

SOLENT
UNIVERSITY
SOUTHAMPTON

www.solent.ac.uk
20
24

Engineering

2024 undergraduate courses



Gold-standard teaching and opportunities

Our focus on practical knowledge and employment opportunities is just one of the reasons we're rated gold in the latest Teaching Excellence Framework (TEF) review from the UK government Office for Students.

TEF recognises excellence in teaching, learning and achieving positive outcomes for students - with gold status awarded only to universities offering outstanding student experience and career outcomes.

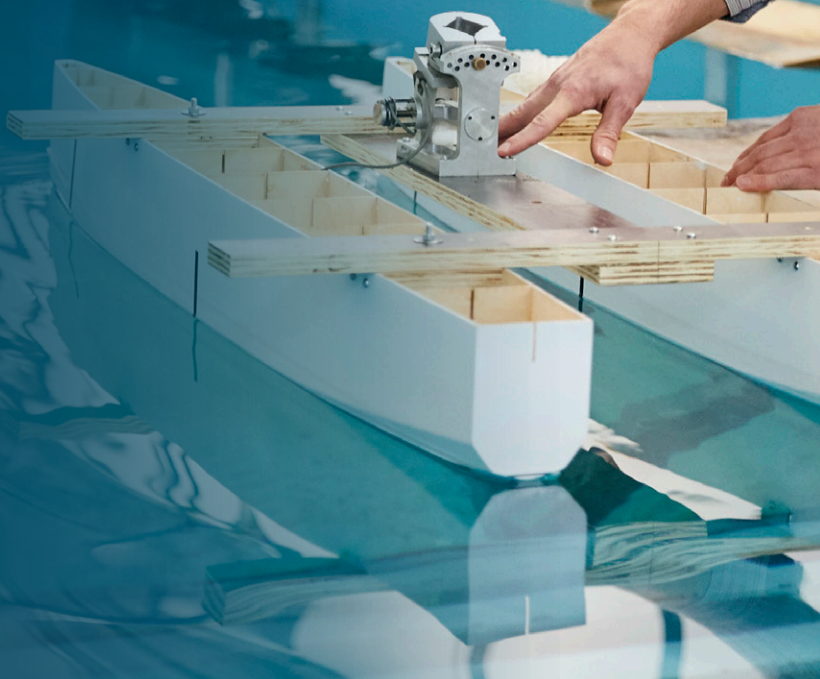


Overall: **Gold**

Student experience: **Gold**

Student outcomes: **Gold**

Teaching Excellence Framework





Build a better world

A career in engineering offers fantastic career prospects and great earning potential. But more than that, it's your chance to make a mark on the world – to find solutions for some of the greatest challenges facing us as a species, from climate change to food production to sustainable transport.

If you've got curiosity, creativity and a passion for change, engineering is the career for you. And our practical industry-informed courses – including electronic, mechanical and renewable energy engineering – will put you on the path towards a rewarding and futureproof career.

Don't just learn the theory – put it into practice in our labs and workshops, giving you plenty of opportunity to get your hands dirty and really learn how to turn your ideas into practical, innovative products and solutions to real-world problems.

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Why Solent

At Solent we go way beyond theory – we're all about the practical side of things. You'll develop the essential understanding of engineering principles and theories, yes – but you'll then test those theories yourself, getting hands-on with the technology, tools and practical principles as they apply in the real world. Explore current challenges and problems. Build your own turbines. Program your own robot. Get hands-on experience in labs and with our engineering partner organisations.

Engineering is the science of what's possible. Find out for yourself, at Solent. And see if you can't stretch the possible a little further.

Access to specialist facilities

Throughout your studies you'll use our state-of-the-art facilities to support your practical learning, supported by a team of dedicated technical instructors with specialist knowledge to help provide training on the latest equipment and techniques. This includes 3D printers to support our engineering courses, and a hydrodynamic test centre to test marine renewable energy devices and yacht and boat designs.

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.

Real-world experience

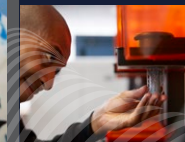
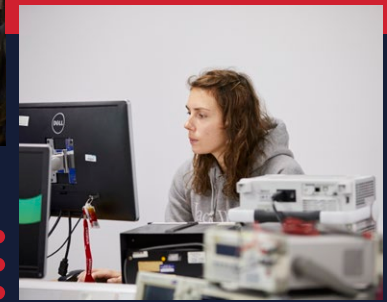
Work experience is an important aspect of all our courses, and our network of highly influential connections out in the industry – everything from world-renowned yacht designers to our far-flung engineering grads – offers plenty of opportunities for interaction with industry professionals.

Some degree students will also have the option to undertake a work placement year between the second and third years of study.

Industry input

Guest lectures and live briefs give engineering students the chance to network with industry practitioners and experts. Final-year engineering projects are informed by real-world industry challenges and students' personal areas of interest.

