
- Your CV
- A professional development report (refer to the guidance below)
- Photocopies of your academic certificates
- Registration fee (see the worksheet in the application below) ****Note that pilot volunteers receive a 50% discount**

Once you have submitted your application, your materials will be forwarded to the Registrar. The Registrar will review your submission and will render a decision within two (2) weeks, either to forward your materials to the Interview Phase, or to reject your application. Unsuccessful applicants will receive feedback from the Registrar indicating the areas in need of improvement for future application on the *Professional Development Recommendation Form*, as well as information about the appeals and reapplication process. We strongly encourage unsuccessful applicants to review the *Professional Development Recommendation Form* to determine which areas of the application need improvement prior to reapplication. Reapplication is encouraged.

The Interview

Applicants meeting the minimum standards for the Initial Application Process, and who are deemed likely to succeed in the Interview Phase will be forwarded to the Professional Review Interview (PRI). The Registrar will review the application and select appropriate interviewers for the specific applicant based on experience and knowledge of the applicant's specific domain of work in marine technology. The Registrar will identify at least three (3) available dates and times for a proposed interview of the applicant and will schedule the interview with the applicant according to his/her preference of proposed interview dates/times. Scheduling of the interview may occur digitally, by Doodle Poll.

The Interview is a critical step in assessing the full range of mastery of each applicant. Interviews are conducted by no fewer than 2 panelists, at least one with broad marine technology knowledge, and at least one with knowledge specific to the applicant's domain of work. The applicant will be questioned on his/her academic experiences, professional development accomplishments, and continuing professional development plans. Questions will align closely with the domains of competency outlined above.

Interviewers will make note of the strengths and weaknesses of the applicant and will record recommendations on the *Professional Development Recommendation Form*. Within seven (7) days of the interview, panelists will render their decision, and forward applications to the Registry Panel. The Registry Panel will verify that all criteria of the application requirements have been met, review the determinations of the Registrar and the Interviewers, and will render a final determination for each application within two (2) months.

Applicants will be notified in writing of the determination of the Registry Panel following their decision.

Registration

Successful applicants shall be awarded the title Chartered Marine Technologist. Applicants may use the title under the following conditions:

- A successful decision has been rendered by the Review Panel, and has been confirmed in writing by SUT/MTS

- The applicant remains a member in good standing with MTS or SUT
- The applicant has paid all fees according to the fee schedule below
- The applicant abides by the terms of Continuing Professional Development
- The applicant abides by the terms of the relevant SUT/MTS ethical & professional standards policy.

Successfully applicants may purchase a signed certificate for display. Details on how to purchase a certificate will be made available to successful applicants. Successful applicants agree to be listed on the MTS/SUT registry.

Appeals

The Appeals Panel (AP) is responsible for managing requests for appeal of rejections for Registry. Requests for appeal may be sent to CMARTECH@mtsociety.org (MTS) or info@sut.org (SUT). Those requesting an appeal should attach all original application materials and any communications from panelists to their request, along with a narrative explaining why the appeal is sought. Requests for appeal will be processed within thirty (30) days of receipt of the request.

Fees

Fees are listed on the Initial Application Form, below. Fees are subject to change, Fees are payable in US dollars to MTS and GBP to SUT (dollars for SUT-US applicants) and may be submitted by check (cheque) or credit card. Returned checks to MTS will incur a fee of \$25. Applicants may not receive a scheduling request for the PRI and may not receive a final determination from the Registry Panel until all fees have been paid. Note that successful applicants must remain a member in good standing with the Marine Technology Society or the Society for Underwater Technology and pay an annual registration fee to remain registered as a CMarTech.

If you are already a MTS or SUT member please don't pay for membership twice!

