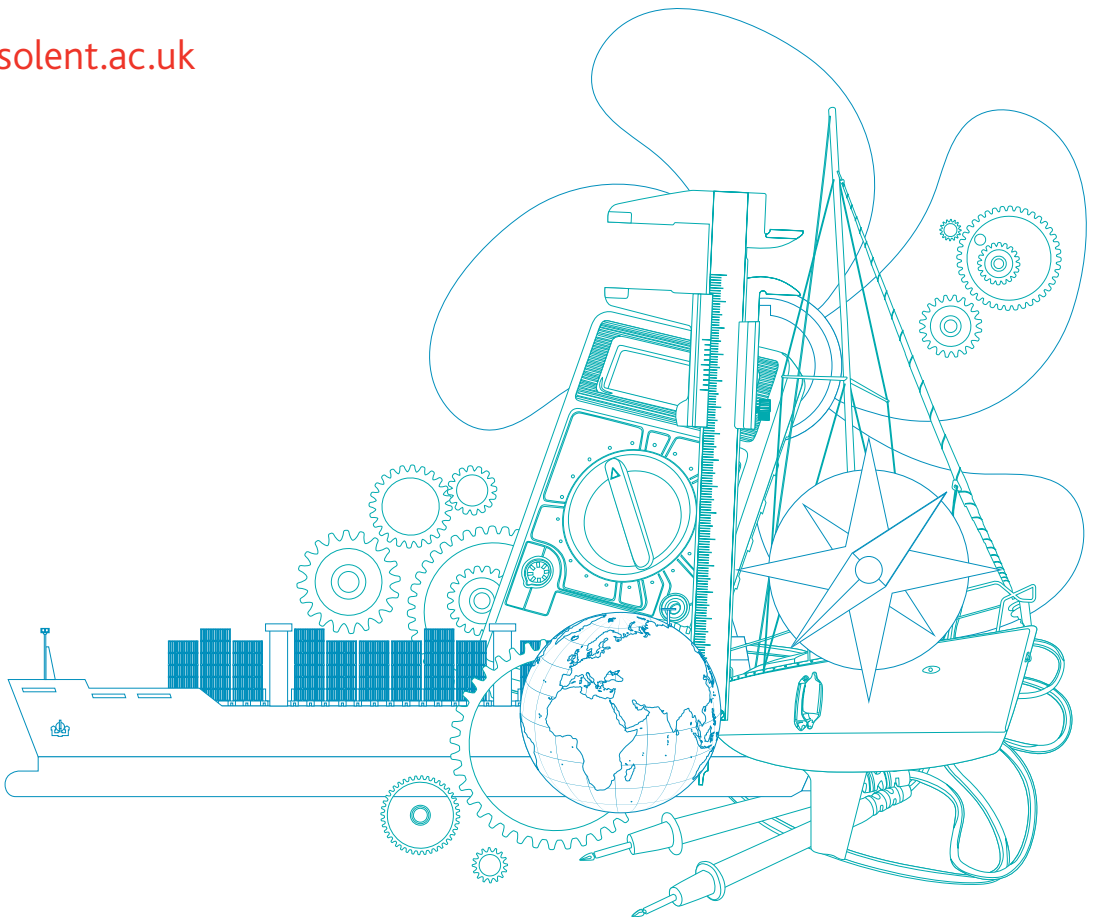


# MARITIME, ENGINEERING AND YACHT DESIGN

Industry-focused courses

[solent.ac.uk](https://solent.ac.uk)







## Welcome

**Based in the heart of Southampton on the UK's south coast, Solent is an open, friendly and inclusive university with around 12,800 staff and students.**

We were voted one of the UK's most creative universities in the *Which? University* 2013 and 2014 student polls, and we have a strong focus on allowing our students to explore the boundaries of professional practice.

As for Southampton, it's a vibrant and modern city with something to offer everyone, and at our city-centre East Park Terrace campus you'll be right in the middle of it. We're surrounded by spacious parks – ideal for everything from a kick-about to stretching out in the sun.

With around 36,000 students living in the city, there's always something going on. Big name DJs, the latest bands and West End theatre productions all come here.

And if you're into sports, Southampton offers both Premier League football and cricket at county and international level. The city's also home to a whole host of sports facilities, including Solent's own Sports Centre St Mary's and the Royal Yachting Association (RYA)-accredited Watersports Centre.

We're currently in the middle of an exciting period of development, with our latest multi-million-pound building project – the Spark building – now completed. As well as great new teaching facilities, the new building provides students with an exciting, modern and environmentally friendly space for social events, teaching, exhibitions and shows.

All the best of Southampton is within easy walking distance of campus and our student residences – restaurants, bars, nightclubs and one of the biggest shopping centres in the south are just minutes away. If you prefer something more cultured, there are countless museums, galleries and theatres. And when you want something different, the beautiful New Forest, Isle of Wight, south-coast beaches and even France are all within easy reach.

Just 75 miles from London, Southampton has excellent transport links by road, rail and air. Visitors from overseas or major UK cities can fly directly into Southampton International Airport, while London is just 90 minutes away by car or train.



# Our courses

To help you find the right route through your education, we offer HNCs, HNDs, foundation years and top-up courses, as well as our undergraduate degrees.

**Undergraduate honours degrees** usually take three years, with some offering a four-year option that includes a year abroad, a work placement (WPLa) or a study abroad placement (SPLa).

**Foundation years** are ideal for people without the usual academic qualifications/experience for an undergraduate degree. Over one year you'll learn essential study skills and prepare to join a specialist degree the following year.

- FdA – Foundation of Arts
- FdEng – Foundation of Engineering
- FdSc – Foundation of Science

**Foundation degrees** are two-year courses, usually focused on a specific career or sector, equivalent to the first part of an undergraduate degree.

**Higher National Certificate (HNC)** courses (two years part-time) are vocational undergraduate qualifications. This is the level below an HND but can be topped up to a full degree.

**Higher National Diploma (HND)** courses (two years full-time or three years part-time) provide work-related experience and knowledge. Once completed, you'll be able to top up to a full undergraduate degree.