- The library features a fully networked resource centre equipped with high-end Macs and PCs and an extensive selection of both open plan and private group working spaces.
- The opportunity to gain professional qualifications alongside your degree, including project management and CIM.
- Built-in placement opportunities.
- Support and funding for student/graduate start-ups.



Our courses

BEng (Hons)

Electronic Engineering

UCAS tariff: 112–128

Course page and UCAS code: www.solent.ac.uk/H610

Perfect for electronics enthusiasts who wish to combine their knowledge with engineering skills to be able to pursue a career in areas such as electronic design, telecommunications, microcomputers or research and development.

Get ahead in an electronics career with this professionally accredited programme, combining practical challenges, excellent facilities and teaching from industry specialists and academic researchers.

With a broad curriculum covering everything from analogue and digital electronics to contemporary embedded systems, signal processing technologies and modern communications, graduates can expect to seek employment in research and development, maintenance engineering, electronic design, telecommunications and much more.



BEng (Hons)

Mechanical Engineering

UCAS tariff: 112–128

Course page and UCAS code: www.solent.ac.uk/H303

Ideal for those looking to pursue a career in engineering in roles such as design or research engineer, mechanical design engineer or junior engineering manager, this course teaches students theoretical and practical mechanical engineering skills alongside business skills to be able to take the first step into a career in engineering.

Tackle real-life industry challenges, and put your knowledge into practice with a degree that delivers hands-on skills for a successful engineering career.

The course focuses on applied engineering principles and places a strong emphasis on employability. Our experienced course team will help you to develop the range of theory based, professional and hands-on skills that employers in the industry are looking for.

BEng (Hons)

Renewable Energy Engineering

UCAS tariff: 112–128

Course page and UCAS code: www.solent.ac.uk/HH80

If you're interested in a more sustainable world, this course combines engineering and environmental science to deliver everything you need for a great career in the fast-growing renewable energy sector. Join the forefront of energy technology, and shape the future of the next generation.

The energy sector is a vast and fast-changing industry as society pivots away from fossil fuels to more sustainable, renewable sources, with enormous potential in the short and long term. From renewable energy generation to increased energy efficiency in systems such as cars and buildings, this massive industry will require

engineers with expertise in the environmentally friendly generation, distribution and efficient use of energy – and the creative skills to put that technology to new, innovative use.

Using a mix of classroom and specialist laboratory facilities, this course will give you a strong grounding in science and engineering theory, with an emphasis on renewable power generation methods, environmental impact, and the efficient use of energy in engineering and technology. When you graduate, you'll have the perfect mix of key engineering skills and knowledge to launch a great career – and help change the world for the better.

BEng (Hons)

Yacht and Powercraft Design

UCAS tariff: 112–128

Course page and UCAS code: www.solent.ac.uk/H522

This internationally-recognised yacht and powercraft design course focuses on small craft technology, computer-aided design (CAD) and design practice, delivering essential engineering theory and design skills.

Taught by experienced marine architects and designers, and specialising in naval architecture for power- and sail-craft, the course is ideal for those looking to design smaller leisure craft.

You'll learn the fundamentals of yacht design alongside the latest construction methods, test your designs in our stability tank and

hydrodynamic testing tank, and gain a solid grounding for roles in yacht design, naval architecture or equipment design.

And you'll be able to benefit from the course team's industry connections, too – bringing recognised professionals into the uni. Previous guest speakers have come from key industry organisations such as the Royal Institute of Naval Architects (RINA), Nigel Gee BMT, Babcock Engineering, Gurit, and Sunseeker.

BEng (Hons)

Yacht Design and Production

UCAS tariff: 112–128

Course page and UCAS code: www.solent.ac.uk/21B6

This unique course, with an international reputation, has been designed alongside industry experts to deliver essential skills in the design and production of yachts and commercial craft.

You'll study the engineering science underlying great design, along with the fundamental principles of naval architecture, construction methods and high-tech fibre reinforced composite materials – along with the essential planning and management skills, and industry-standard processes, for the efficient, effective production of everything from racing yachts to RIBs.

And there's a strong practical element to the course, giving you plenty of changes to build valuable hands-on experience of both design applications and modern workshop methods and materials.



HNC

Engineering

UCAS tariff: 64

Course page: www.solent.ac.uk/hnc-eng

Advance your engineering career with this essential course, designed to deliver the advanced knowledge required for progression in the engineering industry, along with a range of transferable skills and experience in a professional working environment.

You'll explore engineering principles, developing your skills in mathematics, electronics and mechanical engineering, and build hands-on experience with our advanced workshops, robotics, CAD suites and more.

Specially designed for those already working in engineering to improve their academic qualifications, this intensely practical HNC is ideal for those looking to advance their career in a variety of engineering roles.

