

ABOUT THIS COURSE

As the first international professional development course for marine surveyors when launched in 1998, the Lloyd's Maritime Academy and North Kent College Diploma in Marine Surveying has benefited over 3,500 participants from all corners of the globe. Today it remains acknowledged as the world's leading education solution for professional development in marine surveying and continues to educate existing surveyors seeking career development, potential marine surveyors and associated maritime professionals. After many updates in content and delivery style, plus the addition of new modules, we are proud to still offer the leading course on the subject.

In a major enhancement in the recognition of the professionalism of marine surveyors, we are also proud that the Diploma has been recognised by Middlesex University (London) for advanced entry standing to an MSc Marine Operation (Marine Surveying) and an MBA in Marine Surveying by distance learning. Graduates of this Diploma, and it's partner

course in Small Craft Surveying, are the only ones who have the opportunity to apply for this programme and continue their studies to gain an academic postgraduate qualification after additional advanced study in marine surveying, strategic and management skills plus an in depth research project. The course is also recognised by RINA and IMarEST for CPD.

Marine surveyors continue to be in demand and play a vital and prestigious role in the maritime industry. As shipping has developed, so has the role of the surveyor, and today's incumbents need more knowledge of technical systems, surveying skills, legal and regulatory issues, safety issues, commercial matters and reporting. It is widely acknowledged that the most successful marine surveyors must invest in their professional development to stay at the forefront of their important role. The Diploma in Marine Surveying is acknowledged as the best professional development solution for new entrants to the profession and for existing surveyors to update or maintain their knowledge.

COURSE HIGHLIGHTS



Delivered by experts in the field - Course Director. Allan Larsen



Duration: 12 months

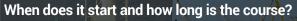


Delivery: Online



Award: **Diploma**

KEY INFORMATION



The course is 12 months long and the modules are released online, one every month. Please go online to see the next available start date.

What are the entry requirements?

Participants should be able to prove a minimum achievement of A-Level or equivalent (High School) plus at least one year of industry experience in a similar or related field. However those without formal qualifications who demonstrate a number of years of relevant industry experience are welcome to apply.

ENGLISH LANGUAGE ABILITY: The course is conducted entirely in English. Applicants must have an adequate command of English in order to meet the demands of the course.

How is the course assessed?

The course is assessed through a mixture of written course work and online tests. Written assignments are submitted online and written feedback is provided by the marker.

How much does it cost?

Please go online to www.lloydsmaritimeacademy.com/ms and see the Fees page for full details. An interest-free instalment plan is available. Please contact us for more details.

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WHO SHOULD TAKE THIS COURSE?

IDEAL FOR

- Professionals involved as official investigators, representatives of ship owners or operators, shipbuilders and equipment manufacturers
- Ship's officers, ship managers, superintendents, DPAs plus health & safety officers responsible for implementing recommendations
- ✓ Marine surveyors, auditors, port state control and vetting inspectors wishing to develop best practice
- ✓ National maritime administration personnel, trade union representatives, lawyers and consultants involved in incident response and implementing corrective actions

- Seafarers and/or military personnel looking to enter the field of marine accident investigation
- ✓ Ship Surveyor
- ✓ Captains / Masters
- ✓ Chief officers

During the 12 months of this tutored distance learning course you will explore:

- The different types of marine surveys in detail
- Roles and responsibilities of the marine surveyor
- Required knowledge of associated international laws and conventions
- Technical skills required for hull, structural and engineering surveys
- The surveyor's role in incident and accident investigation
- Business skills and survey report writing
- The marine surveyor's role in relation to specific cargoes or vessels



Continuation route to MSc Marine Operations and MBA Marine Surveying available by distance learning

✓ Independent Surveyors

✓ Engineers

Seafarers / Crew

✓ Coast Guard

Naval Architects



Recognised by RINA as contributing to CPD requirements



Recognised by the IMarEST as contributing to an individual member's CPD requirements

Scholarships as well as interest-free loans may be

offered to UK seafarers (officers and ratings domiciled in the UK) to undertake this course



COURSE DIRECTOR



Course Director, **Eurlng Allan T Larsen CEng** CMarEng FRINA FIMarEST FCMS.

Allan Larsen is a registered European Engineer (EurIng) with the European Federation of National Engineering Associations (FEANI), which is a federation of professional engineers that unites national engineering associations from 34 European Higher Education Area (EHEA) countries. Allan is also a Chartered Engineer, Chartered Marine Engineer and Fellow of the Royal Institution of Naval Architects, the Institute of Marine Engineering, Science and Technology and of the Society of Consulting Marine Engineers & Ships Surveyors.

