

# MARITIME, ENGINEERING AND YACHT DESIGN



# MARITIME, ENGINEERING AND YACHT DESIGN

You have good numerical skills, a curious mind and a desire to find solutions. Enter a career in engineering and you could join the best-paid graduates in the world.

Our highly qualified and experienced team has excellent working relationships with professionals and organisations.

Our specialised, industry-standard courses – such as acoustic, electronic, mechanical and renewable energy engineering – will put you on the path towards a rewarding and future-proof career.

You'll have the potential to create new products or improve existing ones. You could be an electronic engineer, designing home appliances or life-saving medical equipment.

As a mechanical engineer you could improve infrastructure in cities, develop sustainable energy sources or improve performance in aerospace and automotive engineering.

Our maritime courses reflect Southampton's dockland heritage, as well as the city's vital position as a major international port.

Hugely respected in the industry, our courses cover subjects such as marine underwriting, naval architecture, and yacht and powercraft design. Our graduates go on to work as key players in freight-forwarding businesses, shipping companies and port terminals. Some join teams building racing yachts or high-speed powerboats.

A photograph of students in a laboratory setting, working on a towing tank experiment. The tank is a large blue structure with a wooden base, and a small yellow boat is being towed through the water. The text 'SOLENT UNIVERSITY' and 'Towing Tank' is visible on the side of the tank.

SOLENT  
UNIVERSITY  
Towing Tank



#### ACCESS TO SPECIALIST FACILITIES

Throughout your studies you will have access to state-of-the-art facilities to support your practical learning. This includes 3D printers to support our engineering courses, and a towing tank to test the stability of model yachts if you are studying yacht design.

Around 40 technical instructors with industry experience provide support and extensive training on the latest equipment and techniques.

As a university we invest on average £1 million a year in maintaining and developing our student-facing specialist facilities.

#### TAUGHT BY PROFESSIONALS, WITH EXTENSIVE LINKS TO INDUSTRY EXPERTS

Our academics have vast professional experience, and many maintain strong links with industry experts. This helps to ensure that course content is up-to-date with industry needs, and also allows you to benefit from guest lecturers who can share valuable insight.



#### ENTERPRISE

As a global port, Southampton is home to premier companies, and our strong industry ties and international reputation have fostered a hugely beneficial relationship with the engineering sector. We attract a range of quality speakers, and we visit companies, ports and major maritime organisations.

Warsash Maritime Academy is a world-renowned provider of maritime education and training, with excellent relationships which provide unrivalled opportunities for work experience.

Solent Maritime Society helps students to network and prepare for a career in global shipping.

The China Centre (Maritime) fuses academic excellence with expertise in Chinese maritime affairs, promoting teaching, research and consultancy, a focus for study and a forum for discussion.



#### REAL-WORLD EXPERIENCE

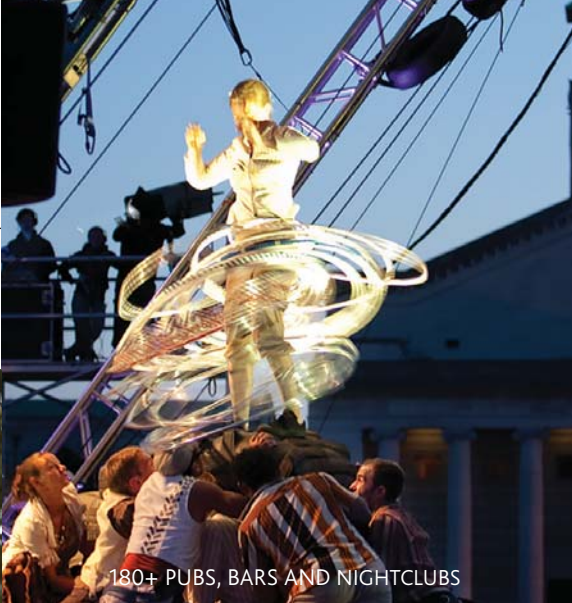
Work experience is an important aspect of all our courses, and you will be encouraged to carry out placements in the summer period to develop your practical learning further. You also have the option to undertake a work placement year between the second and third years of study. Recent students across our maritime, engineering and yacht design programmes have carried out placements at container terminals, port agencies, SAAB, TUV and yacht design offices.

# LIFE IN SOUTHAMPTON

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FIVE CITY-CENTRE PARKS



180+ PUBS, BARS AND NIGHTCLUBS



TOP FOR SPORT SOLENT



SOUTHAMPTON IS A THRIVING CITY WITH A RICH MARITIME HERITAGE. IT IS THE CRUISE CAPITAL OF THE UK AND HOME TO ONE OF THE COUNTRY'S BIGGEST BOAT SHOWS.

The hovercraft has its origins in Hampshire, and Southampton has a rich maritime history and Titanic connection, told through its SeaCity Museum.

Southampton continues to export and import through its docks and the region hosts premier companies at the top end of engineering opportunity, including Rolls-Royce, Coopervision, GE Aviation, NATS and

the Wessex Round Table of Inventors (WRTI). With more than 7,400 businesses employing around 127,000 people, the region is ideally placed for graduate jobs.

Southampton boasts Premier League football, world-class sailing and international cricket. It has a wealth of live music venues, theatres and exhibitions, with a brand new Cultural Quarter around Guildhall Square – and another new development under way, the Bargate Quarter, will blend history and retail in the heart of the city.



OVER 42,000 STUDENTS  
IN A POPULATION OF  
ALMOST 255,000

## SPECIALIST FACILITIES AND EQUIPMENT

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RAPID PROTOTYPING



STABILITY TANK

## ENGINEERING

- 3D printing equipment and laser cutters
- Rapid prototyping and non-destructive testing kit
- Dedicated labs for applied mechanics, materials, electronic engineering, manufacturing and robotics
- Specialist equipment – PSpice/NI MultiSim software and microcomputer and microcontroller development systems, digital multi-meter signal generators, FLIR cameras and digital signal processing (DSP) boards
- Yacht design workshops
- Stability tank
- 60-metre towing tank with computer-controlled wave generator for testing boat designs

## MARITIME

- Dedicated ship-handling centre at Timsbury Lake and specialist bridge and engine room simulators
- Survival craft facilities, including lifeboats, fast rescue boats, RIBs and lifting equipment
- Purpose-built live fire training facility with a three-storey steel ship/offshore unit



## WARSASH MARITIME ACADEMY

Our Warsash Maritime Academy is a world-leading provider of maritime education and training. With a teaching staff mostly made up of current or former seafarers from diverse maritime backgrounds, the academy has provided first-class education and research services to the shipping, commercial yacht and offshore industries for 70 years.

