

THE NATIONAL SEAFOOD INDUSTRY TRAINING PACKAGE SFI 00 INCORPORATING

CERTIFICATE OF COMPETENCY AS Marine Engine Driver (Motor) Grade 2 MED II

The Northern Territory Marine Act places certain certification requirements upon persons wishing to take charge of the propulsion machinery on a seagoing vessel operating in Northern Territory Waters.

All enquiries regarding applications and eligibility for persons wishing to apply for and/or undertake the examination for a Certificate of Competency as Marine Engine Driver (Motor) Grade 2 should be referred to the Marine Safety Branch, Dept of Infrastructure Planning & Environment on the 1st floor, 45 Mitchell St., Darwin. Phone 08 8999 5285 or fax 08 8999 5300.

The Certificate

The MED 2 certificate of competency allows the holder:

- to take charge of the propulsion machinery on a seagoing vessel:

- of less than 500 kw operating OFFSHORE
- of less than 750 kw operating INSHORE

- to be second in charge of the machinery on a seagoing vessel:

- of less than 1500 kw operating OFFSHORE

OFFSHORE means within a limit of 200 nautical miles to seaward.

INSHORE means within a limit of 15 nautical miles to seaward.

Participants will be familiarised with the requirement of the examinations conducted by Marine Safety Branch. Participants are expected to already be proficient in Engineering duties as prescribed in the sea time assessment rules by Marine Safety Branch.

NOTE: THIS IS NOT A COURSE OR TRAINING PROGRAM. IT IS DESIGNED TO PREPARE CANDIDATES FOR THE MARINE QUALIFICATION (COC) ISSUED BY THE NT MARINE SAFETY AGENCY. CANDIDATES WHO QUALIFY FOR EXAMINATIONS ARE EXPECTED TO ALREADY HAVE MARINE ENGINEERING KNOWLEDGE, SKILLS AND APPLICATION ADUCED FROM THE RELEVANT SEA-TIME ASSESSMENT.

This preparatory program is not suitable for beginners and those without previous work experience with vessel's machineries.

Prerequisites

Documentary evidence of approved service in an engineering capacity on vessels of not less than 150kw propulsion power must be presented to and assessed by Marine Safety Branch for assessment. This assessment is essential to determine your eligibility.

Below are guidelines ONLY to approved service periods:

- No previous training 12 months
- Approved Trade Certificate 3 months
- MED 3 6 months

The Program

The MED 2 program is **NOT a course**. It is a series of tutorials and runs for 10 (ten) days full-time in preparation for examination by Marine Safety Branch, by appointment. The pre-requisite short course below is to be completed and competencies achieved prior to eligibility for issuance of a certificate of competency by the Marine Safety Branch:

ELEMENTS OF SHIPBOARD SAFETY:

- Senior First Aid 2 days
- Fire Fighting 1 day
- Survival at Sea 1 day

This short course incorporates the industry Occupation Health & Safety competencies. Students who are not enrolled in any of SMIT's standard course, e.g. Cert. II in Seafood Industry (Fishing Operations) are required to provide evidence of completion or currency in the industry OHS unit of competency (TDMMF701A Observe Safe Working Practice).

The Syllabus (USL Code)

- (a) Operation and maintenance of marine internal combustion engines;
- (b) Care and operation of lubricating oil and cooling systems;
- (c) Pumps and arrangements of bilge and seawater piping systems. Dangers associated with back flooding;
- (d) Attention to steering gears, in particular hydraulic systems and associated pipelines. Emergency steering;
- (e) Arrangements of fuel oil piping systems and filters. Fuel tank ventilation, filling and draining. Tank gauging,; knowledge of effect of slack tanks on stability;
- (f) Oil and grease lubrication;
- (g) Care of electrical systems and batteries. Series and parallel operation. Safety procedures when working on low and medium voltage AC and DC systems: protection devices;
- (h) Dangers of LP gas and liquid fuels; refrigeration safety;
- (i) Precautions against fire and explosion. Methods of dealing with fires; extinguishers, fire pumps, fire mains and hoses, nozzles and sprays, fixed installations, closing appliances, remote shut-offs (***candidates are expected to already have this competency per ESS and seetime assessed***);
- (j) Items for inspection on slipway or in dry-dock;
- (k) Maintenance and recognition of deterioration or various items;
- (l) Preparing for sea. Securing vessel after voyage;
- (m) Methods of propulsion reversal;
- (n) Calculations dealing with consumption of fuel. Speed and range of vessels.

The Training Company

Seafood & Maritime Industries Training is a non-profit, industry based provider established in 1995. It provides a range of training courses as well as being involved in national projects for the development of maritime competencies & recognition.

Facilitators, trainers/tutors are highly experienced and qualified seafarers from both national and international fishing and maritime industries.