MEMBERSHIP FEE (annual) - MTS		
FEE DESCRIPTION	AMOUNT	YOU PAY
Individual Member	\$75	
Associate Member	\$75	
Student Member	\$25	
Patron	\$75 + Contribution _____	
Emeritus	\$40	
Life	\$1,000 (one time)	
For corporate or institutional member rates, or to check your membership status, please contact membership@mtsociety.org .		
MEMBERSHIP FEE (annual) – SUT		
FEE DESCRIPTION	AMOUNT (includes VAT)	YOU PAY
Individual Member (with branch)	£76	
Individual Member (without branch)	£60.80	
Student Member (with branch)	£15.00	
For corporate or academic member rates, or to check your membership status, please contact jane.hinton@sut.org		
ASSESSMENT FEE		
	USD	GBP
Assessment Fee	\$225	£187
Assessment Fee is due at time of application. Applicants are strongly encouraged to speak with the Registrar in advance of payment of fees.		
REGISTRATION ENTRANCE FEE		
Chartered Marine Technologist	\$113	£68
Due at time of successful registration		
REGISTRATION FEE		
Chartered Marine Technologist	\$65 (\$35 retired)	£54 (£29 retired)
Ongoing annual fee		

Continuing Professional Development

Continuing Professional Development (CPD) opportunities are available at MTS and SUT events throughout the year. Review our calendar of events online at <https://www.mtsociety.org/events/> and <https://www.sut.org/events/>.

Registered CMarTech professionals may also submit CPD units earned at other marine science events, at university offerings, at company-sponsored events, online, or other opportunities. Applicants should discuss their continuing professional development plans with the Interview Panel prior to termination of the interview to ensure that suitable CPD opportunities have been identified.



INITIAL APPLICATION FORM (SUT)

Please complete this form and return to the Society for Underwater Technology with your up to date Professional Development Report, and copies of your Academic certificates, signed by your referee.

Return by mail to:
Society for Underwater Technology
2 John Street
London WC1N 2ES
England

Or Electronically to:
info@sut.org

For more information contact the Certification Team at +44 020 3405 9035 or visit our website at www.sut.org.

PLEASE WRITE IN BLOCK CAPITALS

TITLE	
FIRST NAME	
MIDDLE NAME	
SURNAME	
DATE OF BIRTH	
SEX	
NATIONALITY	

FOR OFFICE USE ONLY

DATE RECEIVED			
INITIAL REVIEW CLOSE DATE			
INTERVIEW CLOSE DATE		ASSIGNED INTERVIEWERS	
FINAL REVIEW CLOSE DATE		FINAL DECISION	
MEMBERSHIP FEE		APPLICATION FEE	
MEMBERSHIP TYPE			
PROCESSING	<input type="checkbox"/> ENTERED INTO CRM <input type="checkbox"/> MATERIALS SCANNED <input type="checkbox"/> ASSIGNED TO CERT MODULE		

1. **CONTACT DETAILS:** Please indicated preferred email address for correspondence HOME or BUSINESS

HOME ADDRESS _____

_____ POSTAL/ZIP CODE _____

COUNTRY _____ EMAIL _____

TELEPHONE _____ MOBILE _____

BUSINESS ADDRESS _____

_____ POSTAL/ZIP CODE _____

COUNTRY _____ EMAIL _____

TELEPHONE _____ MOBILE _____

NAME OF ORGANIZATION _____

JOB TITLE _____

1. MEMBERSHIP CATEGORIES (select one, all prices inclusive of VAT - For applicants who are not already SUT Members)

___ **Individual Member (with branch):** £76 (annually) Enjoy the benefits of our global network for knowledge sharing, innovation, and communication. Branch membership included.

___ **Individual Member (without branch):** £60.80 (annually) Enjoy the benefits of our global network for knowledge sharing, innovation, and communication. Branch membership not included.

___ **Student Member (with branch):** £15 (annually) Enjoy the benefits of our global network for knowledge sharing, innovation, and communication. Branch membership included.

For corporate or academic member rates, or to check your membership status, please contact hinton@sut.org.

Or

I AM AN EXISTING ACTIVE A MEMBER OF THE SOCIETY FOR UNDERWATER TECHNOLOGY.

MEMBER NUMBER _____ SPONSORING COMPANY (IF APPLICABLE): _____

I AM INTERESTED IN THE FOLLOWING SPECIAL INTEREST GROUPS:

___ Diving & Manned Submersibles

___ SUT – Policy Advisory

___ Education

___ Salvage & Decommissioning

___ Environmental Forces (SUTGEF)

___ Subsea Engineering

___ Marine Renewable Energies

___ International Underwater Vehicles & Robotics

___ Ocean Resources

___ Underwater Science Group

___ OSIG (Offshore Site Investigation & Geotechnics)

___ Young Professionals International

2. MEMBERSHIP OF OTHER PROFESSIONAL OR TECHNICAL SOCIETIES

Please include name of organization _____

3. REFERENCES

Please Identify an appropriate referee, a responsible person of standing in the marine community, who knows you and your work well (for example, your course tutor, a senior manager or officer at work, a corporate member of SUT). Once you have completed the rest of this application form, please ask your referee to fill in the section below and to sign and date photocopies of your certificates as true copies of the originals.