**Top-up courses** take place over one year and allow you to top up your foundation degree or HND to a full BA (Hons), BSc (Hons) or BEng (Hons) degree.

New courses are regularly introduced – please visit our website for an up-to-date list.

## Jargonbuster

There's a lot of terminology surrounding coming to university – here's a quick guide to help you.

**Further education** – follows on from compulsory secondary school – for example, A-levels, BTEC, diplomas and so on.

**Higher education** – follows on from further education, at a university or other HE institution – for example, an undergraduate degree or HND.

**Hons** – short for 'honours', this shows that your degree includes the maximum number of units. All of our undergraduate degrees are honours degrees.

**Undergraduate degrees** – a first degree, also called a bachelor's degree, these are classified by subject type:

- BA (bachelor of arts) – business or creative courses
- BEng (bachelor of engineering) – engineering-related courses
- BSc (bachelor of science) – science-related courses
- LLB (bachelor of laws) – law-related courses



## Online course comparison tool

You may be interested in more than one course. Visit [solent.ac.uk](http://solent.ac.uk) to see which one would best match your aspirations.



**Disclaimer:** every effort is made to ensure that the information given in this brochure is correct at the time of publication and that the course information accurately describes the courses offered by the University. However, from time to time details change; you should contact the University to verify information, especially if you wish to place particular reliance upon it prior to accepting an offer.

## Maritime and Yacht Design

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FdEng Marine Electrical and Electronic Engineering	6
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Applications for some of our maritime courses are done only via sponsoring shipping companies. You should apply direct to the sponsoring companies for details of their recruitment policies and the availability of sponsorship. There are a number of UK sponsoring companies that recruit UK/EU nationals as officer cadets to work in the various shipping sectors of the Merchant Navy (for example, cargo, container, cruise, tanker and so on) – either individual shipping companies recruiting to fulfil their own staffing needs or training organisations that recruit on behalf of their clients.

## Engineering

18

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Companies normally start the recruitment process around January each year for entry in the following September or January.

Visit [warsashacademy.co.uk/sponsoringcompanies](https://warsashacademy.co.uk/sponsoringcompanies) for more details.



If you want to become a ship's officer, you must undertake an officer cadet training programme approved by the Merchant Navy Training Board (MNTB), which involves academy-based education integrated with periods of practical training at sea. You'll complete a foundation degree in either marine operations, marine engineering, marine electro-technical engineering or study towards a Higher National Diploma (HND) in nautical science or marine engineering.

Visit [warsashacademy.co.uk/officercadets](https://warsashacademy.co.uk/officercadets) for more details.



\*Foundation year route available – please check the relevant course webpage for detailed information.



**Survival craft facilities**, including lifeboats, fast rescue boats, RIBs and lifting equipment



**60-metre towing tank** with computer-controlled wave generator, for hydrodynamic testing



Potential for **field trips to ports** of Southampton, Rotterdam and Antwerp



**Specialist** bridge and engine room simulators



Dedicated **ship handling centre** at Timsbury Lake



The first-year model yacht project was great. Taking a design from paper to build and then testing it was really satisfying. This continued through the next two years, with practical applications of skills and knowledge learnt in the classroom. ”

**Rich Plant, Solent graduate, designer at Sunseeker International**



We are looking for graduates who are keen to learn and try new things. As an organisation we promote innovation and development, so we like to recruit people who will bring new ideas and suggest new ways to work or improve our processes.

We primarily employ graduates from maritime, logistics and transport courses, but all courses are of interest to us, and we value Solent University graduates as they bring energy, new thinking and fresh ideas. ”

**Steve Barfoot, Head of customer care, Wallenius Wilhelmsen Logistics**

# MARITIME AND YACHT DESIGN

Our fascinating courses can help provide you with the skills to unlock a world of career possibilities.

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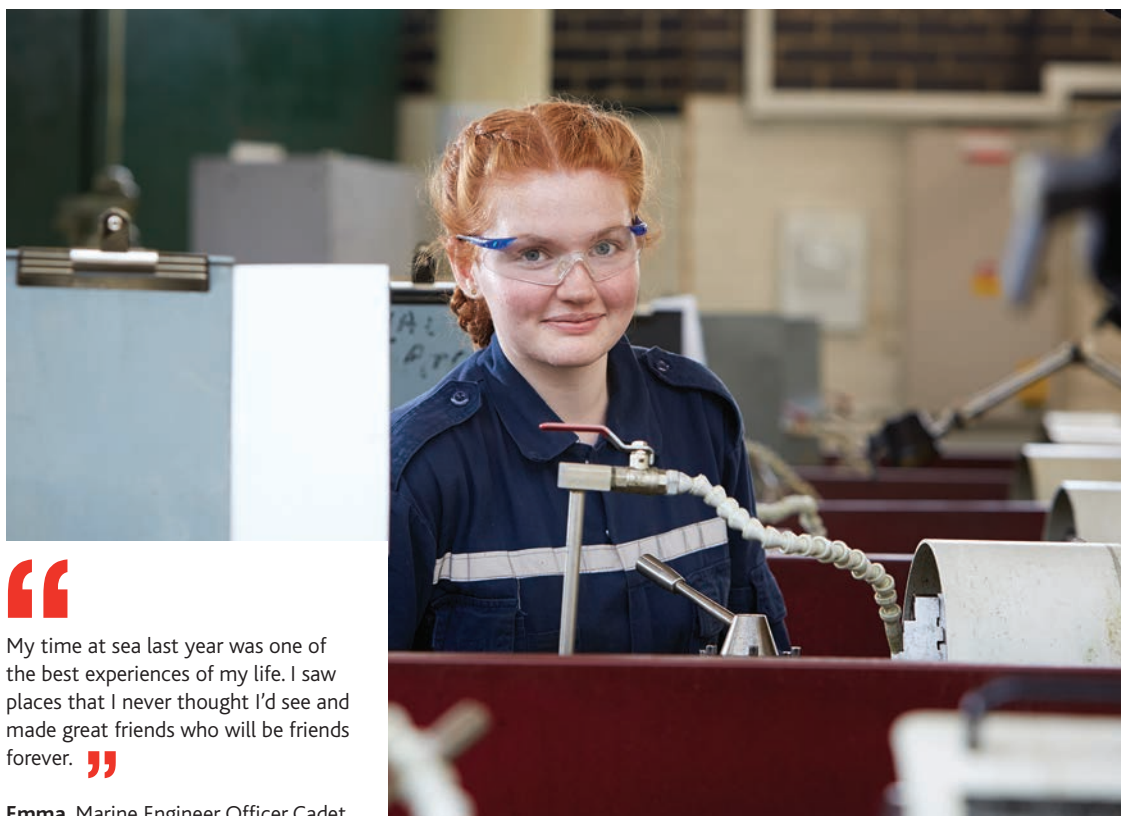
Perhaps your interests lie in maritime, and you'll be using your analytical and investigational skills to estimate risk and draft appropriate insurance policies as a marine underwriter. Or if you have strong organisational and people skills, you may be leading a team in a freight-forwarding business, a shipping company or a port terminal.