Our students also benefit from a range of specialist training facilities, from our fire school and ship-handling centre to bridge and engine room simulators, survival craft and training pool, and much more.

INSTITUTE OF CHARTERED SHIPBROKERS (ICS) AND CHARTERED INSTITUTE OF LOGISTICS AND TRANSPORT (CILT) ACCREDITATIONS

ENGINEERING STUDENTS HAVE THE CHANCE TO BE PARTNERED WITH A COMPANY

ENGINEERING STUDENTS WILL CARRY OUT AN ASSESSED CONSULTANCY PROJECT WITH A RELEVANT COMPANY IN THE FINAL YEAR



# HENRIK SOLLIE KLOKK

BSc (Hons) Maritime Business  
Graduated 2017



## How did university prepare you for your career?

The course consists of a comprehensive collection of units, introducing you to most segments of this wide industry. From weather routing to financial analysis, you are provided with crucial knowledge from various aspects which you can build upon. The University creates assignments similar to real industry situations and challenges, giving you a 'hands-on' experience within your studies, which definitely prepares you for a career within the maritime industry.

## What is your favourite Solent memory?

One of my best Solent memories is our trip to Antwerp and Rotterdam, where we were able to visit the immensely large port

facilities, which illustrates the importance of seaborne trade. The trip also strengthened the relationships within our class, something I believe you may benefit from significantly further down the road in your career. Being awarded the degree classification I aimed for is also one of my greatest Solent memories.

## Tell us about your career story

Along with my studies, trying to get as much and as diverse industry insight as possible was my top priority. This allowed me to complete four internships in three years within various industry segments in countries such as Hong Kong, Cyprus and Norway. These internships not only provided me with knowledge and insight, but also enabled my CV to reflect that I was a young

and eager student who demonstrated great interest in the industry. I do not believe I would have been called to interview at many of the companies I applied for if it was not for my internships and extracurricular activities at the University, such as the Solent Maritime Society. I believe all the above, combined with my academic background, is why I am employed by one of the largest dry bulk and tanker owners in the world.

I am currently employed as a trainee for a company called D/S NORDEN AS, located in Copenhagen. I work in the dry bulk department, but the company also operates tankers, resulting in a total fleet of about 270 ships. Being a trainee, I will be rotated

around the various departments within the company. By doing so, one really learns how a shipping company is built from the inside. In addition to working full-time at NORDEN, we are put through a commercial shipping course established by the Danish Shipowners' Association, with modules provided by organisations such as BIMCO. The working days are quite hectic, full of knowledge and learning. You are given a lot of responsibility, which makes you feel that the company really believes in you, something I greatly appreciate.

**Tell us about your career highlight**

I think it is hard to find a particular career highlight, but if I have to choose, I would say that receiving a job offer from my current employer is my highlight so far. It is a company with a great history and a formidable reputation, and being able to get a position there straight after graduation was beyond my expectations.

**What tips would you give to someone wanting to start a career in your industry?**

My top tip is to be hungry and show great motivation, while remaining humble. Show employers that you are willing and flexible, something that this industry greatly values due to its international nature. Continuously ask yourself 'Why should they hire me?', and then act in a way that can answer this question. On a final note, there is a saying

that I think applies particularly to shipping, which one should always keep in mind: 'Be kind to the people you meet on your way up, because you will meet them on the way down.'

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BSC (HONS) MARITIME BUSINESS IS FOR YOU IF YOU WISH TO PURSUE A HIGHLY INTERNATIONAL AND MULTICULTURAL CAREER THAT FEW, PERHAPS NO OTHER, INDUSTRIES CAN OFFER.

AS SHIPPING ACCOUNTS FOR 90–95 PER CENT OF TOTAL GLOBAL TRADE, IT IS ONE OF THE MOST IMPORTANT INDUSTRIES IN TODAY'S SOCIETY, DRIVING FINANCIAL MARKETS, GLOBALISATION AND DEVELOPMENT. IN OTHER WORDS, IF YOU WANT TO CONTRIBUTE TO AN ENHANCED GLOBAL TRADE, THIS IS THE RIGHT COURSE FOR YOU.”



# FELIX AMORETH

Deck officer cadet, HND in Nautical Science  
Passed out 2018



## **What led you to Solent's Warsash Maritime Academy?**

Before coming to Warsash Maritime Academy I was a maths teacher in Angola, but I got a scholarship from a major oil company to study instrumentation. I travelled to South Africa, where I was supposed to start this training, but after a year the company advised me that studying nautical sciences would suit me best, as they needed marine expertise.

I was a little reluctant in accepting the advice as this would change all my plans, but in the end I accepted the challenge!

## **Do you feel that your studies helped you to prepare for a career in the industry?**

It was very difficult for me to adapt at first, in a new studying environment and in a new country where the language constituted a barrier.

The combination of tuition phases and sea phases really helped me – first to figure out if this is what I really want to do, and second to better understand a career at sea.

## **What was the best thing about your tutors and lecturers?**

The thing about the lecturers and tutors which differs from the lecturers I used

to have at college, apart from their professionalism and experience, is their connection with the students. They were very social people and always keen to help. They would answer any question, help with doubt or worries before exams, or even during my sea phases. They treated us as proper seafarers already, like peers.

## **What was your first sea phase like? Was it what you expected?**

My first sea phase was a real challenge. Because of my background I knew almost nothing about the industry – I'd never been at sea nor even in a single cross-channel boat. I was like a blank piece of paper.