Allan commenced his career in 1987 as Marine Engineer cadet and this career has spanned seagoing positions, machinery and ship repair, ship design and commissioning and marine surveyor / auditor.

Allan was employed by the IACS member classification Society Bureau Veritas from 2001 to 2016 during which time he trained and operated as a class and statutory ship surveyor (all marks and all notations), condition assessment surveyor, offshore surveyor, auditor and trained trainer. For his last seven years with Bureau Veritas Allan was employed simultaneously as Head of Section for Damage Repair, and Head of Section for Offshore Units in Service, based at the societies Head Office in Paris.

Currently, Allan is Managing Director / Principal Surveyor of Larsens Marine Surveyors & Consultants Ltd and Director / Vice President of the Society of Consulting Marine Engineers and Ship Surveyors.



Participating in this course allows me to understand the various functions and techniques of the surveyor from different perspectives, and I am more competent for the work of the surveyor.

Max Huang, Jong-Shin Shipbuilding



HOW YOU WILL LEARN

Every course is broken down into manageable modules, designed to accelerate your learning process through diverse learning activities:

- Work through your instructional material online
- Interact with your peers and learning facilitators through the online forum to discuss subject related issues and to network with your fellow learners
- Investigate relevant, real-world case studies
- Apply what you learn each week to ongoing project submissions
- Tailor the course with your choice of specialist module

a discounted enrolment fee. Click here to find out more

Group Bookings

may qualify for

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SYLLABUS

MODULE 1

Introduction to Marine Surveying

Learning outcomes:

- Describe the structure of the maritime industry
- Explain the regulatory and classification control of ships
- Evaluate the role of the surveyor in various scenarios and survey types

Brief description:

- The structure of the maritime industry
- The world fleet
- Classification societies
- Regulation of the industry
- ▼ The International Maritime Organization (IMO)
- Marine surveyors, survey organisations and how you define them
- Knowing your customers
- Types of surveys
- When things go wrong

RELATED DISTANCE LEARNING **COURSES INCLUDE:**

For a full list of our maritime training courses visit us online at www.lloydsmaritimeacademy.com

- · Diploma in Small Craft Surveying
- Diploma in Surveying of Offshore Floating Units
- · Diploma in Marine Engineering
- Certificate in Marine Consultancy
- Certificate in Marine Warranty Surveying
- · Certificate in Cargo Surveying
- · Certificate in Essentials of Marine Surveying
- · Certificate in Classification and Statutory Surveys
- · Certificate in Dry Dock Planning and Management

MODULE 2

Relationship between Surveyors and their Clients

Learning outcomes:

- Evaluate clients' needs and advise them on suitable services and surveys
- Demonstrate customer communication skills
- Monitor and control customer satisfaction and level of service provided

Brief description:

- Professional status
- Professional reputation
- Recommendations
- Building client relationships
- The importance of trust
- Refusing or abandoning surveys
- Requests for survey
- Clients requirements
- Terms and conditions of surveys
- Delivery of service
- Payment for services
- Quality of service and quality assurance
- Monitoring of customer satisfaction
- Handling of complaints



An interesting and enriching course which provides insights into issues I've never had time to study before. It will undoubtedly boost my career!



MODULE 3

Business Skills for Surveyors

Learning outcomes:

- Produce an effective business plan
- Analyse figures to produce financial forecasts
- Write a professional report

Brief description:

- Marketing/business development
- Producing a business plan
- Obtaining financial support
- Survey report writing
- Protecting your company and its staff
- Financial skills for surveyors

MODULE 4

Laws and Conventions relating to Marine Surveying

Learning outcomes:

- Discuss the legal aspects of the role of the surveyor
- Describe the relationship between surveyors and the legal profession
- Demonstrate an understanding of the surveyor's obligation to courts of law

Brief description:

- The relationship of the surveyor with the legal profession
- The law of contract
- ▼ The law of Tort (Negligence)
- Liability and its extent
- Responsibility for the acts of others
- Registration and Conveyance of Ships
- Admiralty court jurisdiction
- Collisions and salvage
- Towage and pilotage
- Pollution
- Shipping law
- Contract of carriage, bailment and international conventions
- Charterparties
 - Time
 - Voyage
 - Bareboat
- Law of Evidence

MODULE 5

Marine Surveying and Insurance

Learning outcomes:

