



RYA Yachtmaster Offshore **Fast Track**





#theoceaniscalling

RYA Yachtmaster Offshore

- Navigate your way to success

Master the ocean and choose your own path with the
RYA Yachtmaster Offshore Certificate of Competence.

Over three months you will develop and hone your knowledge and skills in a variety of classroom and on water courses and settings, culminating in the Yachtmaster Offshore Exam designed to test your abilities and confirm your competency at the level of Yachtmaster Offshore.

Take your new found knowledge, confidence and abilities and choose to cruise the worlds oceans on your own vessel privately, or go and work around the world on commercial sail vessels living a life of luxury and earning a great income.





Training Process & Course Syllabus (next pages)



Essential Navigation and Seamanship (online)

Course Syllabus

1. Charts Publications and Terms

- Basic terms
- Chart overview
- Introduction to chart datum and depths

2. Buoyage

- Lateral buoys
- Cardinal buoys
- Where to find information

3. Navigation

- Plotting a position
- Measuring distance and bearing
- Position fix
- Heading

4. Safety

- Personal and boat-safety equipment
- Safety procedures and briefing
- Communications
- Engine checks
- Rescue procedures

5. Anchoring

- Where to anchor
- How to anchor

6. Tides

- Tidal streams
- Tidal heights

7. Electronic Navigation

- GNSS termsGNSS use
- Using waypoints

8. Rules of the Road

- Risk of collision
- Who gives way

9. Weather Forecasts

- Sources of forecast
- Terms used in forecast

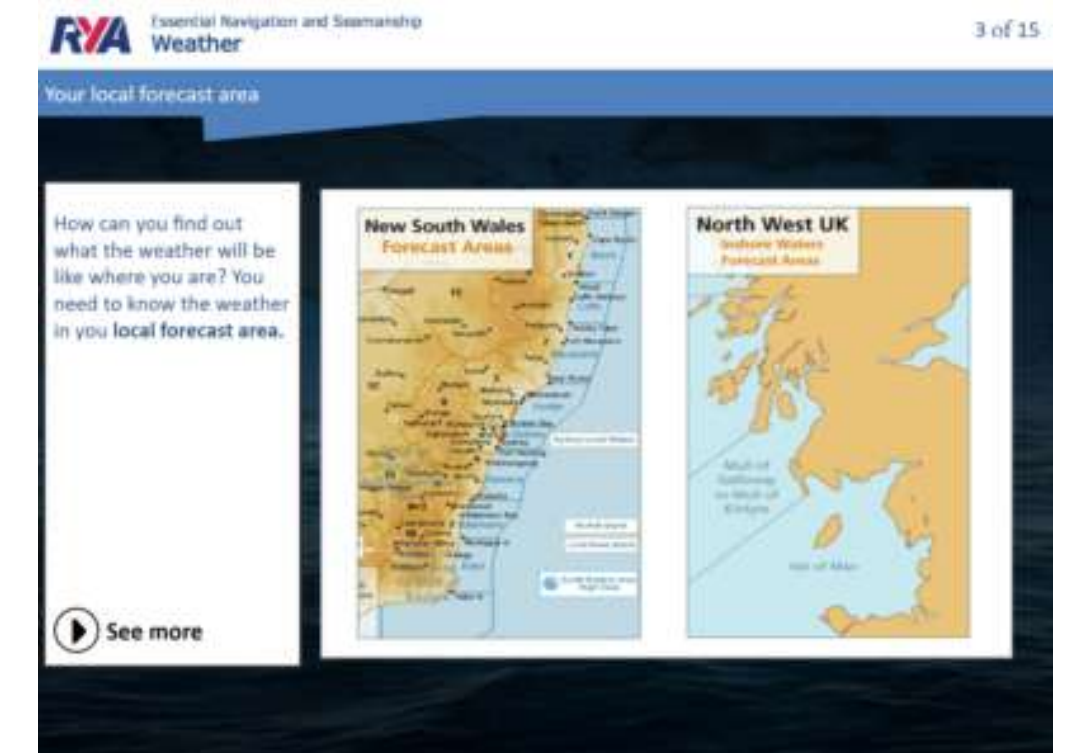
10. Pilotage

- Harbour information
- Transits
- Pilotage plan

11. Passage Planning

- SOLAS V requirements
- Pre-planning
- Chart choice

The Essential Navigation and Seamanship course provides an introduction to the basic skills required before taking a small boat to sea or taking an active part in running a boat.