THIS IS A CHALLENGING AND DEMANDING INDUSTRY. IT TAKES NOTHING FROM YOU; IT GIVES YOU QUALITIES AND ABILITIES WHICH MAKE YOU CAPABLE OF FACING ANY TROUBLE OR DIFFICULTY IN ANY AREA OF YOUR LIFE."

After spending a few months in preparation for the sea phase, I went straight on board a ship, not knowing much. Officers on board expected me to know lots, but I wasn't meeting their expectations. I got shouted at, I got angry, I cried...

I was about to give everything up, but I remembered that I had accepted the challenge and I was there through a scholarship programme which wasn't easy to get in my country. So I had to motivate myself and find ways to overcome all the storms!

I started reading more books, asking more questions and learning from everyone and any activity. I was getting along with the officers and the crew. In the end I started enjoying being at sea and I got a nice performance report.

#### **What was your favourite memory from your time at WMA?**

I made a few very good friends, both lecturers and students, but my favourite memory was participating in Sail4Cancer – spending 24 hours stuck in a liferaft out on the river. It was a great experience, and great to raise money for a good cause.

#### **Did the academy or University give you any help, support or advice when you needed it?**

Both the academy and the University helped me in various ways. The biggest help was when I changed my surname and I needed to get a new biometric residence permit – I got help right from the very start of the process.

#### **What did it feel like to pass out from the academy? How was your passing-out ceremony?**

What seemed to be impossible, I'd finally accomplished: being a merchant officer. It was never something I planned before coming to Solent, but slowly became part of my life and my goals. At the passing-out ceremony, the actual feeling of becoming an officer, with family, friends and relatives to behold the great achievement of ours... it was indeed a great ceremony.

And six months after my passing-out ceremony, I was invited back to receive an annual award: Deck Officer Cadet of the Year 2018. For someone who had lots of difficulties and uncertainty at the start of the course, it was a proud moment.

#### **Where has your career taken you so far?**

As a cadet I have been almost everywhere: around Europe, America, Asia, the Middle East, Australia. The most memorable place I have been to was Istanbul. There was a very nice view when crossing the Turkish Straits, and I was the one driving a 63,000-tonne oil tanker through, under the command of a pilot, with a current of seven knots against us. I got some good shots while passing through Turkey to the Black Sea – after changing the man on the wheel, of course!

#### **What tips would you give to someone wanting a career in maritime?**

If you want a career in this industry, confidence, courage, humility, respect, teamwork and initiative are a few of the important qualities to have. However, don't worry! You will develop them anyway, if you're keen. Knowledge and experience come with time and dedication!

# JOSH PAYNE

BSc (Hons) Maritime Business

Graduated 2015

Port Manager – Southampton, Inchcape Shipping Services





BSC (HONS) MARITIME BUSINESS IS FOR YOU IF YOU ARE LOOKING FOR A COURSE THAT CONSIDERS THE WHOLE INDUSTRY AND THE DIFFERENT SECTORS WITHIN IT. YOU'RE SURE TO MAKE A LOT OF GREAT FRIENDS WHO, WHEN YOU LEAVE, WILL ALSO BECOME SUPERB INDUSTRY CONTACTS."

### **How did university prepare you for your career?**

University allowed me to join a workplace with the same knowledge as somebody who had been there for several years. Also, with that knowledge, it allowed me to bring a different perspective to some situations.

### **Tell us about what you are doing now and what it involves – a typical working day**

A typical day could involve boarding a container ship in the morning to undertake arrival formalities with the captain. Then return to the office, look at time reports on container vessels calls and identify ways we can turn these vessels around more quickly

while in port. An afternoon may then involve booking 20 cars and five diggers onto a ship down to South America and completing the necessary documentation.

### **What's your career highlight so far?**

My career highlight so far is being made port manager only two years after leaving university.

### **What tips would you give to someone wanting a career in your industry?**

Work hard and always keep up-to-date with industry news.

# ELLE WATSON

Phase three Merchant Navy deck officer cadet training  
at Warsash Maritime Academy



## **What made you decide to become a Merchant Navy deck officer?**

For as long as I can remember, I've always had a keen interest in navigation, cartography and generally knowing my way around, to the extent that I was nicknamed 'Pigeon' at a young age, because my sense of direction was like that of a homing pigeon. I also come from a seafaring background, as both my parents are ex-Royal Navy medics and are now high up in the local Royal Naval Association, so I have grown up with tales of life at sea.

In 2005, at the age of 10, I visited an open day at BAE Systems in Barrow-in-Furness, which is close to my home, where I met a Merchant Navy officer. At this point I knew that I wanted a career in navigation, and when I heard what this officer did, I knew that it was the career path I wanted to go down. And here I am, 11 years later, just starting my second year at Warsash Maritime Academy.

**Being away from home for the first time, for some, can be quite daunting – were there any activities to help you get to**

## **know others in the cohort when you got to Warsash?**

Every phase one cadet has to live on campus. This not only makes it easier for us all to get to know each other, but it's also normal to share cabins on board ship, so it gets you used to sharing a sleeping and living space with someone. On the first night we arrived there was a band performing in our campus bar. We had morning muster every day for the first few weeks which took place at 8am and involved everyone in the phase. Our first week was induction and was mostly introductions and safety presentations, but



“

I'M VERY MUCH LOOKING FORWARD TO SOME OF THE SUBJECTS WE STUDY, ESPECIALLY METEOROLOGY, MARITIME LAW, VOYAGE PLANNING, CARGO, AND STABILITY AND RADAR PLOTTING.”

our first Friday was the day we really got to know each other better, starting with paintball and ending with a night out in Southampton organised by Solent SU.

**What type(s) of ship were you on when you were at sea?**

I was on two ships during my sea phase, spending about three months on each. My first ship was the Trinity House vessel *Galatea*, which is a buoy tender operating around the UK coast. The second was Condor Ferries' *Commodore Goodwill*, a ro-ro freight ferry operating between Portsmouth and the Channel Islands. While on board the *Galatea*, along with tendering to buoys, I also took part in lighthouse and helicopter operations, as well as seabed surveying.