BEng (Hons)

Science and Engineering Foundation Year

UCAS tariff: 48

Course page and UCAS code: www.solent.ac.uk/fdn-eng

Designed to give you the essential knowledge, understanding and academic skills to excel in your science or engineering degree, this one-year introduction to the broader subject area is a great way to access degree-level study in science and engineering – even if you don't have the relevant qualifications or experience you'd need to follow a traditional route into uni.

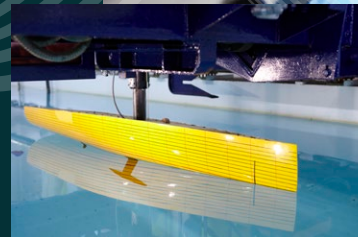


“One of the best things about this line of work is seeing something you design come to fruition.”

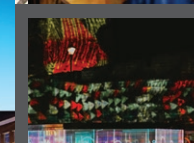
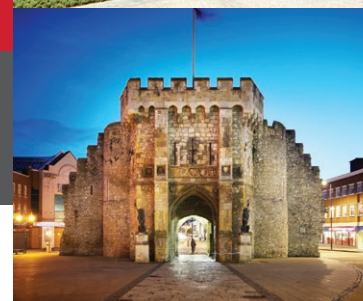
Alex Lee
BEng (Hons) Yacht Design and Production, 2017
Naval Architect, Laurent Giles Naval Architects

Facilities

- 3D printing equipment and laser cutters.
- Rapid prototyping and nondestructive 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.
- A 60-metre hydrodynamic test tank with computer-controlled wave generator for testing yacht and boat designs and renewable energy devices.



Our great city



- With close to 25,000 businesses in knowledge-intensive sectors, employing
- 163,000 people across the region, we're ideally placed for graduate jobs.
-

Southampton is a vibrant maritime city at the heart of a healthy and growing regional economy, home to some of the UK's flagship organisations, including Ordnance Survey, B&Q, Carnival and Ageas – as well as being a hub of maritime design and production excellence.

Hampshire is recognised as one of the most successful economies in the UK and has the largest sub-regional economy in the south east of England, with economic output totalling £50 billion. Southern England enjoys the largest business population in the UK, and the finance and business sector in Hampshire and the Isle of Wight is worth around £4.5 billion.

The region hosts premier companies at the top end of engineering opportunity, including Rolls-Royce, Coopervision, GE Aviation and NATS, alongside engineering innovators such as Ocean Infinity, developing the future of marine robotics.

The city of Southampton also boasts Championship football, world-class sailing and international cricket. It has a wealth of live music venues, theatres and exhibitions, and was shortlisted for UK City of Culture 2025. The city's historic walls and old town bring to life Southampton's rich maritime heritage, with major redevelopments complementing this and bringing new leisure, retail and employment opportunities into the heart of the city.



Josh Bowen

BEng (Hons) Electronic Engineering, 2015

How did university prepare you for your career?

I have seen a lot of universities where academic standing and proprietary research have a much higher priority than their 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 were extremely accommodating and easy to talk to, whether it was 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 notably 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 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.

