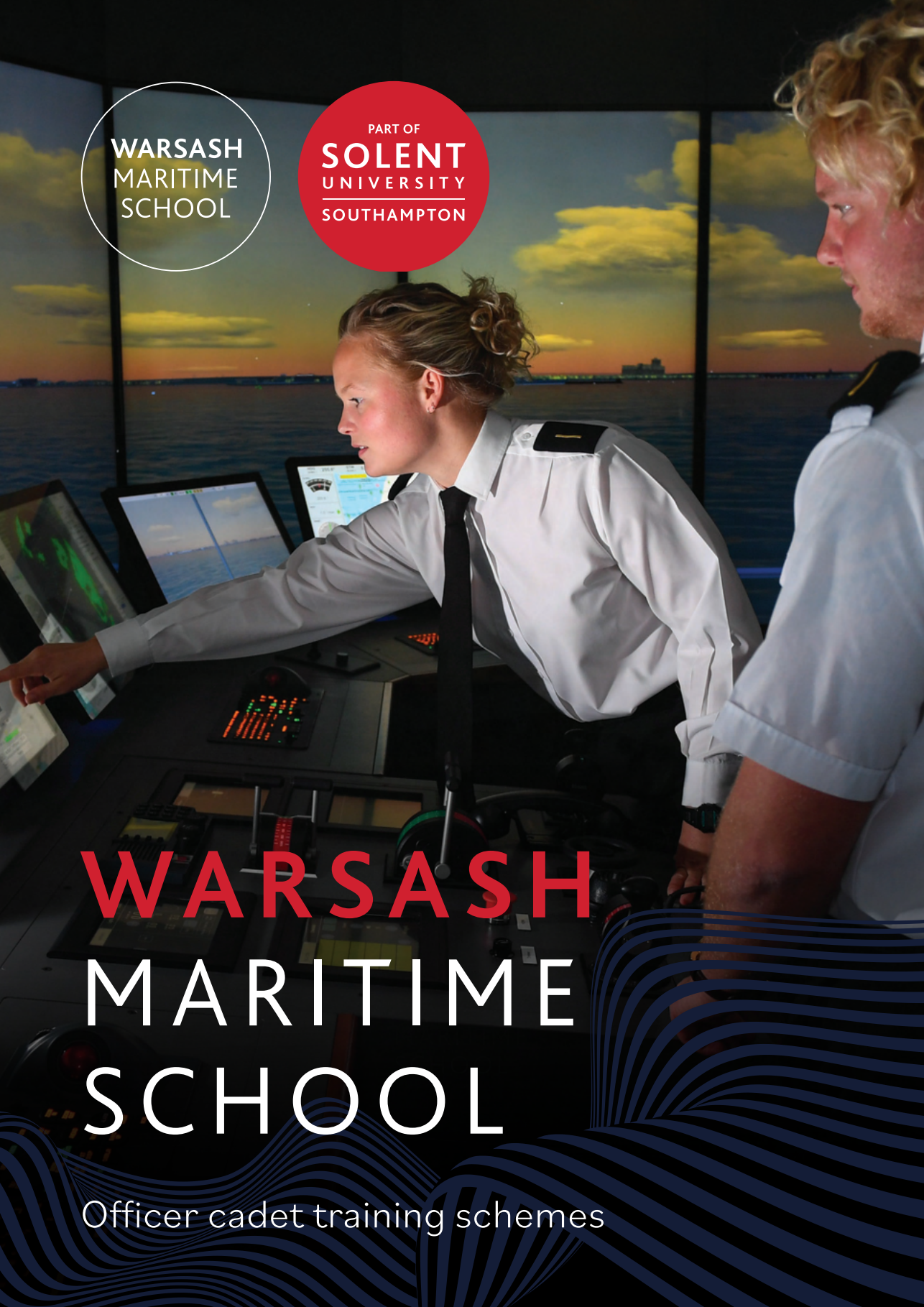

WARSASH MARITIME SCHOOL

Officer cadet training schemes

Contents

The world's leading maritime education and training provider

Visit our website maritime.solent.ac.uk for information on careers guidance and course information on a variety of maritime sectors.

Welcome

Under the Warsash name, we've been providing exceptional training for Merchant Navy officers since 1946. And as part of Solent University, we are superbly equipped to provide professional and vocational maritime education and training that meets all national and international standards.

Officer cadet training schemes are a unique proposition. They provide a fully financed solution to higher education and combine academic study with work experience, resulting in an HND, foundation or honours degree qualification alongside professional certification. This brochure outlines the structure and benefits of cadetships and career progression in an exciting and dynamic industry.

Our courses cover a wide range – from deck, engineering and electro-technical officer cadetships to senior officer certificates of competency, along with the associated safety training and time spent in simulators.

Our officer cadets train at the University's St Mary's campus, in the heart of Southampton and close to one of the UK's busiest ports – a distinct modern teaching environment exclusively for seafarers. As university students, our officer cadets also benefit from all other facilities, services and activities offered by the University.

Warsash has always been dedicated to the highest standard of education for seafarers and, with its range of training and recreational facilities, is ideally placed to give you the best possible start to your maritime career.

Lars Lippuner
Director, Warsash Maritime School

About us

Who we are

Warsash has provided first-class education, training, consultancy and research services to the international shipping, commercial yacht, and offshore oil and gas industries for over 75 years.

We benefit from a strong organisational and quality assurance infrastructure which enables us to maintain exceptional standards of service delivery.

