SINGAPORE MARITIME ACADEMY

Daniel Al-Redzha Bin Saimen
Diploma in Nautical Studies

I CHARTED MY FIRST SHIPPING OPERATION

Marine Engineering
Maritime Business
Nautical Studies
At the Singapore Maritime Academy,

EXPERIENCE AND EQUIP YOURSELF WITH STATE-OF-THE-ART MARITIME TECHNOLOGY.

Because of the wide variety of modules offered, I have gained a broad and well-nuanced perspective on the maritime and shipping industry. I also appreciate the hands-on training that I received during my internship.

Darshni Parathy
Diploma in Maritime Business

At Singapore’s first maritime training institution, you can gain knowledge and skills to navigate the oceans. You can also tap on engineering disciplines to turn a ship into a moving city. You are exposed to a wide array of shipping business activities. Your adventure begins under the guidance of experienced lecturers and with hands-on training using state-of-the-art simulators and facilities.

When you graduate, you can be a part of Singapore’s globally established maritime industry – one of the world’s busiest seaport and largest container ports.

WHY SMA?

At SMA, you will learn in a state-of-the-art maritime Integrated Simulation Centre (ISC) and advanced labs. There’s also a marina for you to experience hands-on training in seamanship and survival skills.

There are many highlights to becoming a student of SMA. If you decide to pursue our Diploma in Nautical Studies or Diploma in Marine Engineering, you get the opportunity to participate in sea-based internships on board foreign-going vessels. If you pursue our Diploma in Maritime Business, you will be exposed to the latest industry developments through industry talks and visits.

Our students are given many opportunities for overseas exposure through study tours and community service.
The Diploma in Marine Engineering (DMR) course trains you in the different engineering disciplines that allow you to understand ship construction and how a ship works as an independent power plant:

- Marine/Mechanical engineering
- Electrical and electronic engineering
- Naval architecture
- Offshore technology
- Control technology

Besides lectures and laboratory work, you will be exposed to advanced ship engineering system simulators and various training software. Our machinery workshops are equipped to train students for operational competencies that are required in the workplace, be it onboard a ship or a shore-based establishment.

You will have the special opportunity to choose between a sea-going or shore-based route during your third year.

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CAREER OPTIONS

<table>
<thead>
<tr>
<th>Age</th>
<th>Sea Salary</th>
<th>Your Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Diploma in Marine Engineering</td>
<td>Shore Job: Marine Industry, Service Industry, Oil Industry</td>
</tr>
<tr>
<td></td>
<td>Sea Training</td>
<td>Further Studies</td>
</tr>
<tr>
<td>23+</td>
<td>$3k++</td>
<td>Junior Engineer</td>
</tr>
<tr>
<td>26</td>
<td>$7k++</td>
<td>Second Engineer</td>
</tr>
<tr>
<td></td>
<td>Internationally recognised Professional Qualification</td>
<td>Shore Job: Merchant Management, Marine Industry, Service Industry, Oil Industry</td>
</tr>
<tr>
<td>29</td>
<td>$11k++</td>
<td>Chief Engineer</td>
</tr>
</tbody>
</table>

**Note:** Free income is paid leave.

DMR is a versatile programme that offers career flexibility. You can apply your skills to a wide range of engineering-related careers. You can be employed as marine engineers on ships, engineers in shipyards, offshore oil and gas industries and even non-maritime engineering firms. Many of our graduates are also employed in sales and service positions in engineering companies.
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 Mathematics
- Basic Occupational Safety and Security Training
- Basic Thermodynamics
- Critical & Analytical Thinking
- Electric Circuits
- Engineering Drawing
- Engineering Mathematics 1
- Instrumentation
- Marine Engineering Knowledge 1
- Narrative Thinking
- Naval Architecture 1
- Workshop Practice 1
- Workshop Practice 2

**SECOND YEAR**
- Applied Thermodynamics
- Auxiliary Machinery
- Communication for
- Project Effectiveness
- Electronics
- Engineering Mathematics 2
- Integrated Control
- Integrated Workshop Practice
- Marine Engineering Knowledge 2
- Marine Engine Room Simulator Training
- Naval Architecture 2
- Sustainable Innovation Project

**THIRD YEAR**
- Basic Tanker Training
- Communication for
- Professional Effectiveness
- Electrical Machines & Systems
- Elective 1
- Marine Workshop Practice
- Marine Power Plant
- Naval Architecture Design & Project
- 6-month shore-based/seagoing internship programme

**ELECTIVES**

The SP elective framework offers students options to pursue their passion and 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, lifelong 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.spedu.sg/sp/education/elective-modules](https://www.spedu.sg/sp/education/elective-modules) for details of this elective scheme and the full list of electives.