**How did you find your first sea phase? Was it what you expected?**

I think my sea phase was both exactly what I expected and yet completely different. Coming from a seafaring background, I'd

been told many stories about what life at sea is like, so I did have an idea of what to expect. The two ships had completely contrasting environments, primarily in terms of crew nationality. I had no issues with this, especially as I adore learning about different languages and cultures, but it did prove to be harder circumstances to work in, with language barriers and different views coming into play.

**What are you looking forward to in your next phases at Warsash and then again at sea?**

I'm very much looking forward to seeing all my friends from Warsash again, because we all know that no matter where you go, it's the company that makes or breaks a place. I'm also very much looking forward to some of the subjects we study this phase, especially meteorology (the study of weather), which the geography geek in me can't wait to start!

We're also going to be doing maritime law, voyage planning, more cargo, and stability and radar plotting. I don't know what my next sea phase will bring – I hope I do get to go deep sea and explore some far-off ports! I'm interested in the science behind reefer shipping, and would also like to look more into survey vessels – I was very interested in what happened on the *Galatea* when we surveyed a fishing wreck.

**The number of female ship's officers is still very small, although we are seeing more women enter the industry. What advice would you give to any aspiring female deck or engineering officers?**

Do it! And stick with it! I've seen both positive and negative aspects of being a female at sea, such as being treated slightly better than the male cadet I was with because I was in the minority – not in the sense of respect, but because those providing training wanted me to succeed more as I was female and I was proving that females can be officers – and good ones at that.

# NADIA LELE

BEng (Hons) Yacht and Powercraft Design  
Graduated 2017  
Structural Engineer, Olesinski Naval Architects



## **Favourite Solent memory?**

It's hard to select a special uni moment, as there were so many. Every person on my course (including our tutors and lecturers) had one thing in common – a strong love of boats; and having a common interest is what makes the course like a big family, which is quite unusual. For our final first-year assignment we had to design a model boat to a box rule using basic principles of naval architecture, build it in the fibre-reinforced plastic (FRP) workshop, and race our little yachts in Gosport. It was a really cool challenge, everyone was really competitive

from the beginning and we all had a lot of fun.

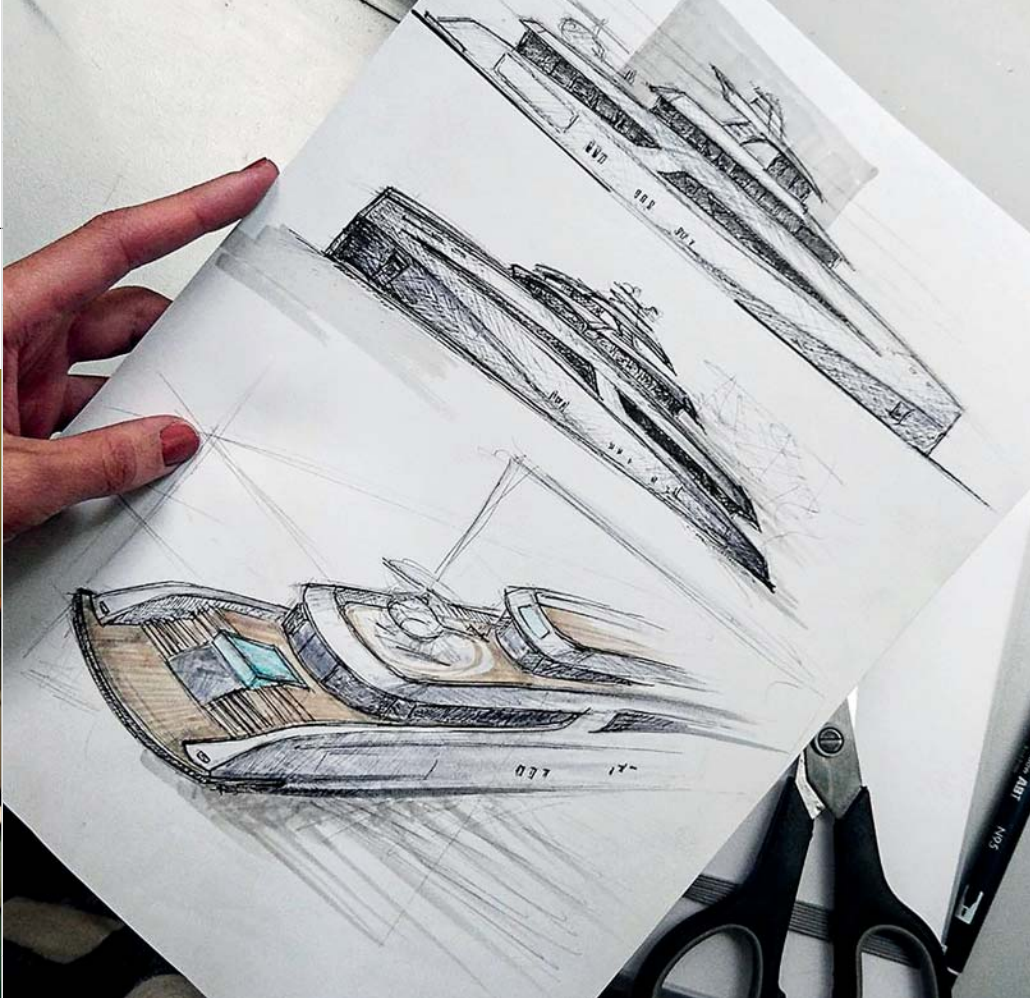
## **How did university prepare you for your career?**

This course absolutely meets the demands of the modern yachting and shipbuilding industry. Access to the towing tank, stability tank, FRP workshop and CAD room full of the most advanced programs was vital. It is an engineering course – that is why, apart from knowing the rules, maths and physics, it is important to understand how things work. Group projects are also industry-

driven, and reflect real company dynamics. Plus the lecturers have an enormous amount of experience, which inspires you a lot, and they make clear how the industry works. By the end of the course I had a bit of everything – naval architect, structural engineer, and stylist knowledge. It was a hard choice what to do next.