We are a world renowned maritime teaching establishment, part of Solent University – which includes an extensive portfolio of maritime and engineering qualifications ranging from HND to PhD, as well as leading research in the maritime industries. The University trains professionals who make a contribution at sea and ashore in ship operations, port management, yacht and powercraft design, maritime business, and logistics.

What we do

Solent's maritime school delivers high-quality provision for the maritime industries to meet the growing international demand for crew, officers and captains who are trained to the highest professional standards.

We offer internationally recognised certification for deck (navigation), marine engineering and marine electro-technical officers, from entry as an officer cadet up to Master (Captain) and Chief Engineer.

We also provide a range of short safety courses (mandatory and non-mandatory) to all maritime personnel for the development of key skills such as fire fighting and sea survival. Continuous professional development modules are offered for more experienced officers.

Our lecturers pioneered the use of bridge, engine room and liquid cargo operations simulators for higher level training, and our simulation centre is the largest in the UK – while our specialist ship handling centre training facility is the only one in the United Kingdom.

The top training destination

As the UK's centre of maritime excellence, the quality, range and scale of training facilities offered by Solent University for students in the maritime industry are unmatched worldwide.

We have invested millions into new maritime education and training facilities, including the UK's largest ship and port simulation centre at our Southampton campus which features:

- State-of-the-art networked 360° bridge simulators
- On- and off-shore crane operations
- Built-in ECDIS suites
- Vessel traffic service and GMDSS radio communications
- A full-mission engine simulator and high-voltage training

We offer a dedicated ship-handling centre at Timsbury Lake – one of just a handful worldwide – while our St Mary's campus is a dedicated space for cadet education, incorporating engineering and electro-technical workshops alongside specialist chart rooms.

And at our waterside campus out at Warsash, we have plans for extensive updates to the safety training facilities – supporting a broad range of future maritime and offshore courses.

The University's student residences offer comfortable self-catered accommodation in Southampton. Our officer cadets also have access to all facilities on offer at the University's main campus, including: 24-hour library, learning resource centre, sports facilities, student union events, food outlets and cafés.

Further information about all of our facilities can be accessed on our website at:
maritime.solent.ac.uk/training-at-warsash/facilities

Careers in the shipping industry

The international shipping industry offers an adventurous lifestyle, packed with exciting and well-paid career prospects, in a dynamic and growing environment. It provides challenges and responsibility for those who want more from a career than the usual 'nine to five' routine.

To succeed in a seagoing career, you will need to combine technical skills with a range of robust personal qualities. A career at sea brings with it a wealth of opportunities, providing individuals with the training and experience for a lifetime of rewarding challenges, either at sea or ashore.

While many will aspire to reach the ranks of Captain or Chief Engineer aboard a ship, others may decide to move ashore. There are many opportunities available for experienced ship's officers on shore, in both the international shipping industry and related fields, such as shipping management, port management, ship broking, maritime law and surveying.

With a long and proud maritime heritage, the United Kingdom remains a major force in the global maritime industry, and commercial shipping is a significant contributor to its economy.

Officers with UK Maritime and Coastguard Agency (MCA) certificates of competency enjoy an excellent reputation throughout the world, enhancing future employment opportunities.

Ten great reasons to train as a ship's officer:

1. Enjoy an exciting lifelong career
2. Work with the latest technology
3. Travel the world
4. Gain responsibility at an early age
5. Gain academic and professional qualifications
6. Get paid while training
7. Course fees are covered by sponsoring shipping companies
8. No tuition fee loan
9. Get an excellent salary and 'tax-free' prospects
10. Enjoy a great holiday entitlement

The Merchant Navy

The Merchant Navy is the name given to the international commercial shipping industry. It is made up of a large number of shipping companies who recruit civilians as crew (officers and ratings), who are known as merchant seafarers.

Shipping companies vary greatly in the size and type of ships, their cargos and the areas of the world where they operate. Their trade routes may take them to every continent and across every ocean on the globe.

The types of modern merchant ship include:

- Container ships
- Cruise liners
- Oil/gas tankers
- Chemical carriers
- Bulk carriers
- Cable layers
- Ro/Ro ferries
- Car carriers
- Oil-rig supply vessels
- General purpose cargo ships
- Royal Fleet Auxiliary vessels
- Superyachts

Maritime and Coastguard Agency

The Maritime and Coastguard Agency (MCA) part of the Department for Transport, is the government agency responsible for issuing navigation, engineer and electro-technical officers' certificates of competency (CoC).

A CoC is gained following an oral examination by the MCA upon the successful completion of the officer cadetship and is effectively the 'passport' to a seagoing career. The MCA also ensures compliance with international standards of training and professional conduct in consultation with other national and international authorities.

The role of a ship's officer

What makes a successful ship's officer?

A successful ship's officer requires particular personal qualities in order to handle the demands of the profession. The ability to manage spending time away from home and to be tolerant whilst living in close quarters with other crew members is essential.

Ship's officers demonstrate the following qualities:

- Decisiveness
- Self-reliance
- Calmness
- Self-discipline
- Initiative
- Good team member
- Adept and versatile
- Effective communication skills

Deck (navigation) officer

Under the Captain's direct management, the deck department is responsible for the safe navigation and operation of the vessel, both at sea and in port. While the safety of the vessel and everyone on board is the prime responsibility, all deck operations and maintenance are also managed by the team.

Deck officers are a vital part of the onboard management team, taking charge of an expensive vessel and its equally valuable crew and passengers. Deck officers maintain watches on the bridge at sea and about the ship in port. They are responsible for passage planning, the safe navigation of the vessel, cargo loading and discharge, ship stability, communications and the maintenance of the hull and deck equipment.