- Explain the various insurance policies utilised in the maritime industry
- Describe how the ISM Code influences maritime surveying and insurance
- Discuss the operation of P&I clubs and their significance to the surveyor

Brief description:

- Personal liability
- Marine insurance law
- Interaction of marine policies
- Cargo carriage of goods by sea
- Hull and machinery
- Other policies
- Cargo
 - Freight demurrage
 - Loss of hire
 - P&I

7 P&I

- Introduction to P&I Clubs
- Scope of cover
- The 'pay to be paid' rule
- People claims (personal injury)
- Collisions and salvage
- Fixed and floating objects (FFO)
- Towage and pilotage
- General average
- Pollution
- Limitation and forum shopping
- Ship inspection regimes
- ▼ ISM code/evidence
- Dispute resolution
- Summary and future developments



MODULE 6

The Surveyor's Role in Incident and Accident Investigation

Learning outcomes:

- Demonstrate an understanding of the roles of official investigating bodies
- Discuss the requirements of the IMO Casualty Investigation Code
- Explain the purpose and objectives of accident Investigation

Brief description:

- The background to marine incident investigation
- The casualty investigation code
 - The role of investigating flag states
 - The role of substantially interested states
 - Mandatory standards
 - Recommended practices
- Cooperation of interested parties
- Legal rights of the surveyor when being interviewed
- Legal rights of witnesses when being interviewed
- The human factor in incident investigation
- Initial actions in the investigation
- Managing the investigation
- Witnesses and interviews
- Collecting physical evidence
- Analysis of evidence
- Human factors
- Analysis, tools and techniques
- Developing conclusions and making recommendations
- Witness interviewing
 - Interviewing skills
- The cognitive interview
- Systematic nature of incidents
- The domino effect of incidents
- Case studies

MODULE 7

Naval Architecture for Marine Surveyors

Learning outcomes:

- Discuss ship structures using naval architecture nomenclature
- Include correct structural terminology in reports
- Explain ships' structural strength, areas of highest stress and structural details
- Advise on matters affecting structural strength and ships stability

Brief description:

- Introduction to naval architecture
- Basic principles of naval architecture
- Naval architecture nomenclature
- Ships principle dimensions
- Primary and secondary structure
- Strength giving structural components
 - Structural failures and their causes
- Highly stressed areas of the structure
- Rudders
- Buoyancy
- Stability
- Strength and scantlings
- Draught and air draught
- Resistance and propulsion
- Impact of the computer
- Design considerations
- Area and volumes
- Moments
- Approximate integration
- Damaged vessels



MODULE 8

Marine Engineering and Systems for Surveyors

Learning outcomes:

- Describe the various engineering systems onboard ships
- Identify critical equipment and the surveyors interaction with such equipment
- Discuss various maintenance methods for shipboard Equipment

Brief description:

- Introduction to marine engineering
- Marine engineering nomenclature
- Ship design and engine room layouts
- Diesel engine working principles
- Slow, medium and high speed engines
- Diesel engine parts
- Other main means of propulsion
- Power transmission
- Boilers
- Feed systems
- Piping systems and pumps
- Purifiers
- Gas exchange systems
- Fuels and fuel systems
- Lubricants and lubricating systems
- Cooling systems
- Starting air systems
- Shafting and propellers
- Refrigeration, air-conditioning and ventilation
- Deck machinery and equipment
- Steering gear
- Electricity and electrical equipment
- Bridge control and emergency systems
- Safety and operation of diesel engines
- Maintenance of ship's machinery

MODULE 9

Hull and Structural Surveys

Learning outcomes:

- Explain the requirements of a hull structural survey
- Describe the common findings of hull structural surveys
- Identify and analyse structural corrosion patterns

Brief description:

- Introduction
- Ship and large yacht structures
- Materials of construction
- Primary hull-girder and local loads
- Structural design criteria
- Materials of construction
- Deterioration of materials
- Welding
- Preparation for surveys
- ▼ Failures of ships' structure
- Periodic surveys of ships' hulls
- Inspections of the ship's structure
- Areas of inspection
- Non destructive testing
- Putting theory to practice
- Damage repair survey
- Corrosion
- Coating condition



MODULE 10

Safety and Security Surveys

Learning outcomes:

- Discuss the importance and relevance of realistic safety drills
- Explain the purpose of SOLAS and COLREGS and how survey procedures promote safety and ensure compliance
- Describe and complete the necessary documentation needed to record processes regarding safety standards and compliance

