The International Institute of Marine Surveying

Higher National Certificate BTEC HNC and Higher National Diploma BTEC HND in

Marine Surveying

Awarded by





- Study Online at Home and at Sea
- IIMS Student Membership included
- Access to Institute Professional Indemnity Scheme
- Courses start every Three months
- One and Two year courses

Next intake:

JULY 2014

For more info email education2@iims.org.uk
Tel: +44 (0) 23 9238 5223

Specialist Units in: Yachts & Small Craft, Cargo, Commercial Vessels and Engineering

The International Institute of Marine Surveying, as the professional body for marine surveying, recognises the need to promote the profession and the professionals within it to the highest level.



Welcome

The Education programme allows you to decide when and where you want to study.

If you travel, you can take the units with you to continue studying and make good use of travelling time.

The benefits of studying with the Institute is that you become a Student Member of the Institute whilst training and you can therefore participate in all Institute activities, including one day courses, seminars and conferences.

One of the most beneficial factors of distance learning study is that you apply your learning immediately.

As the course progresses you can apply the knowledge, skills and expertise gained to your work.

The IIMS is an independent, nonpolitical organisation that aims to advance the reputation of international marine surveying by:

- Promoting professionalism and the advancement of knowledge in the profession of marine surveying
- Maintaining high professional standards decreed in a Code of Conduct
- Recognition from Government Organisations
- Putting into practice the high standards of the Institute
- Conferring professional status on those who contribute to and encourage safety
- Bringing together experts
- Organising and evaluating the training of future marine surveyors

The Programme

The International Institute of Marine Surveying Higher National Certificate and Diploma (BTEC HNC & HND) are approved through Edexcel the UK Government approved Education Authority.

The programme is distance learning with students having their own 'log in' user name and password and their own student account with the Institute.

Students are encouraged to find out what is going on in the Institute in their own area and when possible to attend meetings, workshops and seminars as they happen.

The programme is a series of four core Units and four Specialist Units in year one for the BTEC HNC and further eight Specialist Units for the BTEC HND in year two.

Candidates may opt to study for the BTEC HNC in year one - take time out to put into practice what they have learnt - and then come back at a later date to do the second year and the BTEC HND or go straight through with the BTEC HND from the beginning.

Each Unit is assessed using a written assignment which is externally verified by Edexcel. Students must pass each unit to achieve the HNC and HND.

Each student will have access to support if they need help, and where possible, a specialist mentor for the more complex problems. There is a student forum plus the programme will benefit from on-line tutor sessions, and as it develops, webinars and local workshops.

The BTEC HNC & HND are fully recognised as acceptable to UK and other countries' Universities as evidence of accreditation for applications for degree courses.





Edexcel, a Pearson company, is the UK's largest awarding body offering academic and vocational qualifications and testing to schools, colleges, employers and other places of learning in the UK and internationally. See www.edexcel.com for more information.

YEAR ONE

Higher National Certificate BTEC HNC in Marine Surveying

4 Compulsory Core Units comprising of:

- 1. An Introduction to Marine Surveying Profession
- 2. Materials and Corrosion
- 3. Naval Architecture
- 4. Introduction to Report Writing for Marine Surveyors

4 Specialist Units from your chosen pathway:

- A. Cargo Surveying
- **B. Engineering Surveying**
- C. Commercial Vessels
- D. Yachts & Small Craft

YEAR TWO

Higher National Diploma **BTEC HND in Marine Surveying

After achieving your BTEC HNC in Year One continue with 8 Specialist Units from your chosen pathway:

- A. Cargo Surveying
- **B. Engineering Surveying**
- C. Commercial Vessels
- D. Yachts & Small Craft

How to apply for the BTECHNC & HND?

Apply Today by following these 3 easy steps

3 Easy Steps to Choosing your Marine Surveying Pathway

Step 1

Discussion with the course organiser to assess suitability and previous experience prior to undertaking course

Step 2

Choose the pathway you would like to study: Cargo, Engineering, Commercial Surveying OR Yacht & Small Craft

Step 3

Decide to do the BTEC HNC or HND - Enter this information onto the application form and return to IIMS

The BTEC HNC consists of four core units and four specialist units.

The BTEC HND consists of four core units and twelve specialist units.

The core units are compulsory and are to be studied by all students. You have a choice of specialisms.

Having decided which pathway you are going to study; Cargo, Engineering, Commercial Surveying, or Yacht and Small Craft.

Review the specialist units in that section and choose the units that you wish to study.

Indicate your choices on the application form.

Please send your application and CV/Resumé to the address below.