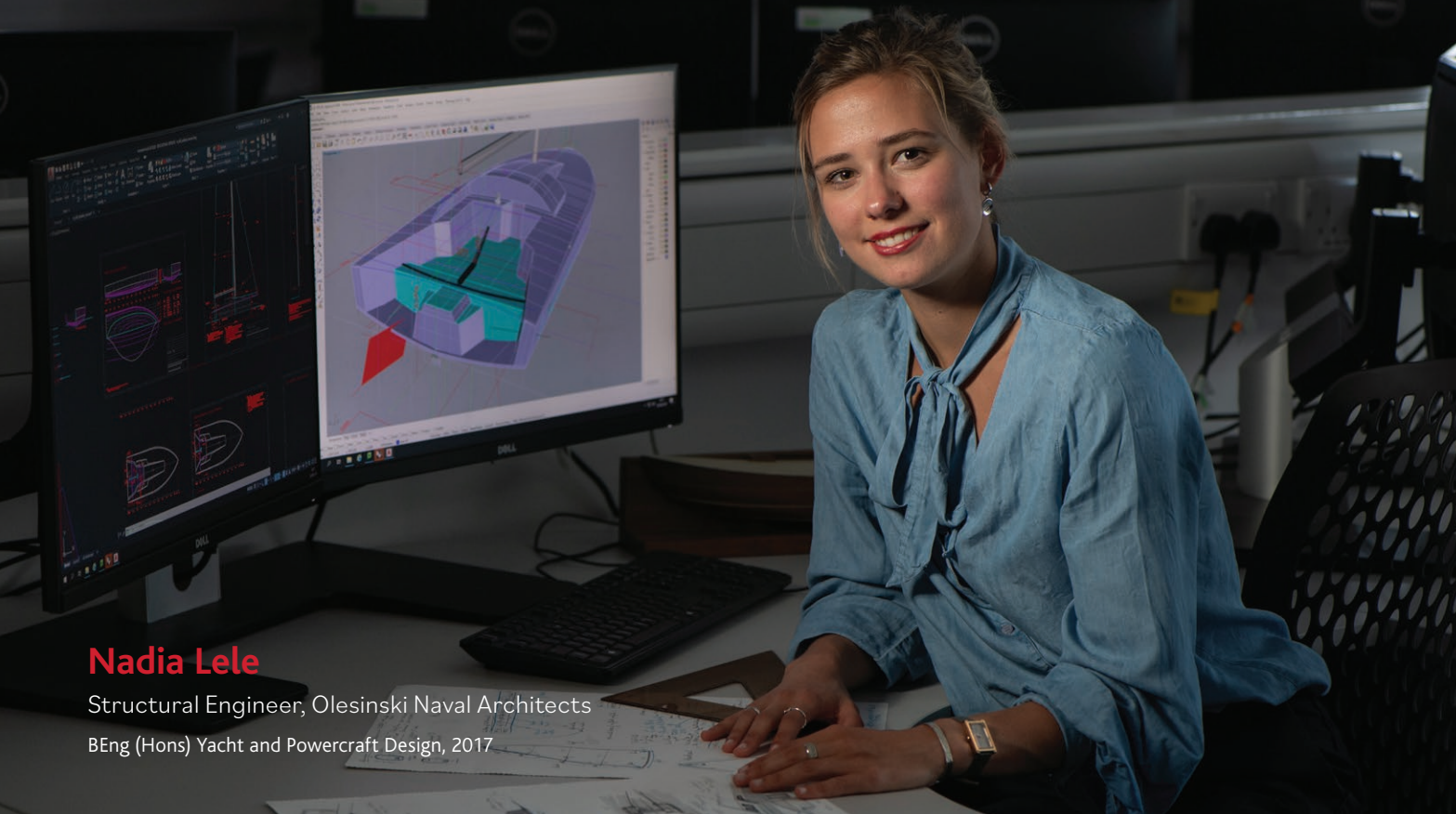
What's your career highlight so far?

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?

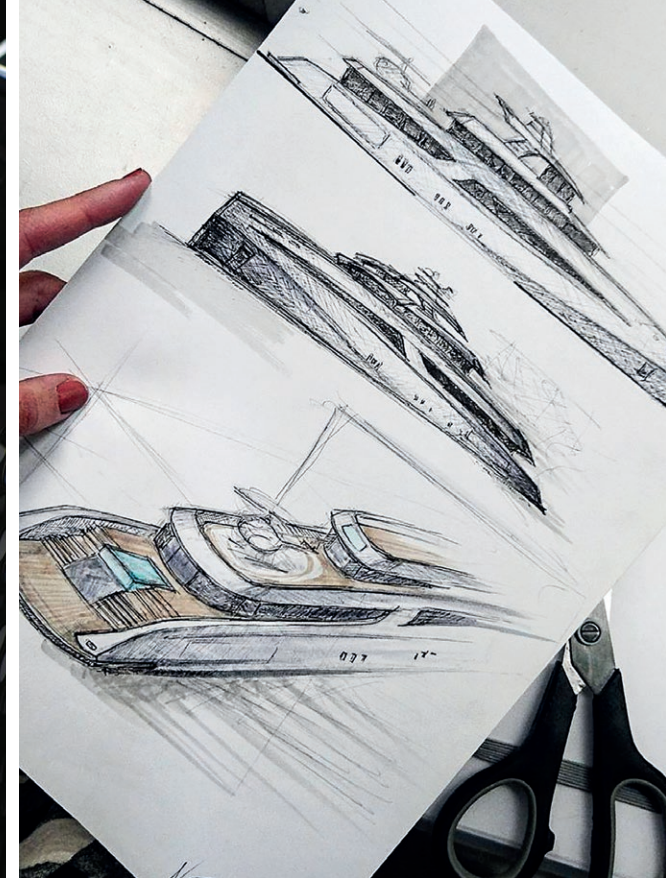
If you have the freedom to choose your career, then you should do something you love. Ask yourself the question: would you still do it if you didn't get paid? I love electronics and am constantly volunteering my own time for out-of-work activities, as well as my own projects. If you are looking for a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





Nadia Lele

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



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 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) – and thanks to the yacht and powercraft design course, I was absolutely ready to complete all these tasks.

Research at Solent

At Solent, research isn't just for academics, or for postgrads and PhDs. Research is for everyone, from undergrad up.

Studying with us, you're part of an active research community – not just learning from researchers in every field, but incorporating that research into your studies.

The way we teach, the practical projects and applied theory you'll be studying? It's informed by the latest research, inspiring and encouraging you to ask questions, investigate problems, propose solutions and create new knowledge. And ensuring you'll be at the forefront of industry thinking when you graduate.

Along with the habits, thinking processes, and curiosity to become a learner for life – evaluating research and industry developments throughout your career – you'll have plenty of opportunities to develop your own research as well, or become a part of a larger project.