The ship's Captain, or Master, is in overall command with ultimate responsibility for the safety of the crew, vessel, cargo and environment. Only navigation officers can be promoted to the rank of Master.

Marine engineering officers
The engineering department is responsible for the safety, performance and efficiency of the vessel's machinery. It is their job to maintain the mechanical and electrical operations, ensure that robust maintenance schedules are implemented and troubleshoot problems effectively and efficiently.

Marine engineering officers are responsible for the maintenance and operation of the ship's main propulsion machinery and auxiliary plant, including deck machinery, air conditioning plants, refrigeration plants and domestic and electrical services. Depending on the type of ship and the operational circumstances, engineering officers will be required to keep watches in the ship's engine room.

The Chief Engineer is in charge of the department and is responsible to the ship's Master for its efficient operation. Whilst the law demands that only one person can be in overall command of the ship – and by tradition that person is the Master – the Chief Engineer status and salary is comparable to that enjoyed by the Master.

Marine electro-technical officers (METOs)
These specialist officers work within the engineering department where they take particular responsibility for the maintenance of onboard control engineering and electronic systems including propulsion control, radio communications and electronic navigation aids.

With the increased use of modern technologies at sea, demand for METOs is rapidly growing to manage and maintain the sophisticated range of electrical, electronic and engineering equipment at sea.

METOs will have the opportunity to develop their careers along a professional electrical and electronic engineering pathway, leading to the rank of Electro-Technical Officer, Chief Technical Officer or Electrical Superintendent, depending on the company they work for.

> "My time at sea last year was one of the best experiences of my life – I saw places that I never thought I'd see and made great friends who will be friends forever."

Emma,
Marine engineer cadet

Crown Copyright

A unique lifestyle

No matter what kind of vessel you join, as a ship's officer you will experience life in a completely different way. Officer cadets will be working at sea within a few months of joining their company, as soon as they have completed their introductory training phase at the academy.

The lifestyle at sea will depend on the type and trading pattern of each ship but there are usually great opportunities for global travel. The food and accommodation on board is excellent, with single cabins and en-suite facilities for officers on many vessels.

Holiday, pay, welfare and benefits vary from company to company but are generally excellent. For example, after a voyage lasting four months, a qualified officer could get two months' holiday or more. Many UK nationals also benefit enormously from tax-free status, provided they meet the associated requirements.

Officer cadet training schemes

Professional and academic qualifications

To become an officer in the Merchant Navy, you must undertake an officer cadet training scheme programme, which involves academy-based education integrated with periods of practical training at sea. The maritime education and training must be completed in order to achieve professional seafaring certification and related educational qualifications.

We offer a number of three-year officer cadet training programmes approved by the Merchant Navy Training Board (MNTB). All of the programmes lead to professional certification by the MCA and, depending on the route followed, one of the following academic awards:

Deck officer cadets
- Honours Degree (BSc) in Nautical Science
- Foundation Degree (FdSc) in Nautical Science
- Higher National Diploma (HND) in Nautical Science

Marine engineer officer cadets
- Honours Degree (BEng) in Marine Engineering
- Foundation Degree (FdEng) in Marine Engineering
- Higher National Diploma (HND) in Marine Engineering

Marine electro-technical officer cadets
- Honours Degree (BEng) in Marine Electrical and Electronic Engineering
- Foundation Degree (FdEng) Marine Electrical and Electronic Engineering - admission in January 2023 only
- HND in Marine Electrical and Electronic Engineering

These qualifications fulfil the academic requirements for the award of the MCA certificate of competency as Officer of the Watch (OOW) for deck/engineer officers; and, for METOs, the award of METO certification, following MCA oral examination.

The HND, Honours and Foundation Degree qualifications also provide the underpinning knowledge for the higher grade certificates of competency (Chief Mate and Master, or Second Engineer and Chief Engineer).

Honours degree
We are currently the only nautical college in the UK to combine a full honours degree programme with the extensive professional training and sea time of our certified cadetships – with tuition costs covered by your sponsoring company. Our degrees also provide cadets with the opportunity for direct entry to master's level (Level 7) study at a later stage in their career, earning an LLM, MBA or MSc in areas such as shipping operations, surveying or marine superintendence.

Application and sponsorship for an officer cadetship

All UK officer cadet training schemes are financed or sponsored by a number of shipping companies and maritime recruitment specialists, in order to complete the sea-time elements of the training programme.

The benefits are excellent, as the sponsorship covers the cost of course tuition fees and provides a salary or training allowance to officer cadets throughout their training. Anyone wishing to undertake an officer cadetship should apply directly to the shipping companies and their representatives, not to the University or UCAS.

Companies normally start the recruitment process around January each year for entry in the following September or January. Companies conduct their communication and interview process directly with the applicant.

A full list of sponsoring shipping companies can be found at **maritime.solent.ac.uk/careers/career-progression-and-advice/recruiting-companies**

> “I found the experience of joining a ship for the first time challenging at times; however, the continued training and support from the sponsoring company and Warsash meant I soon started to gain knowledge and skills in order to become a marine engineer.”