Alternatively, you could be a naval architect, working as part of a specialised team to build the next racing yachts, high-speed powerboats or luxury motor yachts.

Whatever you're interested in, you'll get an unbeatable sense of satisfaction when something you helped develop becomes operational.

There aren't many better places to study maritime and shipping than Southampton. It's a major international port, with companies operating right on your doorstep. You'll benefit from visits from terminal operators, plus trips to other ports and major maritime organisations.

At Warsash Maritime Academy, you'll study within a dedicated environment that is world-renowned as a leading provider of maritime education and training. And drawing on the Academy's industry links, you'll have plenty of opportunities for work experience too.



“

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 Officer Cadet

FdEng


## Marine Electrical and Electronic Engineering

**Prepare yourself for an exciting career at sea as a marine electro-technical officer (METO) on this specialised three-year foundation degree.**

The course is aligned with the International Maritime Organization's formal METO career path for specialists in electrical and electronic engineering at sea and onshore, and has a strong emphasis on real-world, problem-based learning – building the practical understanding of electrical, electronic and general engineering you will need to operate safely at sea.

This degree programme is part of a sponsored merchant navy officer cadetship. You complete practical and academic learning at a nautical training centre such as the internationally renowned Warsash Maritime Academy, combined with sea training in your sponsoring company's vessels.

The course will lead you initially to employment as a certified watchkeeping marine electro-technical officer on board a commercial (merchant) ship.

 Application to this course is only via sponsoring shipping companies – please contact us for more information.

[solent.ac.uk/MarineElectrical](https://solent.ac.uk/MarineElectrical)



“

A job as a ship's officer really offers the full package: responsibility, excellent career opportunities, travel, competitive pay ... the list goes on. I definitely recommend this career to any aspiring young person. ”

Joe, Navigation Officer Cadet


FdEng

## Marine Engineering

**Develop your technical and engineering skills for a career in the maritime industry or other engineering environments, both ashore and afloat, with this specialised foundation degree course.**

This programme will lead you to employment as a certified watchkeeping engineering officer on board a commercial (merchant) ship. This exciting course offers the knowledge and skills to operate in modern marine engineering. On completing your degree (and additional safety training/assessments), you will be eligible for the STCW III/1 Engineering Officer of the Watch Certificate of Competency.

This degree programme is part of a sponsored merchant navy officer cadetship. You complete practical and academic learning at a nautical training centre such as the internationally renowned Warsash Maritime Academy, combined with sea training in your sponsoring company's vessels.

 Application to this course is only via sponsoring shipping companies – please contact us for more information.

[solent.ac.uk/MarineEngineering](https://solent.ac.uk/MarineEngineering)



BEng (Hons)

## Marine Engineering and Management (Top-up)

**Take the next step in your maritime career by developing your qualifications while you work – at sea or in an appropriate industrial area.**

Warsash Maritime Academy is a world leader in maritime education and training, benefiting from close links with the marine industry. The Academy offers you a blended learning course that enables seagoing and shore-based personnel to top up a foundation degree, an HND in marine engineering or an MCA Chief Engineer (Unlimited) Certificate of Competency (or equivalent) into a full BEng (Hons) degree.

Build on your existing engineering knowledge and gain an understanding of the principles and applications of engineering management in the modern industry.

You'll be supported to become a flexible problem solver, able to respond to a wide range of challenges, and develop the managerial qualities and skills that a ship's engineer or senior technical manager ashore requires.

Begin with a 15-week period at Warsash and then complete the course via distance learning over a period of up to 18 months, supported by our course team.

Take advantage of our world-class facilities and learn from staff with extensive professional experience. You'll develop the kind of practical, readily applicable knowledge and skills that will make you an asset to employers.



To apply for this course, please email [wma.admissions@solent.ac.uk](mailto:wma.admissions@solent.ac.uk) or call +44 (0)23 8201 5015.