Solent students have co-authored papers, worked hand-in-hand with industry on knowledge exchange projects, crewed research films, and even presented their work at the UK parliament.

It's a chance to deliver real-world impact in our communities and our society – and it's open to everyone.

Our areas of focus

Across all of our courses we deliver a unique curriculum shaped around inspiring industrial partnerships, ground-breaking professional insights, knowledge exchange and research, divided into four key areas of focus:

• Environment and engineering

Safe and sustainable energy, transport and material systems.

• Social research and policy

Improving individual and community wellbeing through practice, provision and policy.

• Human function and health

The evaluation of human function, health and the social context.

• Media, culture and the arts

Communication, cultural and media studies, creative arts and practice.

Our research

Take a look at some case studies from our recent research work:

Project MAXCMAS (MACHINE eXecutable Collision regulations for Marine Autonomous Systems)

Working alongside industry partners, this project uses Solent's maritime expertise and our world-class networked bridge simulators to demonstrate autonomous control of an unmanned surface vehicle (USV) and develop broader USV applications, along with navigational support for larger conventional vessels.

The Sea Traffic Management (STM) Validation project

Researchers on the Sea Traffic Management (STM) project have created a testbed virtual world which connects and updates the maritime industry with real-time data exchange among ships, service providers and shipping companies – laying the foundations of tomorrow's digital infrastructure for the shipping industry.



IGNITE – Intelligent Ship Centre

The IGNITE project is developing a scaled demonstration and training facility for piloting maritime autonomous surface ships (MASS). Working with leading maritime technology experts Wärtsilä, the IGNITE project links our unique manned model ship handling centre at Timsbury Lake and our high-tech maritime simulation centre on main campus.

PECS

Ports Energy and Carbon Savings (PECS) explored low-carbon technologies, aiming to develop, test and implement different tools and technologies in order to reduce the carbon footprint of small- and medium-sized ports and marinas, helping them become more energy efficient in a cost-effective way.



Adam Smelt

Mechanical Design Engineer, Falcon Tenders

BEng (Hons) Mechanical Engineering with Foundation Year, 2023

How did you end up at Solent?

I finished sixth form and then tried finding a job I liked; after a year I realised I wanted to really challenge myself and study engineering. I chose Solent for two reasons. First, it was the closest uni to my home – I'm a local and was born and raised in Southampton. Second, I'd had a pretty bad experience in education prior to uni and sixth form. I left school with only 2 GCSEs, but Solent allowed me to study engineering provided I complete their science and engineering foundation year.

How did you find studying at Solent?

During university I've had the good fortune to meet some wonderful lecturers. They all have their own quirks, but they have a great level of experience and provide a great space to learn. From my course leader Janet who provided endless help and support, both academically and on a personal level; to my CAD and design lecturer Fayyaz who inspired me to pursue a career in mechanical design engineering; and my materials science lecturer Rob who helped me overcome difficult academic subjects and get through my third year.

From my very first year at uni, in my foundation year, I tried to be like a sponge! I absorbed every bit of knowledge I could, and I tried and tried and tried my luck at networking constantly. As the saying goes it's not just what you know, but who?

In my second year I realised my passion and ability for computer-aided design (CAD), even starting a CAD workshop in the third year to share tips and tricks and knowledge. And through networking I managed to get a freelance job creating technical drawings for companies sending their products to be manufactured. This was my first taste of working in industry.



Then last December, again through networking, I managed to get an interview with a luxury boat building company. They weren't looking for someone with my skillset but saw the potential benefits and skills I would bring to the company. So, in January I started working for Falcon Tenders as an intern mechanical design engineer. I was immediately thrown in the deep end, getting stuck straight into big design projects.

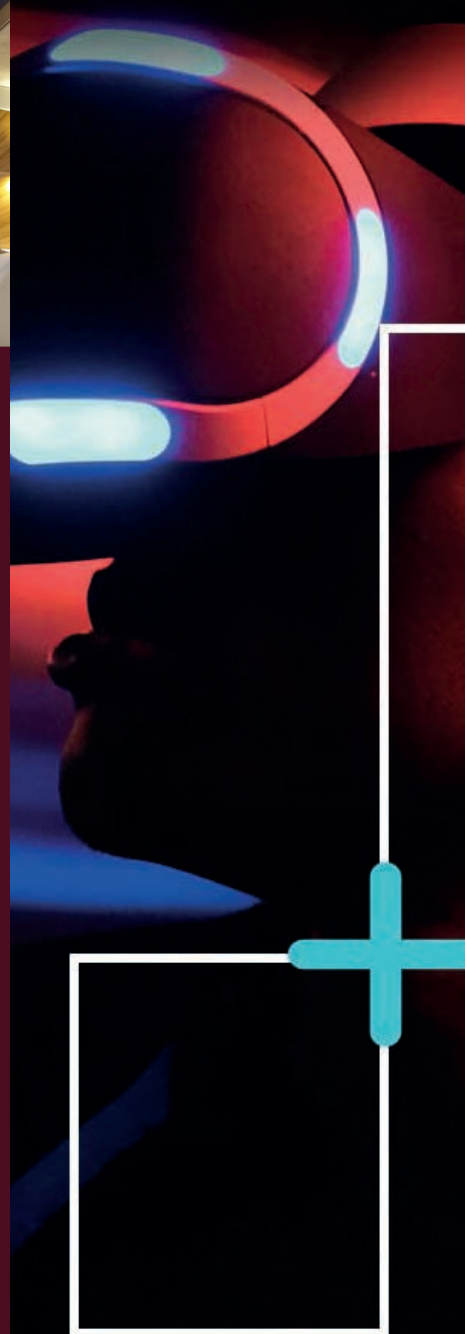
I spent the majority of my final year at uni chaotically balancing my studies and my internship. This was immensely challenging but eventually I managed to find my feet. Sometimes you have to run before you can walk!