Malcolm
Third Engineer Officer

Entry criteria

Qualifications

In order to be accepted on the degree or HND officer cadet training schemes, you will need to have obtained the following minimum qualifications:

Honours degree (A-Level or equivalent) – 3 years

- A minimum of 104 UCAS tariff points (for engineering including a numerate subject)
- Plus GCSE at grade 9 to 4 in the following subjects;
  - Mathematics (preferably Higher Tier)
  - English
  - Science (with significant Physical Science content)

Foundation degree (A-Level or equivalent) – 3 years

- A minimum of 48 UCAS tariff points (for engineering, including a numerate subject)
- Plus GCSE at grade 9 to 4 in the following subjects:
  - Mathematics (preferably Higher Tier)
  - English
  - Science (with significant Physical Science content)

Higher National Diploma/Certificate (GCSE level or equivalent) – 3 years

- Four GCSEs at grade 9 to 4, including:
  - Mathematics (preferably Higher Tier)
  - Science (with significant Physical Science content)
  - English or a subject using English (for example, history, geography, RE)

Or

- Passes in four subjects in the Scottish Certificate of Education (as above)

Or

Passes in four subjects in the Northern Ireland Grammar School Senior Certificate Exam (as above)

The qualifications detailed above are the industry minimum,but individual companies may require a higher standard.

UCAS tariff for access to degree courses

The industry uses the UCAS tariff points system to help you work out your qualifications, to see if you meet the entry requirements. The UCAS points required for the maritime degree programmes can be made up of any combination of qualifications.

To work out how many points your qualification is awarded, we recommend that you visit the UCAS website, listing all FE qualifications. You can log into the tariff calculator at
www.ucas.com/ucas/tariff-calculator

Medical requirements

Officer cadets must be in good health and capable of passing the Merchant Navy Medical Examination (ENG1). Navigation officer cadets must also have normal colour vision and be able to pass the MCA sight test, although corrective lenses may be acceptable in certain cases.

Anyone contemplating a career as a ship's officer would be well advised to take a medical examination and sight test as soon as possible to find out if there are any physical bars to their career aspirations. The MCA holds a list of approved doctors throughout the UK who are able to provide ENG1 seafarer medical examinations. This list can be found at **www.gov.uk/government/publications/mca-approved-doctors-uk-based**

Nationality

MCA certificates of competency may be awarded to people of any nationality and the training programmes are open to all.

However, restrictions on nationalities do apply for officer cadet training sponsorship, and therefore you should take guidance from sponsoring shipping companies. A potential international candidate should secure sponsorship from a suitable shipping company that will be able to provide appropriate sea service as part of the cadetship programme.

International students should also hold a formal International English Language Testing System (IELTS) certificate of at least 5.5, as a good knowledge of written and spoken technical English is required to commence the programme.


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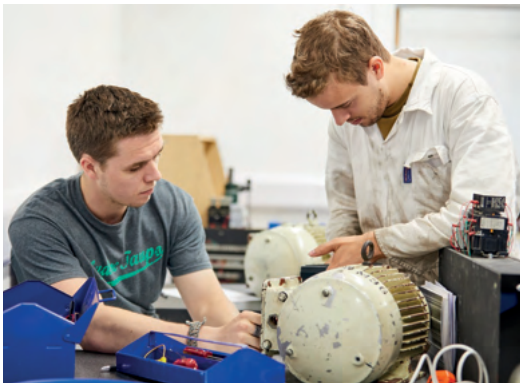


Officer cadet programme

Officer cadet training programmes consist of a number of training phases, alternating between time at the University and time at sea on board one of the shipping company's vessels. The detailed course programmes are outlined on the following pages, but a brief summary of officer cadet training is as follows:

Year 1 – phase one
Training starts at the University and is designed to give officer cadets the necessary skills and academic underpinning knowledge (UPK) required for professional certification by the MCA and to operate safely at sea. Officer cadets also undertake specific safety courses required by international convention.

Year 1 – phase two
Training is at sea, gaining practical shipboard experience. In the deck department, an officer cadet will work alongside ratings and under the supervision of qualified officers, developing practical navigation and other ship operation skills. In the engineering department, qualified engineering and electro-technical officers will help officer cadets put their academic theory into practice.

Years 2 and 3 – phases three, four and five
Training alternates between shore-based studies at the University for underpinning knowledge and specialist short courses, and work at sea for professional development. Greater responsibility is given as training progresses. Phase five includes the final examinations and assessments required to complete the cadetship.

> "No two days are the same. One day I might be crossing the Atlantic with no other ships in sight. A few days later I might be negotiating the Dover Straits, the busiest shipping lane in the world."

Christopher
Third Officer

Deck (navigation) officers – honours degree

University phase	Duration	Content
Phase 1	23 weeks	• Freshers' week and general induction to the shipping industry • Assessment for entry to degree programme • STCW short courses – (BSTW) – 5 days, covering PST, BFF, EFA, PSSR, PSA Proficiency in Designated Security Duties (PDSD) (1 day) Honours Degree (BSc) Level 4 units (20c each): Coastal Navigation, Ocean Navigation, Ship Operations, Stability and Ship Construction, Bridge Management, Work-Based Learning (Operations).
Phase 2 (At Sea)	27 weeks	Work-Based Learning (Operations) MNTB Deck Training Record Book
Phase 3	16 weeks	Honours Degree (BSc) Level 5 units (20c each): Advanced Bridge Management, Advanced Navigation, Advanced Stability and Construction, Maritime Law and Management, Cargo Operations, Work-Based Learning (Management). NAEST, Theory and Practice (2 weeks).
Phase 4 (At Sea)	49 weeks	Work-Based Learning (Management) MNTB Deck Training Record Book
Phase 5	28 weeks	STCW short courses: NAEST, Theory and Practice (final week), ECDIS, AFF, EDH, PSC&RB, GMDSS, and NAEST(O). MCA orals preparation Successful completion of the MCA oral examination leads to the award of the initial MCA Certificate of Competency Honours Degree (BSc) Level 6 units (20c each): Principles of Accident Investigation, Leadership and Management, Marine Surveying and Insurance, Maritime Business and Commercial Practices. Dissertation (40c) Award of BSc (Hons) Nautical Science and end of cadetship