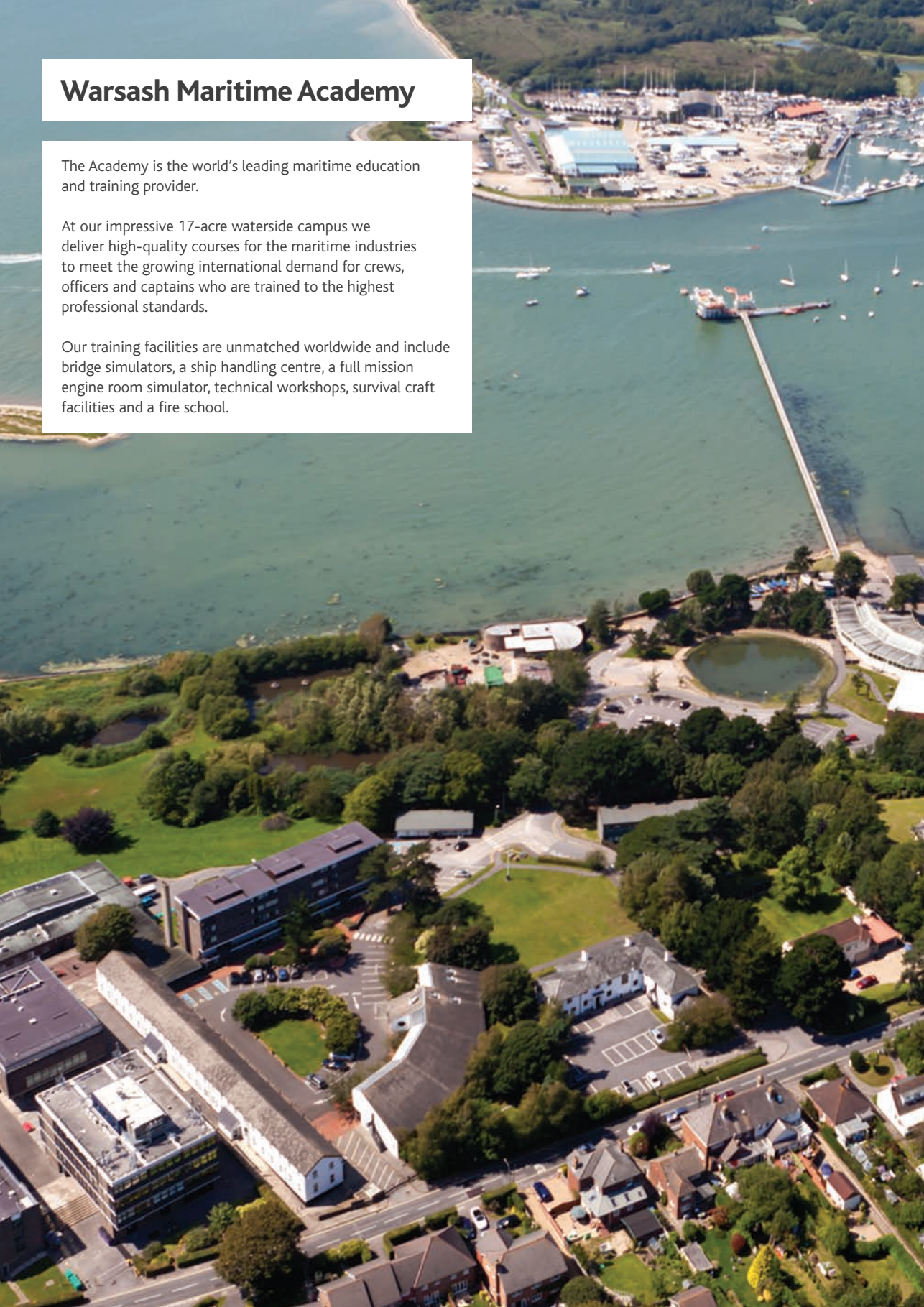
[solent.ac.uk/Marine-Eng](https://www.solent.ac.uk/Marine-Eng)

# Warsash Maritime Academy

The Academy is the world's leading maritime education and training provider.

At our impressive 17-acre waterside campus we deliver high-quality courses for the maritime industries to meet the growing international demand for crews, officers and captains who are trained to the highest professional standards.

Our training facilities are unmatched worldwide and include bridge simulators, a ship handling centre, a full mission engine room simulator, technical workshops, survival craft facilities and a fire school.



“

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




FdSc

## Marine Operations

**Explore a world of opportunities by navigating ships across the globe. Our specialised three-year foundation degree prepares you for a career as a navigation officer at sea or within a shore support or logistics organisation.**

This degree will lead you to employment as a certified watchkeeping navigation (deck) officer on board a commercial (merchant) ship. You can develop a detailed knowledge of the operation of a modern merchant vessel and the activities of the maritime industry, both at sea and ashore.

The three-year programme is part of a sponsored merchant navy officer cadetship. You complete practical and academic learning at a nautical training centre such as the internationally renowned Warsash Maritime Academy, combined with sea training in your sponsoring company's vessels.

 Application to this course is only via sponsoring shipping companies – please contact us for more information.

[solent.ac.uk/MarineOperations](https://solent.ac.uk/MarineOperations)



BSc (Hons)

## Marine Operations Management (Top-up)

**Boost your maritime career while you work, on this flexible course which allows you to learn while you earn.**

Studying at the world-renowned Warsash Maritime Academy, we offer you a blended learning course that enables seagoing and shore-based personnel to top up a foundation degree, an HND in marine operations or an MCA Master Certificate of Competency (Unlimited) to a full BSc (Hons) degree.

Study the principles and applications of operations management in the commercial maritime industry, including law, finance, resource management, maritime business and safety management.

Your learning will draw on real-world case studies, taught by highly experienced staff with strong links to the industry. You'll also be supported to develop the problem-solving and organisational skills required of a ship's officer in that essential move from command to management.

The course includes a 15-week period at Warsash, followed by distance learning over a period of 12 months. With support from a supervisor and building on the knowledge gained during a UK officer cadetship, this course is ideally suited to those seeking to broaden and progress their careers.



To apply for this course, please email [wma.admissions@solent.ac.uk](mailto:wma.admissions@solent.ac.uk) or call +44 (0)23 8201 5015.

[solent.ac.uk/Marine-Ops-Mgt](https://solent.ac.uk/Marine-Ops-Mgt)



“

The reputation the University has in maritime business is really good; my employers had heard really good things about my course. I now work for Odfjell in Norway as a chartering assistant. ”

**Stian**, BSc (Hons) Maritime Business graduate

Image courtesy of Maersk

BSc (Hons)

## Maritime Business

**If you're interested in a career that spans both the maritime world and business, this is the degree for you.**

Taught by experts in their field and accredited by the Chartered Institute of Logistics and Transport (CILT) and the Institute of Chartered Shipbrokers (ICS), this professionally focused course helps prepare you for a career in the international shipping industry through tuition in the latest business skills, practical experience and specialist knowledge of the maritime industry.

The academic team has close links with industry, giving students the opportunity to benefit from guest speakers and a specialist maritime

conference which provide valuable industry insight. Previous speakers have included representatives from Clarksons, Wallenius Wilhelmsen, the Maritime Coastguard Agency and Rio Tinto Marine.

The core teaching staff have varied industry and academic backgrounds – including port and ship operations, chartering, agency, management and logistics – and many are also involved in exciting research in international trade law, sustainable shipping, marine environmental protection and more, so you'll be well informed about current developments in the field.