I now work full time for Falcon Tenders as their one and only mechanical design engineer, helping bring mechanical engineering skills and knowledge to the design team and bring design concepts to a practical and functional reality.

How was life as a Solent student?

I have been very lucky to have made some truly great friends at Solent. I hope and plan to stay in touch as we move onto the next chapter in our lives.

Studying at Solent, you're right in the centre of Southampton, so it's very convenient. Southampton has given me all the best opportunities in my life! Plus it's my hometown, which was great... and I could go home everyday to see my dog!



SOUTH COAST

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South Coast Institute of Technology partnership

Solent University is a proud member of the South Coast Institute of Technology, a partnership of seven education providers and industry-leading employers that are working together to develop opportunities for education and employment in the local maritime, engineering, and digital industries.

The Solent region is going through a new wave of growth and innovation focused on the maritime, engineering and digital industries – some of the biggest and most exciting sectors in our region. And that expansion is opening up plenty of career opportunities for talented, highly skilled people like you.

Our highly supported and practical higher technical qualifications, apprenticeships, professional qualifications, and university degrees are developed and taught in collaboration with employers, offering high-quality training, expert teachers, and state-of-the-art equipment and facilities, alongside real-world experience to prepare you for a fantastic career in the maritime, engineering or digital industries.

So if you're looking to live, study and work in the Solent region, explore our range of IoT courses – to unlock your full potential, pursue your dream job and make a positive impact on the world.

We work with well-known employers to deliver the courses the maritime, engineering and digital industries are looking for – industries which are hungry for new, talented engineers, technologists, technicians and creatives.



Elodie Grenen

Graduate Naval Architect, Babcock International

BEng (Hons) Yacht Design and Production, 2020

What was it about Solent University which made you think 'this is the place'?

After visiting several universities which offered marine engineering courses I chose Solent University as it was the only university in the UK which offered a yacht design course with a highly practical aspect to it. This was a huge appeal to me, being someone who learns more through the practical application of taught skills. On visiting the University it was clear that they had extremely good resources for the students, and the staff were absolutely lovely and clearly dedicated to supporting students.

What first got you interested in engineering?

As a kid I was always playing with Lego and Lego Technic when my friends would be playing with more stereotypical toys for young girls. I was fortunate enough to be brought up in a very rural area where I spent my days building dens and racetracks for our bikes and go-karts – even from a young age I was doing engineering-related stuff!

At ten I was introduced to sailing and it has been a passion and hobby ever since. I then went on to study more 'engineering'-orientated subjects for my A-levels which eventually helped me to gain a place at Solent.

I have worked in chandleries designing mooring setups for sailing and motor vessels, so problem-solving and design have been incorporated into my personal life, hobbies, summer jobs and education from a young age.

“ I have always loved the problem-solving aspects of engineering as this encourages me to achieve my best work.”

What was the best thing about your course?

The facilities are amazing, with FRP labs, and a CAD suite specifically for use by yacht design students. Plus every lecturer on the course has been absolutely fantastic and really supportive. They are constantly adapting their teaching to make sure we get the most out of our lectures, and during COVID they were phenomenal in making sure that all of our online content has been engaging and easy to follow.

How have your studies helped you prepare for a career in the industry?

I got practice in designing vessels and developing an understanding of classification society rules which actually proved invaluable for me when I had to go for an interview with Babcock for their graduate naval architect scheme. We also had several assignments where we had to do an interview-style presentation, which has also proved to be extremely useful when applying for jobs.

What did you learn or study which really made you go 'wow'?

I have developed 3D modelling skills which have been awesome to learn and definitely very cool! I have also loved the resistance and propulsion aspect of our course which helps predict how much power a vessel needs to achieve design speeds, along with what size propellers they should have – along with many other things!

What opportunities were there to get practical experience?

