

Diploma in

Marine Engineering

(KPT:N/0414/4/0012) (MQA/PA 15563)



WHY CHOOSE ALAM?

World-Class Training Facilities

ALAM offers state-of-the-art simulators, advanced workshops, and engine training rooms that provide hands-on, industry-relevant experience.

Internationally Recognized Certification

ALAM is an approved institution for STCW (Standards of Training, Certification, and Watchkeeping) courses, ensuring graduates meet global maritime industry standards.

Experienced Faculty and Mentors

Learn from industry experts with vast sea and shore-based experience, including instructors holding Chief Engineer Class 1 Certificates and advanced degrees.

Strategic Industry Partnerships

ALAM collaborates with leading maritime companies, including MISC and other global shipping operators, offering students exposure to real-world scenarios through internships and sea-time placements.

Comprehensive Academic and Career Pathways

From Diploma in Marine Engineering (DME) to Advanced Diplomas and upcoming degree programs, ALAM provides clear progression routes for those aiming to achieve 1st Class Engineer (Unlimited Voyage) certification.

Modern Campus and Supportive Environment

A serene campus equipped with modern amenities, dedicated mentoring programs, and a vibrant community ensures students thrive both academically and socially.

High Employability Rate

ALAM graduates are highly sought after by maritime companies due to their professional training, technical competence, and adaptability to the demands of the maritime industry.

Focus on Innovation and Sustainability

ALAM integrates green technologies and sustainable engineering practices, preparing students for the evolving challenges in maritime engineering.

Global Alumni Network

Join a robust network of maritime professionals working in prestigious roles worldwide, offering valuable career connections and guidance.

Committed to Excellence

With a mission to develop maritime leaders, ALAM continually enhances its curriculum, research initiatives, and industry relevance to remain at the forefront of maritime education.

Proximity to Key Maritime Hubs

ALAM is strategically located in Malaysia, providing access to one of the busiest maritime trade routes in the world.





PROGRAMME OVERVIEW

The Diploma in Marine Engineering (DME) program at ALAM is designed to prepare students for rewarding careers as marine engineers in the global shipping industry. Fully compliant with the International Maritime Organization (IMO) Standards of Training, Certification, and Watchkeeping (STCW), the program ensures graduates are equipped with the highest standards of competency, professionalism, and global employability in the maritime sector.

The program integrates comprehensive theoretical knowledge with hands-on practical training, producing skilled marine engineers capable of meeting the demands of moder shipping and the dynamic challenges of the maritime industry.

The DME program aims to:

Equip Students with Industry-Ready Skills

Develop technical expertise in operating, maintaining, and troubleshooting marine engineering systems, ensuring readiness for real-world challenges aboard ships.

Provide a Strong Theoretical Foundation

Offer comprehensive knowledge in marine engineering subjects such as thermodynamics, fluid mechanics, naval architecture, and electrical systems to build a robust academic base.

Foster Leadership and Teamwork Skills

Cultivate essential soft skills, including teamwork, communication, and leadership, critical for success in multicultural shipboard environments.

Prepare Graduates for Career Advancement

Lay the groundwork for students to progress from Engine Cadet to higher professional roles, such as Chief Engineer, Technical Superintendent, or other shore-based maritime careers.

Ensure Compliance with International Standards

Align with the International Maritime Organization (IMO) Standards of Training, Certification, and Watchkeeping (STCW) to produce competent marine engineers recognized globally.

Offer Hands-On Practical Training

Deliver experiential learning through advanced simulators, workshops, and onboard sea training to prepare students for the operational demands of the maritime industry.

Promote Innovation and Sustainability

Encourage the adoption of green technologies and sustainable engineering practices to meet the evolving challenges of the maritime sector.

Provide Global Career Opportunities

Enable graduates to pursue diverse career paths in shipping, offshore energy, marine consulting, and other related industries worldwide.