During the course you'll also be encouraged to take part in work placements, helping to ensure you gain valuable industry experience. Past placements have included working at a container terminal, a port agency, a tanker company and a ship broker. Recent course graduates have gone on to find roles with a wide range of companies, including Lorentzen & Stemoco, Fearnleys, Carnival UK, Lloyd's Register and Odfjell Tankers.



**LENGTH: 3 and 4 years**  
**THREE-YEAR UCAS CODE: N900**

[solent.ac.uk/N900](https://solent.ac.uk/N900)



## **Christopher Talhaug Rasmussen, shipbroker at Barry Rogliano Salles – BSc (Hons) Maritime Business graduate**

"I chose to study at Southampton Solent as it was recommended to me by professionals in the shipping industry who had already seen the great value of Solent graduates in their businesses.

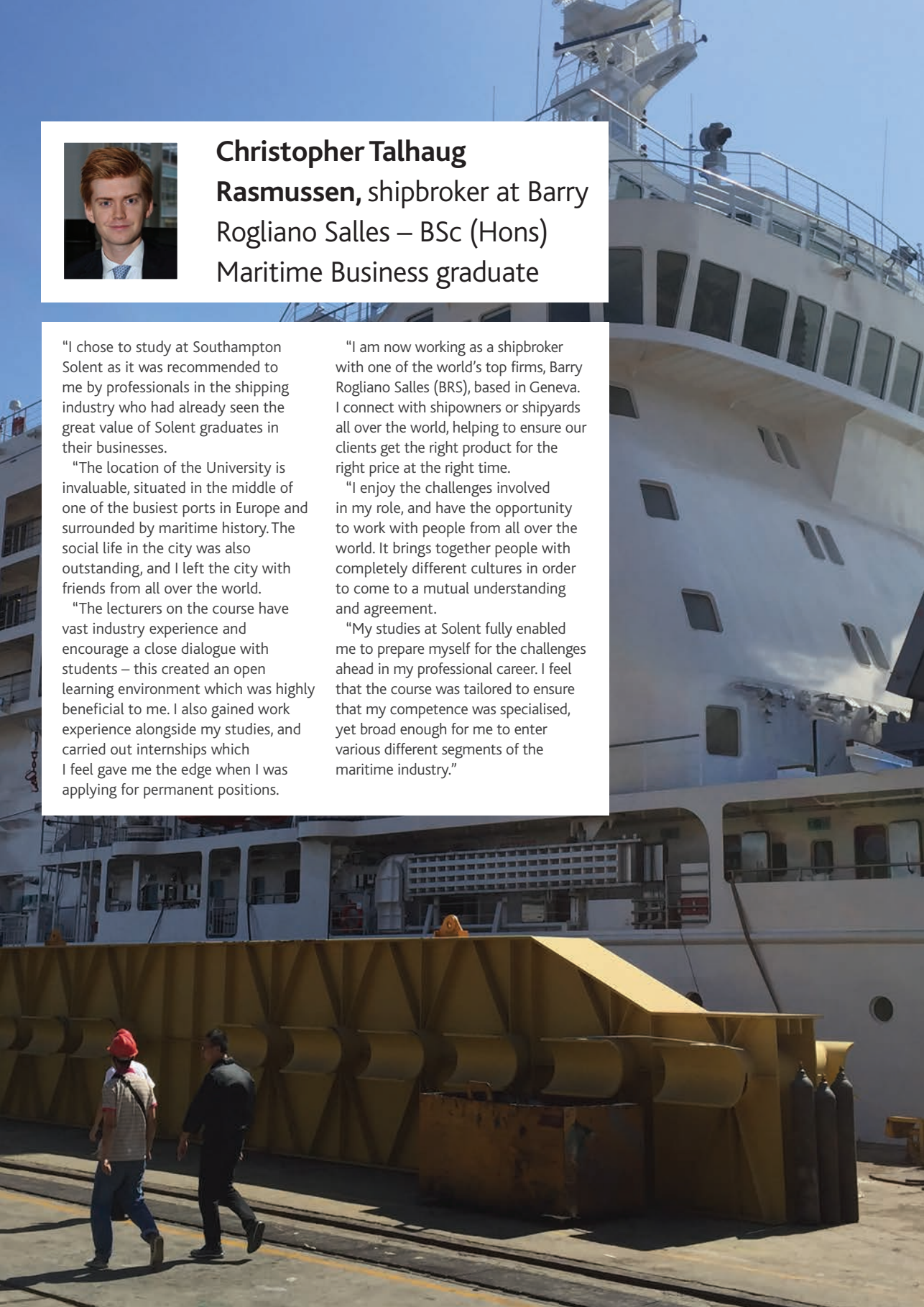
"The location of the University is invaluable, situated in the middle of one of the busiest ports in Europe and surrounded by maritime history. The social life in the city was also outstanding, and I left the city with friends from all over the world.

"The lecturers on the course have vast industry experience and encourage a close dialogue with students – this created an open learning environment which was highly beneficial to me. I also gained work experience alongside my studies, and carried out internships which I feel gave me the edge when I was applying for permanent positions.

"I am now working as a shipbroker with one of the world's top firms, Barry Rogliano Salles (BRS), based in Geneva. I connect with shipowners or shipyards all over the world, helping to ensure our clients get the right product for the right price at the right time.

"I enjoy the challenges involved in my role, and have the opportunity to work with people from all over the world. It brings together people with completely different cultures in order to come to a mutual understanding and agreement.

"My studies at Solent fully enabled me to prepare myself for the challenges ahead in my professional career. I feel that the course was tailored to ensure that my competence was specialised, yet broad enough for me to enter various different segments of the maritime industry."





BSc (Hons)

## Shipping and Port Management

**If you're interested in a career in ship or port operations and management, or in logistics, freight forwarding, supply chain management, port agency or terminal operations, this course is for you.**

The international shipping industry employs thousands of people worldwide in a huge number of roles, and this course will help prepare you to go on to a rewarding career in this dynamic industry.