## **Tell us a little about your career story so far**

In my second year I was representing Solent University at the London Boat Show and won a couple of days' work experience at



BENO (HONS) YACHT AND POWERCRAFT DESIGN IS FOR YOU IF YOU HAVE A PASSION FOR YACHTS, SAILING AND THE MARITIME WORLD. UNIVERSITY HELPED ME GET CLOSER TO MY DREAMS, AND I WISH YOU THE SAME."

Olesinski Naval Architects, a yacht design company based on the Isle of Wight. This was a prize for second place in the Young Designer Competition held by Superyacht UK and British Marine. Now I work in the company as a structural engineer. We have all three disciplines in-house – design, naval architecture and structural engineering – which is quite rare.

**Tell us about what you are doing now and what it involves – a typical working day**

In structures we make things work. One day it is development of the entire hull structure,

another day it is analysis of a particular part of the boat, like a giant sliding roof or cleat support laminate. The tasks are so varied and challenging. Mainly we work with composite structures, so it is never boring. We do hand calculations, design lay-ups, create a full representation of all structural elements using 3D modelling and drafting, and complete finite element analysis (FEA) – thanks to the yacht and powercraft course I was absolutely ready to complete all these tasks.

# ADAM LEWIS

Head of Training and Operations, International Maritime Employers' Council  
BSc (Hons) Merchant Ship Operations  
Graduated 2005



## Why did you pick Solent?

My route to Solent was slightly unusual. I originally applied and was accepted on two maritime courses at Solent, but in the February before leaving school, I found out about cadetships in the Merchant Navy.

I applied and was accepted by Cunard, but I needed to undertake a very specific degree as part of my training. I therefore had to drop the places I had and then apply through clearing for the Merchant Ship Operations course.

## Do you feel your studies helped you prepare for a career in the industry?

Undoubtedly. My degree dealt with real-life situations, whether it was navigating a ship in one lecture, to legal studies in another.

I wouldn't have described myself as an academic at all before starting at Solent. I had very average A-levels and I wasn't overly motivated by the classroom environment. However, university academics are very different from traditional schooling and it quickly became an environment that I thrived in.

I didn't stay at sea after my studies, but I stepped straight into a ship operator's role where I was expected to communicate with captains at sea on all aspects of their daily voyage.

## What opportunities were there for practical experience?

My course was a sandwich course, so after the second year I spent a year at sea, before returning to university again for my final year.

I was rather fortunate as I was given the *QE2* as my first ship in the summer of 2003.

I spent the first four and a half months travelling around Norway, the Mediterranean, Canada and the Americas, then joined the *QM2* in the January as her first cadet, and sailed on the maiden voyage, before spending a few months in the Caribbean. Later that year I even managed to stay on board when she was chartered as a floating hotel for the Athens Olympics!

## What did you like best about living and studying in Southampton?

Southampton is a great city and the campus is right in the middle. My best (and very possibly worst!) memories were living in a large shared house.



MY DEGREE DEALT WITH REAL-LIFE SITUATIONS, WHETHER IT WAS NAVIGATING A SHIP IN ONE LECTURE, TO LEGAL STUDIES IN ANOTHER. UNIVERSITY QUICKLY BECAME AN ENVIRONMENT THAT I THRIVED IN."

**What did you like best about being a Solent student?**

I remember walking into the Freshers' Fair and being met with so many opportunities outside your normal academic routine. On a whim, I joined the taekwondo club at Solent, carried on after leaving uni and got a couple of black belts.

There are obviously academic deadlines you have to meet, but in your free time, if you want to learn a martial art, circus skills or how to fly a plane, there's opportunities for you.

**Tell us a little about your career so far. What were the challenges, starting out?**

My career has been great so far, but down a totally different route than expected. I came to the University through a cadetship with Cunard and fully expected to become an officer at sea. But I quickly started to excel at the more business and legal-related subjects, and made the decision after my course to come ashore.

I secured my first role through the University as a broker and operator for a small shipping company. It was a fantastic first job as I saw

all aspects of running a company. I could be negotiating freight rates in the morning and visiting a ship in the afternoon. After nearly two years in that job, I moved to London and started work for one of the large superyacht companies, specialising in safety and security management.

I joined IMEC in March 2010 and have been there ever since – I'm now primarily responsible for running IMEC's cadet programme in the Philippines. We have around 700 officers under training, who will become navigation or engineering officers on board merchant ships. Outside of the training operations, I also get involved in industrial negotiations and negotiations at the International Labour Organization in Geneva.

**What are you working on at the moment? Any projects or plans you're excited about?**

In 2017 we launched a new training programme in the Philippines to train school leavers from underprivileged backgrounds to become engine ratings on board merchant ships. Most of the boys are from extreme poverty, so the programme is a genuine,

life-changing opportunity for them. The programme hasn't been an easy start-up, but we're just about to enter the second pilot course.

**What tips would you give to someone wanting a career in the industry?**

Think digital, think mathematics and think interpersonal skills. Shipping is about to undergo some major digital changes. While I'd question whether anyone will pull off a full unmanned deep sea vessel anytime soon, automation will certainly be adopted by the industry in quite a large way.

The future workforce will not only require good maritime skills, but also good digital and cyber security knowledge, as well as good mathematical skills to deal with the data analysis. One thing that will never leave the industry, though, is networking – good interpersonal skills are a must in shipping.

# JOSH BOWEN

BEng (Hons) Electronic Engineering  
Graduated 2015



## **How did university prepare you for your career?**

I have seen a lot of universities where academic standing and proprietary research has a much higher priority than students' studies. Solent has it right however, with industry-focused courses and lecturers with diverse working backgrounds and experience, I felt confident that what I was learning would give me a good starting point in my career, which it has. The staff are extremely accommodating and easy to talk to whether it be university-related or not, making Solent University a very comfortable learning environment.

## **Favourite Solent memory?**

I met some good friends while studying at Solent, both students and staff. My entire time at Solent was an enjoyable memory

because of them, most prominently the amusing conversations we had when working on our group projects and the good results we achieved because of our teamwork.