RYA Competent Crew

Course Syllabus and Outcomes

1. Sea Terms and Parts of a Boat, her Rigging and Sails

- Understands orders given concerning the sailing and day-to-day running of the boat

2. Sail Handling

- Can bend on, set, reef and handle sails
- Can use sheets and halyards and their associated winches

3. Ropework

- Can handle ropes, including coiling, stowing, securing to cleats and single and double bollards
- Can handle warps
- Can tie the following knots and knows their correct use: figure-of eight; clove hitch; bowline; round turn and two half hitches; reef knot; rolling hitch; single and double sheet bend.

4. Safety on board

- Understands fire precautions and fighting
 - What the particular hazards are, and actions to be taken to prevent and in the event of fire.
- Understands on-board alarms, including gas and carbon monoxide

5. Personal Safety Equipment

- Understands how to comply with guidance for the wearing of safety harnesses, life jackets and personal buoyancy aids

6. Man Overboard

- Understands the action to be taken to recover a man overboard
- Understands how cold-water shock can affect a casualty in the water

7. Emergency Equipment

- Understands how to launch and board a life raft
- Understands distress flares and knows when they should be used

8. Manners and Customs

- Understands accepted practice with regard to: use of burgees and ensigns; prevention of unnecessary noise or disturbance in harbour including courtesies to other berthed craft
- Understands the responsibility of the boating community to protect the environment

9. Rules of the Road

- Can keep an efficient lookout at sea

10. Tender Usage

- Understands the loading rules and complies with them
- Understands the use and importance of a kill cord
- Understands safety equipment for tenders
- Can handle a dinghy under oars

11. Meteorology

- Knowledge of The Beaufort Scale
- Understands the forecasting services and where to obtain a forecast

12. Seasickness

- Understands how to reduce the effects of seasickness (e.g. steer, look at the horizon, take anti-seasickness tablets before going afloat)

The Competent Crew course introduces the complete beginner to cruising. You will learn about personal safety, seamanship and helmsmanship to the level required to be a useful member of the crew of a cruising yacht.



Sailing/Helming Skills Course

Course Syllabus

The course develops both your theory and practical skills to confidently take control on the helm.

Practical

- How to helm the yacht on all points of sail
- How to set the sails and hunt the breeze
- Better helming techniques whilst tacking & gybing
- Understanding wind & weather
- Recognize relative direction to the wind & where it's coming from
- Deeper understanding of the Rules of the Road
- Better understanding of the Buoyage system
- More knots, clove hitch, single and double sheet bends & rope handling
- How to use Winches plus jammers & cleats correctly



RYA Day Skipper Shorebased (Theory)

Course Syllabus

1. Nautical Terms

- Parts of a boat and hull
- General nautical terminology

2. Ropework

- Knowledge of the properties of synthetic ropes in common use

3. Anchorwork

- Characteristics of different types of anchor
- Factors to take into account when anchoring

4. Safety

- Knowledge of the safety equipment to be carried, its stowage and use
- Fire precautions and firefighting
- Use of personal safety equipment, harnesses and life jackets
- Ability to send a distress signal by VHF radio
- Basic knowledge of rescue procedures including helicopter rescue
- Stability

5. International Regulations for Preventing Collisions at Sea

- Steering and sailing rules (5, 7, 8, 9, 10 and 12-19)
- General rules (all other rules)

6. Definition of Position, Course and Speed

- Latitude and longitude
- Knowledge of standard navigational terms
- True bearings and courses
- The knot

7. Navigational Charts and Publications

- Information shown on charts, chart symbols and representation of direction and distance
- Navigational publications in common use
- Chart correction

8. Navigational Drawing Instruments

- Use of parallel rulers, dividers and proprietary plotting instruments

9. Compass

- Application of variation
- Awareness of deviation and its causes
- Use of hand-bearing compass

10. Chartwork and Navigation - Traditional and Electronic

- Dead reckoning and estimated position including an awareness of leeway
- Techniques of visual fixing
- Use of GNSS and chart plotters for position fixing
- Use of waypoints to fix position
- Course to steer

11. Tides and Tidal Streams

- Tidal definitions, levels and datum
- Tide tables
- Use of Admiralty method of determining tidal height at standard port
- Awareness of corrections for secondary ports
- Use of tidal diamonds and tidal stream atlases for chartwork