Study Pathways

Hears

Pre-Sea Training

Academic and practical training at ALAM focusing on foundational maritime knowledge, marine engineering, safety, and seamanship

Sea Time Training

Structured onboard training as a cadet on merchant vessels under the supervision of experienced officers (mandatory sea time to gain practical skills and meet certification requirements)

▼

Career as an Engine Officer

Upon completing the DME program and obtaining the COC, graduates start their maritime careers as Junior Engineer or Engine Officers

Post-Sea Modular Training and Certification

Final phase of training at ALAM to prepare for the Certificate of Competency (CoC) as STCW III/I -Officer in Charge of Engineering Watch (OICEW) or DDE of 750 kW Power or More

Includes assessments, simulator training, and STCW-compliant examinations

Programme Structure

Skill development

Foundational maritime education

Basic knowledge of marine engineering

Phase 1

24 months

PRE-SEA TRAINING (Academic and Practical Learning)

Continuous evaluation by ship officers

Submission of a Training Record Book (TARB)

Phase 2

12 months

SEA TIME TRAINING (Onboard Ship Training)

Preparation for the Certificate of Competency (CoC) examination

Advanced Training Modular

Phase 3

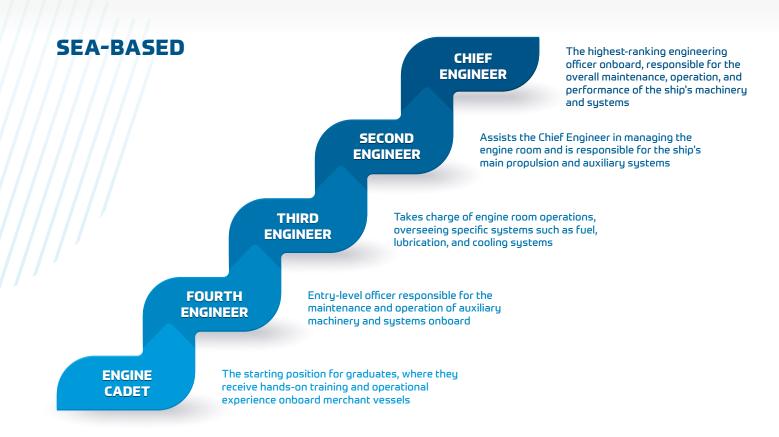
3-6 months

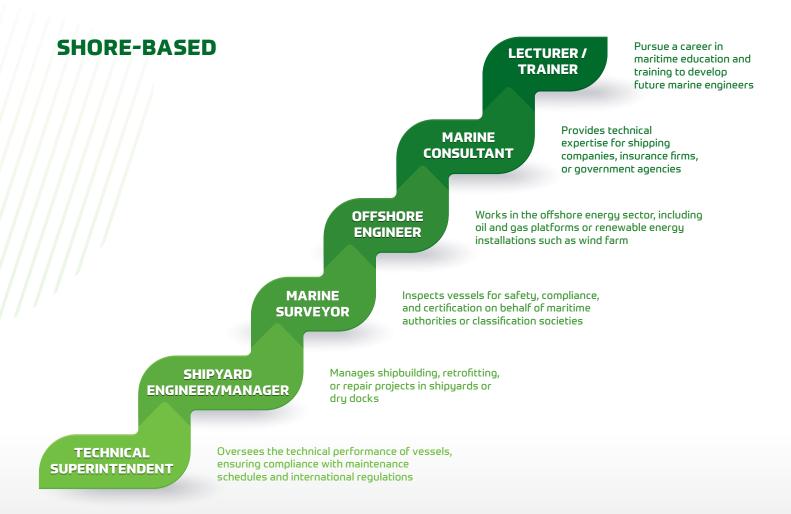
POST-SEA TRAINING & SEMESTER 7 (Preparation for Certification)

Duration of Study 3 Year 4 months



Career Pathways







ASSESSMENT SYSTEM

Continuous Assessment

Conducted by lecturers throughout the semester, focusing on understanding and application of concepts. This includes:

Writen Tests

Periodic tests covering theoretical knowledge and concepts.
Focused on navigation, safety, and operational aspects.

Assignments

Individual or group assignments related to practical maritime scenarios.

Encourages independent research and problem-solving.

Case Studies

Real-world maritime scenarios for analysis and solution formulation.

Focus on critical thinking and application of maritime regulations and principles.

Projects

Practical or research-based projects to demonstrate in-depth knowledge.