## **Tell us a little about your career story so far**

I started my career during the summer breaks when I worked for a defence engineering firm. This gave me a good standing for when I graduated to then be selected to be involved in a Knowledge Transfer Partnership, a government scheme between the University and an outside private company – He-Man Dual Controls, a small company dedicated to producing dual control pedals for driving tuition vehicles. I was involved in using the combined expertise of both parties to develop innovative new products. I have since been taken on by the company after they were



BENG (HONS) ELECTRONIC ENGINEERING IS FOR YOU IF YOU ENJOY INDULGING YOUR PASSION FOR EVERYTHING TECHNICAL. WITH A FIRMLY GROUNDED FOUNDATION IN MATHS AND PHYSICS, THE INDUSTRY-FOCUSED CONTENT WILL GIVE YOU THE KNOWLEDGE NEEDED TO HIT THE GROUND RUNNING WHEN YOU START YOUR CAREER."

pleased with my progress and wanted to continue after the project ended. I am still constantly involved with Solent University as I find the staff members extremely friendly and open to collaboration and consultation.

#### **Tell us about what you are doing now and what it involves**

As the electronic engineer for He-Man Dual Controls, a typical working day includes overseeing the entire design/development cycle of any new electronic products, as well as developing our other experimental projects. I am also involved in technical sales logistics which includes the testing of our products to pass different international market standards.

#### **What's your career highlight so far?**

Each stepping stone in my career has been memorable so far, from one exciting point to the next, with a new set of challenges and a new opportunity to indulge my passion for engineering. Every challenge helps me learn something new that I can use on subsequent projects, and with my current open-ended career the possibilities of what can be designed and accomplished are endless.

#### **What tips would you give to someone wanting a career in your industry?**

If you have the freedom to choose your career, then you should do something you love – ask yourself the question, would you still do it if you didn't get paid? I love electronics and am constantly volunteering my own time for out-of-work activities, as well as my own projects. If you are looking

for a career in engineering, as with any industry, you shouldn't need a reason to give 100 per cent – and by doing this, you will be on the road to success while never having worked a day in your life.

# ELIZABETH STANLEY

Deck officer cadet, FdSc Marine Operations  
Passed out 2018



## **What made you choose Solent's Warsash Maritime Academy?**

I looked at my options, and looked at their reputation – this, for me, was what I wanted to be associated with. I genuinely believe I picked the best place, and the training I've received is unreal – so I'm glad I made the decision I've made. And I live down here now, as I fell in love with Southampton as well.

## **Who do you work for now?**

I work for the Royal Fleet Auxilliary, the RFA. It is part of the navy but not military – we're uniformed civil servants, supporting the Royal Navy in operations across the world. We provide fuel, ammunition, stores – but recently we've been doing more humanitarian tasks. The migrant crisis, the hurricane season in the Caribbean, etc.

## **What was the highlight of your time with us?**

To pin down one thing would be difficult. I've met some amazing people – friends, colleagues on the courses. I probably met the best friend I've ever had on this course.

The short courses were good fun, coming to sea for the first time, doing things like sea survival. Having to jump off a three-metre board into a pool with a massive lifejacket on, then getting into a circle. Firefighting was incredible too.

All of that put together? It's an experience like no other experience in your life, and I've done this all through work, and with friends – which makes it all one great big amazing memory.

## **How did you find the teaching?**

I've had some incredible experiences with my lecturers. They were always there for us, they supported us. I just can't speak highly enough. They care so much about what they're doing – and because they're from the industry themselves, they understand it. They've had that experience, and it makes it so relatable.

I'm not the most academic person, but the lecturers helped me because they knew at times I struggled a little bit, and I'll be forever grateful for that.

## **What work experience have you gained?**

We do five phases, with phases two and four spent at sea. Because we're sponsored by a company, the company puts us at sea. In my first sea phase I flew out to Dubai at the



IF ANYONE EVER SAYS TO ME, WOULD YOU ADVISE WORKING AT SEA, I DON'T EVEN THINK ABOUT MY ANSWER. IT'S ALWAYS A YES."

end of January 2016, spent four months on a ship out there, but halfway through we got retasked to help with the migrant crisis out in the Mediterranean.

During my second sea phase, I was on a ship in the Caribbean for six months – the standard length of a trip is four months but I opted to extend because... I was in the Caribbean! Why wouldn't I?

We were out there in hurricane season – 20 hours after the first hurricane, Irma, hit, we were there in Anguilla, in the British Overseas Territories. 24 hours later we were in the British Virgin Islands, 48 hours after that we were in Turks and Caicos, helping them out.

We spent six weeks basically going between the territories, supporting them with water, food, shelter – that's probably the most rewarding thing I've ever done. I can't put into words how proud I am of what we did out there. And it was a whole-ship effort; every person on that ship worked insane hours.

And all through it, we had work-based learning! We had a lecturer back in

Southampton we'd speak to who would support us through that, and I remember emailing, 'So, slight problem... hurricanes have hit. Struggling to do my work-based learning!' He said 'This isn't an email you get every day!' and he was brilliant actually, really supported me very well.

#### **Back on campus, how did you find the facilities, and the new St Mary's Campus?**

The new St Mary's campus – as soon as you walked in you could see that a lot of effort had been put into making it more advanced. You could see a lot of time and money had been spent on making the rooms the best for us, as cadets – it was a comfortable learning environment, and bright. I can't stand a dull dark classroom. Lots of windows, smartboards – it makes a big difference, and when it comes to revising as well.

#### **How did your studies help you prepare for a career in the industry?**

I look back now, and the things I've learned – I never thought in a million years I'd be able to get a sextant out, look at a star, take a sight of that star and tell you where our ship is in the world. But I can do that now – I can

put that knowledge into practice at sea. At times there was stuff I thought, 'Oh yeah, I'm never going to use that', but now I'm using it. It's just the joining together of so much information, which lets me think – I'm a qualified deck officer, I know what I'm doing. I don't know if that surprises me more or other people!