12. Visual Aids to Navigation

- Lighthouses and beacons, light characteristics

13. Meteorology

- Sources of broadcast meteorological information
- Knowledge of terms used in shipping forecasts, including the Beaufort Scale, and their significance to small craft
- Basic knowledge of highs, lows and fronts

14. Passage Planning

- Preparation of a navigational plan for short coastal passages
- Meteorological considerations in planning short coastal passages
- Use of an visual confirmation of waypoints on passage
- Importance of confirmation of position by an independent source
- Keeping a navigational record

15. Navigation in Restricted Visibility

- Precautions to be taken in, and limitations imposed by, fog

16. Pilotage

- Use of transits, leading lines and clearing lines
- IALA system of buoyage (Regions A & B)
- Use of sailing directions
- Pilotage plans and harbour entry

17. Marine Environment

- Responsibility for avoiding pollution and protecting the marine environment

A comprehensive introduction to chartwork, navigation, meteorology and the basics of seamanship for Competent Crew. You will find this course invaluable if you want to learn how to start making decisions on board.



RYA Day Skipper Practical

Course Syllabus and Outcomes

1. Preparation for Sea

- Knowledge of basic stability and buoyancy for small vessels
- Can prepare a cruising vessel for sea, including engine checks, securing and stowage of all gear on deck and below
- Can select sails based on conditions

2. Deck Work

- Can prepare an anchor, mooring warps and take charge on deck when mooring alongside, coming to a buoy, anchoring, weighing anchor and slipping from a buoy or an alongside berth
- Can reef, shake out reefs and change sails to suit prevailing conditions

3. Navigation

- Knowledge of the uses and limitations of AIS
- Understands working up dead reckoning (DR) and estimated positing (EP)
- Understands use of a lead line, or similar
- Understands how to work out a course to steer to allow for set, drift and leeway
- Can take and plot visual fixes
- Can use electronic navigation equipment for position fixing
- Can use secondary means of position fixing
- Can estimate tidal heights and tidal streams
- Can use waypoints and routes
- Can use knowledge of IALA buoyage
- Can maintain navigational records
- Can use an echo sounder

4. Pilotage

- Can prepare and execute a pilotage plan for entry into, or departure from, harbour
- Can use leading and clearing lines
- Can use transits and soundings as aids to pilotage

5. Meteorology

- Understands how to interpret shipping forecasts and use a barometer as a forecasting aid
- Can source forecast information

6. Rules of the Road

- Can demonstrate suitable awareness of other water users boat at sea and in close-quarter manoeuvring
- Can demonstrate a practical understanding of the International Regulations for Preventing Collisions at Sea

7. Maintenance and Repair Work

- Knowledge of the properties and uses of common synthetic-fibre ropes
- Understands maintenance tasks and is able to carry them out

8. Engines

- Understands the need for periodic maintenance checks on engines and electrical installations
- Understands requirements for tool kits, spares and lubricants
- Understands the locations of filters and bleed points for fuel
- Understands the tension of drive belts and how to adjust or replace them
- Can carry out checks before starting, while running and after stopping
- Can clean water filters and knows the location of impellers
- Can estimate fuel consumption at various speeds and knows the effects of fouling
- Can carry out basic troubleshooting

9. Victualling

- Understands how to victual a cruising vessel appropriately for the planned passage

10. Emergency Situations

- Understands how to issue distress signals by all available means, including distress flares and a VHF radio, in an emergency
- Understands how to use a life raft, and how to secure a tow
- Understands rescue procedures including helicopter rescue
- Understands the effects of cold-water shock on a casualty in the water
- Understands the aftercare requirements of a casualty who has been in the water
- Can carry out the correct action as skipper for the recovery of a man overboard

11. Handling under Power

- Knowledge of effects of waves on boat handling and crew comfort
- Understands differing styles of hull and propulsion systems
- Understands how to moor and leave a bow/stern-to mooring
- Understands how to identify and take into account wind and current conditions when planning and executing manoeuvres
- Can carry out the following manoeuvres under power: steer a straight course; turn in a confined space; anchor at a pre-determined position; berth alongside; leave an alongside berth; pick up a mooring buoy.

12. Yacht Handling under Sail

- Understands the characteristics of different types of keel
- Understands how to identify and take into account wind and current conditions when planning and executing manoeuvres and choosing appropriate sail plan
- Can bring a boat safely to and from a mooring buoy, and can anchor
- Can steer and trim sails effectively on all points of sailing

13. Passage-making

- Knowledge of marina locks
- Understands the practical benefits and limitations of a chart plotter or GNSS
- Can plan and make a coastal passage, taking into account relevant navigational hazards and limitations imposed by the type of boat and the strength of the crew.

