

### SUBSIDISED PROGRAMME

# Superintendent – Hull Structures

Continuous technical advancement along with complex environmental and regulatory framework requirements are common challenges for every superintendent. It's a key position which aims to secure safe, smooth and cost effective operation of a vessel. A superintendent's ability to identify hazards, analyse technical requirements and related risks, identify and evaluate options and take action, determines the flow of the shipping process. This seminar aims to bridge the professional knowledge gap of ship board officers and the constantly evolving variables their position faces, in order for effective decision-making to take place through awareness and understanding of the subject areas.

Frederick University, in collaboration with the Classification Society Det Norske Veritas - Germanischer Lloyd (DNV GL), introduce a Professional Training course on Superintendency (Hull Structures). Both Frederick University and DNV GL firmly believe in the continuous development of specialized skills in the maritime industry and as such are committed to offering short courses for Professional Training, designed to meet the need for skilled labor in the most demanding and rapidly changing areas of the shipping industry.

This Training Course addresses the needs of professionals, which may be directly or indirectly involved in the integrated Cypriot Maritime Network. It has been approved by the Human Resources Development Authority of Cyprus (HRDA) which subsidizes 72% of the participation cost.

#### WHO SHOULD ATTEND?

The training program is addressed to employees of enterprises and organizations who are active in the field of Superintendency in the Maritime Industry or they are Shipping or Shipping related BSc or MSc students/graduates. Supporting material will be given to the trainees during the course. Upon satisfactory course completion, including a test, participants will receive a Certificate issued jointly by DNV GL and Frederick University.

#### WHERE AND WHEN

**Venue:** The courses will be held in the Frederick University Accredited Classes at: Limassol Campus, Address: 18, Mariou Agathagelou Str., Agios Georgios Havouzas,

Limassol 3080 - Telephone: +357 25730975

Date & Time: 25-28 Feb 2019, 14:30-19:20

#### PROGRAMME SUPPORT

Participants will have access to the necessary facilities of Frederick University as well as access to supporting material all of which is included in the course fee.



## FREDERICK UNIVERSITY









#### **SEMINAR COST AND DURATION**

The seminar's cost and duration for participation is presented on the table below:

Seminar Title	Duration	Participation Cost	HRDA Subsidy (for beneficiaries) <sup>1</sup>	Cost to company
Superintendent – Hull Structures	18 hours (4 days)	€425 + 19% VAT	€306	€119 +VAT(€80.75)

<sup>&</sup>lt;sup>1</sup> Beneficiaries: working in companies/organisations (€306 subsidy) and unemployed (100%) provided that they satisfy the conditions laid down by the HRDA. No financial support is provided for self-employed and public servants. Beneficiaries pay the difference of participation cost that remains after the HRDA subsidy. For unemployed beneficiaries the participation is free.

#### MODULES

### Module 1:: Class Systematics - Statutory Regulations

- Basics of Classification, Class Notations, Introduction to Class Rules
- Classification role in Construction phase of the vessel
- Classification role in Operation phase of the vessel
- Overview of Statutory Surveys and Certificates
- Classification role as Recognised Organisation

#### Module 2: Structural connections of a ship structure

- Types of welds
- Connections of stiffeners
- Connections of girders/web frames
- Connections between panels
- Design details

#### Module 3: Machinery Surveys and Class Systematics

- Explanation of Machinery Components relevant to Class
- Survey Arrangements, alternatives and possibilities
- Survey schedules
- Survey requirements and methods of examination by Class
- Postponement of machinery surveys
- Machinery damages vs Class, responsibilities and handling

#### Module 4: Hull structure failure types

Critical Areas, Damages, Acceptance Criteria and Repair Methods for the following hull defects will be presented:

- Corrosion (global and local)
- Cracks
- Buckling
- Indents

#### **Module 5: MARPOL & SOLAS Conventions**

- MARPOL Annex I, Regulations for the prevention of pollution by oil
- MARPOL Annex IV, Regulations for the prevention of pollution by sewage from ships
- MARPOL Annex V, Regulations for the prevention of pollution by garbage, from ships
- MARPOL Annex VI, Regulations for the prevention of air pollution from ships
- SOLAS structure
- SOLAS scope
- Latest developments