Deck (navigation) officers – foundation degree

University phase	Duration	Content
Phase 1	23 weeks	• Freshers' week and general induction to the shipping industry • Assessment for entry to degree programme • STCW short courses (BSTW)- 5 days, covering PST, BFF, EFA, PSSR and PSA. • Proficiency in Designated Security Duties (PDSD) (1 day) Foundation Degree (FdSc) Level 4 units (20c each): Coastal Navigation, Ocean Navigation, Ship Operations, Stability and Ship Construction, Bridge Management, Work-Based Learning (Operations).
Phase 2 (At Sea)	27 weeks	Work-Based Learning (Operations) MNTB Deck Training Record Book
Phase 3	16 weeks	Foundation Degree (FdSc) Level 5 units (20c each): Advanced Bridge Management, Advanced Navigation, Cargo Operations, Work-Based Learning (Management), Advanced Stability and Ship Construction, Maritime Law and Management. NAEST, Theory and Practice (two weeks) HELM(O) and MFA
Phase 4 (At Sea)	49 weeks	Work-Based Learning (Management) MNTB Deck Training Record Book
Phase 5	44 weeks	**Award of Foundation Degree (FdSc) in Nautical Science** STCW short courses: NAEST, Theory and Practice (final week), ECDIS (5 days), AFF, EDH, GMDSS, NAEST(O), PSC&RB MCA orals preparation Successful completion of the MCA oral examination leads to the award of the initial **MCA Certificate of Competency** and end of cadetship.
Top up to BSc (Hons) degree – optional		
Candidates who successfully achieve a foundation degree are then eligible to top up the academic award to: **BSc (Hons) Maritime Management Top-Up**		

Deck (navigation) officers – HND programme

University phase	Duration	Content
Phase 1	14 weeks	• Freshers' week and general induction to the shipping industry • HE entry course, including: Intro to General Ship Knowledge, Mathematics for Nautical Science, Intro to Navigation, Academic Study Skills and Intro to Ship and Port Operations. • STCW pre-sea short courses – 5 days, covering PST, BFF, EFA, PSSR, PSA and PDSD. Successful completion of the HE Entry Course leads to the award of: **Level 3 Certificate in Nautical Science**
Phase 2 (At Sea)	39 weeks	MNTB Deck Training Record Book
Phase 3	22 weeks	HND Level 4 units (20c each): Coastal Navigation, Ocean Navigation, Ship Operations, Stability and Ship Construction, Bridge Management, Academic Study Skills. Preparation for SQA examinations STCW short courses – HELM(O) and MFA
Phase 4 (At Sea)	31 weeks	MNTB Deck Training Record Book Guided Studies (HND Level 2; SQA/MCA written and oral exams)
Phase 5	44 weeks	HND Level 5 units (20c each): Advanced Stability and Ship Construction, Advanced Navigation, Maritime Law and Management, Advanced Bridge Management, Cargo Operations, Academic Study Skills. NAEST, Theory and Practice (3 weeks) Preparation for SQA/MCA written and oral examinations. STCW short courses: ECDIS, AFF, PSC&RB, GMDSS, EDH and NAEST(O) Successful completion of HND Level 4 units, SQA/MCA written and oral examinations and STCW short courses leads to the award of the initial **MCA Certificate of Competency** and end of cadetship. Successful completion of all HND academic assessments at the required pass rates provides full academic exemptions to Chief Mate/ Master level and leads to the award of: **Higher National Diploma (HND)**
Top up to BSc (Hons) degree – optional		
Candidates who successfully achieve a full HND are then eligible to top up the academic award to: **BSc (Hons) Maritime Management Top-Up**		

Marine engineering officers – honours degree programme

University phase	Duration	Content
Phase 1	19 weeks	• Freshers' week and general induction to the shipping industry • Assessment for entry to degree programme • STCW short courses (BSTW) – 5 days, covering PST, BFF, EFA, PSSR. Proficiency in Designated Security Duties (PDSD) (1 day) Marine Engineering Principles and Workshop Skills Training Honours Degree (BEng) Level 4 units (20c each): Engineering Mathematics, Marine Electronics and Control Systems, Marine Engineering Systems, Marine Engineering Principles, General Engineering Science, Work-Based Engineering Operations
Phase 2 (At Sea)	32 weeks	Work-Based Engineering Operations, MNTB Engineer Training Record Book
Phase 3	34 weeks	Honours Degree (BEng) Level 5 units (20c each): Further Engineering Science, Marine Electro-Technology, Marine Engineering Management, Marine Propulsion Systems, Naval Architecture, Work-Based Engineering Project STCW short courses: MFA, AFF
Phase 4 (At Sea)	21 weeks	Work-Based Engineering Project, MNTB Engineer Training Record Book
Phase 5	23 weeks	STCW short courses: HV(O), HELM(O), PSC&RB. Workshop Skills Training MCA orals preparation Successful completion of MCA oral examination leads to award of initial **MCA Certificate of Competency** Honours Degree (BEng) Level 6 units (20c each): Principles of Accident Investigation, Leadership and Management, Marine Surveying and Insurance, Fundamentals of Engineering System Design Dissertation (40c) Award of **BEng (Hons) Marine Engineering** and end of cadetship.

