

ABOUT THE COURSE

Ship strength has seen major advances in recent years as the subject has been transformed from a collection of largely empirical rules based on past practice to the systematic application of classical structures theory and in particular thin-walled structures theory.

The course draws upon this in order to provide a solid foundation for the theory of global ship strength. Fundamental to the lecturer's approach is that if the reader is able to understand the thinking of those who have made major contributions, he/she will gain a deeper understanding of the subject.

WHO SHOULD ATTEND?

The course is intended for Engineers, Operations managers, Fabricators, Applied Scientists, and Technologists interested in ship design.

COST

The registration fee for the course will be £3000 plus VAT (UK ONLY) for a minimum of 6 people. For additional persons, it will be £600 plus VAT per person.

PAYMENT

Payments can be made by cheque (made payable to ASRANet Ltd.), cash or bank transfer. Please enquire for details.

CONTACT US

ASRANet Ltd.
Surrey, UK

W www.ASRANet.co.uk/courses

E info@asranet.co.uk

T +44 (0)7764575990

General enquiries: +44 (0)7764575990

Payment enquiries: +44 (0) 7712731566

ONLINE

In-House Course

Advanced Structural Design of ships



(A Maritime Company for Courses,
Conference and Research)

PROGRAMME (All timings are in
BST(GMT+1))

DAY 1

09:00 – 10:30 **Lecture 1:** Ship structures & Practice
ofship structural Design

Dr. Piero Caridis

10:30–11:00 *Break*

11:00 – 12:30 **Lecture 2:** Sea loads on surface ships

Dr. Piero Caridis

12:30 – 13:00 *Break*

13:00 – 14:30 **Lecture 3:** Primary loading on ships

Dr. Piero Caridis

DAY 2

09:00 – 10:30 **Lecture 4:** Hull structure: Equipment
&Cargo related loads

Dr. Piero Caridis

10:30 – 11:00 *Break*

11:00 – 12:30 **Lecture 5:** Linear response to primary
loading

Dr. Piero Caridis

12:30 – 13:00 *Break*

13:00 – 14:30 **Lecture 6:** Non-linear response
toprimary loading-1

Dr. Piero Caridis

DAY 3

09:00 – 10:30 **Lecture 7:** Non-linear response to
primary loading-2

Dr. Piero Caridis

10:30 – 11:00 *Break*

11:00– 12:30 **Lecture 8:** Design of Hull girder for
strength-1

Dr. Piero Caridis

12:30 – 13:00 *Break*

13:00 – 14:30 **Lecture 9:** Design of Hull girder for
strength-2

Dr. Piero Caridis

About the Lecturer

Dr Piero Caridis B.Sc. M.Sc. Ph.D.



Dr Caridis received his education in Greece and attended the universities of Glasgow and London (UCL) where he studied naval architecture at an undergraduate and a postgraduate level. After his studies and following completion of his military service he was employed as a marine superintendent in a shipping company in Piraeus, Greece. He was subsequently employed by Glasgow University and carried out research which led to his PhD degree in nonlinear structural mechanics. Dr Caridis then returned to Greece and joined the School of Naval Architecture and Marine Engineering of the National Technical University of Athens where he taught courses in ship strength and inspection, repair and maintenance of ship structures for thirty years. His research interests included nonlinear behaviour of ship structures, marine accident analysis, ship repair and maintenance and the history of ship structural design and ship construction. He has been a member of the International Ship and Offshore Structures Congress (ISSC) committees since 1991 and is currently a member of Committee IV.1 Design Principles and Criteria.

Dr Caridis retired from NTUA in 2016 following which he taught a number of courses at the University of Strathclyde in Glasgow, Scotland (ship structures, shipping economics and maritime business-related courses) during the period 2017- 19.

Dr Caridis has authored two texts on the mathematical theory of ship structures (in Greek) and one text dealing with inspection repair and maintenance of ship structures (in both English and Greek). Details of these texts are given below. He is currently working on developing a series of texts dealing with ship structures.

1. *Inspection, Repair and Maintenance of Ship Structures*. Second Edition 2009, Witherbys Seamanship International, Edinburgh 326 p.
2. *Global Strength of Ships. Marine Structures Series* (2022). Distributed by Lulu.

(<https://tinyurl.com/y4efrlwd>) 708 p.