# Module 6: Hull Survey Requirements, Preparation and Reporting

- ESP vessels and requirements
- Scope of Inspection, Pressure Testing and Ultrasonic Thickness Measurements
- Pre-survey arrangements and preparation
- Access, safety, cleaning requirements
- Owners reporting system

# Module 6: Port State Control procedures - Reducing the risk of detentions

- Introduction to PSC
- PSC Selection of ships
- Reducing the risk of detention
- DNV GL's PSC Improvement Campaign
- DNV GL's Handling PSC inspections
- PSC Updates and Statistics

Basic hull strength & loads

- Simple beam theory
- Typical hull girder stresses
- Local and global loads, static and dynamic loads
- Commonly used steels

### Module 8: Survey Simulator: Cargo & Ballast Tanks

Interactive Inspections

Interactive inspection under simulated conditions with the use of DNV GL Survey Simulator at the following tanks and spaces:

- Cargo Tank of Oil Tanker
- Cargo Hold of Bulk Carrier
- Water Ballast Tank

Findings, such as hull defects, will be spotted and elaborated upon. For each finding, participants will be asked to discuss the following: Description and reporting, Possible cause, Assessment of what may happen if finding is unattended, Acceptance criteria and Repair proposal.

#### **INSTRUCTOR'S CURRICULUM VITAE**



Mr Tsonis Demetrios

Demetris graduated from the school of Naval Architecture and Marine Engineering of the National Technical University of Athens in 2003 with honours. He then obtained his Master's Degree in Computational Engineering from the same University in 2005 while working as a professor's assistant. After completing the mandatory army service, Demetris has been working in DNV GL since 2006 having acquired a broad range of expertise in the Maritime Classification sector both in office and field projects.

Demetris has long experience in project management, plan approval of drawings, Class and Statutory surveys for ships in operation and he is currently Head of DNV GL Piraeus office for Condition Assessment Programme (CAP) surveys. CAP surveys mainly focus on Oil Tankers more than 15 years-old and comprise a thorough evaluation of the hull structure, machinery components and cargo systems on-board. In addition, Demetris has been contributing for several years to DNV GL Maritime Academy as a trainer for seminars conducted in Piraeus and abroad. Demetris has a keen interest in innovative technologies and he places emphasis on team work and knowledge sharing.



Captain Eugen-Henning Adami

Eugen Adami is a Lecturer at the Department of Maritime Studies of Frederick University teaching ship management. He is the Owner and Managing Director of the Cyprus-based shipping company Mastermind Shipmanagement Ltd (MSM). Presently MSM manages a fleet of 20 ships consisting of both fully owned vessels and thirdparty management dry-cargo ships. German-born Captain Adami began his nautical career studying at Elsfleth Nautical University. In addition to his successful merchant marine career, which saw him serve as Master of the Bremen-owned cargo ship Condor P, Captain Adami has a wealth of experience as master on tall ships, spanning more than 25 years. He has sailed on and captained both the SS Thor Heyerdahl and the SS Grossherzogin-Elizabeth (formerly the SS Ariadne) and still retains an association with both sail-training vessels. Captain Adami is the immediate past president of the Cyprus Shipping Chamber, the trade association that comprises all the major shipowning, shipmanagement, chartering and shipping related companies based in the shipping industry of Cyprus. He is the Director of various Cypriot Shipping and Ship-management companies as well as the chairman of the Mission to Seafarers in Cyprus and serves as Vice president at the Cyprus Maritime Environment Protection Association.

#### ADDITIONAL INFORMATION

For further information, you can contact Mr. Daniel Ellinas at 25730975 (ext. 112), bus.ed@frederick.ac.cy. In addition, you can visit Frederick Training and Examination Centre at www.frederick.ac.cy/EKEK and contact 22394489, ekek@frederick.ac.cy.