About the Course

The primary objective of this short course is to provide conversion or refresher training for science and engineering graduates and experienced draughtsmen who hold active line responsibilities in the design of ships and ship systems and in shipbuilding practice. The course is designed in such a way that at the end of the lectures, the person will have a very broad understanding of the behaviour of ships under a variety of loading and operating conditions.

The syllabus will include: basic definitions of ships, structural components of the hull girder, general arrangement, ships as functional blocks, hydrostatics, hydrodynamics & structural aspects related to the behaviour of ships at sea.

The course is intended for practising engineers and research scientists who need to understand the concepts behind the behaviour of ships & ships system at sea.

Who Should Attend

Engineers and scientists involved in the design of ships and ship systems. Personnel from ship management companies, oil companies, classification societies and ship builders will benefits from attending this course. The course is innovative in both content & structure with a careful balance of theory & practice.

PROGRAMME

Wednesday 9 June 2010

09.00 - 10.30	Lecture 1: Naming and locating parts of a ship, introduction to the general arrangement – functional blocks of ship (I E Winkle)
10.30 - 11.00	*Break*
11.00 - 12.30	Lecture 2: Basic definitions, displacement, deadweight, deck load etc. loading conditions, stability and trim, stability book, role of marine agencies (I E Winkle)
12.30 -13.30	*Lunch*
13.30 – 15.00	Lecture 3: Resistance, powering, fuel consumption, effects of appendages (David L Smith)
15.00 - 15.30	*Break*
15.30 - 17.00	Lecture 4: Hydrodynamics related to wind, wave and current. Wave data, spectra, RAO's (David L Smith)

Thursday 10 June 2010

09.00 - 10.30	Lecture 5: Ship capsizing, static stability, worked example on ships (I E Winkle)
10.30 - 11.00	*Break*
11.00 - 12.30	Lecture 6: Water tight integrity and damage stability, water tight doors and bulkheads (I E Winkle)
12.30 - 13.30	*Lunch*
13.30 - 15.00	Lecture 7: Ship motion as a result of wind, waves and currents (David L Smith)
15.00 - 15.30	*Break*
15.30 - 17.00	Lecture 8: Ship Design – Dimensions, weight and layout (David L Smith)
18.30	Course Dinner

Friday 11 June 2010

09.00 - 10.30	Lecture 9: Still water bending moment *Prof. P.K. Das*
10.30 - 11.00	*Break*
11.00 - 12.30	Lecture 10: Wave induced bending moment *Prof. P.K. Das*
12.30 - 13.30	*Lunch*
13.30 - 15.00	Lecture 11: Hull girder response I *Prof. P.K. Das*
15.00 - 15.30	*Break*
15:30 - 17:00	Lecture 12: Hull girder response II (Hands on experience) *Prof. P.K. Das*

REGISTRATION FORM

Name _____

Address _____

_____

_____

Tel. _____

Fax _____

Email _____

☐ I wish to register for the course at a cost of £650 + VAT including course material, lunches and workshop dinner

☐ I enclose a cheque for £650 +VAT @ 17.5% (£763.75)

☐ Please invoice me at the above address

☐ Please send me information on local hotels

Signature _____

Date _____

The completed form, together with a cheque in pounds sterling payable to *ASRANet Ltd.*, should be sent by **9 May 2010 to:**

ASRANet Ltd., 141 St. James Road, Glasgow G4 0LT

No refund will be possible after 9 May 2010 but the attendance of a replacement participant is permitted.

Cost

The cost of the workshop will be £650 + VAT (pounds sterling) including registration, Workshop papers and Workshop dinner for authors and delegates. You should make your own arrangements for accommodation. For more information on accommodation in Glasgow please visit www.seeglasgow.com.

Payment

ASRANet Ltd. accepts payments by cheque, cash, bank transfer and credit card. Please contact for further details.