Accredited by the Chartered Institute of Logistics and Transport (CILT) and the Institute of Chartered Shipbrokers (ICS), the course also provides opportunities for work placements

in shipping, as well as the possibility of studying abroad through the Erasmus programme.

Students also have the option of attending a four-day field trip to visit major ports, as well as trips to major maritime organisations. In the past these have included study visits to Lloyd's of London, the Baltic Exchange and the International Maritime Organization.

With close ties to the industry, our expert course tutors will ensure you're up-to-date with practical skills and theory, while our annual maritime conference gives you the chance to build strong links with employers and industry experts alike.

Course graduates have gone on to a huge range of relevant roles with companies as diverse as Bristol Ports, Associated British Ports, Anglo Eastern Fleet Operations in Hong Kong, Bominflot Bunkers in Gibraltar, CMA/CGA in Marseille, DFDS Logistics in Oslo, Hoegh Autoliners in Dubai and Seabulk Offshore in the UAE.



**LENGTH: 3 and 4 years**  
**THREE-YEAR UCAS CODE: 3GAL**

**[solent.ac.uk/3GAL](https://solent.ac.uk/3GAL)**



BEng (Hons)

## Yacht and Powercraft Design

**From designers and engineers to round-the-world sailors, this degree has a history of producing exceptional graduates who have achieved success across all areas of yacht and powercraft design. The skills they've learned allow them to produce outstanding vessels – such as the first- and second-place yachts in the 2013 Vendée Globe which were both designed by Solent graduate Guillaume Verdier. That's just one example from the 40-year history of the course.**

Students are supported to develop practical experience and hands-on skills throughout the course, and have the opportunity to use state-of-the-art facilities including our CAD and 3D

printing facilities, composites and material testing laboratories, our own 60-metre towing/testing tank for hydrodynamic testing, and a static, four-metre stability tank. From design to materials, our students aren't just aware of industry practice – they've tried it for themselves.

Our graduate network of sporting and industry connections stretches around the world and enables students to make contacts for work placements, graduate positions, guest lectures and collaborative partnerships.

With a long history of excellence and a firm eye on the future, Solent's yacht and powercraft design degree gives you the perfect blend of academic

learning and practical experience. Graduates of this course have gone on to a range of exciting careers including working as naval architects, design engineers and yacht designers at companies such as Dubois Yachts, Ker Yacht Design, Sunseeker Yachts, Monaco Marine and Viareggio Shipyards in Italy.



**LENGTH: 3 and 4 years**  
**THREE-YEAR UCAS CODE: H522**

**[solent.ac.uk/H522](http://solent.ac.uk/H522)**

“

I would really recommend the course and Solent – it has an excellent reputation within the industry. Many designers and engineers within the marine industry have come through Solent, designing everything from America's Cup yachts to commercial craft and warships. The very high employment rates after graduation were also a big influence on my choice. ”

**James**, BEng (Hons) Yacht and Powercraft Design graduate

“

I chose Southampton Solent University because of the hands-on, practical nature of the course and the University. I also spoke to numerous professionals in the field and they recommended the University.

Absolutely everything we studied and looked at was accompanied by a real-world example. I also enjoyed the ease with which I could approach the lecturers and question them about the course, future careers and their own past experiences. ”

**Shane**, BEng (Hons) Yacht and Powercraft Design graduate



Southampton  
**SOLENT**  
University

# Towing Tank



BEng (Hons)

## Yacht Design and Production

**Develop an international perspective and be supported to make key industry contacts on this highly regarded degree which covers both powered and sailing design and production.**

The course team has strong links with the local and global industry. Up-to-date with the latest developments, this cutting-edge course delivers the professional skills and technical knowledge you'll need to help you on your way to a great career in the design and production of powercraft and yachts.

You'll study the engineering science underlying yacht design, along with the fundamentals of naval architecture, construction methods and materials. Your studies will have a strong practical emphasis, focusing on examples, design applications and workshop experience. You'll be very hands-on, and will have opportunities to work in the CAD office and testing laboratories with composite materials to hone your skills. You'll also have the chance to visit boatyards, builders and marine equipment suppliers.

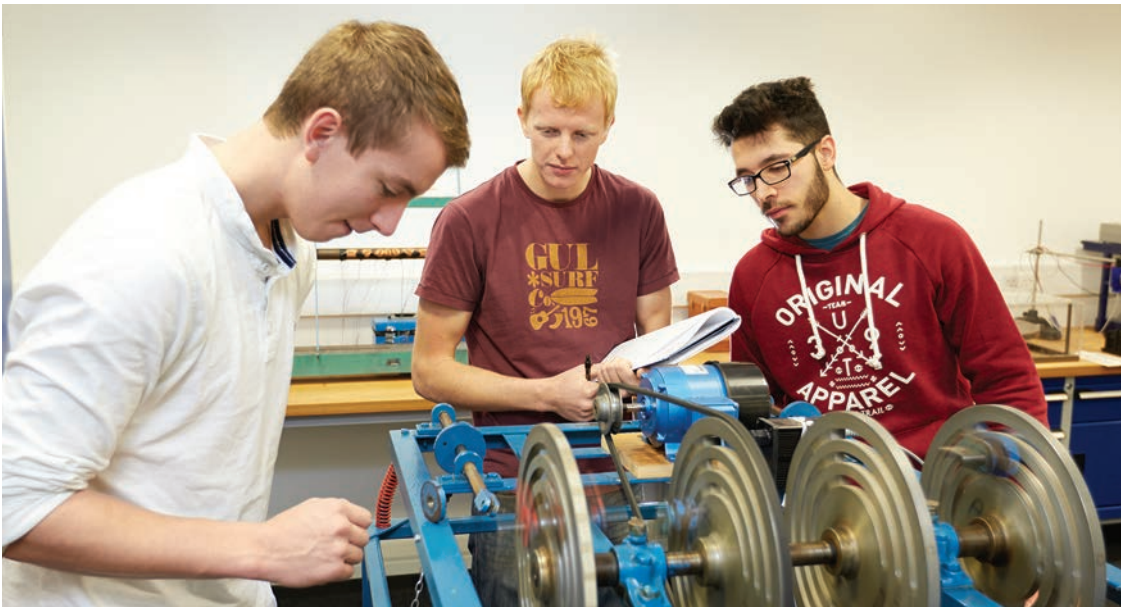
Our facilities include our own 60-metre commercial-standard towing test tank, a static, four-metre stability tank, a composite construction workshop and a yacht drawing office.