The International Institute of Marine Surveying

BTEC HNC & HND in Marine Surveying

CORE UNIT I

An Introduction to Marine Surveying Profession

- Marine Regulation & Safety
- The Purchase of a Vessel
- The Law and the Marine Industry
- Health and Safety of the Marine Surveyor
- Survey Organizations
- The Marine Surveyor in Practice
- Business Management
- Marketing your Business
- Being prepared -SWOT Analysis
- Finance

CORE UNIT 2

Materials and Corrosion

- · Force, Stress and Strain
- Materials
- Structural Configuration Galvanic and stray current corrosion
- Cathodic Protection
- Breakdown of Materials

CORE UNIT 3 Naval Architecture

- Shape and Size Definitions
- Tonnage
- The Calculation of Areas and Volumes
- Moments and Centres
- Stability
- Resistance and Propulsion

CORE UNIT 4 Introduction to Report Writing for

Marine Surveyors

- Effective Writing and Reporting
- Information Technology in Marine Surveying
- Structure of Reports

Core Units

These Core Units are compulsory and are to be studied by all candidates.

Specialist Units

Candidates are required to study Specialist Units from their chosen pathway. Four for the BTEC HNC or Twelve for the BTEC HND.

SPECIALIST UNIT 5 Draught Surveying

- -

- Marine Regulation & Safety
- Introduction to Ship Construction
- · Understanding Basic Ship Stability
- The Theory of Draught Surveying
- The Practical Draught Survey

SPECIALIST UNIT 6 Surveying Dry Bulk Cargoes

- The Nature of the Cargo and their Specific Hazards
- · Safety and Safe Practice
- Ship Types and Cargo Problems
- Quantity Calculations
- Sampling and Documentation
- BIMCO, sGAFTA and the Role of the Trade Associations

SPECIALIST UNIT 7Surveying Chemical Cargoes

- The Nature of the Cargo and Types of Hazards
- · Safety and Safe Practices
- Quantity Calculations
- Cargo Problems
- Sampling Procedures
- Vetting and Documentation
- CDI Inspections and the CDI System

SPECIALIST UNIT 8

Petroleum Products Crude and Refined Oils

- The Nature of the Cargo and Types of Hazard
- Safety and Safe Practices
- Ship Types and Cargo Problems
- Quality and Quantity
- Cargo Calculations
- Sampling and Documentation
- SIRE Inspections and SIRE Systems

SPECIALIST UNIT 9

The Carriage of Refrigerated Cargoes

- Ship or Container
- Ship Features and Problems
- Container Types and Problems
- Particular Trades and their Problems
- Record Keeping and Troubleshooting

SPECIALIST UNIT 10 Surveying Containers and Cargoes in Containers

- Types of Containers
- Types of Container Ships
- The East/West Trade and the North/South trade
- Container Construction and Securing
- · Container Stuffing and Cargo Securing
- Problem Areas Ship, Cargo and Container

SPECIALIST UNIT 11

Surveying Bulk Vegetable/ Animal Oils & Fat Cargoes

- The Nature of the Cargo and Types of Hazards
- Safety and Safe Practices
- Ship Types
- Quantity Calculations
- Cargo Problems
- Sampling
- Documentation

SPECIALIST UNIT 14 Surveying General Cargo

- What is a General Cargo Ship?Types of Ship and Areas of Trade
- · Loading and Securing
- Stowage, Separation and Ventilation
- Hatch Opening and Arrival Surveys
- Discharge and Damage Surveys
- The Role of Mates Receipts and the Bill of Lading in Practical Terms

SPECIALIST UNIT 12

Heavy Lift and Project Cargoes

- What is a Heavy Lift or Project Cargo
- Ship Types Heavy Lift, Semi-ubmersible
- Load Out and Preparation Surveys
- Loading and Securing
- Voyage Planning
- · Reports and Reporting
- Project Example of Lading in Practical Terms

SPECIALIST UNIT 13

Transportation of LNG and LPG Cargoes

- The Nature of Gas Cargoes and the Background to Cryogenics
- Safety and Safe Practices
- Ship Types
- Cargo Problems
- Quantity Calculations

SPECIALIST UNIT 15

Surveying Large Vessel Main Engines

- Diesel Engines
- Steam Machinery
- Propellers
- · Stern Tubes and Bearings
- Gearboxes

SPECIALIST UNIT 16

Surveying Large Vessel Auxiliary Systems

- Windlasses
- Winches
- Bow Thrusters
- Cranes
- Passarelle
- Side Gangway
- Deck Machinery
- Evaporators
- Thermal Boilers