14. Night Cruising

- Has experienced cruising at night, including leaving and entering harbour
- Understands special considerations for pilotage plans, keeping a lookout and identifying marks by night

The Day Skipper course is taught on board a cruising yacht. You will learn pilotage, navigation, seamanship and boat handling to the standard required to skipper a small cruising yacht safely by day in waters with which you are familiar.



Radio

Course Syllabus

The course topics include:

- The basics of radio operation
- The correct frequencies (channels) to be used
- Distress, emergency and medical assistance procedures
- Making ship-to-shore telephone calls
- Digital Selective Calling (DSC) using simulators
- Global Maritime Distress and Safety System (GMDSS)
- Emergency Position Indicating Radio Beacons (EPIRB)
- Search and Rescue (SART)

The radio course is for anyone who wishes to use fixed or handheld marine VHF radio. A radio is an important piece of safety equipment on board and it is vital to understand the correct procedures.



Safety and Sea Survival

Course Syllabus

1. Preparation for Sea Survival

- Survival difficulties
- Survival requirements
- Equipment available
- Actions prior to abandonment

2. Life Jackets and Life Rafts

- Life Jackets
 - Design and construction
 - Correct donning procedure
 - Purpose and use of life jackets
- Safety harness:
 - Purpose and use
- Life rafts:
 - Stowage and containment on board
 - Types, design and construction
 - Launching
 - Abandoning the vessel and boarding the life raft
 - Righting a capsized life raft
 - Life raft equipment
 - Initial actions to be taken in a life raft

3. Principles of Survival

- Methods to increase chances of survival
- Signs, symptoms and treatment of hypothermia
- Symptoms; method of treatment for sunburn, heat exhaustion and heatstroke
- Survival routines to aid location
- Correct use of pyrotechnics and other location aids
- Water rationing - procedures
- Dehydration and preventative measures
- Food rationing
- Sources of food

4. Survival-craft Ailments

5. Raft Management

6. Search and Rescue

- Rescue by helicopter or vessel
- The role of national Search and Rescue (SAR) organisations
- International SAR organisations
- Other services

The aim of this course is to give an understanding of how to use the safety equipment carried on small boats, including a practical session in launching and boarding a life raft.



RYA Diesel Engine Course Syllabus

1. Introduction

- Principles of the diesel engine

2. The Four-stroke Cycle

- Naturally aspirated engines
- Turbocharging
- Intercooling/aftercooling

3. The Fuel System

- The basic system
- The tank
- The water-separating pre-filter
- Fuel lift pump
- The engine fine filter
- Injection pump
- Injectors
- Bleeding the system

4. The Cooling System

- Seawater cooling
- Freshwater cooling
- Temperature control
- The thermostat

5. The Air System

- The airway in
- The airway out

6. Engine Electrical Systems

- The basic system
- Battery capacity and care
- Drive belts
- The alternator

7. Spares and Tool Requirements

- Basic spares and tools

8. The Importance of Winterisation and Servicing

- Engine lubrication
- Transmission lubrication
- Winterisation and servicing
- Service Schedule

9. Fault Finding

The aim of the course is to give an awareness of the main systems of a marine diesel engine and the ability to take simple measures to prevent mechanical breakdown at sea and rectify defects which do not require workshop support



RADAR

Course Syllabus

1. Basic Understanding of Radar Wave Propagation

- Conditions giving rise to abnormal propagation

2. Radar Set Components

- Function and correct use of controls
- Correct setting-up procedure

3. Target Definition and Discrimination

- Spot size, pulse length and beam width
- Target characteristics, size, shape, material
- False echoes
- Shadow sectors, shadow diagram

4. Radar Reflectors

- Passive and active

Radar is probably the most versatile of all electronic navigation aids, but the best results are only obtained when you know how to use all the functions correctly.

The RADAR course is designed to give you an understanding of RADAR as an aid to navigation and collision avoidance.



Mile and Skill Building

The Mile and Skill Building passages are strategically placed throughout the course to enable candidates to practice the recently learnt skills on the water while building miles and experience in different conditions on the way to the Yachtmaster Offshore exam.