#### **Best thing about living in Southampton?**

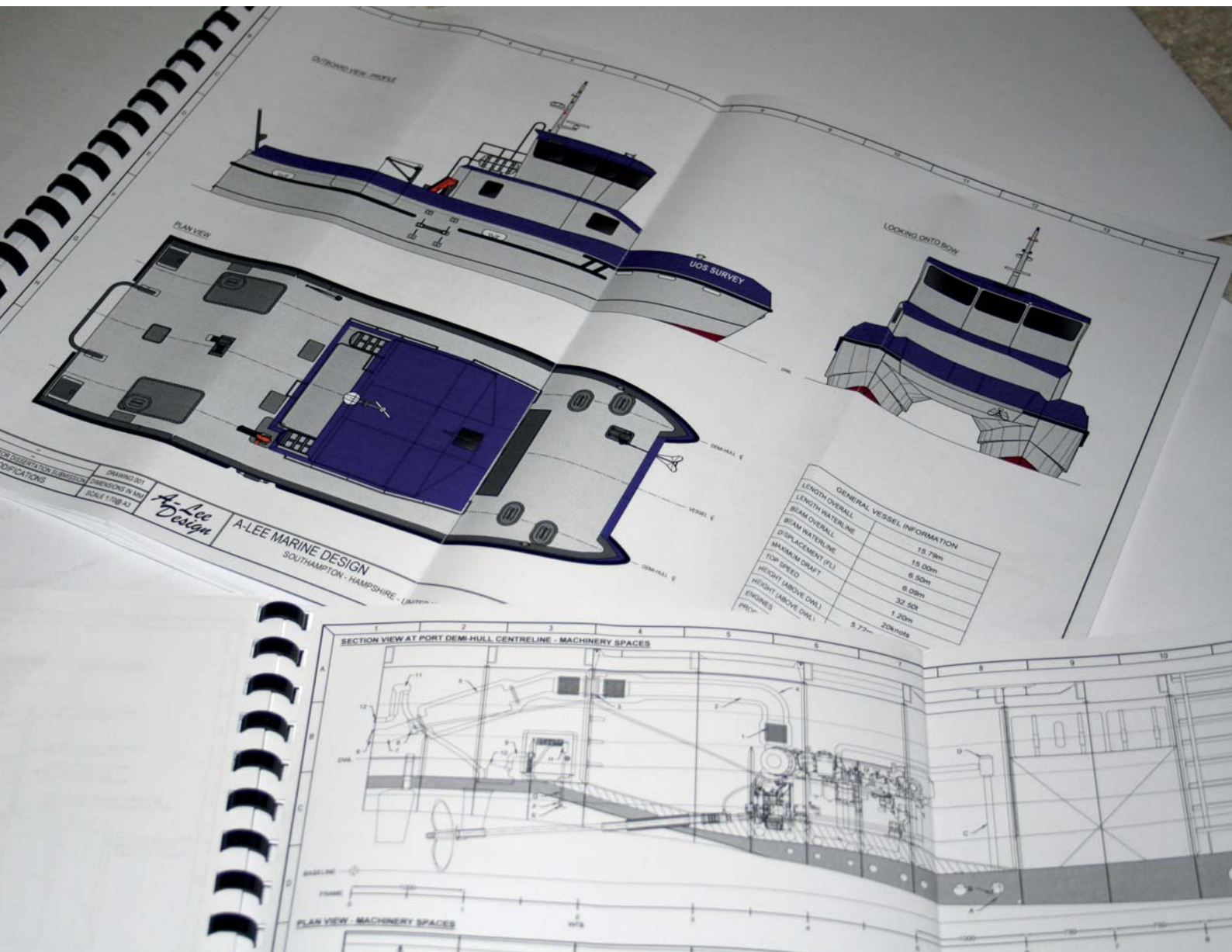
Living in Southampton – I've moved down here permanently, having fallen in love with the city. I've lived in Birmingham and the Isle of Man, and it's made me realise that somewhere like Southampton is perfect. I love the pace of life, and you've got links to places all over the country where I want to go, to family – I've fallen in love with the city.

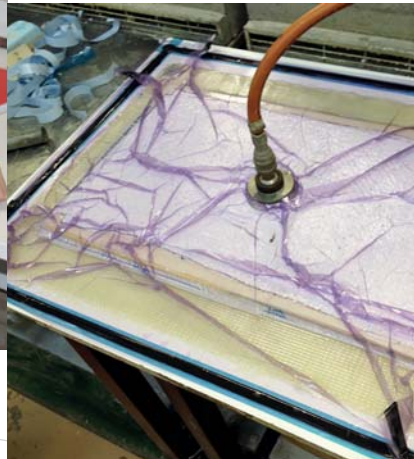
#### **Best thing about cadetship?**

The people you meet. The experiences you get. I've been part of search and rescue and saved three people. International relief operations for hurricanes, part of support on the migrant crisis – I'd never have got those kinds of experiences in any other walk of life.

# ALEXANDER JAMES LEE

BEng (Hons) Yacht Design and Production  
Graduated 2017





THIS COURSE IS FOR YOU IF YOU HAVE A PASSION FOR DESIGN, ENGINEERING AND ALL THINGS BOATS!"

### **How did university prepare you for your career?**

The yacht engineering courses at Solent University provide you with the knowledge and software familiarity required to step into the industry and continue your professional development. Going into the superyacht industry, I have been equipped to deal with a range of tasks, from preliminary design to production drawings for boats almost ten times the length of my dissertation!

### **Favourite Solent memory?**

Taking part in the model yacht race at the end of the first year. I loved designing and manufacturing my model, but seeing it race was fantastic. One of the best things about this line of work is seeing something you design come to fruition.

### **Tell us a little about your career story so far**

After finishing university I was awarded the RINA-BAE Systems Student Naval Architect Award for the best final-year project and the RINA and IMarEST Southern Joint Branch prize for the top final-year student in the same year. This led to my employment at Laurent Giles Naval Architects, where I complete preliminary design work, 3D modelling and production drawings for large yachts and superyachts.

### **Tell us about what you are doing now and what it involves – a typical working day**

Three hours of design (preliminary or for production), three hours of 3D modelling, two hours of report writing and don't forget lunch! Every day is different, though!