In the first year we had to build model yachts to race at the end of the year – this was a good opportunity to design a boat to a set classification and also build it, even if it was on a model scale! It was a fun and practical application of the skills learnt during our first year at university and brought everyone on the course closer together. We also had an assignment to design a five-metre RIB for pleasure or commercial use, as a result of a company showing interest in the yacht design courses at Solent and the students' potential.

What did you like best about being a Solent student?

The best thing about Solent – apart from the course – was the people. The staff were always so supportive and wanted to see you achieve your best work, and the students were lovely and friendly – having such a large ratio of international students has meant I have made connections not just nationwide, but worldwide. The social life was also good and there are loads of sports clubs at the University which you are able to join!

What did you take away from your time at Solent University? Friends, connections, new opportunities?

Since my time at Solent, I feel like I have become a more confident young person who has been able to push themselves to be recognised in the employment field to successfully gain a job. I have made lots of new connections with people from all sorts of different cultures and walks of life – on the whole, I feel like my time at Solent has been incredibly enriching.

What have you been up to since graduating?

Up until recently, I have predominantly worked summer jobs – these were still marine-based as they were in two chandleries. I have since been able to secure a place working for Babcock on their graduate naval architect scheme. Qualifications are obviously an important part of bagging a successful job, however I have learnt that you do not need to be perfect when you turn up to work because as a student, you

simply won't have the experience of older staff. It's more important to an employer that you show up and prove that you are willing to learn and do the work, than to turn up with 100 per cent and a first-class degree.

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

If you have a passion for engineering, follow it. I strongly believe there is no point in choosing a career path that doesn't capture your full interest as you'll struggle to unlock your full potential.

Women are finding places in the engineering field more easily these days and I really urge any young girls or sixth-formers to pursue their interests and push to be the next women in the industry. Times are changing, which is fantastic – if you go in with passion and a strong work ethic, there should be no reason for any employer to doubt your potential.

Engineering at Solent is for you if...

...you love the practical application of theoretical study, you endeavour to achieve your absolute best, you want to make friends from a range of international countries, you want to receive an extremely high standard of education... and if you want to have a uni course experience that doesn't feel challenging because you are doing a course you love!



Sam Baynham

Controls Engineer, Tate & Lyle Sugars

BSc (Hons) Engineering Design and Manufacture, 2017
– see BEng (Hons) Electronic Engineering

Why did you pick Solent? What made you think 'this is the place'?

I went through Clearing to get into Solent – the University was local to me and offered an HND in engineering design and manufacture. I didn't achieve the best results in my A-levels, so Solent allowed me to take the next steps to getting onto a degree course.

What was the best thing about your course?

Engineering design and manufacture at Solent is a well-rounded degree that will enable you to enter the industry with a good understanding of the basic principles.

The course leaders were supportive, professional and had a wealth of experience between them, and while I was there the University invested a lot of money into enhancing the facilities on offer to students.

What did you study which really stuck with you over the years?

One module that I found particularly useful was lean manufacturing. We had to work with a local company to run our own continuous improvement initiatives – this was an invaluable experience and gave me a better understanding of the industry.

Now, working for a manufacturing company, I often refer back to material I learned in this module, and apply many of the tools we covered for my own continuous improvement initiatives.

What's your favourite Solent memory?

I would have to say my graduation – nothing compares to the feeling of successfully completing your degree. Throughout your whole academic life, it felt as if everything had led to this point and there was this overwhelming sense of excitement, freedom and accomplishment.

What did you like best about being a Solent student?

The University has some great resources on offer to students, but for me the best thing was the social aspect. With two universities in the city, there are a large number of students and plenty to do outside of uni.

I joined the DJ society in my first year at Solent and went on to become President for two years after. We ran our own nights, worked closely with local clubs to help with their student offering, and held weekly lessons for aspiring DJs and producers.

What did you take away from your time at Solent University?

The University is full of creatives and entrepreneurial spirit. I have met people from a diverse range of backgrounds, and made some great friends and connections. The Uni has also opened up a lot of doors for potential career choices, as well as offering support with building a career.

The careers advice is brilliant and there are active schemes to help you set up businesses, including applying for grants and funding through the University.

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

The biggest challenge, for me, was trying to find a job in the industry with no work experience. I never did a placement or internship – in hindsight, something I would definitely recommend doing – this meant that I was applying for graduate schemes, and these are notoriously difficult to get onto.

But after graduating from Solent, I managed to join an HVAC manufacturer on their six-month graduate scheme, which eventually opened the door for a position in their controls department. I led my own projects, designed heating systems for major building projects in London, and developed software that has been rolled out on hundreds of PLC controllers.

What's the best thing about your industry?

There's nothing more satisfying than simplifying and automating something. I enjoy making things easier for people, and the automation industry allows you to be creative in doing so.

But the best thing is that automation is a growing industry with a shortage of engineers – this means there are plenty of jobs on offer across different manufacturing sectors. I actually lost my job during the COVID-19 outbreak, but I'm now starting a new position as a controls engineer at Tate & Lyle.

