PROGRAMME SPECIFICATION

Certificate of Higher Education in Marine Engineering

Awarding institution	Liverpool John Moores University
Teaching institution	Springdale Academy Of Maritime Education (SAMET)
JACS Code	H300
Programme Duration	Full-Time: 1 Year
Language of Programme	All LJMU programmes are delivered and assessed in English
Subject benchmark statement	STCW (Standards for Training, Certification & Watchkeeping for Seafarers) for Engineering OOW (Officer of the Watch)
Programme accredited by	
Description of accreditation	
Validated target and alternative exit awards	Certificate of Higher Education in Marine Engineering
Link Tutor	Geraint Phylip-Jones

Educational aims of the programme

The educational aim of this programme is to provide the underpinning knowledge for a Engineering Officer of watch (EOOW) certificate of competence. The programme also aims to develop students as independent learners and prepare them for a career as a Merchant Navy Engineering Officer with the knowledge, skills and attitudes which such an undertaking demands.

Target award Learning Outcomes - Certificate of Higher Education

A student successfully completing the programme of study will have acquired the following subject knowledge and understanding as well as skills and other attributes.

A student who is eligible for this award will be able to:

1. Demonstrate a knowledge and understanding of scientific principles and methodology necessary to underpin their education in marine engineering.

2. Illustrate a knowledge and understanding of mathematical principles necessary to underpin their education in marine engineering and related engineering disciplines.

3. Demonstrate an ability to apply and integrate knowledge and understanding of other engineering disciplines to support study of marine engineering disciplines.

4. Understand engineering principles and the ability to apply them to analyse key engineering processes.

5. Illustrate an ability to identify, classify and describe the performance of systems and components through the use of analytical methods and modelling techniques.

6. Demonstrate an ability to apply quantitative methods and computer software elevant to mechanical and related engineering disciplines to solve engineering problems.

7. Apply appropriate quantitative science and engineering tools to the analysis of problems.

8. Demonstrate an understanding of and ability to apply a systematic approach to engineering problems.

9. Understand the need for a high level of professional and ethical conduct in engineering.

10. use practical engineering skills acquired through, for example, work carried out in laboratories and workshops; in industry through supervised work experience; in individual and group project work; in design work; and in the development and use of computer software in design, analysis and control. Evidence of group working and of participation in a major project is expected.

11. Demonstrate creativity to establish innovative solutions.

12. use transferable skills that will be of value in a wide range of situations. These are exemplified by the Qualifications and Curriculum Authority Higher Level Key Skills and include problem solving, communication, and working with others, as well as the effective use of general IT facilities and information retrieval skills.

13. Understand the use of technical literature and other information sources.

Teaching, Learning and Assessment

The methods used to enable outcomes to be achieved and demonstrated are as follows:

Acquisition of knowledge is achieved mainly through lectures, tutorials and directed student-centred learning.

Understanding is reinforced through practical exercises.

Testing of the knowledge base is through a combination of written examinations and submission of coursework assignment.

Intellectual skills are developed through case studies and coursework assignments.

Testing of intellectual skills is through a combination of written examinations, and coursework assignment submissions.

Professional practical skills are developed in a coordinated manner throughout the programme.

Testing of professional practical skills is through a combination of written examinations, coursework in the form of case-study reports and coursework assignment submissions.

Transferable/key skills are developed in a coordinated manner throughout the programme.

Testing of transferable/key skills is through a combination of written examinations and coursework assignment submissions.

Programme structure - programme rules and modules

The programme is designed to provide academic requirements for an STCW Engineering Officer EOOW certificate in addition to CertHE. It is offered in full time mode.

Level 4	Potential Awards on completion	Certificate of Higher Education
Core	Option	Award Requirements
4550SAM Thermodynamics and Fluid Mechanics (20 credits) 4551SAM Materials (20 credits) 4552SAM Applied Mechanics (20 credits) 4553SAM Engineering Mathematics (20 credits) 4554SAM Marine Electrical Systems (20 credits) 4555SAM Engineering Knowledge and Naval Architecture (20 credits)		120 core credits at level 4 0 option credits at level 4

Information about assessment regulations

All programmes leading to LJMU awards operate within the University's Academic Framework. https://www.ljmu.ac.uk/about-us/public-information/academic-quality-and-regulations/academic-framework

Opportunities for work-related learning (location and nature of activities)

All modules include work related learning with the syllabus dictated by industry. No WBL modules are considered necessary on this programme as the students complete seatime as part of the professional conditions to achieve the Merchant Navy certificate. After completion of the CertHE, students will be eligible to proceed to sea for industrial experience. Student may then progress to the second year of the B.Eng in Mechanical and Marine Engineering at Liverpool. On completion of the B.Eng year they will be eligible to sit the STCW EOOW examinations set by the UK MCA. The CertHE programme is also integrated with applicable short

courses to meet professional qualification requirements.

Criteria for admission

Overseas qualifications
Students need to have attained a minimum 50 % in aggregate in the Higher Secondary Certificate (10+2) Science.

Students are strongly advised to have a Merchant navy medical examination before entry.

Students with alternate equivalent qualifications can be accepted on an individual basis.

Students whose first language is not English will be expected to have attained IELTS 5.5 average or equivalent within the previous two years.

External Quality Benchmarks

All programmes leading to LJMU awards have been designed and approved in accordance with the UK Quality Code for Higher Education, including the Framework for Higher Education Qualifications in the UK (FHEQ) and subject benchmark statements where applicable.

The University is subject to periodic review of its quality and standards by the Quality Assurance Agency (QAA) Published review reports are available on the QAA website at www.qaa.ac.uk

Programmes which are professionally accredited are reviewed by professional, statutory and regulatory bodies (PSRBs) and such programmes must meet the competencies/standards of those PSRBs.

Support for students and their learning

The University aims to provide students with access to appropriate and timely information, support and guidance to ensure that they are able to benefit fully from their time at LJMU. All students are assigned a Personal Tutor to provide academic support and when necessary signpost students to the appropriate University support services.

Students are able to access a range of professional services including:

- Advice on practical aspects of study and how to use these opportunities to support and enhance their personal and academic development. This includes support for placements and careers guidance.
- Student Advice and Wellbeing Services provide students with advice, support and information, particularly in the areas of: student funding and financial matters, disability, advice and support to international students, study support, accommodation, health, wellbeing and counselling.
- Students studying for an LJMU award at a partner organisation will have access to local support services

Methods for evaluating and improving the quality and standards of teaching and learning

Student Feedback and Evaluation

The University uses the results of student feedback from internal and external student surveys (such as module evaluations, the NSS and PTES), module evaluation questionnaires and meetings with student representatives to improve the quality of programmes.

Staff development

The quality of teaching is assured through staff review and staff development in learning, teaching and assessment.

Internal Review

All programmes are reviewed annually and periodically, informed by a range of data and feedback, to ensure quality and standards of programmes and to make improvements to programmes.

External Examining

External examiners are appointed to programmes to assess whether:

- the University is maintaining the threshold academic standards set for awards in accordance with the FHEQ and applicable subject benchmark statements
- the assessment process measures student achievement rigorously and fairly against the intended outcomes of the programme(s) and is conducted in line with University policies and regulations

- the academic standards are comparable with those in other UK higher education institutions of which external examiners have experience
- the achievement of students are comparable with those in other UK higher education institutions of which the external examiners have experience

and to provide informative comment and recommendations on:

- good practice and innovation relating to learning, teaching and assessment observed by external examiners
- opportunities to enhance the quality of the learning opportunities provided to students

Please note:

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content, teaching, learning and assessment methods of each module can be found in module and programme guides.