ENGINEERING THE MARITIME FUTURE

FALMOUTH MARINE SCHOOL

The Professional Superyacht Engineer HNC/FdSc Programme

The next generation of engineer officers for the superyacht and small vessel sector

THE PROFESSIONAL SUPERYACHT ENGINEER HNC/FdSc PROGRAMME

The Superyacht Engineer Programme is a new, pioneering three-year, Falmouth Marine School FdSc career programme. Developed after feedback and close collaboration with industry, it represents a hybrid approach based on traditional marine engineering expertise, combined with a strong focus on the current and future skills needed to support the technological and sustainable development of the sector.

The programme blends practical maritime training with academic study and engineering workshop skills, alongside occupational and professional competencies, following the guidance of the MCA MIN 1904 (M+F) UK Requirements for Engineer Officers Small Vessel Certificate of Competency. Leading to qualification as STCW III/2 Engineer Officer of the Watch, EOOW unlimited less than 9,000 kW, less than 3000 GT CoC.

Falmouth Marine School is committed to supporting the next generation of professional superyacht engineer officers, providing education and training that enables graduates to pursue long term careers not only within the sector, but broadly across the maritime fleet, both power and sail.

"We are committed to developing groundbreaking industry relevant education and training for the maritime industry. By raising awareness of the careers available to young people and breaking down barriers to entry, with the aim of promoting and supporting successful careers within the industry for all."

Emma Baggett, Consultant and Programme Manager, Falmouth Marine School

FALMOUTH MARINE SCHOOL

Falmouth Marine School, as part of the Cornwall College Group, is a specialist provider of marine related programmes of study within Further Education and is accredited through Plymouth University and its own degree awarding powers to deliver programmes of Higher Education study within the Maritime Sector. The modern campus in the centre of Falmouth, has a very special, uniquely friendly and dynamic atmosphere, backed by an extremely caring, supportive and highly knowledgeable team.

The Marine School delivers both full time and part time (apprentice) programmes of study in Marine Technology, Marine Engineering, Boat Building and Water Sports, whilst also offering degree level courses including Operational Yacht Science (Superyacht Deck Cadetship training in partnership with UKSA) Marine Engineering and the latest Superyacht Engineer Programme.

The college has recently had a £3m investment providing state of the art training facilities, for the marine sector. Including engineering and boatbuilding workshops, a dedicated marine science laboratory and access to a well-equipped water sports centre. 2023 saw an addition of a £100K VR training facility to provide extraordinary levels of engine room training for Marine Engineering students.

WHAT DOES A SUPERYACHT ENGINEER DO?

With over 6000 luxury vessels sail and power, operating worldwide of 24 meters plus, with the very largest currently reaching 222m, there is huge variety across the sector. The engineer's role onboard can vary from vessel to vessel but in general, whether you work as a sole engineer or as part of a team, you will need to develop a wide range of knowledge and skills and be a great problem solver. In terms of engineering, crew need to have a wide of range of specialisations and be able to think on their feet, from the engine room where they will be dealing with advanced diesel and electric engines, jet drives, and propulsion systems, to generators, electrics, silent running battery banks, hydraulics, water makers and refrigeration.

On the interior, audio visual skills, IT, lighting, and satellite communications, as well as sanitation and environment control. On the bridge there are electronic navigations systems and computer driven systems to contend with. There is also an increasing array of "toys" ranging from jet skis and jet drive tenders to inflatable slides and submarines. All need maintaining and servicing during busy seasons at sea and periodically updated and replaced in refit yard periods. An engineer also needs to have great IT and organisational skills to monitor and keep track of parts and servicing schedules as well as running the engine room safety management (ISM).

In recent years there had been an increase in yachts being built with experimental systems onboard, all with the aim of achieving fuel efficiency, more sustainable operation, and less impact on the environment. These vessels pose a real learning curve to the marine engineer and provide exciting and professionally challenging employment opportunities.

Life on board has its challenges, with long hours and extended periods at sea and depending on what size of vessel you work on, sail or power, you may be expected to get involved in other duties onboard, helping with watchkeeping, mooring duties and washdowns. There is currently a shortage of trained engineers in the industry, the Professional Superyacht Engineer Programme offers an exciting chance for students to become young trainee marine engineers, at the forefront of meeting the technical challenges of the developing sector.

PROGRAMME CONTENT & TRAINING

RYA Training

During the first 18 months of the programme students will spend part of their time with our RYA training partner and Forces Charity, Turn to Starboard, based by the water in Falmouth. Living and studying onboard their sailing yachts and traditional sail training vessels, developing their seamanship skills, maintaining onboard systems, and gaining their RYA Coastal Skipper qualification, alongside a range of RYA/ MCA qualifications, to build on their personal growth, seamanship resilience, and support their employability.

