PROGRAMME SPECIFICATION

Programme Title: **FdSc Professional Super Yacht Engineer**

University of Plymouth Programme Code: **FT 6605**

Partner Faculty: **Academic Partnerships, University of Plymouth**

Partner Delivering Institution: **Cornwall College, Falmouth Marine School**

Start Date: **September 2021**

First Award Date: **June 2022**

Date of Approval: **12/2/19**

Date(s) of Revision(s) to this Document: **October 2018/Dec 17/3 June 19/18 Sept 24**

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2. Programme Details

Awarding Institution:	University of Plymouth
Partner/Teaching Institution:	Cornwall College, Falmouth Marine School
Accrediting Body:	N/A
Language of Study:	English
Mode of Study:	Full Time
Final Award Title:	FdSc Professional Super Yacht Engineer
Intermediate Award Title:	N/A
UCAS Code:	
HECoS Code:	100190
Relevant QAA Benchmark Groups:	This programme has been produced in line with the FHEQ and the Foundation Degree Characteristics. It has also been aligned to the QAA Benchmark for Engineering (2015)
Date of Programme Approval:	12 February 2019

3. Distinctive Features of the programme and the Student Experience

This text is definitively approved at programme approval and therefore may be directly used for promotion of the programme without the need for further confirmation:

The proposed Foundation Degree Professional Super Yacht Engineer programme has been developed with a view to meet a number of specific needs; these being for learners:

- To study for a range of specialist academic and commercial qualifications and gain employment in the Super Yacht industry through the Falmouth Marine School Professional Super Yacht Engineer Cadetship Programme.

- To enrol to a Cadetship programme jointly delivered with the support of a commercial yachting organisation, gaining the skills and qualifications required to work as a Marine Engineer within the Small Commercial Vessel sector (Super Yachts, Off-shore Workboat, Fishing, Towing (Tugs), Standby, Seismic Survey, Oceanographic Research and Government Patrol Vessels).

- To undertake a Foundation Degree programme which will support the Cadetship programme with a mix of marine engineering related practical and academic study to support the development of the skills and knowledge required for employment within the marine engineering sector, thus meeting the skills requirement for employment as an engineering officer within this sector.

- To study in Falmouth and the South West of England in an area renowned for its' Super Yacht and Commercial vessel support industries, to participate in site visits and undertake marine engineering related research with the guidance from those employed within these local industries in support of their studies.

- To reflect upon the learning and skills developed during the HNC and first Sea phase study periods and develop further understanding of the knowledge and skills required to work effectively within the Super Yacht industry as an Engineering Officer.

- To undertake a programme of study with the support of a range of subject specialists and guest speakers, representing the latest developments within the marine industries relevant to the Super Yacht and Small Commercial Vessel sectors.

- To meet the academic requirements of Maritime Coast Guard Agency (MCA) Marine Information Notice (MIN) 524 Engineer Officer Small Vessel Certificate of Competency, thus enabling those learners that achieve the FDSC programme to apply for accelerated progression to Second and First Engineer Officer within that industry.

- To meet the academic requirements of MCA MIN 511 The Alternative Route for Qualified Engineers and Engineering Graduates to Obtain an Engineer Officer of the Watch (EOOW) Unlimited Certificate of Competency through the study of those specific modular requirements such as to allow Engineering Cadets following this programme to qualify for those vessels that are newly in build, or in service, that are greater in size than 3000GT (classified as of unlimited tonnage >3000GT).

- To undertake a Foundation Degree programme of study offering opportunities for progression into employment and to further Higher levels of study within the maritime sectors.

The Falmouth Marine School Professional Super Yacht Engineer Cadetship and this Foundation degree programme are intended to run in parallel as a Cadetship programme, this giving Cadets the opportunity to progress to further employment within the Super Yacht industry to 2nd Engineer Officer Status; however achievement of the Foundation degree programme is not dependent upon the completion of the Cadetship.

If a Cadet should have to withdraw from the Cadetship programme, that learner could still complete the necessary academic modules of study (120 Credits at Level 5) to complete the Foundation degree. There would then be opportunity for that learner to apply for the identified progression routes through Plymouth University.