The academic team has close links with industry, and you'll be able to benefit from visiting guest speakers; in the past these have included representatives from BMT Nigel Gee, Babcock International and Structural Polymers. Previous students have worked for local boat builders to gain valuable experience.



**LENGTH: 3 and 4 years**  
**THREE-YEAR UCAS CODE: 21B6**

**[solent.ac.uk/21B6](https://solent.ac.uk/21B6)**



“

I like the 3D modelling aspect, designing and building my own products – and the lecturers are really helpful. ”

**Giles, BEng (Hons) Mechanical Engineering student**



**3D printing equipment**, plus other rapid prototyping equipment and **non-destructive testing kit**



**Dedicated labs** for applied mechanics, materials, electronic engineering, manufacturing and robotics

# ENGINEERING

Engineering tackles some of the biggest challenges facing humanity: from finding reliable sources of sustainable energy to designing equipment that can diagnose, monitor and treat diseases, or connecting distant places and people.

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Engineering is not just about engines. It is the practical application of science to the world we live in with the aim of improving it. If you have good numerical skills, a curious mind and a desire to find solutions, engineering could be the career for you. As an added incentive, this global industry offers some of the best-paid international graduate roles around.

Perhaps you'll create new products that will revolutionise the way we live, or devise essential improvements to existing ones. Or you could be an electronic engineer, designing home appliances, life-saving medical equipment or the latest portable devices.

As a mechanical engineer you could be improving infrastructure to make cities more liveable, developing sustainable energy sources or improving performance in aerospace and automotive engineering.

Whatever you're interested in, you'll get an unbeatable sense of satisfaction when something you helped develop becomes operational.



BEng (Hons)

## Electronic Engineering

**This Institution of Engineering and Technology (IET)-accredited course delivers a mix of taught theory and practical work focused on electronic principles.**

Explore everything from analogue and digital electronics to microwave communications and digital signal processing – helping prepare you for an exciting and challenging career as a professional engineer.

Thanks to our strong links with industry, your studies will be focused on improving your future employment prospects. Previous students have had the opportunity to carry out work experience with companies including Rolls-Royce, Marine

Concepts, BAE Systems, Stannah, Saab and Seaeye.

You'll also be encouraged to take part in practical, work-based initiatives, including local events at the University run with the Institution of Engineering and Technology. You will also have the chance to hone your practical skills in our well-equipped laboratories featuring PSpice and NI Multisim software, rapid prototyping equipment and a wide range of development systems for microcomputers.

Whether you choose to take your studies to a higher level or secure a role in the industry, you'll be supported to develop the key skills to help you on your way to a varied and rewarding career in electronic design, micro computing or embedded systems, or even automation or circuit development.



**LENGTH: 3 and 4 years**  
**THREE-YEAR UCAS CODE: H610**

**[solent.ac.uk/H610](http://solent.ac.uk/H610)**



## Megan Mackley-Heath, BEng (Hons) Electronic Engineering graduate

Having graduated from Solent with first-class honours in electronic engineering, Megan Mackley-Heath is now at Britannia Royal Naval College (BRNC) Dartmouth – beginning the process of becoming an engineering officer in the Royal Navy.

"Solent University offered the high quality of teaching and course material required to train as an engineering officer in the armed forces," Megan said. "Currently I am in a training role before commissioning, hopefully as a marine engineer submariner."

"My degree and time at Solent taught me the best way to learn and retain information in short periods of time, which will be crucial in a demanding environment such as a submarine. Eventually I hope to use the skills gained in my degree to become part of the design team of the Royal Navy's new submarines."

"I recommend Solent to anyone who wishes to make a career in engineering. The University facilities meant that we learned practical engineering, rather than the predominantly theory-based lessons of other universities. Solent provided a good mix of lessons, made the course enjoyable, and all our lectures were taught at the right pace to ensure we understood."

Megan also praised the diversity and enthusiasm of Solent's community. "The mix of part-time and full-time students allowed me to meet friends who already work in the engineering industry and learn from their experiences."

"The lecturers were always available," she continued, "and more than willing to help. Their interest in helping everyone succeed was evident, especially in my final year."





HNC

## Engineering

**Are you working in engineering? Would you like to improve your career prospects? This course will equip you with the skills you need to take your career to the next level.**

Studying one day a week alongside your day job, you'll gain the essential mathematics, engineering and mechanical engineering skills needed to thrive in a range of engineering roles.

The course includes a mix of theory, practical work and hands-on experiments. You will explore real-life engineering problems and have opportunities to apply the learning to your day-to-day work. Optional units allow you to tailor the course to suit your interests and career aspirations.

As you learn, you'll have access to specialist facilities, including production and electronics labs as well as heat treatment and materials testing labs. You'll also have access to simulation and analytics software, including Multisim, SolidWorks and Autograph.