Personal & Professional Development

Working at sea, very often many thousands of miles away from home, can be challenging in many ways and Falmouth Marine School understands the value of supporting and developing the individual. Time is focused on students own personal career plan, establishing goals, and the importance of their own professionalism, resilience, mental health and wellbeing. Students will have access to both personal and industry mentors, extensive industry tutorials, independent careers advice and strong support throughout their time at sea and ashore.

What does the Programme Involve?

The programme is aimed at young people who wish to become professional superyacht engineers or work as marine engineers in the small vessel sector.

The Superyacht Engineer Programme is based on a combination of time studying in college to gain the Superyacht Engineer HNC and FdSc, time on the water gaining RYA qualifications, and time spent in professional paid employment in the superyacht or small vessel sector, gaining experience and sea time towards the EOOW unlimited less than 9,000 kW, less than 3000 GT CoC. Tuition is delivered through "blended and accelerated learning" which means that college classroom and workshop delivery is full time, five days a week.

Successful candidates will also need to have exceptional motivation towards their training and show commitment to a career in the superyacht and maritime industry and be willing to work abroad.

Additional Bespoke Tutorial Delivery During the Programme

- Industry Knowledge Tutorials – in depth knowledge of vessels and industry developments and operational routines.
- Preparation for industry – Contracts, job descriptions, rights and responsibilities.
- Operational Sustainability.
- Expected working and behavioural standards.
- Soft Skills Training.
- Industry Speakers.
- Crew Agent interviews.
- Personal and professional development.
- Personal Mentor 121 sessions support and guidance.
- Industry Engineer Mentor online sessions.

YEAR BY YEAR & CAREER PATHWAYS

Year One: Superyacht Engineer HNC & RYA Coastal Skipper Training

10 Months (September to July)

During the first year students will spend 24 weeks with Falmouth Marine School and will start and finish their studies with on the water and classroom RYA Training with Turn to Starboard.

Qualifications & Awards

- HNC Superyacht Engineer
- MCA AEC 1
- MCA AEC 2
- RYA/MCA Yachtmaster Coastal (Sail)
- RYA/MCA Yachtmaster Theory
- MCA Workshop Skills Programme
- RYA Powerboat Level 2
- RYA First Aid
- RYA Marine Short Range Radio

Year Two: Superyacht Engineer FdSc & STCW Basic Training

7 Months (September to March)

Students will attend Falmouth Marine School and continue their programme of study with classroom tuition and workshop based skills. Alongside the academic and practical training will be the final RYA short training courses and the STCW Basic Safety Training. This year will finish in late March, in order for students to be prepared and available to gain employment at the start of the superyacht summer season. The Foundation degree will be completed at this stage.

Qualifications & Awards

- FdSc Superyacht Engineer
- STCW Basic Safety Training
- MCA Proficiency in Designated Security Duties
- FMS Superyacht Crew Maintenance Skills Training
- IAMI GUEST Yacht Mental Health & Wellbeing Course
- IAMI GUEST AV & IT Training (1 & 2)
- IAMI GUEST Introduction to Yachting & Yachting Life: Unit 23