SPECIALIST UNIT 17

Electrical and Electronic Engineering Surveying

- Distribution Systems
- Voltage and Frequency
- Cables and Circuit Breakers
- Switch Boards and Earth Testing
- Batteries and Chargers
- Diesel Electric Drives
- Principle of Operation (Electronic Cell)
- Typical Electronic Circuits
- Advantages of Electronics
- Typical Control Circuits
- Alarm Systems and Engine Controls
- · Lightning Protection Systems

SPECIALIST UNIT 18 Marine Incident Investigation

- Introduction to Incident
- Investigation
- The Nature of Incidents
- · Gathering Evidence
- · Analysing the Evidence
- Case Studies
- Interviewing Techniques
- Memory
- Cognitive Interviewing

SPECIALIST UNIT 19

Classifications, Statutory Surveys and Inspections

- History of Ship Classification Societies
- IACS its History Organisation and Activities
- General Rules and Definitions
- The Role of a Society
- Ship Registries and Class Surveys
- Classification Related Activities
- Interaction with Other Organisations
- · Hull Construction and Equipment
- Statutory and Quality System Certification
- Audit and Registration of SMS Systems
- Technical Services
- Emergency Technical Assistance
- Advanced Technology
- Research and Class Publications

SPECIALIST UNIT 20

The International Safety Management Code

- Study of the ISM Code
- Initial Assessment, Action Plans for Creating and Implementing a SMS
- Operation of the SMS Ashore
- Operation of the SMS Onboard
- ISM Training of Personnel
- Internal Assessment and Presentation of Certification
- Key Performance Indicators
- Continuous Compliance Assessment
- How to Present You System to the Possible Customer (Starting Company)

SPECIALIST UNIT 21

Marine Coatings

- Prevention
- Methods of Corrosion Control
- Identifying Corrosion Defects
- Survey Equipment and Methods
- Case Studies

SPECIALIST UNIT 22

Warranty Surveys

- Warranty Insurance
- Warranty Clauses Their Meaning
- Warranty Companies and their Role
- Appointing a Warranty Surveyor
- Approval Certification
- A Review of Types of Warranty Surveys
- Practical Aspects of Warranty Surveys
- Tugs and Towing Equipment
- Mooring Operations

SPECIALIST UNIT 23

Inspecting Small Craft Engines

- Discussing Operational Faults on all Engines
- · Holding Down Bolts and Engine Beds
- · Petrol inboard engines
- · Petrol outboard engines
- Drive systems, including conventional shaft, sterndrive etc.
- Looking at Crankcase Ventilation and Exhaust Systems

SPECIALIST UNIT 26

Surveying Steel and Aluminium Alloy Small Craft

- Review of Materials and their Physical and Chemical Properties
- Welding Yacht Building in Steel and Aluminium
- Steel and Aluminium Alloy Construction Methods
- Paint Coatings and Protection Systems
- Ultrasound Thickness Gauge
- Damage and Repairs

SPECIALIST UNIT 24

Surveying Small Craft **Systems and Mechanical** Installations

A detailed review of:

- Water, Sewage and LPG
- Electrical and Fuel Systems
- Differing Standards
- Surveying and Repairs

SPECIALIST UNIT 28

Inspecting Small Craft Rigs and Sails

- Different Rig Types
- Types of Mast Material and Construction
- Types of Rigging
- · Particular Problems
- · Sail Cloth and Manufacture
- Surveying
- Damage and Repairs

SPECIALIST UNIT 25

Surveying FRP Craft

- Thermoplastic and Thermoset Resins
- Reinforcements and Core Materials
- Building Techniques, Moulding Techniques
- Problems with Internal Structure
- Surveying the Hull and Structure
- Gelcoat Blisters (Osmosis)
- · Damage and Repairs

SPECIALIST UNIT 29

Surveying Wooden Craft

- Different Types and Selection of Timber
- · Cutting and Drying
- Rot and Preservation
- Timber Use in Building
- Different Types of Construction
- · Performance in Service
- · Surveying, Damage and Repairs

SPECIALIST UNIT 30 Specific Ship Survay

On/Off Hire Surveys

e purchase Surveys

Bunker Surveys

SPECIALIST UNIT 31

Maritime Law and Insurance

- Professional Negligence
- Maritime Law
- Marine Insurance

SPECIALIST UNIT 32

Hulls and Machine Damage Claims

- The Claims Process
- Claims on Commercial Vessels
- Claims on Pleasure Craft
- Marine Hull Insurance
- The Marine Insurance Act 1906

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Commercial Vessel Insurance

SPECIALIST UNIT 33 Cargo Damage Claims

- The Nature of a Cargo Claim
- The Role of Surveyors and Adjusters
- The Claims Process
- Claims Adjustment
- Documentation

SPECIALIST UNIT 34 Helidecks and Equipment

- Helicopter Operations
- Helideck Design
- Codes and Standards
- · Helideck Equipment and Training
- Surveying Helidecks

IIMS - Pathway Indicators

C---- C------

Candidates should be aware that the IIMS membership specialisations are covered by the following Unit numbers.