All full-time diploma students are required to take two compulsory Education and Career Guidance Modules in SP. Students will take Education and Career Guidance 1 — Personal Development (30 hours) in their first year. In their second year, students will take Education and Career Guidance 2 — Career Development (15 hours).

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

I would describe student life in SMA as exhilarating. There is always something new to discover. For my final-year project, we used creativity to transform conventional shipboard training into a virtual reality simulation that can be used to train marine engineers. Because of the training we've received, I am sure that we can explore a lot of job opportunities that are both shore-based and sea-going.

Muhammad Syafiq Bin Abdul Rahman
DMR Gold Medalist
Class of 2021
Will be pursuing a Bachelor of Mechanical Engineering with a Minor in Business at NTU
As one of the world’s busiest seaports and largest container ports, there is a continuous demand for maritime and logistics-related organisations involved in a wide range of shipping activities in Singapore. Graduates from DMB will fill this manpower gap.

If you are looking for a challenging and rewarding career in the maritime industry, join the Diploma in Maritime Business (DMB).

**COURSE HIGHLIGHTS**

- A practice-oriented course that links theory and practice through hands-on training, case studies and field visits
- An extensive programme that prepares you to be versatile, enabling you to gain employment in various sectors within the maritime industry
- Six-month enhanced shore-based internship during the second year which provides enhanced first-hand experience of working in maritime-related organisations

**ENTRY REQUIREMENTS**

- Range of Net 2022 JAE ERL2B2: 7 to 18
- Aggregate Type: ERL2B2-C

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>GRADE</th>
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</thead>
<tbody>
<tr>
<td>English Language</td>
<td>1 – 7</td>
</tr>
<tr>
<td>Mathematics (Elementary/Additional)</td>
<td>1 – 6</td>
</tr>
<tr>
<td>Any two other subjects:</td>
<td>1 – 6</td>
</tr>
</tbody>
</table>

Note: To be eligible for admission, you must also have sat for one of the following subjects:

- Biology
- Biotechnology
- Chemistry
- Computing/Computer Studies
- Creative 3D Animation
- Design & Technology
- Electronics/Fundamentals of Electronics
- Food & Nutrition
- Physics
- Science (Chemistry, Biology)
- Science (Physics, Biology)
- Science (Physics, Chemistry)

**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, United Kingdom and the United States. You may also pursue business programmes at NUS, NTU, SMU or SIT.

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.

**CAREER OPTIONS**

Upon graduation, DMB graduates are highly sought after for appointments as junior executives in organisations running ship owning/management, ship broking/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$2,000
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
- Introduction to Maritime Industry
- Financial Accounting for Business
- Port Operations
- Principles of Shipping Practice
- Ship Operations

**SECOND YEAR**
- Business Data Analytics
- Elective 1
- Enhanced Internship
- Financial Management in Shipping
- Law of Carriage of Goods by Sea
- Port Agency
- Sustainable Innovation Project

**THIRD YEAR**
- Electronic Commerce
- Elective 2
- Elective 3
- Marine Engineering Knowledge
- Marine Insurance
- Maritime Law
- Marine Offshore Operations
- Marketing of Shipping Services
- Project
- Ship Financing
- Ship Management
- Supply Chain Management

**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, lifelong 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](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](https://www.sp.edu.sg/sp/education/common-core-curriculum).

I had an enriching experience in DMB. The curriculum covers a wide scope of the maritime industry and it equipped me with the skills and knowledge to be work-ready. My internship at PSA Corporation was an eye-opening experience. I gained valuable insights on how one of the largest and busiest container ports in the world operates.