Year Two: Industry Employment 12 -18 months

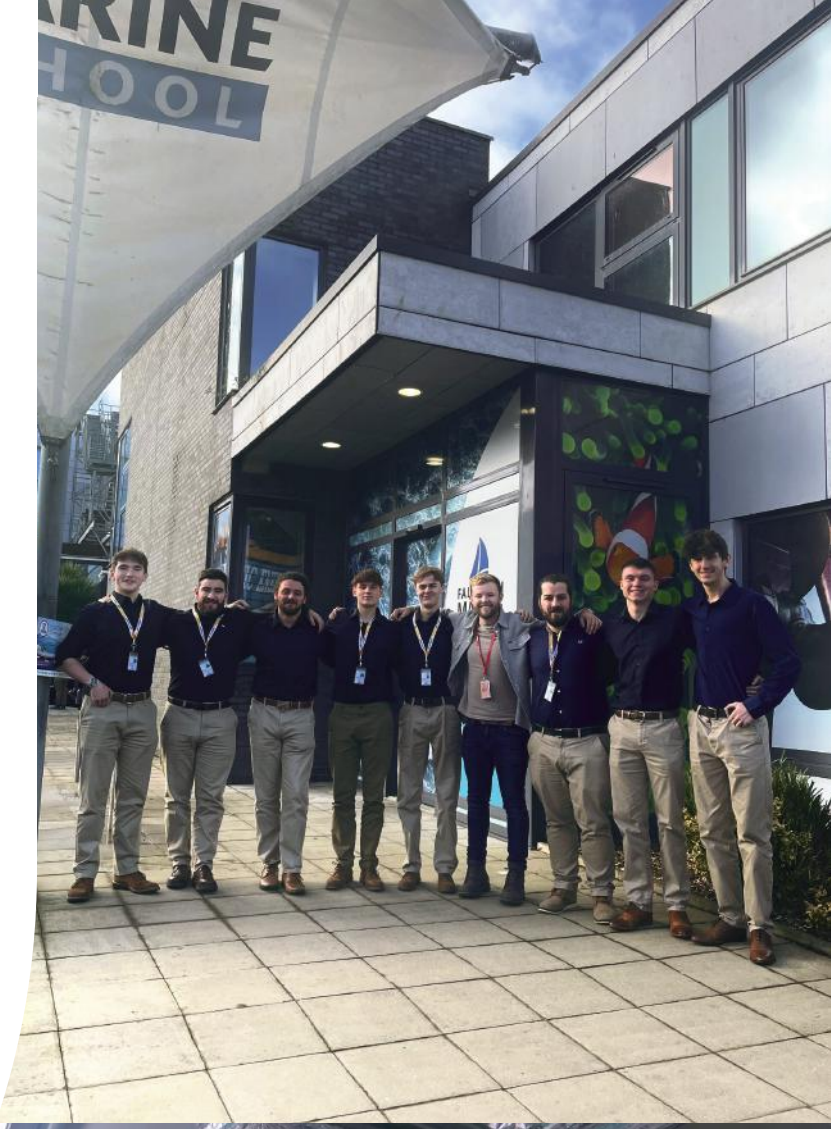
Students will commence their first fully paid and contracted professional role onboard a superyacht, sail or power or small commercial vessel based globally. Employment will be as a deckhand/engineer or a junior engineer, following the guidance of their Training Record Book and gaining the prerequisite sea time. Mentoring and support will be available remotely throughout.

Year Three

Students return to complete the final modules towards their MCA Engineer Officer of the Watch in accordance with MIN 1904. Once completed and the oral exam has been successfully passed this brings a conclusion to the programme.

- Marine Diesel Engineering
- Auxiliary Equipment Part – 1
- Operational procedures, Basic Hotel Services and Ship Construction
- MCA HELM Operational
- MCA PCSRB (Proficiency in Survival Craft & Rescue Boats)
- MCA Advanced Fire Fighting
- MCA Medical First Aid

EMPLOYMENT OPPORTUNITIES & PROGRESSION



What other vessels could I work on with the qualification that the programme delivers?

