

# 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

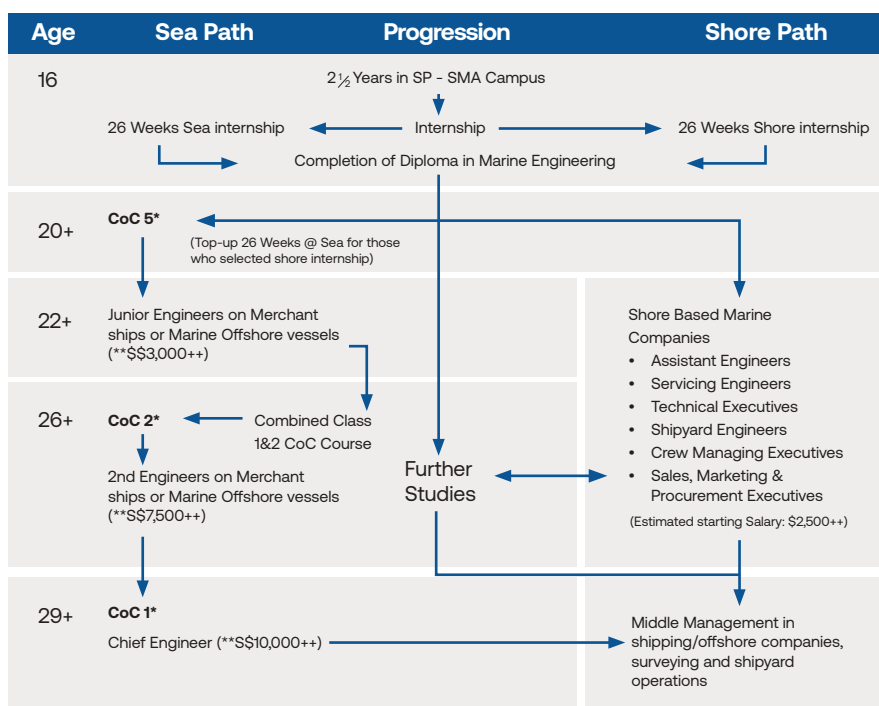
Range of Net 2023 JAE ELR2B2: 7 – 26  
Aggregate Type: ELR2B2-C

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.*

