



# SINGAPORE MARITIME ACADEMY

Marine Engineering  
Maritime Business  
Nautical Studies

**SP** Singapore  
Polytechnic



FIRST POLY  
FUTURE INSPIRED  
EST 1954



# MARINE ENGINEERING

## DMR – S63

### Driving Force of Maritime Advancements

The Diploma in Marine Engineering (DMR) is a rigorous programme covering various engineering disciplines. It combines mechanical engineering, electrical and electronic engineering, engineering design, and control technology - all crucial for transforming a ship into an independent power plant.

- Marine/Mechanical Engineering
- Electrical and Electronic Engineering
- Naval Architecture
- Offshore Technology
- Control Technology

Alongside lectures and practical workshops, you'll gain hands-on experience in advanced ship simulators and various engineering training softwares. Be equipped with operational skills and competencies required for both sea-going and shore-based careers.

During your third year, you will have the opportunity to choose between a sea-going or shore-based route.

Join DMR and gear towards a rewarding career path with abundant opportunities.



#### WHAT YOU CAN EXPECT

- Acquire a diverse range of in-demand engineering technological skills and comprehensive knowledge through immersive hands-on training
- Attend talks by industry professionals, participate in on-site visits and get real-world industry exposure through various international maritime events
- Propel your maritime career with a six-month internship either on board ships or within the shore-based maritime sector.
- Gain direct entry into related engineering degree programmes locally such as at NUS and NTU and overseas universities.

*All applicants must pass the colour vision test as per the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).*

#### ENTRY REQUIREMENTS

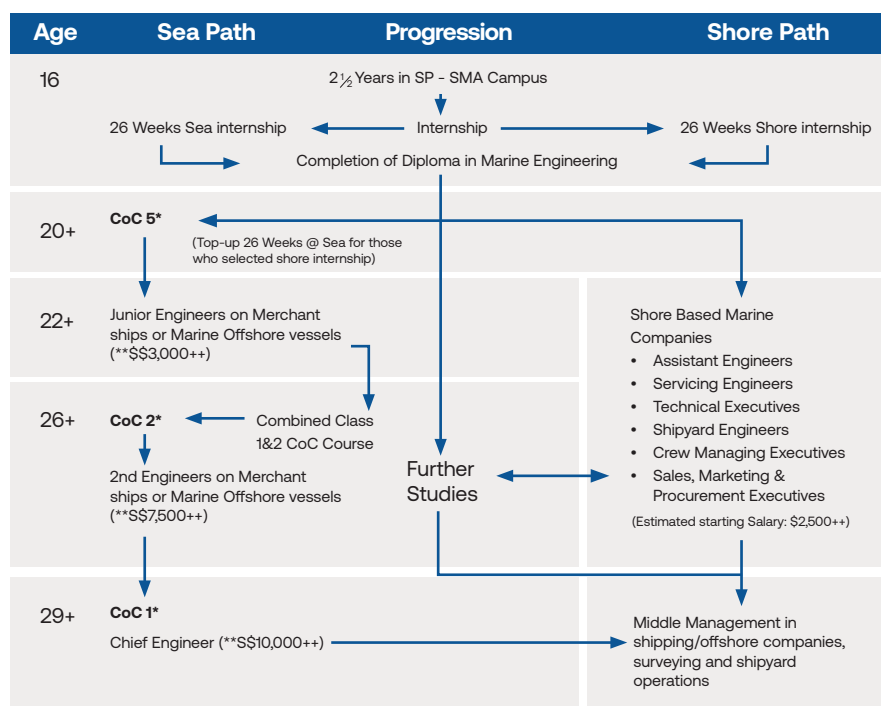
Range of Net 2023 JAE ELR2B2: 7 – 26  
Aggregate Type: ELR2B2-C

| SUBJECT                                                                                                                                                                                                                                                                                                                                                                        | GRADE |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| English Language                                                                                                                                                                                                                                                                                                                                                               | 1 – 7 |
| Mathematics (Elementary/Additional)                                                                                                                                                                                                                                                                                                                                            | 1 – 6 |
| Any one of the following subjects:                                                                                                                                                                                                                                                                                                                                             | 1 – 6 |
| <ul style="list-style-type: none"> <li>• Biology</li> <li>• Biotechnology</li> <li>• Chemistry</li> <li>• Computing/Computer Studies</li> <li>• Design &amp; Technology</li> <li>• Electronics/Fundamentals of Electronics</li> <li>• Physics</li> <li>• Science (Chemistry, Biology)</li> <li>• Science (Physics, Biology)</li> <li>• Science (Physics, Chemistry)</li> </ul> |       |

#### CAREER OPTIONS

DMR is one of the most versatile programmes and it offers you career flexibility. You can apply your knowledge to a wide-ranging field of engineering technologies.