### **What's your career highlight so far?**

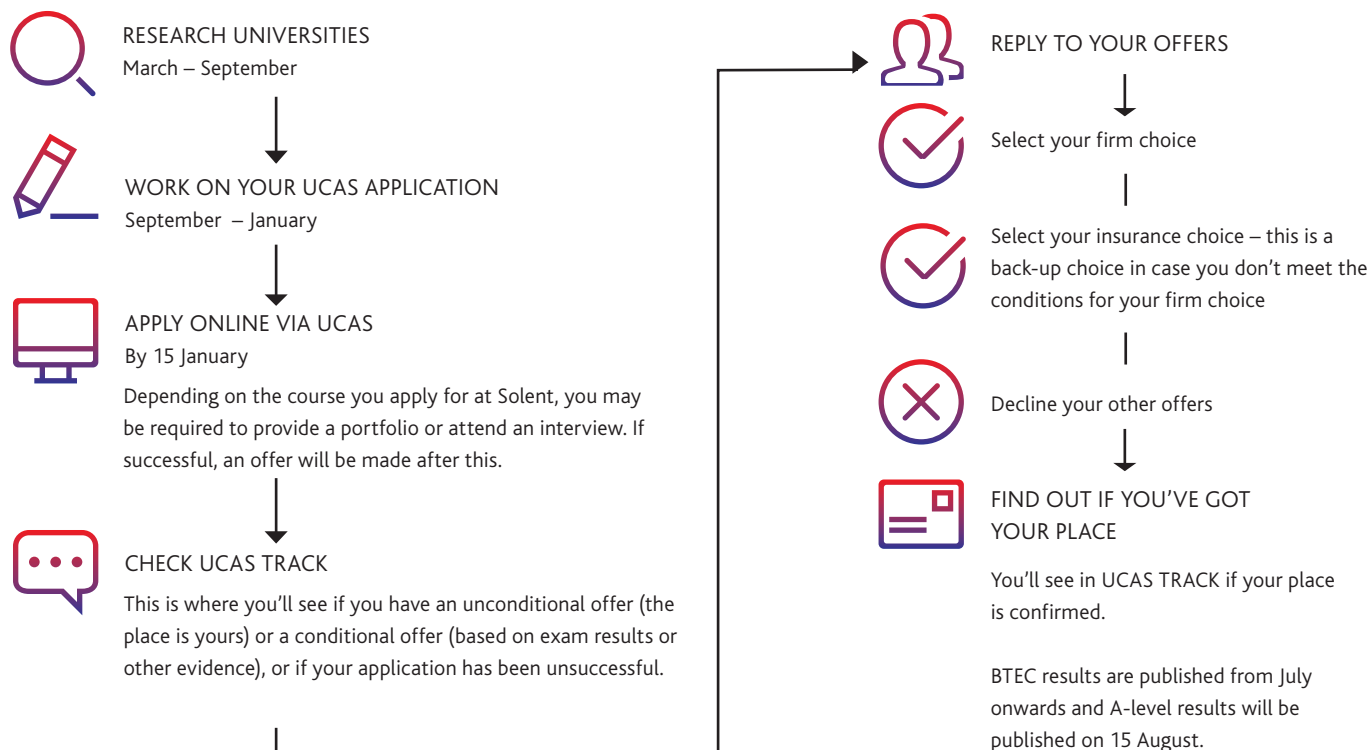
I recently visited one of our projects in build, which was fantastic to see because it brings all of the drawings produced to life. I also attended the Fort Lauderdale International Boat Show, which was an incredible experience.

### **What tips would you give to someone wanting a career in your industry?**

Work hard and be open-minded. I started off the degree with a love for sailing and sailing yachts but quickly discovered the wonder of the engineering behind the motor yacht.

# HOW TO APPLY

Solent University code name: **SOLNT** Solent University UCAS code: **S30**



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**OUR STUDENT RESIDENCES**

We have well-equipped student residences, with fantastic study-bedrooms, right in the city centre and only a short walk from the main campus. For more information, visit [www.solent.ac.uk/accommodation](http://www.solent.ac.uk/accommodation)

## UNDERGRADUATE

BSc (Hons) Engineering Design and Manufacture	112	Y	Y
BEng (Hons) Electronic Engineering	112	Y	Y
FdEng Marine Electrical and Electronic Engineering	112	Y	Y
FdEng Marine Engineering	*	Y	
FdSc Marine Operations	*	Y	
BEng (Hons) Marine Engineering and Management (Top-up)	*	Y	
BSc (Hons) Marine Operations Management (Top-up)	*	Y	
BSc (Hons) Maritime Business	112	Y	Y
BSc (Hons) Maritime Law and Business	112	Y	Y
BSc (Hons) Maritime Transport and International Logistics	112	Y	Y
BSc (Hons) Maritime Management (Top-up)	*	Y	
BEng (Hons) Mechanical Engineering	112	Y	Y
BEng (Hons) Renewable Energy Engineering	112	Y	Y
BSc (Hons) Shipping and Port Management	112	Y	Y
BSc (Hons) Sustainability Science	112	Y	Y
MSci Sustainability Science	128	Y	Y
BEng (Hons) Vehicle Engineering	112	Y	Y
BEng (Hons) Yacht and Powercraft Design	112	Y	Y
BEng (Hons) Yacht Design and Production	112	Y	Y

\* Contact admissions for entry requirements

- UCAS tariff points
- Work placement opportunity
- Foundation route available

## POSTGRADUATE

MSc International Maritime Business
MBA International Maritime Management
MSc International Shipping and Logistics
MSc Shipping Operations (Distance Learning)
MSc Superyacht Design



## FEES AND FINANCE

Worried about the cost of going to university? There's plenty of support on offer to ensure that financial circumstances don't stop you from gaining a higher education. For more information, visit [www.solent.ac.uk/finance](http://www.solent.ac.uk/finance)

Solent University  
East Park Terrace  
Southampton  
SO14 0YN

T. +44 (0)23 8201 3000  
E. ask@solent.ac.uk

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

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