I, the undersigned, recommend the above applicant, from personal knowledge, for registration via SUT. I append my initials against all statements by the candidate, which I can verify.

Name _____ Position _____

Company _____ Contact Tel No _____

Email _____

If a member of SUT – Membership Category _____ Membership Number _____

Capacity in which the applicant is known to you _____ I have known the applicant for _____ year(s) and support his/her application for registration.

Signature _____ Date _____

4. IF AN MTS MEMBER HAS REFERRED YOU, PLEASE COMPLETE THEIR NAME AND EMAIL ADDRESS IN THE FIELDS BELOW.

NAME: _____ EMAIL: _____

6. ACADEMIC QUALIFICATIONS (THIS SECTION MUST BE COMPLETED – ‘please see CV’ will NOT be accepted)

Your qualifications can help you to demonstrate evidence of your knowledge. You must submit authenticated copies (i.e. initialed by your referee as true copies of the originals) of your qualification certificates with your application form.

Start & Finish Dates	Establishment (e.g., Strathclyde University, University of Southampton etc.)	Degree/Diploma/Certificate (e.g., MEng (Hons) Marine Engineering; BSc (Hons) Oceanography)	Initials of Referee

7. SUMMARY OF CAREER PROGRESSION (THIS SECTION MUST BE COMPLETED – ‘please see CV’ will NOT be accepted) Please include details of your current or most recent job role and attach your Professional Development Report and a plan of CPD activities identifying the key responsibilities and accountabilities you have had during your career to date.

Dates	Current / most recent job role	Initials of Referee

8. GENERAL AREAS OF PRACTICE (Please check as appropriate)

- | | |
|---|--|
| <input type="checkbox"/> Fleet Manager | <input type="checkbox"/> Harbormaster |
| <input type="checkbox"/> Hydrographer | <input type="checkbox"/> University Faculty |
| <input type="checkbox"/> Marine Superintendent (deck) | <input type="checkbox"/> Navigator |
| <input type="checkbox"/> Meteorologist | <input type="checkbox"/> Radar/Sonar Maintenance Expert |
| <input type="checkbox"/> Pilot | <input type="checkbox"/> Warfare Officers and Ratings |
| <input type="checkbox"/> Marine Logistician | <input type="checkbox"/> Naval Officers and Ratings |
| <input type="checkbox"/> Deck Officer & Ratings | <input type="checkbox"/> Instrumentation and Platform Design/Development |
| <input type="checkbox"/> Marine Surveyor | <input type="checkbox"/> Other |
| <input type="checkbox"/> Shipping Professional | |

9. DECLARATION

I hereby confirm that the statements made in this application are, to the best of my knowledge and belief, correct. I agree to abide by the SUT Code of Professional Conduct (please see our website for details), to maintain my Continuing Professional Development, and to uphold the values and principles of SUT.

Signature: _____ Date: _____

SUT is committed to protecting and respecting your privacy. In accordance with the EU General Data Protection Regulation (GDPR), the personal data collected in this form will be processed securely in order to provide you with the service(s) requested. To learn more about how SUT collects, processes, and protects personal information, or to contact us about data protection, please see our website at www.sut.org.

10. MEMBERSHIP AND PAYMENT DETAILS (UPDATED 9/1/2019)

Note on Membership Subscription: The Society for Underwater Technology accepts new members throughout the year; a full year's subscription shall be payable on admission, however, when the date of admission is on or after the first day of January in any year, then an amount equal to one half of the subscription payable on admission shall be due. The annual subscription shall be due and payable by each Member on the first day of July in each year.

Your payment will be composed of an assessment fee, your annual membership subscription (required for those who are not already active members of SUT), and your registration entrance fee.