Marine engineering officers – foundation degree

University phase	Duration	Content
Phase 1	19 weeks	• Freshers' week and general induction to the shipping industry • Assessment for entry to degree programme • STCW short courses (BSTW) – (5 days) PST, BFF, EFA, PSSR. Proficiency in Designated Security Duties (PDSD) (1 day) • High Voltage (Operational) – Certificated only – part of FD Marine Engineering Principles and Workshop Skills Training Foundation Degree (FdEng) Level 4 units (20c each): Engineering Mathematics, Marine Electronics and Control Systems, Marine Engineering Systems, Marine Engineering Principles, General Engineering Science, Work-Based Engineering Operations.
Phase 2 (At Sea)	32 weeks	Work-Based Engineering Operations, MNTB Engineer Training Record Book
Phase 3	34 weeks	Level 5 units (20c each): Further Engineering Science, Marine Electro-Technology, Marine Engineering Management, Marine Propulsion Systems, Naval Architecture, Work-Based Engineering Project. Workshop Skills Training STCW short courses: MFA, AFF
Phase 4 (At Sea)	21 weeks	Work-Based Engineering Project, MNTB Engineer Training Record Book
Phase 5	23 weeks	Award of **Foundation Degree (FdEng) in Marine Engineering** STCW short courses: PSC&RB, HV(O), HELM(O) Workshop Skills Training and MCA orals preparation Successful completion of MCA oral examination leads to award of initial **MCA Certificate of Competency** and end of cadetship.
Top up to BEng (Hons) degree – optional		
Candidates who successfully achieve a foundation degree are eligible to top up the academic award to: **BEng (Hons) Mechanical Engineering**.		

Marine engineering officers – HND programme

University phase	Duration	Content
Phase 1	26 weeks	• Freshers' week and general induction to shipping industry • HE Entry Course – Intro to Engineering Mathematics, Intro to Marine Electro-Technology, Intro to Marine Engineering Systems, General Ship Knowledge, and Intro to Engineering Science. Successful completion of the HE Entry Course leads to the award of: **Level 3 certificate in Marine Engineering** • MNTB Workshop Skills and Technology • STCW short courses (BSTW) – 5 days, covering: PST, BFF, EFA, PSSR, PSA. • Proficiency in Designated Security Duties (PDSD) (1 day).
Phase 2 (At Sea)	32 weeks	MNTB Engineer Training Record Book Consolidation of underpinning knowledge (UPK)
Phase 3	32 weeks	HND Level 4 units (20c each): Engineering Mathematics, Marine Electronics and Control Systems, Marine Engineering Systems, General Engineering Science, Marine Engineering Principles and Marine Engineering Operations. MNTB Workshop Skills; IAMI EK examination preparation STCW short courses: AFF, MFA, HV(O)
Phase 4 (At Sea)	30 weeks	MMNTB Engineer Training Record Book Consolidation of UPK/IAMI EK and MCA orals preparation
Phase 5	32 weeks	STCW short courses: HELM(O), PSC&RB Completion of MNTB Workshop Skills Preparatory courses for IAMI EK and MCA oral examinations HND Level 5 units (20c): Engineering Project Portfolio, Marine Propulsion Systems, Further Engineering Science, Naval Architecture, Marine Engineering Management and Marine Electro-Technology. Successful completion of IAMI EK/MCA oral examinations leads to the award of the initial **MCA Certificate of Competency** Successful completion of all HND academic assessments provides full academic exemptions up to chief engineer level and leads to the award of **Higher National Diploma (HND) Marine Engineering**.
Top up to BEng (Hons) degree – optional		
Candidates who successfully complete a full HND are then eligible to top up the academic award to: **BEng (Hons) Mechanical Engineering.**		

Marine electro-technical officers – honours degree programme

University phase	Duration	Content
Phase 1	19 weeks	• Freshers' week and general induction to the shipping industry • Assessment for entry to degree programme • STCW short courses (BSTW) – 5 days, covering PST, BFF, EFA, PSSR, PSA. • Proficiency in Designated Security Duties (PDSD) (1 day) • MCA ETO Workshop Skills Training Honours Degree (BEng) Level 4 units (20c each): Engineering Mathematics, Marine Electronics and Control Systems, Marine Engineering Systems, General Engineering Science, Marine Electrical and Electronic Principles, Work-Based Engineering Operations
Phase 2 (At Sea)	32 weeks	Work-Based Engineering Operations MNTB ETO Training Record Book and Electronics (Guided Studies)
Phase 3	34 weeks	Honours Degree (BEng) Level 5 Units (20c each): Electronic Navigation Systems, Marine Power Systems, Marine Engineering Management, Microprocessor Control and Programming, Radio Communication Engineering, Work-Based Engineering Project STCW short courses: MFA, HV(O), AFF Workshop Skills Training
Phase 4 (At Sea)	21 weeks	Work-Based Engineering Project MNTB ETO Training Record Book
Phase 5	21 weeks	STCW short courses: PSC&RB, HELM(O), HV(M) ENEM / GMDSS Radio Maintenance Workshop Skills Training MCA Orals Preparation Successful completion of MCA Oral examination leads to award of initial **MCA Certificate of Competency**. Honours Degree (BEng) Level 6 units (20c each): Principles of Accident Investigation, Leadership and Management, Marine Surveying and Insurance, Fundamentals of Engineering System Design. Dissertation (40c) Award of **BEng (Hons) Marine Electrical and Electronic Engineering** and end of cadetship

Marine electro-technical officers – foundation degree

Admission in January 2023 only.