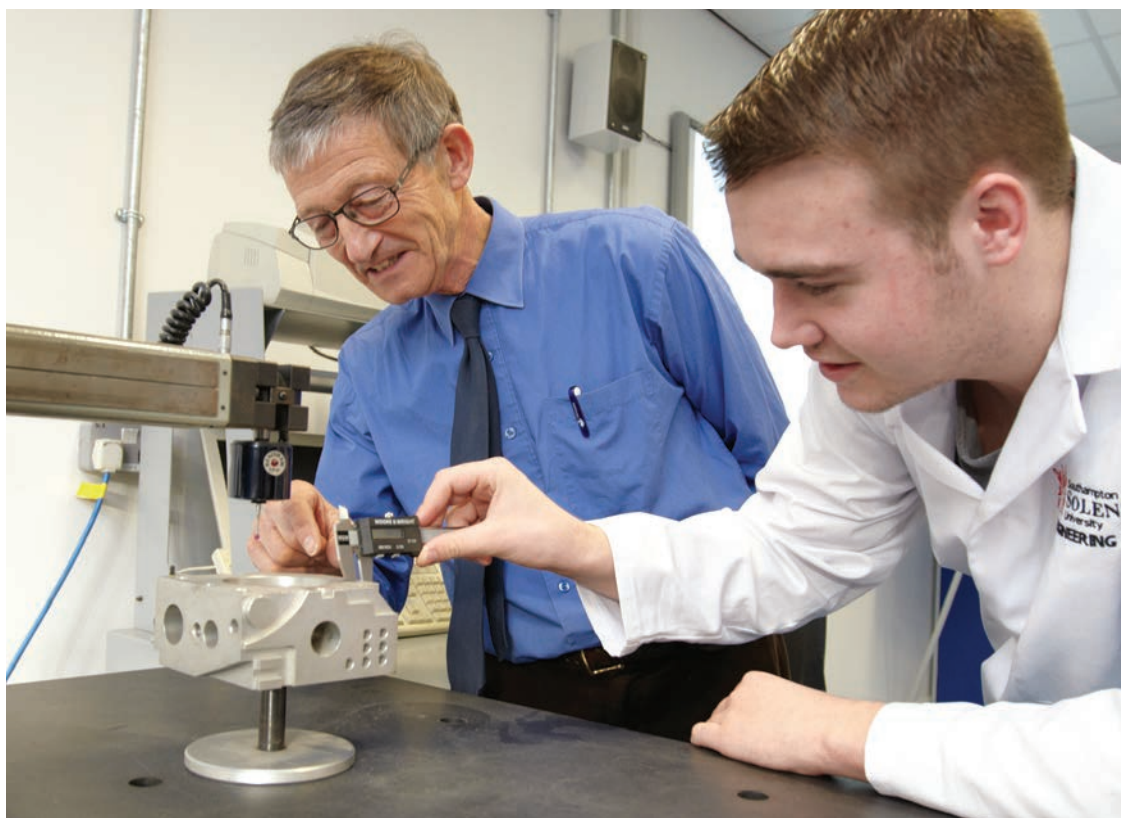
Our course team has a wide range of industry backgrounds and maintains close connections with the engineering sector. Drawing on these links, past students have taken part in live briefs with our industry partners. This practical aspect of the course will help to develop the analytical, problem-solving, teamwork and business management skills that will prove essential in your future career.

On successful completion, you'll be well placed to move into supervisory, senior technician or engineering management roles. If you'd like to continue your studies after the HNC, you can progress to our engineering degree courses.



**LENGTH: 2 years**

**[solent.ac.uk/hnc-e](https://solent.ac.uk/hnc-e)**



BSc (Hons)

## Engineering Design and Manufacture

**If you've got a passion for engineering, from electronics to mechanical or manufacturing, this course will help you develop the practical and analytical skills you need to take the first steps into an exciting career.**

Through a mix of taught theory, practical work and experiments, you'll be supported to develop key engineering skills and experience. You will also have the opportunity to work closely with employers on projects within the course and participate in practical, work-based initiatives. Previous students have had the chance to work with partners including Rolls Royce, Marine Concepts, BAE Systems, Stannah, Saab and Seaeeye.

Access to our excellent laboratories in electronics, mechanics, material testing and manufacturing will also help you develop practical, career-focused skills. You'll have the chance to use the latest rapid prototyping equipment and software including PSpice, NI Multisim, SolidWorks and CES.

Our teaching team has close links with locally based and multinational companies, giving you the opportunity to benefit from external visits, guest speakers and visits from professional bodies.

When you graduate, you'll be well placed to go on to a range of careers in engineering, and suitable roles may include design engineering, production and manufacturing operations, electrical-mechanical systems engineering or project planning.



**LENGTH: 3 and 4 years**  
**THREE-YEAR UCAS CODE: H1H7**

**[solent.ac.uk/H1H7](https://solent.ac.uk/H1H7)**



BEng (Hons)

## Mechanical Engineering

**This engineering course has a strong focus on applied engineering principles, underpinned by theory and with your future employment firmly in mind.**

You can benefit from the chance to use our excellent facilities for applied mechanics, material testing and manufacturing, and have access to a range of rapid prototyping equipment and all the latest software, including SolidWorks, CES, a comprehensive CAD suite and more.

The course team has close links with industry, and the Institution of Engineering and Technology also holds regular local professional development events at Solent, giving you the opportunity to build a strong network of professional connections.

The course supports you to develop the engineering and employability skills needed to help you on your way to varied career opportunities in a wide variety of mechanical engineering disciplines, such as aerospace, automotive engineering, design engineering, component manufacture, management of engineering departments or production planning.

Alternatively, you could take your skills to a higher level through postgraduate study or professional development towards becoming a chartered engineer.



**LENGTH: 3 and 4 years**  
**THREE-YEAR UCAS CODE: H303**

[solent.ac.uk/H303](http://solent.ac.uk/H303)



**Joseph Henshall-Coates,**  
BSc (Hons) Mechanical Design  
graduate (now known as BEng  
(Hons) Mechanical Engineering)

"The mechanical design course at Southampton Solent University gave me an excellent understanding of mechanical engineering, engineering business and material properties, which are vital for my role as a mechanical engineer in renewable energy at Siemens. The lecturers and support staff were extremely knowledgeable and would do anything to help.

"I'm currently in Newcastle dealing with maintenance issues for onshore and offshore wind turbines around the UK. The best thing about the job is that I am able to apply my engineering knowledge to real-life issues such as investigating how a wind turbine may have failed – examining the turbine's mechanical properties and design issues, with a view to design changes for future models.

"Some of the theory that I took for granted at university and felt I would never use has been useful in my new career, which just shows the importance of each part of the course. The mix of theory and laboratory practicals really helps you understand complex engineering principles, while project work allows you to demonstrate your creativity in a form you can share with future employers.

"I was very successful in my final-year dissertation project which was a major factor for the interview stages of the company – as was my previous work experience in the engineering sector. The advice I would give to students and graduates is to try and gain as much work experience as possible. Having any work experience, whether that is a summer placement or a company project at university, will give you and your CV a real boost."



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