During these passages you will ensure you skipper at least five qualifying passages over 60 nautical miles in length while choosing your passage details and destination.

RYA Coastal Skipper and Yachtmaster Offshore Theory

Course Syllabus

This is an advanced course in navigation and meteorology. The assumed level of knowledge before starting this course is the Day Skipper Shorebased Course.

1. Position

- Dead reckoning and estimated positioning
- Satellite-derived position
- Use of waypoints to fix position
- Radar fixes
- Techniques of visual fixing
- Fixes using a mixture of position lines
- Relative accuracy of different methods of position fixing
- Areas of uncertainty

2. The Magnetic Compass

- Allowance for variation
- Change of variation with time and position
- Causes of deviation
- Compass checks for deviation, but not correction
- Allowance for deviation
- Different types of compass

3. Tides

- Causes of tides - springs and neaps
- Tide tables - sources
- Tidal levels and datum
- Standard and secondary ports
- Tidal anomalies (Solent, etc.)

4. Tidal Streams

- Sources of tidal information
- Tidal stream information in sailing directions and yachtsmen's almanacs
- Allowance for tidal streams in computing a course to steer
- Tide rips, overfalls and races
- Tidal observation buoys, beacons etc.

5. Buoyage

- IALA system buoyage in Regions A and B
- Limitations of buoys as navigational aids

6. Lights

- Characteristics
- Ranges - visual, luminous and nominal
- Rising and dipping distances
- Light lists

7. Pilotage

- Harbour regulations and control signals
- Methods of pre-planning
- Clearing lines
- Use of soundings
- Transits and leading lines

8. GNSS and Chart Plotters

- Principles of operation and limitations of use
- Raster and vector charts, ECDIS and ENC's
- Datum
- The importance of secondary means of position fixing via an independent source and keeping a separate record of position.
- The importance of paper charts

9. Echo Sounders

- Principles of operation and limitations of use

10. Logs (Speed and Distance Measuring)

- Principles of operation and limitations of use

11. Deck Log

- The importance of the log as a yacht's official document
- Layout of log, hourly and occasional entries

12. Meteorology

- Basic terms, the Beaufort Scale
- Air masses
- Cloud types
- Weather patterns associated with pressure and frontal systems
- Sources of weather forecasts
- Ability to interpret a shipping forecast, weatherfax and weather satellite information
- Land and sea breezes
- Sea fog
- Use of a barometer as a forecasting aid

13. Rules of the Road

- A sound knowledge of the International Regulations for Preventing Collisions at Sea, except Annexes 1 and 3

14. Safety at Sea

- Personal safety, use of life jackets, safety harnesses and lifelines
- Fire prevention and firefighting
- Distress signals
- Coastguard and Boat Safety Scheme
- Preparation for heavy weather
- Life rafts and helicopter rescue
- Understanding the capabilities of vessel and basic knowledge of stability

15. Navigation in Restricted Visibility

- Precautions to be taken in fog
- Limitations to safe navigation imposed by fog
- Navigation strategy in poor visibility

16. Passage Planning

- Preparation of charts and notebook for route planning and for use on passage at sea
- Customs regulations as they apply to yachts
- Routine for navigating in coastal waters
- Strategy for course laying
- Use of and visual confirmation of waypoints and routes
- Use of weather forecast information for passage planning strategy
- Sources of local and national regulations

17. Marine Environment

- The responsibility to minimise pollution and protect the marine environment.

RYA Coastal Skipper Practical

Course Syllabus and Outcomes

1. Passage Planning

- Knowledge of the effects of fouling on boat speed and fuel consumption
- Understands fuel consumption at different speeds and can calculate fuel required for passage, including reserve
- Understands customs procedures
- Understands stability
- Can plan a coastal passage, taking into consideration the capability of the vessel, navigation, victualling, weather, ports of refuge, tidal heights and tidal streams, publications required, and strategy

2. Preparations for Sea

- Understands what safety equipment is required for offshore passages
- Can prepare a cruising vessel for sea, including stowage, safety briefing, watchkeeping, delegating responsibilities, equipment, and engine checks

3. Pilotage

- Can prepare a pilotage plan, taking into consideration soundings, transits, clearing bearings, buoyage, port or harbour regulations, and tidal factors
- Can pilot a cruising vessel by day and at night