University phase	Duration	Content
Phase 1	19 weeks	• Freshers' week and general induction to the shipping industry • Assessment for entry to degree programme • STCW short courses (BSTW) – 5 days, covering PST, BFF, EFA, PSSR, PSA. • Proficiency in Designated Security Duties (PDSD) (1 day) • MCA ETO Workshop Skills Training Foundation Degree (FdEng) Level 4 units (20c each): Engineering Mathematics, Marine Electronics and Control Systems, Marine Engineering Systems, General Engineering Science, Marine Electrical and Electronic Principles, Work-Based Engineering Operations.
Phase 2 (At Sea)	32 weeks	Work-Based Engineering Operations MNTB ETO Training Record Book and Electronics (Guided Studies)
Phase 3	34 weeks	(FdEng) Level 5 units (20c each): Electronic Navigation Systems, Marine Power Systems, Marine Engineering Management, Microprocessor Control and Programming, Radio Communication Engineering, Work-Based Engineering Project. STCW short courses: MFA, AFF, HV(O) Workshop Skills Training
Phase 4 (At Sea)	21 weeks	Work-Based Engineering Project MNTB ETO Training Record Book
Phase 5	21 weeks	Award of **Foundation Degree (FdEng) Marine Electrical and Electronic Engineering** STCW short courses: PSC&RB, HELM(O), HV(M) Workshop Skills Training, ENEM/GMDSS Radio Maintenance MCA orals preparation Successful completion of the MCA oral examination leads to award of initial **MCA Certificate of Competency** and end of cadetship

Marine electro-technical officers – HND programme

University phase	Duration	Content
Phase 1	27 weeks	• Freshers' week and general induction to shipping industry • HE Entry Courses – Intro to Engineering Mathematics, Intro to Marine Electro-Technology, Intro to Marine Engineering Systems, General Ship Knowledge, and Intro to Engineering Science. Successful completion of the HE Entry Course leads to the award of: **Level 3 Certificate in Marine Engineering** • MNTB Workshop Skills and Technology • STCW short courses (BSTW) – 5 days, covering: PST, BFF, EFA, PSSR, PSA. • Proficiency in Designated Security Duties (PDSD) (1 Day)
Phase 2 (At Sea)	28 weeks	MNTB Engineer Training Record Book Consolidation of underpinning knowledge (UPK)
Phase 3	32 weeks	HND Level 4 units (20c each): Engineering Mathematics, Marine Electronics and Control Systems, Marine Engineering Systems, Marine Electrical and Electronic Principles, General Engineering Science, Marine Electrical Operations MNTB Workshop Skills STCW short courses: HV(O), AFF, MFA
Phase 4 (At Sea)	30 weeks	MNTB Engineer Training Record Book Consolidation of UPK/IAMI EK and MCA orals preparation.
Phase 5	34 weeks	STCW short courses: HELM(O), PSC&RB, HV(M) Completion of MNTB Workshop Skills Preparatory courses for IAMI EK and MCA oral examinations HND Level 5 units (20c): Engineering Project Portfolio, Electronic Navigation Systems, Marine Power Systems, Marine Engineering Management, Microprocessor Control and Programming, and Radio Communication Engineering. Successful completion of IAMI EK/MCA oral examinations leads to the award of the initial **MCA Certificate of Competency**. Successful completion of all HND academic assessments leads to the award of **Higher National Diploma (HND) Marine Electrical and Electronic Engineering**.

Professional short courses

In addition to academic studies, officer cadets undertake a number of mandatory safety and survival courses during their cadetship. These include the following:

- Personal Survival Techniques (PST)
- Personal Social and Safety Responsibilities (PSSR)
- Basic Fire-Fighting (BFF)
- Elementary First Aid (EFA)
- Personal Security Awareness (PSA)
- Proficiency in Designated Security Duties (PDSD)
- Medical First Aid Aboard Ship (MFA)
- Proficiency in Survival Craft and Rescue Boats (PSC&RB)
- Advanced Fire-Fighting (AFF)
- Human Element, Leadership and Management: Operational Level (HELM(O))

Deck cadets must also complete the following courses:

- Efficient Deck Hand (EDH)
- Global Maritime Distress and Safety System General Operator's Certificate (GMDSS)
- Navigation Aids and Equipment Simulator Training: Operational Level (NAEST(O)).

Marine engineer and METO* cadets must also complete the following course:

- High Voltage: Operational Level (HV(O))
- High Voltage: Management Level (HV(M))*

Life after the officer cadetship

Deck officers
Newly qualified deck (navigation) officers will usually join their company's fleet as third Officer, undertaking bridge watchkeeping duties at sea and operational duties in port, with responsibility for the safety of the crew, ship, cargo and environment.

As their skills and experience develop, young officers progress to higher certificates of competency, leading eventually to certification as ship's Captain (Master) and possibly to the command of their own vessel.

Marine engineering officers
Newly qualified marine engineering officers will usually join their company's fleet as fourth Engineer, undertaking engine room watchkeeping duties and having responsibility for the safe and efficient operation of the ship's main propulsion unit and other vital services.

As their skills and experience develop, young officers progress to the higher certificates of competency, leading eventually to certification as the Chief Engineer and possibly to this position aboard ship.

Marine electro-technical officers
After completing the cadetship, METOs typically remain within the ETO specialisation. Job opportunities and career progression within the ETO specialisation will then depend on the shipping company concerned but can often lead to the position of Electro-Technical Officer, Chief Technical Officer or Electrical Superintendent.

Positions ashore
Many opportunities also exist for qualified deck, marine engineering and METO officers ashore and the maritime industry offers lifelong careers, whether at sea or ashore.

Shipping companies often recruit shore-based marine superintendents and fleet operations staff from their seagoing officers. Harbour authorities recruit experienced officers to train as pilots, harbour masters and port operations managers.

Marine insurance companies require the officers' skill andexperience to fill such roles as hull, cargo and machinery surveyors. The MCA also requires surveyors and examiners, while maritime colleges recruit lecturers and assessors.