Cargo Surveying	Engineering Surveying	Commercial vessels	fachts & Small Craft
Unit 5 Unit 12	Unit 15 Unit 21	Unit 15 Unit 21	Unit 18 Unit 28
Unit 6 Unit 13	Unit 16 Unit 22	Unit 16 Unit 22	Unit 21 Unit 26
Unit 7 Unit 14	Unit 17 Unit 31	Unit 17 Unit 30	Unit 23 Unit 31
Unit 8 Unit 18	Unit 18 Unit 34	Unit 18 Unit 31	Unit 24 Unit 32
Unit 9 Unit 21		Unit 19 Unit 32	Unit 25
Unit 10 Unit 31		Unit 20 Unit 34	
Unit II Unit 32			

Terms & Conditions

How to Enrol on the Course

Download the application form from www.iims.org.uk/education, complete the form and send to:

The Education Team, IIMS, Murrills House, 48 East Street, Portchester, Hampshire, PO16 9XS or scan and email to: education2@iims.org.uk or contact us on Tel:+44(0) 239 238 5223

Course Fees

When your application is approved, you will be contacted and given details on how to pay for your course.

Course fees are as follows if registering for individual courses:

Higher National Certificate (One Year) £3,000.00
Higher National Diploma (Two Year) £5,000.00

If registering at the beginning of the Higher National Diploma there is a 10% discount.

The course fees are exempt from VAT.

Discounts are available for group bookings, please contact us for more details.

Not included in the fees:

Reading and referencing as many books as possible will greatly enhance your knowledge base and is strongly recommended. You can purchase recommended books new or second-hand or borrow them from a library.

Any travel, food or hotel accommodation.

Course Content

Studying Time

Core and Specialist Modules - We recommend 60+ hours study time for each Unit with additional time for research.

The content of the course is subject to change at the discretion of the Course Programme Manager.

Language of the Course

The course will be conducted entirely in English, in written format, so a good level of written English is essential.

Entry Criteria

- "A" level standard or equivalent (High School)
- · Five years plus of relevant experience
- NVQ Level 4 or equivalent and minimum DTI Class Two Certificate of Competency
- Candidates with no formal qualifications but who can demonstrate a number of years relevant industry experience are welcome to apply.

These are a guideline only as all applicants will be vetted by the Course Programme Manager who holds the final decision on acceptance.

Course Start Dates

The HNC/HND programmes start on the following dates each year: 10th January | 10th April | 10th July | 10th October

Applicants may opt for any start date.

Confidentiality

Students are advised that assignments are processed as confidential and will not be shared with any third party outside of the IIMS.

Payment and Payment Methods

Do not send any money with your application.

When your application is approved you will be contacted by email about making a non-refundable registration fee of £100 to secure your place on the course. Once this fee is received you will then be emailed a pro-forma giving full details of the course payment required with the £100 registration fee deducted.

Payment Plan

50% payment of your total fees in order to start your course and then two further payments (each 25%) made at three monthly intervals for the HNC or six monthly intervals for the HND after the course start.

Ways to pay

By Cheque

Cheques should be made payable to: IIMS Ltd. (Cheques must be in sterling and drawn on a British bank).

By Bank Transfer to the IIMS Account at

Bank Transfer Lloyds Bank, 20-24 High Street, Gosport, Hampshire, PO12 IDE Account Number 02161333 Sort code: 30-93-56 BIC Number: LOYDGB21292

Please note this may incur a charge

By Credit Card

Payment may be made via Visa or Master Card credit cards only. Payments to include card type and number, expiry date, 3 digit security code and name of the card holder on the card.

You can also call our office direct to make credit card payments.

Cancellation Policy

Application to be made in writing before the start date of the course and applicant will receive a full refund less an administrative charge of £250.

Cancellation after the start of the course will incur an administration cost of £500 plus £300 for every unit loaded up to the student site.

After all Core Units are uploaded NO REFUND will be issued.

The IIMS reserves the right to change and update either the Course Handbook or Terms and Conditions as necessary. At all times the latest version will apply.