Brief description:

- Onboard Alarms
- Safety drills
 - Fire
 - MOB
 - Abandon Ship
 - SOPEP / SMPEP related
- International safety standards
- Introduction to Safety Surveys
- ▼ The role of the IMO
- The role of governments
- SOLAS and COLREGS
- Surveys and certification
- Classification societies and IACS
- Harmonising surveys and certification
- Documents of compliance
- Reports and records
- Sub-standard ships
- Port State Control
- Life-saving appliances
- Fire protection, detection and extinction
- Navigational aids and equipment

SPECIALIST MODULE A -NON-LIQUID CARGO SURVEYS

Learning outcomes:

- Discuss the need for and the different types of cargo surveys
- Explain the common causes of cargo damage
- Describe the role of the cargo surveyor with specific cargoes

Brief description:

- General principles
- Origins of damage
- Storages
- Lashing/securing
- General cargo
- Heavy lifts
- Unitised cargoes
- Bulk cargoes
- Hazardous cargoes
- Deep tank cargoes
- Specific surveys
- Damage and loss surveys

SPECIALIST MODULE B-LIQUID CARGO SURVEYS

Learning outcomes:

- Describe how the changes in cargo quality can occur and the methods of detection used
- Explain the regulations and guidelines covering cargo
- Evaluate cargo calculations which include vapour as well as liquid quantities

Brief description:

- An introduction to liquid cargo surveys
- Origins of damage
- The stowage of liquid cargoes
- Liquid volume measurements and on-board cargo care
- Crude mineral oil
- Petroleum products
- Bulk chemical cargoes
- Liquefied gas cargoes
- Animal/vegetable oils and fats

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SPECIALIST MODULE C-SUPERYACHTS SURVEYS

Learning outcomes:

- Describe the different types and basic requirements of each survey required for ocean going superyachts
- Recognise the importance of the survey with regards to machinery breakdowns
- State the common faults and defects with regards to hull structures across the different yacht materials used

Brief description:

- Overview of the reasons for and the types of survey required by Superyachts
 - Class surveys
 - Tonnage measurement and registration surveys
 - Safety surveys
 - Pre-delivery surveys
 - Breakdown surveys
 - Damage surveys
- The survey of yacht machinery and equipment
 - Primary power plant surveys
 - Auxiliary machinery
 - Electrical equipment
 - Navigation and communication equipment
 - Safety and fire fighting equipment
- Breakdown surveys and fault finding
 - Main power plant faults
 - Pumping systems
- Faults and defects hull and deck
 - Surveying hull structures
 - Defects in coatings

SPECIALIST MODULE D - MARINE ENVIRONMENTAL SURVEYS

Learning outcomes:

- Describe the reasons why the shipping industry needs to take action to comply with international legislation regarding the environment
- Discuss the role of the environment marine surveyor
- Discuss the different risks to the marine habitat and the techniques used to survey and monitor them

Brief description:

Part I - Marine Environmental Surveying

- The need for marine environmental surveying
- The main categories of marine environmental surveying
- Surveys, surveillance and monitoring techniques of marine habitats and communities
- Assessing the environmental impact of pollution incidents in the marine environment
 - Oil
 - Chemical
 - Flotsam and Jetsam
 - Air pollution
- NOx pollution
- SOx pollution
 - Noise
- Assessing the impact of the ports and shipping industry on the marine environment
- Assessing the environmental impact of the introduction of non-native marine species
- Case studies

Part II - Potential Risks and Impacts of Shipping on the Marine Environment

- Oil spills
- Operational pollution
- Invasive species in ballast water
- Anti-fouling paints
- Ship-breaking/recycling
- Air pollution
- Ballast water
- Anti fouling
- Scrapping and disposal



SPECIALIST MODULE E-MARINE ENGINEERING AND SYSTEMS SURVEYS

Learning outcomes:

- Discuss the scope and techniques used for marine engineering surveys
- Evaluate the merits of the independent marine engineering surveyor over the surveying powers of the Chief Engineer

Brief description:

- Introduction
 - Scope of marine engineering surveys
 - Preparation for survey
 - Techniques
- The role of classification societies
 - Ensuring that the ship and machinery comply
 - Classed and non classed items.
- Diving companies
- NDT companies
- Radio survey companies
- Surveying powers of the Chief Engineer
 - Prevention of detention by Port State Control
 - Type approval of equipment
 - Class approved
 - Marine Equipment Directive
- The work of the independent marine engineering surveyor
 - Discussions with engine room staff
 - Main propulsion machinery
 - Handling of equipment
 - Prime movers and power transmission
 - Auxiliary machinery (inc HVAC systems)
 - Pumps and pumping systems
 - Electrical equipment
 - Deck machinery