MEMBERSHIP FEE (annual) – SUT		
FEE DESCRIPTION	AMOUNT (includes VAT)	YOU PAY
Individual Member (with branch)	£76	
Individual Member (without branch)	£60.80	
Student Member (with branch)	£15.00	
For corporate or academic member rates, or to check your membership status, please contact jane.hinton@sut.org Note that from January 1 – June 30, you may apply a 50% discount on your membership subscription fee.		
ASSESSMENT FEE		
	USD	GBP
Assessment Fee	\$225 \$112.50 (50% off)	£187 £93.50 (50% off)
Assessment Fee is due at time of application. Applicants are strongly encouraged to speak with the Registrar in advance of payment of fees.		
REGISTRATION ENTRANCE FEE		
Chartered Marine Technologist	\$113 \$56.50 (50% off)	£68 £34 (50% off)
Assessment Fee	\$225	£187
Assessment Fee is due at time of application. Applicants are strongly encouraged to speak with the Registrar in advance of payment of fees.		
		TOTAL TO PAY: _____

11. DEADLINES FOR APPLICATION SUBMISSIONS

SUT reviews initial applications on a rolling basis throughout the year. Interviews are scheduled at several events throughout the year, including Oceanology International, Ocean Business, the OCEANS Conferences, the Offshore Technology Conference (Houston), and Underwater Intervention. Interviews may also be accommodated virtually, upon request. Note that applications must be received at least 8 weeks in advance of your preferred interview event to be scheduled.

Preferred interview venue:

- | | | |
|---|-------------|--|
| <input type="checkbox"/> Oceanology International | Date: _____ | <input type="checkbox"/> Virtual Interview Requested |
| <input type="checkbox"/> Ocean Business | Date: _____ | |
| <input type="checkbox"/> OCEANS North America | Date: _____ | |
| <input type="checkbox"/> OCEANS Europe | Date: _____ | |
| <input type="checkbox"/> OCEANS Asia | Date: _____ | |
| <input type="checkbox"/> OTC (Houston) | Date: _____ | |
| <input type="checkbox"/> Underwater Intervention | Date: _____ | |
| <input type="checkbox"/> Other Event (Specify) | Date: _____ | Details: _____ |

For a complete listing of upcoming SUT events, please visit <https://www.sut.org/events/>.

12. APPLICANT CHECKLIST

- | | |
|--|--|
| <input type="checkbox"/> Personal Details Completed | <input type="checkbox"/> Qualifications listed |
| <input type="checkbox"/> Contact Details Completed | <input type="checkbox"/> Authenticated copies of academic qualifications attached (if appropriate) |
| <input type="checkbox"/> Category of Membership Completed | <input type="checkbox"/> Professional report or CV attached |
| <input type="checkbox"/> Registration requirements completed | <input type="checkbox"/> Membership and payment details completed |
| <input type="checkbox"/> Membership of other societies completed | <input type="checkbox"/> General areas of practice completed |
| <input type="checkbox"/> Applicant's declaration signed | <input type="checkbox"/> Professional Development Report (attached) |
| <input type="checkbox"/> Referee details completed | |

APPLICANTS FOR PROFESSIONAL REGISTRATION MUST COMPLETE THE PROFESSIONAL REPORT PER THE EXAMPLE LISTING EXPERIENCE AGAINST EACH INDIVIDUAL COMPETENCY

13. PAYMENT DETAILS

- Cheque (please make payable to "Society for Underwater Technology")
 VISA MASTERCARD AMEX OTHER _____

CARD NUMBER ____ / ____ / ____ / ____

Expiration Date ____ / ____ Security Number (VCC) _____

I authorize the Society for Underwater Technology to charge my card for the amount shown in PART 10 of this application.

Name on Card _____ Signature _____

SAMPLE PROFESSIONAL DEVELOPMENT REPORT FOR CMARTECH REGISTRATION

(example)

Firstname Lastname - Date

Personal Details

Name: F. M. Lastname

Address: 123 Example Street

Southampton, Hampshire, UK

Email: f.m.lastname@email.com

Mobile Phone: 07XX - XXXXXXX

Academic Qualifications

MSc Marine Engineering/Science/Technology, University, 20xx-20xx (CEng accredited degree)

BEng (Hons) Marine Engineering/Science/Technology, University, 20xx-20xx (CEng accredited degree)

Career Overview – Positions Held

Current Position and Duties:

Marine Engineer/Scientist/Technologist

Company: 20xx to present

Previous Positions and Duties:

Marine Engineer/Scientist/Technologist

Company: 20xxx to 20xx

Marine Engineer/Scientist/Technologist

Company: 20xxx to 20xx

Career Overview – Introduction

More than x years of working in Marine Engineering/Science/Technology, primarily focused on x. My career has recently taken me in to the x sector, having primarily been focused on the x sector.