4. Programme Structure

College	Cornwall College – Falmouth Marine School
Academic Year	2024-2025
Plymouth Programme Code	6605
Programme Title	FdSc Professional Super Yacht Engineer
Mode of Attendance	Full Time
Course Duration	1 Years
Total Credits	240 (Level 5 120 credits)

)FHEQ level: 5 For: Full Time Level 5 (120 credits)				
F/T Route Year	**When in Year? (i.e. Autumn, Spring etc)**	**Core or Option Module**	**Credits**	**Module**
FT	AY	Core	20	CORF2005 Applied Thermodynamics and Fluidics for Marine Engineers
FT	AY	Core	20	CORF2006 Research Project for Marine Engineers
FT	AY	Core	20	CORF2011 Finite Element Analysis for Marine Engineers
FT	AY	Core	20	CORF2008 Naval Architecture for Marine Engineers
FT	AY	Core	20	CORF2009 Further Electro-technology for Marine Engineers
FT	AY	Core	20	CORF2010 Control and Instrumentation Systems for Marine Engineers
FT	AY	Core	0	CORF2012 Work Experience for Marine Engineers

NB: There are no optional modules for this programme of study

5. Programme Aims

The Foundation Degree Professional Super Yacht Engineer is a structured programme that delivers the academic knowledge for learners looking to continue with their employment within the maritime engineering sector focusing on the academic route towards qualifying as Engineering Officer within the Small Commercial Vessel sector, Super Yacht industry. The programme combines the most relevant skills and knowledge required for the learner to gain further understanding of the technologies appropriate to that industry.

Those learners completing this programme of study will have the academic knowledge and skills for progression towards further employment within the Super Yacht industry becoming responsible for the maintenance and operation of a ship's main propulsion and auxiliary machinery, deck equipment and hotel services.

When combined with the Falmouth Marine School Professional Super Yacht Cadetship programme this academic course continues the development of the career path towards the Marine Engineer Officer Certificate of Competency.

The programme has been designed in consultation with the Super Yacht industry and the Maritime and Coast Guard Agency.

This programme will deliver:

1. A challenging and stretching learning experience that equips learners with the necessary knowledge, skills and behaviours to excel in their chosen engineering field of study.

2. A comprehensive curriculum, covering the advanced principles of engineering to work within the Super Yacht industry, alongside a specialist marine pathway, aligned to the needs of the that industry.

3. A vocational study programme that extensively uses the solution of real marine engineering problems as the basis of the assessment tasks.

4. Graduates with the capability to solve problems and develop solutions for the issues facing employment as an engineer within the Super Yacht industries.

5. A vehicle for delivering the higher level engineering skills needed by the commercial shipping industries, including the priority sectors identified by the Maritime Coast Guard Agency.

6. Programme Intended Learning Outcomes

For this programme the following learning outcomes have been informed by the QAA Foundation Degree Qualification Benchmark (2010), the QAA Subject Benchmark for Engineering (2015) The Accreditation of Higher Education Programmes.

UK Standard for Professional Engineering Competence (2010):

6.1 Knowledge and Understanding

On successful completion graduates will have developed the ability to:

i) Demonstrate knowledge and understanding of essential facts, concepts, theories and principles of engineering as applied to the marine industry and the science and mathematics that supports this

ii) Demonstrate an ability to assimilate the application of ship's design concepts, theories and principles and critically apply mathematical methods, tools and notations proficiently in the support of the ship's operational capability.

iii) Demonstrate a broad knowledge and critical understanding of the relevant legislation, regulation, standards and ethics that are required to comply with the operational requirements of the commercial shipping sector

6.2 Cognitive and intellectual skills

On successful completion graduates will have developed the ability to:

i) Analyse and evaluate the performance of marine engineering systems and components through the use of operational data and testing techniques

ii) Apply a detailed knowledge of the theory and skills required to resolve faults and failures within marine structures, recognising cause and achieving satisfactory solution.

iii) Select and evaluate a range of marine industry and engineering relevant information in making informed decisions for the solution of engineering problems