Seafood & Maritime Industries Training Ltd - MED II Tutorial

Errors & Omissions Exempt

Materials Required:

- Drawing instruments including -
 - 1 x pair drawing compasses
 - 1 x ruler
- 1 x eraser
- 2B pencil(s) plus sharpener
- Blue or black biro/pen
- 1 x note book
- 1 x calculator (non programmable)

Recommended or Suggested References:

- Student Learning Guide & Assessment Guide
631 Marine Diesel Operations (MED II)
- Student Learning Guide & Assessment Guide
632 Marine Auxiliary Equipment & Systems operation (MED II)
- Student Learning Guide & Assessment Guide
633 Marine Engineering Operational Procedures & Safety (MED II)

**DARWIN SHIPSTORES, Fisherman's Wharf
Frances Bay Drive. Ph: 8981 7322**

Proposed Timetable:

Week 1

Time	Mon	Tues	Wed	Thurs	Fri	Sat
0830	Introduction ML201A ME101A Marine internal combustion engines MR2701A	Steering gears, emergency steering, hydraulic systems onboard a vessel MR2801A	Oil and grease lubrication MR2701A MR2801A MEM 18.1A MEM 18.2A	Electrical Systems and Batteries MR2901A	LP gas and liquid fuels & refuelling gases Precautions against fire and explosion MR5402A	Revision as required
1200	LUNCH					
1700	Cooling systems Pumps, bilge, seawater piping systems MR2801A	Fuel tanks Operate & Manage fuel oil systems. Fuel storage and handling systems MR5402A MU502A	REVISION	Electrical Systems and Batteries. Calculate voltage, amp, resistance, watts MR2901A	Assessment (Supervised Written Test)	
	ASSIGNMENTS					

Week 2

Time	Mon	Tues	Wed	Thurs	Fri	Sat
0830	Items for inspection on slipway, dry dock MB1901A	Preparing for sea. Securing vessel after voyage MB2901A	Methods of propulsion reversal	Calculations dealing with consumption of fuel MF4001A	Assessment (Supervised Written Test)	Revision as required
1200	LUNCH					
1700	Maintenance and recognition of deterioration of various items MB2901A	Work Team Communication ME101A Marine pollution prevention MU502A	Operation of water jet propulsion unit Outboard Motor MR2701A	Electrical Systems 240V 440V Safety MR2901A	Oral Examination Preparation for COC	
	ASSIGNMENTS					

Certificate III in Seafood Industry (Fishing Operations - Marine Engine Driver II) SFI32204 Units of Competency

- TDMMB1901A Carry out basic hull servicing
- TDMMR1901A Safely handle & stow explosive & flammable materials
- TDMMU502A Ensure compliance with environmental considerations
- TDMMR5402A Carry out refuelling & fuel transfer operations
- TDMMB2901A Recognise & correct deteriorated fittings & machinery in small domestic vessel
- TDMMF4001A Carry out basic operational engineering calculations
- TDMMR2701A Operate & maintain marine internal combustion engines on vessels of 750KW propulsion power or less
- TDMMR2801A Operate & maintain auxiliary systems on vessels up to 750KW propulsion power
- TDMMR2901A Operate & maintain marine low & medium voltage electrical systems
- MEM 18.1A Use hand tools
- MEM 18.2A Use power tools/hand held operations
- TDMME101A Understand orders & be understood in relation to shipboard orders
- TDMML201A Contribute to effective human relationship on board a vessel

Certificate of Competency as Marine Engine Driver (Motor) Grade 2 - MED II

Industry and individuals have indicated a need for MED 2 - Marine Engine Driver (Motor) Grade II Certificate of Competency (licence). This program complies with Units of Competency specified within Certificate III in Seafood Industry (Fishing Operations – Marine Engine Drive II) SFI32204.

This is not a government funded course therefore a minimum fee for service is applied. As a result there needs to be enough guaranteed participants for delivery to be financially feasible. (minimum of 6 people)

VENUE:	Seafood & Maritime Industries Training Centre, Level 1 Darwin Shipstores Building, Fishermans Wharf, Darwin.
COST:	\$800.00 fee for service. (excludes Elements of Shipboard Safety and Government assessment fees)
DURATION:	10 days full-time from 0800 to 1630hrs with assessment assignments, consisting of tests & projects
PROPOSED DATES:	
EXAMINATIONS:	Marine Safety Branch Examinations by appointment
RECOGNITION:	Nationally Recognised Marine Qualification by State & Territory marine jurisdictions.

Please contact us on 08 8981 0495 if you are interested. There will be a brief candidate interview to assess area and level of knowledge. Specialists are on hand to assist in the industry-based language, literacy and numeracy fields.

SMIT IS AN EQUAL OPPORTUNITY ORGANISATION

This organisation is not responsible for any errors, omissions or exemptions. All candidates/Students are to seek final certification of Governmental requirement/regulations from Marine Safety Branch/DIPE.

**ALL FEES MUST BE PAID IN FULL ONE WEEK PRIOR TO THE COURSE
COMMENCEMENT.**
PLEASE NOTE THAT WE ONLY ACCEPT CASH OR CHEQUE FOR TUITION FEE.
THANK YOU.