With the training received, a wide variety of career options and opportunities awaits you. You can be employed as marine engineers on ships as well as engineers in shipyards, offshore oil and gas industries and non-maritime engineering firms. Many of our graduates are also suitably employed in sales and service positions in various engineering companies.



Internationally recognised professional qualification issued by MPA  
++ Tax free income plus paid leave

\*\*<https://www.maritimeone.sg/article-detail/marine-engineer-officer>



Internships in the Maritime industry can be daunting for women but the experiences I've gained onboard the vessel have allowed me to emerge stronger than I ever thought was possible. I'm excited about what the future brings and I look forward to the endless possibilities of digital transformations in the maritime industry. 📖

**Petrina Tan**

SP Institutional Medallist

Lee Kuan Yew Award

Recipient

4th Engineer, Synergy Marine Group



# WHAT YOU'LL STUDY

The Diploma in Marine Engineering is a three-year full-time programme that includes a six-month Internship Programme with an approved establishment.



## FIRST YEAR

- Applied Mechanics
- Basic Thermodynamics
- Basic Occupational Safety & Security Training
- Common Core Modules
- Electric Circuits
- Engineering Drawing
- Engineering Mathematics 1
- Marine Engineering Knowledge I & II
- Naval Architecture 1
- Workshop Practice 1 & 2

## SECOND YEAR

- Applied Thermodynamics
- Auxiliary Machinery
- Computer Aided Design
- Common Core Modules
- Electronics
- Engineering Mechanics
- Engineering Maths 2
- Integrated Workshop Practice
- Instrumentation
- Marine Power Plant
- Naval Architecture 2
- Sustainable Innovation Project (SIP)

## THIRD YEAR

- Common Core Modules
- Electric Machines & Systems
- Integrated Control
- Marine Engine Room Simulation Training
- Marine Workshop Practice
- Basic Tanker Training (Sea)
- Naval Architecture Design and Project (Shore)
- Internship (Shore / Sea)

## ELECTIVES

The SP elective framework offers students options to pursue their passion and / or meet different career needs, and is an integral part of the holistic education we seek to provide to our students. The learning experiences of this elective framework help students in their development as self-directed, versatile, life-long learners, which are essential in today's volatile and changing societal as well as occupational landscape.

Students who are interested to explore additional new skills and abilities will have the opportunity to take up to five electives. Certificates and minors will be awarded when students complete a suite of related elective modules. Please visit <https://www.sp.edu.sg/sp/education/elective-modules> for details of this elective scheme and the full list of electives.

## COMMON CORE CURRICULUM

The Common Core Curriculum is designed to prepare students for a disruptive world that is ever-changing. Comprising critical human and emerging digital skills, the common core modules offer students an integral and inter-disciplinary learning experience to address the wicked problems of the world (framed by the United Nations' Sustainable Development Goals).

Through the Common Core modules, students will think critically about real-world problems, empathise with local and global communities and be challenged to effect change. For more information on the Common Core Curriculum, please visit <https://www.sp.edu.sg/sp/education/common-core-curriculum>.

*All full-time diploma students are required to take a compulsory Education and Career Guidance module in SP. Students will take Education and Career Guidance – Personal Development (30 hours) in their first year.*

*All students are required to take one compulsory Wellness for Life (WFL) module for one semester in their first year in SP. In their second and third year, students may sign up for WFL module as an optional module.*





# MARITIME BUSINESS

DMB – S74



## Synergizing Success in Maritime Business

The Diploma in Maritime Business (DMB) offers a rewarding journey in the maritime industry. Gain a deep understanding of how the maritime business world operates, opening doors to exciting, fulfilling careers.

### WHAT YOU CAN EXPECT

- Experience hands-on training, case studies and field visits to help you to link classroom concepts to real-world situations.
- An extensive programme that prepares you to be versatile, enabling you to gain employment in various sectors within the maritime industry.
- Receive first-hand experience of working in maritime-related organisations in your six-month shore-based internship during the second year.

### CAREER OPTIONS

Upon graduation, DMB graduates are highly sought after for appointments as junior executives in organisations running ship owning/management; shipbroking/chartering; ship/port agency; logistics/supply chain management and marine insurance/law companies; and port/terminal operators and regulatory authorities. With working experience and exposure, the majority of DMB holders progress to managerial positions such as supervisors and assistant managers, with a few taking on higher responsibilities as managers.