Career progression

Once initial certification is gained, further training and experience will enable progression to the qualifications needed to become either a ship's Captain, who is in overall command of the ship, a Chief Engineer, who is in charge of all the engineering and technical services, or an Electro-Technical Officer, with overall responsibility for control engineering and electronic systems.

It typically takes a further five or six years to achieve these senior qualifications. Promotion will then depend on merit and opportunity, as well as holding higher level qualifications.

For those who, later, wish to progress their career ashore, there is an extensive range of opportunities available, from marine pilots and surveyors to port operations, marine law and a host of other occupations.

Detailed career progression charts for each discipline and academic route can be accessed at:
maritime.solent.ac.uk/careers

> "In the space of four years I have been around the world twice. I have hosted the Captain's table on Queen Mary 2 and met royalty, celebrities and some of the most interesting people who travel with us.
> I am responsible for driving a £500 million ship carrying over 2,500 passengers and 1,000 crew."

Christopher
Third Officer

Taking the next step

Research the sponsoring companies

You will find a lot of information on each individual shipping company's website about the types of vessel operated by the company and the voyage areas. If you wish to apply for an officer cadetship, the next step is to contact companies directly or apply online for an officer cadet application form.

Sponsoring companies normally have a recruitment drive twice a year for entry in January and September. Our website holds a comprehensive list of, and web links to, sponsoring companies who recruit navigation, marine engineering and marine electro-technical officer cadets.

For a list of sponsoring companies, visit **maritime.solent.ac.uk/careers/officer-cadet-training/how-to-apply**

Come to our maritime careers open days

We run an open day usually around February, June and October where you can meet some of the sponsoring shipping companies and recruitment specialists. You can also walk around the campus; take a look at our facilities, listen to talks about life at sea and meet the officer cadets currently studying at Warsash.

Take a look at our website for more information, dates and how to register at **maritime.solent.ac.uk/maritime-open-days**

or email us at **opendays@solent.ac.uk**

> "Do it – jump in and you won't look back. Be prepared to work very hard, both at college and at sea, but the rewards are more than worth it."

Graham
Third Engineer

Useful links

The following links will help provide more information about maritime courses and training, careers at sea, recruiting shipping companies and guidance to MCA certification:

British Marine
Britishmarine.co.uk/careers

Careers at Sea
www.careersatsea.org

International Maritime Organisation
www.imo.org

Maritime and Coastguard Agency
www.gov.uk/government/organisations/maritime-andcoastguard-agency

Maritime London
Maritimelondon.com

Maritime UK
www.maritimeuk.org

Merchant Navy Training Board
www.mntb.org.uk

Solent University
maritime.solent.ac.uk

The Chamber of Shipping
www.ukchamberofshipping.com

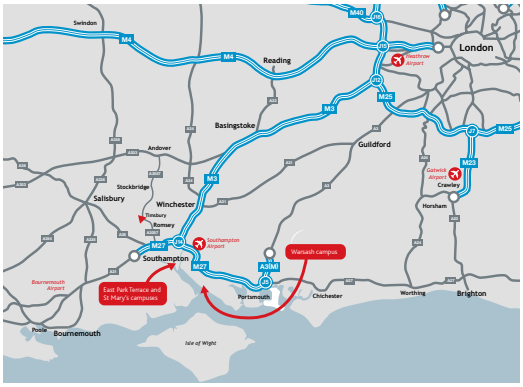
The Marine Society and Sea Cadets
www.marine-society.org

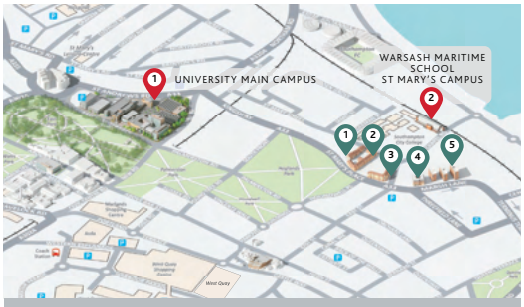
How to find us

Officer cadet training at Solent University is located in Southampton on the south coast of England with excellent links and fast access by rail, air and road.

Please visit **maritime.solent.ac.uk/training-at-warsash** for more detailed guidance and maps.

The postcode for St Mary's Campus is **SO14 5GL**





Campus buildings

1: East Park Terrace - main campus
2: St Mary's campus

Student residences

1: David Moxon
2: Kimber
3: Hamwic
4: Chantry
5: Deanery

By road

Southampton is just 75 miles (120km) from London, with excellent road links. Southampton sits at the southern end of the M3 motorway.

By air

The closest airports are Southampton International Airport (Airport Parkway station) and Bournemouth International Airport. However, London Heathrow and London Gatwick airports are both one and a half hours away by car or taxi (traffic dependent).

By rail

From London and the rest of the UK, travel to Southampton Central station, where there are taxi ranks.

By coach

National Express runs a coach service from many UK towns and cities to Southampton.

Contact us

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St Mary's Campus
Chapel Road
Southampton
SO14 5GL

@warsashmaritime
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Officer cadet enquiries

Cadet Admissions
Tel: +44 (0)23 8201 5066
Email: warsash.admissions@solent.ac.uk

General enquiries

Main Switchboard tel: +44 (0)23 8201 3000
Email: admissions@solent.ac.uk
maritime.solent.ac.uk

Every effort has been made to ensure that the information contained in this brochure is accurate and up to date. However, the content was prepared in September 2022, and there may be unforeseen circumstances which force change to some of the details printed.

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