4. Passage-making and Ability as Skipper

- Understands the practical uses of integrated electronic aids to navigation, including AIS, radar, electronic navigation charts (ENCs), and raster navigational charts (RNCs)
- Can take charge of a yacht and direct the crew
- Can organise the navigation, deck work and domestic duties of a cruising vessel on passage
- Can be aware of the significance of meteorological trends
- Can be aware of crew welfare on passage
- Can use electronic navigational equipment for planning and undertaking a passage, including the use of waypoints and routes

5. Yacht Handling Under Power

- Understands how to identify and take into account wind and current conditions when planning and executing manoeuvres
- Can control the cruising vessel effectively in a confined space under power, including all berthing and unberthing situations.
- Can pick up a mooring bow- or stern-to
- Can avoid excessive use of power

6. Yacht Handling under Sail

- Understands how to identify and take into account wind and current conditions when planning and executing manoeuvres
- Can use the sails to control the yacht in a confined space
- Can consistently pick up a mooring
- Can sail efficiently on all points of sail, including downwind techniques

7. Adverse Weather Conditions

- Understands how to handle a cruising vessel in strong winds
- Understands general conduct in restricted visibility

8. Emergency Situations

- Understands the actions to be taken when abandoning to a life raft, and during helicopter and lifeboat rescues
- Understands how to carry out the aftercare requirements on a casualty who has been in the water
- Can describe to a crew member the effects of cold-water shock on a casualty who has been in the water
- Can recover a man overboard under power
- Can recover a man overboard under sail

The aim of the course is to teach the skills and techniques required to skipper a cruising yacht safely on coastal and offshore passages by day and night, with significant night hours and watch-keeping rotas.



RYA Yachtmaster Ocean Theory

Course Syllabus and Outcomes

This is a course in astro navigation and worldwide meteorology, which also reveals the mysteries of the sextant.



1. The Earth and the Celestial Sphere

- The definition of observer's zenith and position of a heavenly body in terms of latitude, longitude, Greenwich Hour Angle (GHA) and declination
- Right angle relationships, latitude and co-latitude, declination and polar distance
- The relationship between GHA, longitude and Local Hour Angle (LHA)
- Tabulation of declination in nautical almanac
- The rate of increase of hour angle with time

2. The PZX Triangle

- The tabulated components of the triangle, LHA, co-latitude and polar distance
- The calculable components, zenith distance and azimuth
- The relationship between zenith distance and azimuth
- Introduction to the tabular method of solution in the Air Navigation Tables and the basic sight form
- The use of calculations for the solution of the PZX triangle

3. The Sextant

- Practical guide to the use and care of a sextant at sea
- Conversion of sextant altitude to true altitude
- Application of dip, index error and refraction
- Correction of side error, perpendicularity, index error and collimation error

4. Measurement of Time

- Definition of, and relationship between, Universal Time (UT), Local Mean Time (LMT), standard time and zone time
- Rating of chronometers and watches

5. Meridian Altitudes

- Forecasting time of meridian altitude
- Reduction of meridian altitude sights

6. Sun, Star and other Sights

- Reduction and plotting of sun sights using Air Navigation Tables
- Awareness of use of a calculator for sight reduction
- The plotting of a sun-run-sun meridian altitude
- Awareness of the reduction and plotting of sights obtained from stars, moon and planets

7. Compass Checking

- Use of amplitude and azimuth tables systems and/or calculator

8. Satellite Navigation Systems

- Principles and limitation of use of all systems

9. Great Circle Sailing

- Comparison of rhumb lines and great circles
- Vertices and composite tracks
- The computation of a series of rhumb lines approximating to a great circle by use of gnomonic and Mercator projections

10. Meteorology

- General pressure distribution and prevailing winds over the oceans of the world
- Tropical revolving storms, seasonal occurrences and forecasting by observations

11. Passage Planning

- Publications available to assist with planning of long passages (routeing charts, ocean passages of the world and other publications)
- Preparation for ocean passage including survival equipment, victualling, water and fuel management, chafe protection, spares and maintenance

12. Passage-making

- Navigational routine
- Watchkeeping
- Crew management

13. Communications

- Satellite and terrestrial systems
- Weather information

Course Information and Booking

Find additional information about the course and the course booking by going to:
<https://learn2sail.com.au/sailing-course/rya-yachtmaster-fast-track/>

Get more information or talk to one of our friendly team by:

- Calling from Australia: 0499 TO SAIL (0499 86 7245)
- Calling from Overseas +61 7 5478 2299
- Emailing: sailing@learn2sail.com.au