Educated to Masters/Bachelors/HND level, with extensive management experience.

This report is written as part of my application to apply for registration as a Chartered Marine Technologist with the Marine Technology Society. The report will attempt to demonstrate technical and leadership skills and responsibilities in line with the requirements set out in the MTS Competencies.

The academic requirement for CMarTech registration is satisfied by possession of a (qualification and accreditation status).

(please note that from this point onwards the exemplar report is tailored to an applicant for CEng registration)

The CMarTech competencies are listed as follows, matched to relevant evidence from throughout my career.

A1

On completion of my Master's degree (specialising in finite element (FE) computer analysis) I joined a subsea engineering company. After learning the initial basis pipeline calculations, I soon started taking part in small lateral buckling studies. I initially began by examining various papers and formulae which allowed me to develop a simple but effective buckle onset worksheet. I then progressed into performing FE analysis of sections of pipeline. The initial work was fairly theoretical however soon progressed into aiding a client whose pipeline had buckled and wanted to know if these buckles were catastrophic to the pipeline or not. I was able to prove that they were not catastrophic as well as showing that they would aid in limiting future buckles.

Recently I took part in a large design project which produced new problems, as I had to find ways to limit the pipeline from buckling due to temperature. This was performed using various methods however the outcome for the client had to be the "best" solution from a cost, installation and operational point of view. On completion of this work I then started to examine the effects of lateral buckling due to external pressure and seismic faults due to the pipeline lying in 2000m water and crossing between two continents. Having completed this I am currently looking at extending my knowledge from lateral buckling into upheaval buckling.

A2

As part of a team working for a gas company, my role was to research the current state of the offshore oil and gas industry with respect to High Temperature High Pressure (HTHP) projects. On completion of this I presented my results to BG who asked for my assistance with examining the technology and infrastructure limitations as well as taking part in BG internal workshops. The outcome of these workshops was to aid BG with its cost estimation and understanding of all aspects of HTHP fields and how feasible their portfolio of HTHP fields was and areas where possible research, investment and development may further the extremes.

B1

While providing offshore support for a state-owned natural gas company, who were in the process of taking over a recently installed pipeline that required span rectification work, I highlighted that their proposed solution would only work for a short time and that a better solution would be to rock dump exposed sections of the pipeline. I presented to them a detailed review of how scour can affect pipelines and gave them examples of this that we had witnessed while performing the span rectification work. I was then asked to prepare CTR's outlining a proposed work scope for designing the rock berms, preparing the ITT package and installation supervision for the clients.

B2

A company introduced a new cathodic protection code. I initially prepared a CTR outlining the process, this was approved and I then (with the help of others) created a piece of software that would perform the analysis for us. The software was reviewed in house and externally by the company themselves who approved our design methodology.

B3

The software has successfully been used on a project and the resulting anodes are now installed subsea in an African country. I was present at the installation of the pipeline and anodes and have since recommended a small warning/upgrade to the software due to my in the field experiences.

C1

I am currently the lead engineer for a deep-water tie back from 4 wells to the shore based in the Mediterranean. With a small budget and not many personnel available, I am having to make the most of my available resources and motivate the team to keep on top of the schedule. I have also tried to find out how the engineers would like to further their knowledge and have encouraged them to take an active role within that area on the project thus expanding everyone's knowledge of the project and pipeline design.

C2

Recently I have been responsible for creating the budget, man hours and schedule for a small project in a Middle Eastern country to review the available survey data and then design the required mitigation measures to prevent further scouring of a pipeline and to provide additional protection. The proposed solution is to rock dump the pipeline, and the scope included the design for the rock, the bid preparation, the bid evaluation and tender process as well as offshore support during the construction phase.

C3

As the lead pipeline engineer on a major pipeline project I was responsible for a team of 6 engineers covering all aspects of offshore pipeline design. The project was particularly challenging as the first 10km had to be constructed of stainless steel due to a high inlet temperature and very corrosive contents. The high inlet temperature also caused severe buckling problems and required some innovative solutions.