May involve creating navigational plans, safety audits, or operational strategies.

Presentations

Students present findings, strategies, or plans related to their assignments or projects.

Builds communication and presentation skills critical for leadership roles.

Final Assessment

A comprehensive evaluation at the end of the semester.

Focuses on testing cumulative knowledge and practical application.

Typically, in the form of a final written examination

MINIMUM ENTRY REQUIREMENTS

FOR MALAYSIAN APPLICANTS

Possess SPM/ SPMV with 5 credits in:

- Malay Language (Bahasa Melayu)
- Science (Sains) /
 Pure Science (Sains Tulen) /
 Technical (Teknikal)
- Mathematics (Matematik) / Additional Mathematics (Matematik Tambahan)
- 2 other subjects
- A Pass in English language (Bahasa Inggeris) and History (Sejarah)

SPM & SKM L3 in engineering, mechanical, mechatronic, electrical, automotive, marine or maritime.

or

STPM pass with a minimum of grade C (GP 2.00) in any 2 subjects.

or

Any equivalent qualification as approved by Director of Marine (as advise or proposed by MATRAIN senate)

SVM with credit in Malay Language (Bahasa Melayu)

AND

- CGPA Academic 2.00
- CGPA Vocational 2.67
- A Pass English
- Pass ALAM's entry examination in Mathematics and Science.

Physically fit as certified by a marine medical practitioner approved by the Marine Department

Normal eyesight without aids and normal color vision as stipulated in Table A-1/9 of the STCW 2010

FOR INTERNATIONAL QUALIFICATION

Qualifications as listed in "MQA's list of entry qualifications for international student" with 5 credits comprising of:

- Mathematics
- Science/Technical
- 3 other subjects

International students may be exempted from English language proficiency requirements under certain conditions:

- International students who are from countries where English is used as the official language;
 OR
- International students who hold academic qualifications from institutions that fully use English as the medium of instructionand intend to pursue higher levelsof study in Malaysia.

| English Competency | Types of Examination | Score |
|--|--|--------|
| MUET | MUET | Band 3 |
| IELTS | IELTS / IELTS Online | 5.0 |
| TOEFL | TOEFL iBT | 40 |
| | TOEFL Essential (Online) | 7.5 |
| Pearson Test of English | PTE Academic / PTE Academic (Online) | 47 |
| Cambridge English Qualifications & Test | B1 Preliminary, B2 First, C1 Advanced, C2 Proficiency | 154 |
| | Linguaskill Online | |
| ELS | Certified Intensive English Programme Level (CIEP Level) | 107 |

- Normal eyesight without aids and normal color vision as stipulated in Table A-1/9 of the STCW 2010
 - Physically fit as certified by medical practitioner approved by the Marine Department

English Language Proiciency Requirements

Malaysia Certification system

A Pass in English Language (Bahasa Inggeris)

For International Qualification

Fulfil a minimum score of at least ONE of the following.

| English Competency | Types of Examination | Score |
|--|--|--------|
| MUET | MUET | Band 3 |
| IELTS | IELTS / IELTS Online | 5.0 |
| TOEFL | TOEFL iBT | 40 |
| | TOEFL Essential (Online) | 7.5 |
| Pearson Test of English | PTE Academic / PTE Academic (Online) | 47 |
| Cambridge English Qualifications & Test | B1 Preliminary, B2 First, C1 Advanced, C2 Proficiency | 154 |
| | Linguaskill Online | |
| ELS | Certified Intensive English Programme Level (CIEP Level) | 107 |

International students may be exempted from English language proficiency requirements under certain conditions:

- International students who are from countries where English is used as the official language; OR
- International students who hold academic qualifications from institutions that fully use English as the medium of
 instructionand intend to pursue higher levelsof study in Malaysia.

Academic Partners



Awards & Accreditations







Akademi Laut Malaysia

Batu 30, Kampung Tanjung Dahan, 78200 Kuala Sungai Baru, Melaka

- +606 388 2377
- +6017 334 4634
- (f) Akademi Laut Malaysia
- www.alam.edu.my

Your Maritime Future



SCAN HERE FOR MORE INFORMATION