Seng Yeow Chong
DMB Gold Medallist
Class of 2021
Will be pursuing a Double Degree in Accountancy and Business at NTU
DIPLOMA IN NAUTICAL STUDIES
(DNS - DAE)

“The job prospects are wonderful for self-motivated, independent and adventurous young people who love a sea career. It’s a direct fast track to becoming a ship’s captain.”

Kitack Lim, Secretary-General, International Maritime Organisation

“Today, more than ever, seafaring is a job that demands highly trained and qualified personnel. Modern ships are designed and built to the highest technical standards and require crew members with a high-level of professional competence. To operate them safely and efficiently is a stimulating job in a truly hi-tech workplace. But more than that, a successful seafaring career also holds the promise of a rewarding career ashore, after retiring from the sea.”

COURSE HIGHLIGHTS
• A double award programme that awards you both a 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
• Attractive incentives and payout offered by the Maritime and Port Authority of Singapore on completion of internship and attaining your Class 3 CoC
• An extensive programme that prepares you to be versatile, equipping you with competencies to sail in any type of ship of any size worldwide
• A 12-month sea training phase which gives you first-hand experience in working on board a vessel
• Attractive salaries and great career advancement prospects - a junior officer’s salary starts at $3,000

CAREER OPTIONS
There are plenty of exciting career options and opportunities. You can start off as a Junior Navigating Officer and progress to become a Ship Captain or Manager ashore. You will learn to operate some of the most advanced technologies in the maritime industry.

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.

ENTRY REQUIREMENTS

Aggregate Type: ELR2B2-C

SUBJECT

GRADE

English Language

1 – 7

Mathematics (Elementary/Additional)

1 – 6

Any two other subjects

1 – 6

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• Biology
• Biotechnology
• Chemistry
• Computing/Computer Studies
• Creative 3D Animation
• Design & Technology
• Electronics/Fundamentals of Electronics
• Food & Nutrition
• Physics
• Science (Chemistry, Biology)
• Science (Physics, Biology)
• Science (Physics, Chemistry)

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 required to find a Singapore shipping company of their choice that is prepared to offer them an internship for phase 2 of this course.

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Singapore Maritime Academy  •  Singapore Polytechnic

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Once, I was on a ship in the Bay of Biscay where we navigated through choppy seas and strong winds. It was a scary experience but I knew at the back of my mind that this challenge would shape me into becoming a strong-minded individual that is ready for the maritime industry.

**Calista Chan**
DNS Gold Medallist  
Class of 2020  
Currently pursuing a Bachelor of Science in Sustainable Maritime Operations at the University of Plymouth

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### COURSE MODULES

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 YEAR
- Communications for Personal & Team Effectiveness
- Critical & Analytical Thinking
- Meteorology
- Principles of Navigation
- Ship Knowledge
- Science 1
- Software Applications
- Basic Occupational Safety & Security Training
- Collision Regulations
- Introduction to Navigation
- Marine Communications & Signals
- Mathematics 1
- Narrative Thinking

#### SECOND YEAR
- Advanced Fire Fighting
- Applied Science
- Basic Tanker Training
- Electronic Navigation Systems 1
- Elective 1
- Mathematics 2
- Sustainable Innovation Project
- 1-year Sea-going Internship Programme

#### THIRD YEAR
- Cargo Work & ISM
- Coastal Navigation
- Electronic Navigation Systems 2
- Global Maritime Distress and Safety System
- Practical Navigation
- Ship Construction & Ship Stability
- Ship Operations

### ELECTIVES

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I appreciate the hands-on learning we get to do in the course. When I graduate, I know that the skills will serve me well in not just shipboard careers, but shore-based careers as well.
Singapore Polytechnic
500 Dover Road Singapore 139651

For more information regarding entry requirements and course information, please contact:

Singapore Maritime Academy
Tel: (65) 6775 1133
Email: contactus@sp.edu.sg
Website: www.sp.edu.sg/sma

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@singaporepoly  @singaporepoly

The polytechnic reserves the right to alter the information in this publication. Information is correct as of December 2022.