SPECIALIST MODULE F-INTERNATIONAL SAFETY **MANAGEMENT (ISM) CODE SURVEYS**

Learning outcomes:

- Evaluate the different types of audit for the ISM Code
- Describe how to build a safety management system
- Discuss the relationship between the legislation connected to and influencing the ISM Code

Brief description:

- Auditors qualifications
- Study, interpretation and enforcement
 - Thirteen lessons with examples
- Techniques for implementation of a Safety Management System (SMS) in a shipping company
- Initial assessment, action plans for creating and implementing a SMS
- Operation of the system ashore and on-board and training of the entire personnel
- Assessment and presentation for certification
- ISM Audit
 - Special ISM audit techniques
- Continuous compliance assessment
- Miscellaneous
 - How to present your system to the possible customer
 - How to restart a dormant existing system
 - Theoretical efficiency of the ISM Code
 - Necessary and probable improvement of management of safety



Throughout the course, the tutoring was very helpful and provided good guidance. I enjoyed using the platform which through the discussions and assistance from Allan, it provided very useful information both for the course and future use.

Bernard Cutajar, Transport Malta



SPECIALIST MODULE G-MARINE WARRANTY SURVEYS

Learning outcomes:

- Describe the relationship between warranty surveys and marine insurance principles
- Discuss who is deemed competent and suitable to carry out warranty surveys
- Explain the role of the warranty surveyor and the purpose of such surveys

Brief description:

- Introduction to warranty surveying
- Who appoints the surveyor for warranty surveys?
 - The role of the appointed surveyor
 - Joint hull committee requirements
 - Types of marine warranty survey

SPECIALIST MODULE H-MOBILE OFFSHORE DRILLING UNIT (MODU) SURVEYS

Learning outcomes:

- Describe the difference in regulations between MODU's and ships
- Explain how the operational requirements of a MODU differ from that of a Ship
- Recognise and analyse the surveying techniques and regimes for MODU's
- Discuss the auxiliary equipment specialist to a MODU

Brief description:

- Introduction to Mobile Offshore Drilling Units (MODU)
- Regulatory control and certification
- Construction, strength and material
- Subdivision, stability and freeboard of MODU
- Machinery installations onboard MODU
- Electrical installations
- Periodically unattended machinery spaces onboard MODU
- Fire safety
- Life saving appliances onboard MODU
- Radio communications and navigation
- Lifting devices, personnel and pilot transfer
- Helicopter facilities of MODU
- MODU operations

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Distance learning, face-to-face workshops, webinars and blended delivery.

Cut costs while improving performance. Ensuring a good return on your training investment is critical for all our clients and, whether delivered by distance learning or instructor led workshops, Lloyd's Maritime Academy delivers the best training, at a competitive price and from a reliable partner.

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WHO WE ARE



ABOUT LLOYD'S MARITIME ACADEMY

Lloyd's Maritime Academy was born from Lloyd's List.

Lloyd's Maritime Academy is the trusted brand for professional development, working with leading academic and industry bodies to provide accredited education and training where it is much needed.

We are stepping up investment in new learning management platforms, improved content and learner resources to enhance your experience and ensure maximum reward for the investment you make in your future.

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We look forward to welcoming you onto one of our programmes.

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Save money no addit<u>ional travel or</u> accommodation costs



TUTORED AND AWARDED BY NORTH KENT COLLEGE

North Kent College is a major UK college based on the River Thames providing further and higher education in the south east of England. The College caters for more than 4,500 students across two main campuses, with a wide variety of academic and vocational courses, as well as professional education and training via short courses, part-time study or distance learning. Full-time and part-time higher education programmes and foundation degrees are

delivered via a partnership with the University of Greenwich.

The National Maritime Training Centre at North Kent College is widely recognised within the maritime industry for providing sector-specific training within high quality industry-standard facilities.

The College is committed to helping students to achieve their ambition whether they wish to gain their first job, achieve high-level professional qualifications, change career or prepare for their next promotion. The College takes pride in working in partnership with industry to provide the correct mix of knowledge and practical skills that are required to sustain the workforce.

North Kent College is a partner of Lloyd's Maritime Academy in delivering this course and manages assessment, quality assurance and the award of the professional development Diploma.

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