Prior to this, my typical working day would see me managing controls projects, liaising with customers, writing software, debugging issues on site, creating/mapping graphical user interfaces and working on research and development projects.

There are a lot of transferable skills across industries. While I was job-hunting, I did some work with a friend who installs security systems on yachts. He needed some help with a door access system and so I flew over to Amsterdam for a few days to help program it. Having been used to working on crowded building sites, it was an eye-opener to be sat on a £200-million luxury yacht!

What's your career highlight so far?

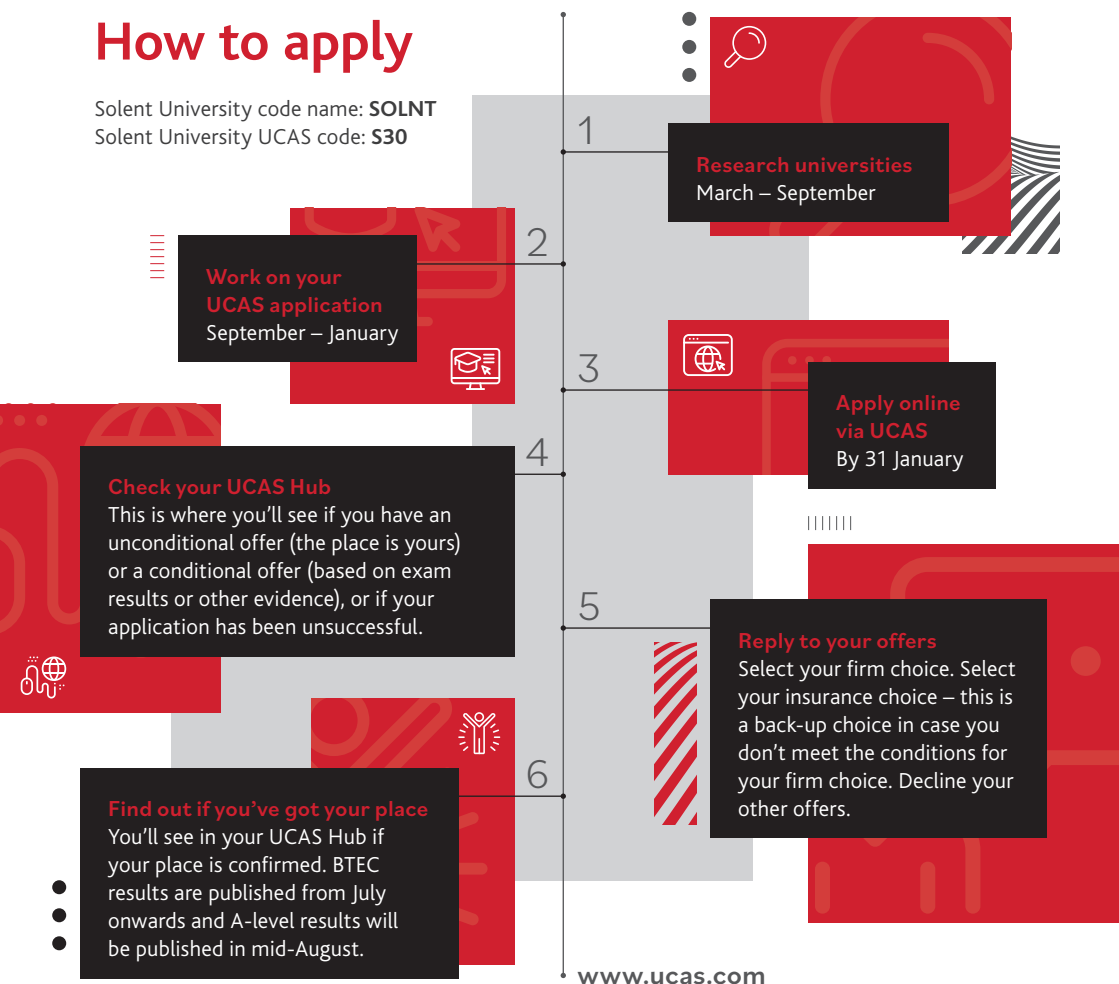
So far, the most rewarding thing has to be handing over completed projects. When you've worked on something tirelessly for months at a time, to see the customer happy with it once it's finally completed is extremely rewarding.

Course list

Course	UCAS tariff points	Work placement opportunity	Foundation Year available
BEng (Hons) Electronic Engineering	112–128	-	Y
BEng (Hons) Mechanical Engineering	112–128	-	Y
BEng (Hons) Renewable Energy Engineering	112–128	-	Y
BEng (Hons) Yacht and Powercraft Design	112–128	-	Y
BEng (Hons) Yacht Design and Production	112–128	-	Y
HNC Engineering	64	-	-
Science and Engineering Foundation Year	48	-	-

How to apply

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



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