Venue

Dept. of Naval Architecture & Marine Engineering
Henry Dyer Building, University of Strathclyde
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Ships at Sea

9 – 11 June 2010

(A spin-out company of the Universities of Glasgow & Strathclyde)

GLASGOW

Brief CVs of Lecturers

Prof. Purnendu Das, BE, ME, PhD, C.MarEng, FIMarEST, C.Eng, FRINA, FIStructE is Professor of Marine Structures and Head of 'Structures and Reliability Centre' and is Director of 'ASRANet' (a spin out company of the University, which originates from an EPSRC Network of Excellence Project ASRANet (1999-2002). Present EU projects are MARSTRUCT (a network of excellence on Marine Structure) and SHIPDISMANTL (a cost effective and environmentally friendly dismantling of ship structures). Industrial projects are with the UK Health and Safety Executive, Subsea-7, the UK and US navies. He has previously been the principal investigator of many EPSRC projects. Before joining the University of Glasgow he worked with British Maritime Technology as principal Structural Engineer (1984-91). He is author of more than 250 publications, including contract reports and more than 60 journal papers. He is a member of the editorial boards of the 'Journal of Marine Structures', 'Journal of Ship & Offshore Structures' and 'Journal of Engineering for Maritime Environment' amongst others. In 2007, he has been awarded 2 Royal Society International short term visit awards for India & Czech Republic. His areas of research include ultimate strength & reliability analysis of ship & offshore structures. He has been running various successful CPD courses which have attracted many people from different industries. These courses are on 'Design by Advanced Structural Analysis', 'Structural Reliability and Decision Making', 'Fatigue & Fracture Analysis', Ships at Sea', 'Finite Element Analysis', 'Risk Analysis and Structural Reliability' and 'Offshore Renewable Energy'. He was a member of ISSC (International Ship and Offshore Structure Congress) for the period 1991-97 & 2003-06 and organised the 1st, 2nd and 3rd International ASRANet Conference in 2002, 2004, 2006 and 2008. During the year 2007 & 2008, he has been invited by many organisations abroad to deliver lectures on 'A state of the art on Strength & Reliability Analysis of Ship Structures', and they include; Institut Francais de Machanique Avancee (IFMA) France, Politechnike Wroclawske, Wroclaw, Poland, Klockner Institute of Technology, Czech Tech. University, Prague, China Ship & Scientific Research Centre (CSSRC), Wuxi, China, Pusan National University, Korea, University of Galati/Naval Academy, Romania, Dept. of Ocean Engineering, India Institute of Technology, Chennai, India, Dept. of Naval Architecture & Ship Technology, University of Gdansk, Poland.

Ian E Winkle BSc CEng, MRINA recently retired as a Senior Lecturer in the Dept of Naval Architecture & Marine Engineering, Universities of Glasgow & Strathclyde after 26 years involved in Naval Architecture, Ship Design and Ship Production. Before joining the Universities of Glasgow & Strathclyde Mr Winkle worked with Vicker's Ltd Shipbuilding Group at their Walker Naval Yard and St. Albans Ship Model Experiment Tank before joining Lloyd's Register of Shipping for a year as a Travelling Scholar. He then spent nearly 4 years working as a Research Officer in the Production Division of the British Ship Research Association, developing new fabrication techniques, before becoming Principal Lecturer in the Dept of Maritime Studies at the Northern Ireland Polytechnic. His areas of research interest include Stability of Damaged Ro-Ro Vessels - most notably the development of the 'Glasgow Concept' and the Fabrication of Steel and GRP Ship Structures using Toughened Structural Adhesives, much of which has been undertaken as principal investigator of a range of EPSRC projects.

David L. Smith BSc. MSc. MRINA, FIESS, AMSNAME, C.Eng., recently retired as a lecturer in the Department of Naval Architecture & Marine Engineering, The University of Strathclyde. Prior to joining the University in 1990, Mr. Smith worked in Production Planning in Lithgows Ltd. for 2 years before joining Yarrow Shipbuilders Ltd in 1974 to work in Ship Design. He was Chief Design Engineer with responsibility for various aspects of the Type 23 Frigate, particularly its structure for nine of these years spent at Yarrows. His recent teaching includes; Introduction to Naval Architecture, Marine Manufacturing, Naval Architecture Design Projects, Engineering Applications for Naval Architects, Marine Design, Ship Design Project, Shipbuilding Technology, Fourth Year Project supervision, M.Sc. Group Project Supervision, M.Sc. Individual Project Supervision. His previous teaching included; Small Craft Systems and Manufacture, Design/Small Craft Design Case Studies and Marine Structures. His other activities include being Chief Examiner for The Engineering Council Examination Paper D212, 'Design & Operation of Marine Vehicles', a member of the Professional Affairs Committee of the Royal Institution of Naval Architects since 2006 and he was Chairman of the Scottish Branch of the Royal Institution of Naval Architects from 2006 to 2008.