6.3 Key and transferable skills

On successful completion graduates will have developed the knowledge and ability to:

i) Manage time and resources to analyse, assess and interpret information, develop lines of argument and make sound judgement and management decisions

ii) Manage effectively, as part of a team, with subject specialists, with equipment manufacturers and with employers to investigate and resolve problems thereby maintaining operational capability

iii) Communicate and present informed decisions at an operational level for both technical and non-technical personnel

6.4 Employment related skills

On successful completion graduates will have developed the knowledge and skills needed to:

i) Apply knowledge, understanding and technical ability to contribute to the management and safe operation of on-board machinery, equipment and services within the framework of the relevant legal requirements

ii) Undertake a relevant level of management responsibility to maintain the safe operation of a vessel with respect to its' design and operational requirements

iii) Assess and review personal strengths and ability, acquire new competency and assume responsibility for personal development and accreditation at a professional level within the maritime and engineering sectors.

6.5 Practical Skills

On successful completion graduates will have developed the ability to:

i) Utilise the knowledge and skills required to analyse and support the effective operation and maintenance of ship's services and equipment to comply with the appropriate codes of practice and maritime legislation

ii) Work effectively in the management of engineering design, manufacture and maintenance in compliance with the relevant legislation

iii) Maintain a personal professional portfolio evidencing professional and academic qualification, the sea service undertaken; make use of social media and professional agencies and promote further employment within the industry

5. Progression criteria for final and intermediate awards

This programme currently has no designated progression route to University of Plymouth. Should a student wish to progress to another HEI then they will need to follow the relevant entry and admissions procedures.

6. Non Standard Regulations

None

7. Transitional Arrangement

None

8. Admissions Criteria, including APCL, APEL and DAS arrangements

Learners enrolling to the FdSc Professional Super Yacht programme will have successfully completed the HNC Professional Super Yacht programme.

Qualification(s) Required for Entry to this Programme:	Details:
Interview / Portfolio requirements:	All learners are to be interviewed before selection for this programme of study
Higher National Certificate	Learners enrolling to the Foundation Degree Professional Super Yacht Engineer will have successfully completed the HNC Professional Super Yacht Engineer programme
Independent Safeguarding Agency (ISA) / Disclosure and Barring Service (DBS) clearance required:	Not a requirement
Capability Statement:	The requirement for all personnel working on-board a commercial vessel to hold a Seafarer Medical Certificate ENG1. It is recommended that prior to enrolment to this programme that the prospective learner should be advised to approach an MCA approved doctor for examination. Approved list of MCA approved doctors is available from FMS. Applicants to this programme must have an awareness of working safely in a variety of marine settings, particularly within the yachting industry. Applicants considering employment on-board a Super Yacht must be aware that there will be periods where they can expect to be “at sea” and not necessarily able to communicate through social media or other IT related systems; that “sea time” can be of a prolonged period away from shore-side facilities and that staff can be expected to work at any time during a 24 hour period as “on watch” arrangements will apply.
APEL (Accreditation of Prior Experiential Learning)	Applicants may apply for the award of credit towards a University of Plymouth award in respect of knowledge and skills acquired through life, work experience, and/or study which are not formally attested through

	certification by a recognised professional or academic body. The application for experiential learning will be formally assessed by the Programme manager or other relevant member of the programme delivery team to determine that this learning has in fact occurred and that it is still current in relation to the module(s) concerned, and its equivalence in relation to University credit weightings and levels. It is the student's learning, not his or her experience, which is being assessed.
APCL (Accreditation of Prior Certificated Learning)	Applicants may apply for the award of credit towards this programme in respect of knowledge and skills acquired through certification by a recognised professional or academic body. Where the College is satisfied that an applicant has fulfilled the assessment requirements and met the learning outcomes of a particular module(s) by means other than attendance on the planned programme, exemption may be given from the specific module(s) and the appropriate credit awarded.
UNIVERSITY OF PLYMOUTH ACADEMIC REGULATIONS, 2024-25	UoP Academic Regulations 24-25