C4

As manager of the in-house software development I regularly have to put together work scopes for people to create or update our in-house software, as well as review and manage our technical needs. I encourage people to pass on their knowledge to the other team members, both by producing manuals of our software which other people can use as well as encouraging one-on-one knowledge sharing where projects allow. I am also persuading people to perform "lunch and learns" where people give presentations about their experiences or about something new, they have learnt. I have also taken on the role of helping our HR department as the IMarEST Champion, trying to first motivate myself to become chartered and then help establish a system for helping and encouraging others to do the same.

D1

While at a Subsea Engineering Company I was part of a small team of personnel who helped some non-native English-speaking clients, who had recently purchased some software. I provided individual and group training for 6 of their engineers on a finite element program which designed offshore risers and spool pieces. I was required to communicate at a very high technical level while struggling with the language barrier. I also provided them with support for the following 6 months while they learnt how to use the software.

D2

I have been part of proposal teams who have been bidding for work with clients who have requested to see our engineering capabilities and past project experiences. I have presented numerous presentations on our finite element and technical capabilities.

D3

I was recently the sole client offshore representative for the repair of 3 pipelines which had excessively long spans. The pipelines were originally installed by a contractor for the government and the remedial work had been subcontracted to a firm from another country. With three languages and four nationalities on board, all with different priorities, the working atmosphere was very intense. As sole representative it was my responsibility to make sure that the correct rectification measures were adopted and that all work was performed in a safe and effective manner, with no short cuts

were taken. I was required on numerous occasions to justify my engineering judgement, back it up with knowledge and facts and to insist that the work was completed in the correct manor so that the client was left with a pipeline that could be placed back into operation.

E1

I have been designated as the individual responsible for maintaining and promoting legislative compliance with necessary codes, regulations and standards on several projects. Part of my work was to ensure that the company in question was well-placed to demonstrate compliance with existing standards, and future-proofing for those in development.

E2

As I have gained greater responsibility in the roles mentioned in this report I have been designated as the Health and Safety representative on several projects. This requires me to have a detailed knowledge of HSEQ standards (HASAW 1974, CDM regulations, OHSAS 18001:2007 etc.) for myself and colleagues, ensuring that they have received adequate training in order to work in safe environment.

E3

I am responsible for carrying out environmental impact assessments for pipeline projects. I plan and implement best practice using environmental management systems (ISO 14000).

E4

I record all of my CPD using the XXX software tool. After attending a conference in Norway, I was able to upload a photograph of my attendance ticket through the app on my phone. As such I have a record of my CPD which I am able to demonstrate whenever required. I also read the Marine Professional every month and reflect on what I have read CPD log. I feel that reflective analysis on my CPD such as this enables me to develop as an engineer and apply what I have learned in practical situations.

E5

At various points in my career I have been in a position where I advise on the selection of work which is contracted out. As a result, I often receive invitations to corporate events. Because of my responsibilities to ensure impartial contractual award, I never accept gifts or invitations of more than a nominal value. I ensure that the team members under my supervision abide by this ethical guidance.

Professional Development Activities

Professional Membership

IMarEST – Affiliate Membership (Membership Number)

MTS – Member (Membership Number)

SUT – Member (Membership number)

Challenger Society for Marine Science – Member (Membership number)

Key Professional Development Courses

Technical Development

Subsea Pipeline Installations (Short Course) – Uni. Aberdeen (date)

Offshore Pipeline Design (Short Course) – Robert Gordon Uni. (date)

Corrosion Engineering and Control – Uni. Aberdeen (date)

Mechanical Fatigue and Stress Analysis (Short course) – Texas A&M Uni. (date)

Safety and Risk Assessment

Offshore Safety Induction – Internal Course (date)

Understanding Process Hazards Analysis (HAZOP, FMEA, etc.) – Internal Course (date)

NEBOSH UK (level, date)

Management and Leadership

Introduction to Project Management – Internal Course (date)

Key Performance Planning – Internal Course (date)

Pipeline Legislation Awareness – Robert Gordon Uni. (date)

Lead Auditor/ISO9000 Training (date)

Conferences

I have contributed lectures at international conferences, most recently a lecture on pipeline repair systems at OTC Houston (date) / Oceanology International London (date)

Selected Recent Published Papers

Lastname, F. M., 'Advanced Finite Element Analysis in Deepwater Pipeline Installation', Deep Offshore Technology Conference (date)