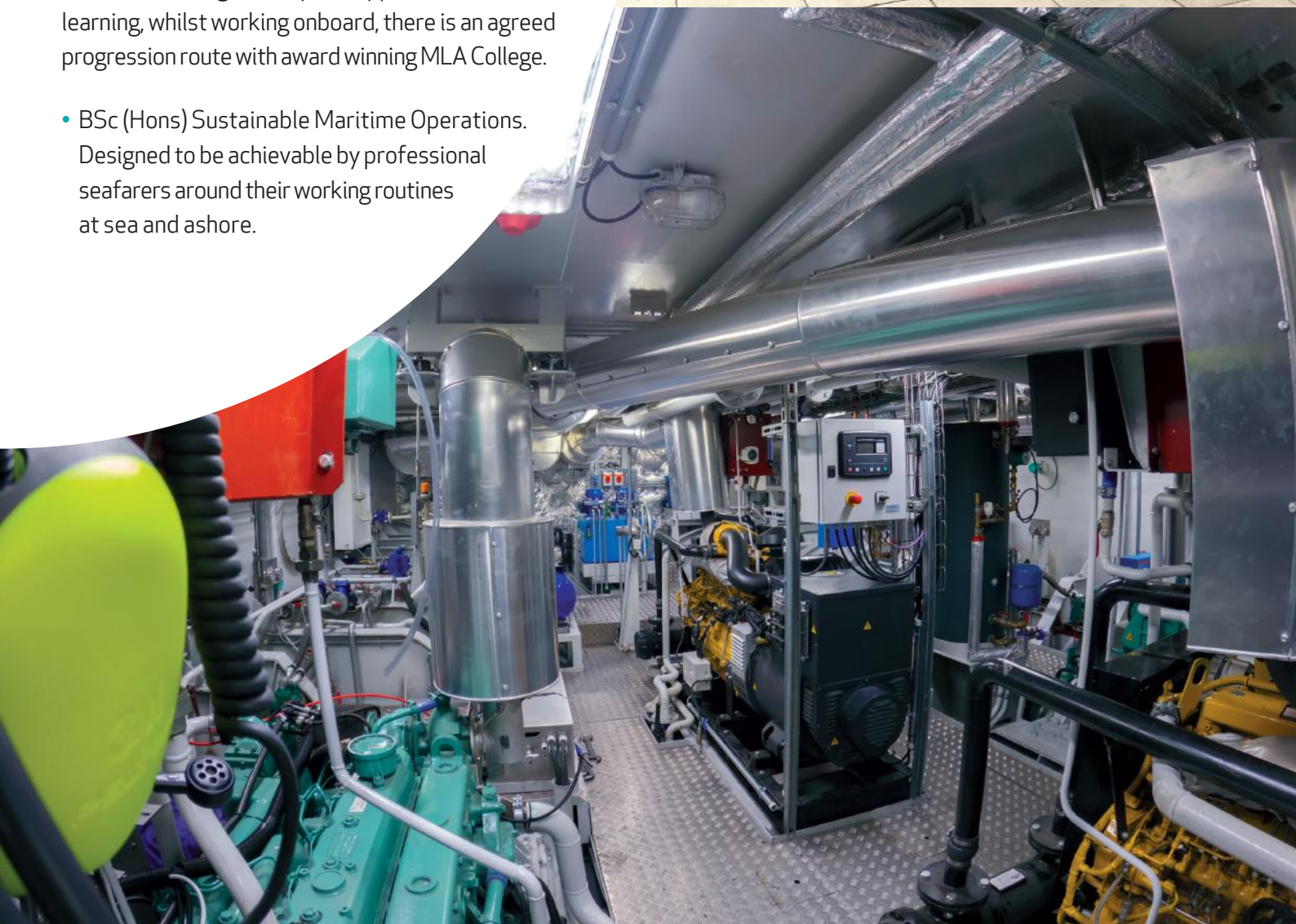
The STCW III/2 Engineer Officer of the Watch EOOW unlimited less than 9,000 kW, less than 3000 GT CoC qualification is designed to enable the ability to work across a wide range of vessels, in what is considered the "small" vessel sector. These vessels include fishing vessels, tugs. workboats, standby, seismic survey, oceanographic research vessels and government patrol vessels.

Academic Progression Route

All those successfully completing their HNC/FdSc studies, will have the opportunity to progress on to a range of final year honours degree options. For those wishing to attend as full time students, Plymouth University offer access to the final year of a number of their programmes:

For those wishing to study via supported, online, distance learning, whilst working onboard, there is an agreed progression route with award winning MLA College.

- BSc (Hons) Sustainable Maritime Operations. Designed to be achievable by professional seafarers around their working routines at sea and ashore.



ENTRY, SUPPORT & APPLICATION

Criteria for Applicants

- Applicants should have GCSEs (or equivalent) in English Language, Maths and Science, passed with grades C/4 or above. Alternatives at level 2 may be considered.
- 48 UCAS Points from AS and A levels or equivalent Level 3 qualification should ideally be technically, or science based. However this can be discussed with FMS advisors.
- They must have an aptitude and/or a keen demonstrable interest in engineering.
- Applicants be required to pass an MCA ENG1 medical examination prior to the start of their training at FMS. Certain factors that may prevent them from passing this include; colour blindness, short sightedness, diabetes, epilepsy, heart disease, uncontrolled high blood pressure, mental illness and alcoholism.

Support & Funding

The nature of the training means there are additional costs to cover the cost of the RYA/MCA Training (See our website for the latest costings), Falmouth Marine School works with maritime charities to address potential financial barriers for individuals. You may be able to get help with a bursary. Contact us for more information.

Application and Interview Process

There is an application and interview process for all potential students, to ensure that they have the potential to benefit from the programme and that they fully understand the nature, expectations and standards of the training and industry employment. Applicants will be required to submit an application form, personal statement and CV prior to interview. Interview's days will take place on a monthly basis.

Planning Ahead?

For those individuals looking at the Superyacht Engineer Programme as a future option, FMS deliver marine engineering programmes for 16 -18 year olds, combining practical skills with academic qualifications to provide routes into the superyacht, offshore windfarm renewables, small vessel sectors and other maritime career routes.

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T2S TURN TO STARBOARD

Maritime and Coastguard Agency

UNIVERSITY OF PLYMOUTH

The Worshipful Company of Shipwrights

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MARINE SOCIETY REALISING SEAFARER POTENTIAL

Interested in finding out more?

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