11 Appendix 1 – Programme Specification Mapping (UG)

Core Modules		Programme Intended Learning Outcomes contributed to (for more information see Section 5)																Compensation Y/N	Assessment Element(s) and weightings [use UNISTATs definition] EX- exam ICT- test CW- coursework P1 - practical
		Knowledge & understanding			Cognitive & intellectual skills			Key & transferable skills			Employment related skills			Practical skills				
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
-Level 5	**CORF2005 – Applied Thermodynamics and Fluidics for Marine Engineers**	✓	✓		✓		✓	✓			✓	✓	✓	✓			Y	CW 50% ICT 50%
	CORF2006 – Research Project for Marine Engineers			✓				✓		✓			✓		✓	✓	N	CW 50% P1 50%
	CORF2008 – Naval Architecture for Marine Engineers	✓	✓	✓		✓	✓					✓			✓		Y	CW 50% EX 50%
	CORF2009 – Further Electro-technology for Marine Engineers		✓			✓	✓		✓	✓	✓	✓	✓	✓			Y	P1 40% CW 60%
	CORF2010 - Control and Instrumentation systems for Marine Engineers		✓		✓		✓	✓	✓		✓	✓	✓	✓			Y	CW 60% P1 40%
	CORF2011- Finite element analysis for Marine Engineers	✓	✓		✓	✓	✓	✓									Y	CW 100%
	CORF2012 – Work Experience for Marine Engineers	✓						✓	✓	✓		✓	✓	✓	✓	✓	N	E1 Exam - Pass/ Fail CW - Pass/ Fail
Level 5 LOs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Confirmed Award LOs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

12. Appendix 2 – Work Based Learning Mapping (WBL)

FHEQ level: 5					
WBL/WRL Activity:	**Logistics**	**Programme Aim**	**Programme Intended Learning Outcomes**	**Range of Assessments**	**Related Core Module(s)**
Record of professional development	The learner will be required to record all relevant RYA and MCA examinations and qualifications undertaken and reflect on further professional development requirements to advance their career opportunities within the Super Yacht industry	1, 4, 5	1, 3, 4, 5	Exam/ Log Book/ Reflective Journal	CORF 2012 Work Experience for Marine Engineers
Develop and reflect upon learning and skills developed in the workshop and on-board ship	The learner will develop marine engineering skills and understanding of the operation and maintenance requirements of marine systems and structure whilst employed on-board ship and relate this knowledge to theoretical learning	1, 2, 3, 5	1, 2, 3, 4, 5	Report on the evaluation of a thermodynamic system In-class test on fluidic systems	CORF2005 – Applied Thermodynamics and Fluidics for Marine Engineers
Develop and reflect upon learning and skills developed on-board ship and industry visits	The learner will develop an understanding of ship's operation with respect to stability and operational capability whilst employed on-board and relate this knowledge to theoretical learning	1, 2, 3, 4, 5	1, 2, 3, 4, 5	Report on the principles of Ship design Exam – calculations for ship's powering and fuel consumption	CORF2008 – Naval Architecture for Marine Engineers

Correct as 3 June 19/6 June 19/18 Sept 24

FHEQ level: 5					
WBL/WRL Activity:	**Logistics**	**Programme Aim**	**Programme Intended Learning Outcomes**	**Range of Assessments**	**Related Core Module(s)**
Develop and reflect upon learning and skills developed in the workshop and on-board ship	The learner will develop marine engineering skills and understanding of the operation and maintenance requirements of marine communication and navigation systems whilst employed on-board ship and relate this knowledge to theoretical learning	1, 2, 3, 5	1, 2, 3, 4, 5	Formal report on networking of marine navigation and communication systems Group presentation on integrated systems	CORF2009 – Further Electro-technology for Marine Engineers
Develop and reflect upon learning and skills developed in the workshop and on-board ship	The learner will develop marine engineering skills and understanding of the operation and maintenance requirements of marine control and instrumentation systems whilst employed on-board ship and relate this knowledge to theoretical learning	1, 2, 3, 5	1, 2, 3, 4, 5	Report on purpose and function of marine control systems Group analysis of autonomous control systems	CORF2010 - Control and Instrumentation systems for Marine Engineers
Personal and Professional Development	The learner will undertake and develop project management and research skills in order to plan and implement a study into a research topic of the individual's personal interest. The research topic must be relevant to the maritime industries.	1, 4, 5	1, 3, 4, 5	Formal report on a Research topic of learner's choice Presentation to panel of experts on that research project	CORF2006 Research Project for Marine Engineers