Singapore Maritime Academy

Maritime Business
Marine Engineering
Nautical Studies
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.

A highlight of our courses is the Maritime Experiential Learning (MEL) Camp, a floating campus experience carried out onboard a ship. Sail onboard the STS Pallada, the world’s fastest tall ship, to learn practical navigation and traditional sailing skills. Our students are given many opportunities for overseas exposure on study tours and community service.

WHY SMA?

Go on an adventure and ride the waves with the Singapore Maritime Academy.

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 the 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 part of Singapore’s growing maritime industry – one of the world’s busiest seaport and one of the world’s largest container ports.

I CAN CHOOSE MY OWN ADVENTURE

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.

A highlight of our courses is the Maritime Experiential Learning (MEL) Camp, a floating campus experience carried out onboard a ship. Sail onboard the STS Pallada, the world’s fastest tall ship, to learn practical navigation and traditional sailing skills. Our students are given many opportunities for overseas exposure on study tours and community service.
The Diploma in Marine Engineering (DMR) course encompasses various engineering disciplines that is required to make you 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 they would require 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.

ENTRY REQUIREMENTS

2019 JAE ELR2B2: 22
Aggregate Type: ELR2B2-C

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>GRADE</th>
</tr>
</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>One of the following 3rd relevant subjects:</td>
<td>1 - 6</td>
</tr>
<tr>
<td>- Biology</td>
<td></td>
</tr>
<tr>
<td>- Biotechnology</td>
<td></td>
</tr>
<tr>
<td>- Chemistry</td>
<td></td>
</tr>
<tr>
<td>- Computing</td>
<td></td>
</tr>
<tr>
<td>- Computer Studies</td>
<td></td>
</tr>
<tr>
<td>- Design &amp; Technology</td>
<td></td>
</tr>
<tr>
<td>- Electronics</td>
<td></td>
</tr>
<tr>
<td>- Fundamentals of Electronics</td>
<td></td>
</tr>
<tr>
<td>- Physics</td>
<td></td>
</tr>
<tr>
<td>- Science (Chemistry, Biology)</td>
<td></td>
</tr>
<tr>
<td>- Science (Physics, Biology)</td>
<td></td>
</tr>
<tr>
<td>- Science (Physics, Chemistry)</td>
<td></td>
</tr>
</tbody>
</table>

All Applicants must pass the colour vision test as per The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).
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
- Computer-Aided Drafting
- Communicating for Project Effectiveness
- Design Thinking for Social Innovation
- Electronics
- Engineering Mathematics 2
- Integrated Control
- Integrated Workshop Practice
- Marine Engineering Knowledge 2
- Marine Engine Room Simulator Training
- Naval Architecture 2

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

**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 await our graduates. Our graduates are 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.

The DMR course has prepared me for the challenges of working on board a ship or in a shore based establishment. With real-life experiences from my internship, I am now determined to make my mark as a marine engineer.

Alistair Teo Guo Hao
DMR Gold Medallist, Class of 2017

**FURTHER STUDIES**
You can gain direct entry into related engineering degree programmes in NUS, NTU and overseas universities or pursue a BEng (Hons) in Naval Architecture, Marine Engineering or Offshore Engineering offered by Newcastle University through the Singapore Institute of Technology (SIT).
DIPLOMA IN MARITIME BUSINESS

If you are looking for a challenging and rewarding career in the maritime industry without having to go to sea, take the Diploma in Maritime Business (DMB).

As the world’s busiest seaport and one of the world’s largest container ports, there is a continuous demand for maritime and logistics-related organisations involved in a wide range of shipping business activities in Singapore. Graduates from DMB will fill this manpower gap.

DIPLOMA IN (DMB – S74)

ENTRY REQUIREMENTS

2019 JAE ELR282: 18
Aggregate Type: ELR282-C

SUBJECT GRADE

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>GRADE</th>
</tr>
</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)

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
All full-time diploma students are required to take two compulsory Education and Career Guidance Modules in SP. Students will take SP101A: Education and Career Guidance 1 – Personal Development (15 hours) in their first year. In their second or third year, students will take SP201A: Education and Career Guidance 2 – Career Development (30 hours) or an approved Internship Programme with an approved establishment.

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 elective.

