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# STABILITY BY DISTANCE - BASIC
# DISTANCE LEARNING

**DURATION:** Self-paced

**COURSE DATES:**
Course Fee | Online | $1,440

Teaches the necessary basic understanding of a ship's stability.

## COURSE AIM

To provide a basic understanding of the fundamentals of ship stability. This involves basic mathematical principals and formulas, which are simpler to learn once you understand the principles of stability.

## CONTENT

This course covers the Law of Flotation, Load lines, Basic Transverse Stability, Small Angles of List, Free Surface Effect, Causes and correction of a Negative Stability and an introduction to the Curve of Righting Levers as well as an introduction to Longitudinal Stability.

## WHO SHOULD PARTICIPATE?

The course is ideally suited for Container Ship Planners, Ballast Operators in the oil & gas industry, stevedores or any shore based personnel dealing with ship operations where the stability requirements of the vessel are critical to a safe and successful operation, as well as seagoing staff wishing to further their knowledge in the subject.

## DURATION

This course is designed to be self-paced. Participants should aim to complete the course within 12 months of the enrolment date.

## OUTCOME

Participants who satisfactorily complete the course will be issued an AMC Basic Knowledge and Principles of a Ship's Stability certificate.

## COVID-19 VACCINATION

AMC Search (AMCS) is operating a COVID-Safe campus aligned with the protocols and procedures established by the University of Tasmania. The safety and wellbeing of staff, students and the broader community is an absolute priority for the University of Tasmania.

We strongly encourage everyone to remain up to date with their COVID-19 vaccinations but no longer require our students to be vaccinated to come to our university campuses, facilities or events.

## PAYMENT OPTIONS

Payment methods accepted:

- Register now and pay later (payment required 15 days before the course starts)
- Credit Card (online or via (03) 6324-9850)
- Bank Deposit
- Company sponsorship.

Detailed payment options are available here.

## REGISTRATION TERMS

Face to face courses

Cancellations up to 15 working days prior to the scheduled date will be accepted without penalty. Cancellations less than 15 working days will be subject to 100% cancellation fee.

AMC Search reserves the right to cancel the course 15 working days prior to the scheduled date if insufficient registrations are received. Any fees paid for cancelled courses will be refunded in full.

When making flight bookings please ensure you book on a fully refundable basis.

Online courses

Payment of course fees, or authorisation to invoice from your company, is required before access to the online learning environment is provided. Please note, it will take between 2-4 business days to provide your access to the online course if you have not studied previously with AMC Search, the Australian Maritime College or the University of Tasmania.

## COURSE STRUCTURE AND ASSESSMENT INFORMATION

The Stability by Distance Basic Course consists of:

- One Basic Knowledge and Principles of Ship's Stability Workbook, broken into 12 Sections.
- Assessments include course progress exercises (30% of total grade) and 1 exam (70% of total grade). You must achieve a grade equal to or greater than 60% across all assessment items, and no less than 50% in the progress exercises, to successfully complete the course. You have 12 months to complete the course.

On successfully completing this course you will:

- Have knowledge of the correct terminology and definitions used in relation to a ship's stability, together with providing the basic knowledge in determining a ship's size and shape.
- Understand the Archimedes Principle relating this to a ship's displacement and buoyancy values.
- Understand Loadlines and how a ship can be loaded in any water density to ensure a correct draft is achieved once it is at sea in salt water.
- Understand the basic concept of how a ship returns to the upright when heeled by an external force.
- Be able to show how the position of a ship's Centre of Gravity can be calculated when a single weight is loaded, discharged or shifted on board and how the Centre of Gravity can be determined by taking moments of all weights about the vessel's keel.
- Be able to provide information on the cause of a ship's list, and how to correct a list with a movement of weight.
- Understand how a ship's stability is adversely affected by the free movement of a liquid within the vessel, and how this reduction of stability can be calculated.
- Understand a ship's hydrostatic data, outlining how this information is derived and its correct use.
- Understand how a negative stability can occur and outline how remedial action should be taken to avoid capsizing the vessel.
- Understand Cross Curves of Stability, as the method for producing a curve of Righting Levers, to determine the vessel's Dynamical Stability.
- Understand Longitudinal Stability and the movement of the Centres of Buoyancy and Gravity as described in the 2nd dimension.