Estimated starting salary: S\$2,600

Embark on an exhilarating journey into the dynamic world of the shipping industry, where economic and commercial forces drive its success.

You'll be engaged in real-life industry case studies and master essential business skills. Form a deep appreciation of the complex freight transport network and explore the seamless integration of its components.

Join DMB to unleash your potential and excel in the dynamic world of maritime business careers.

### FURTHER STUDIES

You can gain direct entry into relevant BSc (Hons) programmes in Shipping Management, Maritime Business and Logistics conducted by local universities and reputable tertiary institutions from Australia, the United Kingdom and the United States. You may also pursue business programmes at NUS, NTU, SMU, SIT or SUSS.

With our strong collaboration with international universities, you may gain direct entry into a number of maritime programmes offered by international universities if you obtain more than 3.0 GPA, such as the third-year of a four-year programme at the State University of New York (SUNY) Maritime College in the United States, the final year at the University of Plymouth as well as the Solent University, Southampton in the United Kingdom and Australian Maritime College.

### ENTRY REQUIREMENTS

Range of Net 2023 JAE ELR2B2: 10 – 18

Aggregate Type: ELR2B2-C

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I performed my internship at a local company, Golden Stena Baycrest (GSB) Tankers which was a joint venture company comprising of 3 different companies. During my 6 months stint, I was exposed to the container shipping industry with countless different opportunities that gave me a fulfilling learning experience. 📌

**Tan Xu Jie**

DMB Gold Medallist

Internship at Golden Stena Baycrest (GSB) Tankers



# WHAT YOU'LL STUDY

The Diploma in Maritime Business is a three-year full-time programme that includes a six-month Internship Programme with an approved establishment.



## FIRST YEAR

- Bunkering Practices
- Business Statistics
- Common Core Modules
- Critical and Analytical Thinking (CAT)
- Financial Accounting in Shipping
- Introduction to Maritime Industry
- IT & Data Analysis for Business
- Logistics Management
- Maritime Economics
- Maritime Personnel Management
- Narrative Thinking (NAT)
- Port Operations
- Principles of Shipping Practice
- Ship Operations

## SECOND YEAR

- Business Data Analytics
- Communicating for Project Effectiveness
- Financial Mgmt in Shipping
- Law of Carriage of Goods by Sea
- Port Agency
- Port Management (Elective 1)
- Sustainable Innovation Project (SIP)
- 26 + 1 - Week Internship Programme

## THIRD YEAR

- Communicating for Professional Effectiveness
- Electronic Commerce
- HSSE Management
- Marketing of Shipping Services
- Marine Insurance
- Maritime Law
- Maritime Offshore Operations
- Marine Engineering Knowledge
- Ship Chartering Practices (Elective 2)
- Ship Management
- Ship Financing
- Supply Chain Management
- Project

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# NAUTICAL STUDIES

## DNS – DAE



The DNS course consists of three phases, providing a solid foundation for your maritime career.

**Phase 1: Pre-Sea Induction (18 months)** — covering fundamental knowledge, skills and the STCW required training courses.

**Phase 2: Sea-Training/ Correspondence (12 months)** — structured shipboard training to develop skills as a Navigating Officer.

**Phase 3: Final phase (6 months)** — return to Singapore Polytechnic to continue study and complete requirements leading to the Class 3 Certificate of Competency (CoC) qualification.

Join DNS and set sail toward an exciting future in maritime.

### FURTHER STUDIES

With a DNS diploma, you can gain direct entry into relevant degree courses overseas. You can pursue a Bachelor's degree in Navigation & Maritime Science Offered by the University of Plymouth (UK), which is useful and beneficial for a Shore based career path.

## Charting the Future of Maritime Excellence

Embark on an exciting voyage with the Diploma in Nautical Studies (DNS) and earn your Class 3 Deck Certificate of Competency (CoC), your first professional sea-going qualification. Take confident steps as a junior deck officer and rise to the helm as a ship master.

### WHAT YOU CAN EXPECT

- Graduates will be awarded both an SP diploma and the internationally recognised professional Class 3 Certificate of Competency (CoC) qualification that allows you to sail as a certified sea-going officer worldwide
- Train in the state-of-the-art simulators using virtual reality-based training tools and immersive environment that will equip you to handle various scenarios at sea.
- Gain the competencies and versatility to sail in any type of ship of any size worldwide
- Get first-hand experience in working on board a vessel in the 12-month sea training phase
- Receive support for career progression from government agencies and industry partners through financial rewards and benefits.