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

FIRST YEAR
- Bunkering Practices
- Business Statistics
- Critical & Analytical Thinking
- Communication for Personal & Team Effectiveness (CPT)
- Financial Accounting in Shipping
- Introduction to Maritime Industry
- IT & Data Analysis for Business
- Logistics Management
- Maritime Economics
- Maritime Personal Management
- Narrative Thinking
- Port Operations
- Principles of Shipping Practice
- Ship Operations

SECOND YEAR
- Business Data Analytics
- Communication for Project Effectiveness (CPF)
- Design Thinking for Social Innovation
- Elective 1
- Enhanced Internship
- Financial Management in Shipping
- Law of Carriage of Goods by Sea
- Port Agency

THIRD YEAR
- Communicating for Professional Effectiveness (CPF)
- Electronic Commerce
- Elective 2
- Elective 3
- Maritime Engineering Knowledge
- Marine Insurance
- Maritime Law
- Maritime 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, life-long learners, which are essential in today’s volatile and changing societal as well as occupational landscape.

For a list of electives offered, please visit www.sp.edu.sg

CAREER OPTIONS
On 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$2000

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

With our strong collaboration with foreign universities, you may gain direct entry into a number of maritime programmes offered by overseas universities such as into the third-year of a four-year programme at Chung-Ang University in South Korea or the State University of New York (SUNY) Maritime College in the United States for graduates who obtain more than 3.0 GPA. They may also gain direct entry into the third final year of the Plymouth University or Southampton Solent University in the United Kingdom maritime degree programme.

SP’s DMB course was my first choice as I knew that I will be learning in a robust and dynamic environment. The knowledgeable and engaging lecturers shared their rich experiences and exposed us to the realities of the Maritime industry. It has truly been an enriching time at SP for me.

Aaron Goh
DMB Gold Medalist and Chua Chor Teck Gold Medal winner. Class of 2015, who graduated with a maritime degree at the University of Plymouth (UK) under the MaritimeONE scholarship.
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,” Mr. Kitack Lim, Secretary-General, International Maritime Organisation.

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.

**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 pay-out 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

**ENTRY REQUIREMENTS**

**Aggregate Type: ELR2B2-C**

**SUBJECT**
- English Language
- Mathematics (Elementary/Additional)
- Any two other subjects

**GRADE**
- 1 - 7
- 1 - 6

**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 Electronic
- Food & Nutrition
- Physics
- Science (Chemistry, Biology)
- Science (Physics, Biology)
- Science (Physics, Chemistry)

- Applicants must ensure that they have good eyesight (i.e. visual acuity unaided of 6/60 in both eyes or with visual aids of 6/6 in one eye and at least 6/6 in the other eye). Applicants must also prove having passed the Maritime and Port Authority of Singapore (MPA) Short Sea Training which is conducted at the Singapore Polytechnic Optometry Centre or by General Practitioners.
- All applicants must pass the colour vision test as per The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).
- All applicants must be sponsored by a Singapore shipping company. 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.
**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**
- Basic Tanker Training
- Design Thinking for Social Innovation
- Electronic Navigation Systems 1
- Elective 1
- Mathematics 2

**THIRD YEAR**
- Cargo Work & ISM
- Coastal Navigation
- Electronic Navigation Systems 2

**Phase Two B & Three A**

During this phase, candidates undergo shipboard training with a SCTW approved Training & Assessment Record Book and follow a distance learning programme. Candidates are required to complete a total of 12 months sea service to proceed to the Diploma in Nautical Studies Phase 3B and to enrol for the Class 3 Certificate of Competency examination.

**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.

For a list of electives offered, please visit [www.sp.edu.sg](http://www.sp.edu.sg)

---

**FURTHER STUDIES**

America, Europe, China and the Middle East are some of the countries I visited during my one-year internship with international shipping firm APL. As a member of the ship’s crew, I learnt to maintain a ship and navigate the seas. It has been a challenging yet enriching experience that I will never forget.

Amelia Sue Pickering
DNS Gold Medallist, Class of 2017

---

**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. If you are considering a sea career, you can pursue a Bachelor degree in Navigation & Maritime Science offered by the University of Plymouth (UK).
For more information regarding entry requirements and course information, please contact:

**Singapore Maritime Academy**
Tel: (65) 6775 1133  
Fax: (65) 6772 1958  
Email: contactus@sp.edu.sg  
Website: www.sp.edu.sg/sma

For the latest updates on Singapore Polytechnic, follow us on:

- @singaporepoly
- @singaporepoly
- @singaporepoly
- fb.com/singaporepolytechnic
- youtube.com/singaporepolytechnic

The polytechnic reserves the right to alter the information in this publication. Information is correct as of 1 April 2019.