### ENTRY REQUIREMENTS

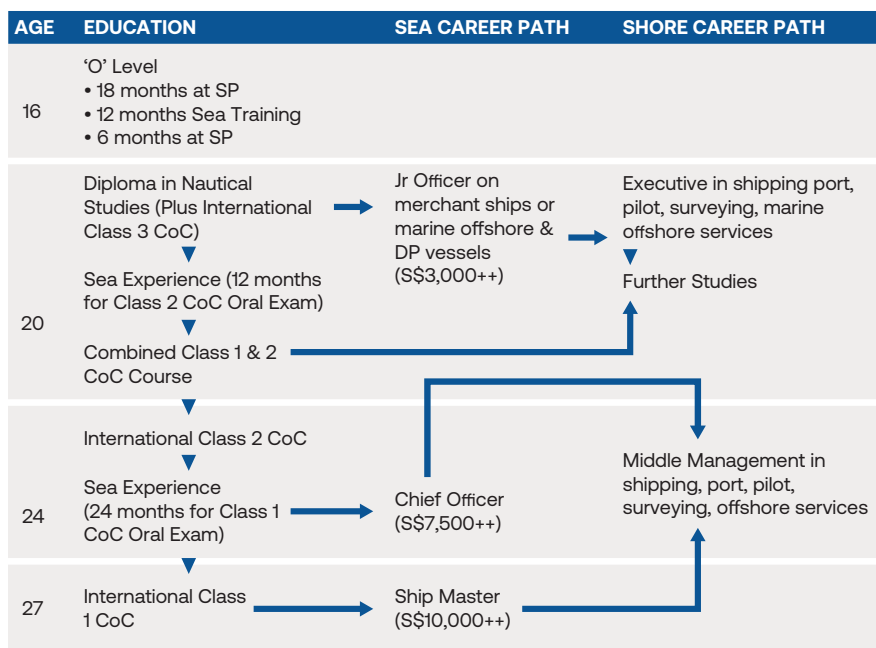
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### CAREER OPTIONS

As you enter the maritime world, remarkable opportunities await. Your experience and skills can lead to prestigious roles such as navigating officers, harbour pilots, and superintendents.

- Applicants must ensure that they have good eyesight (i.e. visual acuity unaided of 6/60 in both eyes and with visual aids of 6/6 in the better eye and at least 6/9 in the other eye) and do not have colour vision deficiency. Applicants must show proof of having passed the Maritime and Port Authority of Singapore (MPA) Sight Test which is conducted at the Singapore Polytechnic Optometry Centre or by General Practitioners.
- SMA/SP will assist in sourcing for a sponsoring company for local students. Shortlisted candidates will be required to attend an interview conducted by the Singapore Maritime Academy. International students are highly recommended to seek out their preferred shipping company to facilitate the successful completion of their phase 2 internship aboard a ship.



++ Tax free income plus paid leave



My cadetship experience has not only reinforced my passion for the maritime field but also shaped my future aspirations. I am now determined to become a skilled and proficient maritime professional, to continue contributing to the safety and efficiency of maritime operations.

**Fadhl Bin Bohari**

DNS Course Medallist



# WHAT YOU'LL STUDY

The Diploma in Nautical Studies is a three-year training programme, comprising three phases, which includes a 12-month sea service with an approved shipping company and an internationally recognised professional Class 3 CoC qualification exam.



## FIRST PHASE - 18 MONTHS

- Advanced Fire Fighting
- Applied Science
- Basic Occupational Safety & Security Training
- Basic Tanker Training (Seagoing)
- Collision Regulations
- Common Core Modules
- Critical and Analytical Thinking (CAT)
- Elective
- Electronic Navigation Systems 1
- Fundamentals of IT & Data Analysis
- Introduction to Navigation
- Marine Communications & Signals
- Mathematics 1
- Mathematics 2
- Meteorology
- Narrative Thinking (NAT)
- Principles of Navigation
- Ship Knowledge
- Science 1
- Sustainable Innovation Project (SIP)

## SECOND PHASE - 12 MONTHS

- 52-Week Sea Service

## THIRD PHASE - 6 MONTHS

- Cargo Work and ISM
- Coastal Navigation
- Electronic Navigation Systems 2
- GMDSS
- Practical Navigation
- Ship Operations
- Ship Construction & Ship Stability

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