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2026 WINTER NEWSLETTER

ENG DES

Inside:

Special ENG DES Around the World Feature

Hear from ENG DES students and alumni who are pursuing ventures across the globe



ENGINEERING DESIGN SOCIETY

Editor - Charlie Newbold

With special thanks to Paul Harper, Robert Gregson, the Engineering Design Society Committee and all contributors

Happy New Year, and welcome to this winter edition of the ENG DES Newsletter!

Firstly, I'm pleased to report that last term was a great success! Despite everyone's busy schedules, our events enjoyed strong participation from student members, alumni, and industrial partners alike. A special mention goes to the first-year Design Engineering cohort, who've fitted into the society with ease and great enthusiasm (one even asked about running for President during our very first promo session!).

As we head into an equally busy second term, this newsletter is a welcome chance to reconnect with the wider ENG DES community. We're particularly pleased to present a special "Around the World" feature; perhaps now more than ever, it's inspiring to be part of such an active, engaged global community, working to make the world a better place - so I'm very grateful to everyone who shared their stories!

Finally, huge thanks to Charlie and Paul for their efforts compiling such a bumper edition. Best wishes for 2026, on behalf of the whole Committee, and I hope you enjoy the read!

Robert Gregson, President



Lego "Give it a Go!" session in welcome week



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STUDENT NEWS

New Committee Member

We are delighted to welcome **Farrell Governor** into the ENG DES committee for the remainder of this academic year. Farrell was elected as the society's First Year Representative, meaning we now have a student from every year on the committee. We hope this will better ensure that every student feels part of the society, and particular aid the integration of the first year Design Engineering cohort with the rest of the society.

To all first years, please use Farrell as a point of contact if you have any suggestions, concerns or points you'd like to raise.

We are looking forward to working with Farrell for the remainder of the year!

TB1 in Review

We believe TB1 was a success for the society. Here's some of what we got up to:

Academic Events

On the 22nd of October, we aided Paul Harper in running the **Networking for Sustainable Futures** event, supported by other engineering societies: Women in Engineering, Women in STEM, Black in STEM, CivSoc, MechSoc, AeroSoc, and BEEES. Financial support was generously provided through the University of Bristol's Green Apple Scheme.

The event was a huge success, with 40 companies attending, and over 400 students! A huge thanks to everyone who contributed.



The ENG DES committee after the event

Talk Series

We had an exciting range of talks in TB1. These talks took place on Tuesday lunchtimes, with free pizza provided for all attendees. Many thanks to Will Helme, Jack Miller, Sophie Myers, Peter Collen, Chloe Tingle, Dominic Winter, Marcus Ng and Enny Grimwood for offering their time. The Talk Series (and pizza!) will be returning in TB2 (see further details below).

Socials

Numerous socials events were organised in TB1, providing some respite from study and promoting the cross-year ENG DES network. Highlights include:

- Family Dinners and Pub
- Lego Give-it-a-go
- Pub Quiz
- Pool Tournament
- Games Night
- Winter Formal (*particular thanks to everyone who attended - we appreciate it was at a difficult time with coursework and events!*)

What's on in TB2?

Academic Events

We will be starting an **Outreach** programme this term - communicating engineering ideas and careers to local school kids. Details TBC. Please keep an eye out on our Instagram and emails for more information.

Talk Series

The ENG DES Talk Series will return this term, with lectures on **Mondays at 1pm in LT 1.15**. The following talks are confirmed (subject to change):

- Week 14 - 26 Jan: Andy Greener - Careers in Aerospace
- Week 15 - 2 Feb: [Ellie Carey | LinkedIn](#) - Project Management for Offshore Wind
- Week 16 - 9 Feb: [Lottie Macnair | LinkedIn](#) - Sustainable Infrastructure & Communities
- Week 17 - 16 Feb: [Helen Inman | LinkedIn](#) & [Mareks Zēvalds | LinkedIn](#) - Product Design & Development

Week 18 - Reading Week

- Week 19 - 2 Mar: [Rosie Hudson | LinkedIn](#) & [James Padbury CEng MCIBSE | LinkedIn](#) - Sustainable Built Environments
- Week 20 - 9 Mar: Osprey - Marine Contractors & Specialist Logistics
- Week 21 - 16 Mar: [Wes Hassan | LinkedIn](#) - Designing Medical Trials

Socials

Keep your eyes peeled for the details of socials throughout this term. Here's some of the things we are planning:



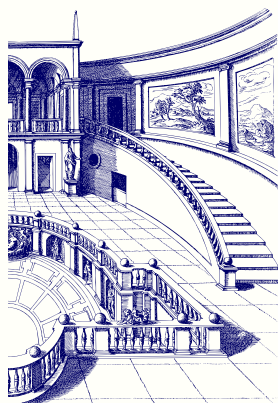
Wine and Cheese Night

A free wine and cheese gathering - as is ENG DES tradition!



Bristol Bears Rugby Match

A trip to Ashton Gate to watch the Bristol Bears - and our very own ENG DES alumni Ella Lovibond!



Bath Trip

It doesn't look like we'll be able to get an international ENG DES trip off the ground this year - but why not join us for a day trip to Bath?



Curry Night

A curry night (complete with whacky shirts) - as is ENG DES tradition!



Summer Formal

Ending the year in style with a Summer formal - details to be announced.



Many More TBC!



Lastly, a reminder that this is YOUR society. If you have any ideas for socials, please let us know!

And now a word from our sponsors, Osprey

We are delighted that Osprey will continue to support the Engineering Design society this term!



If you or your organisation are looking to engage with our students and support the society, please contact engdes-committee@bristol.ac.uk for more information!



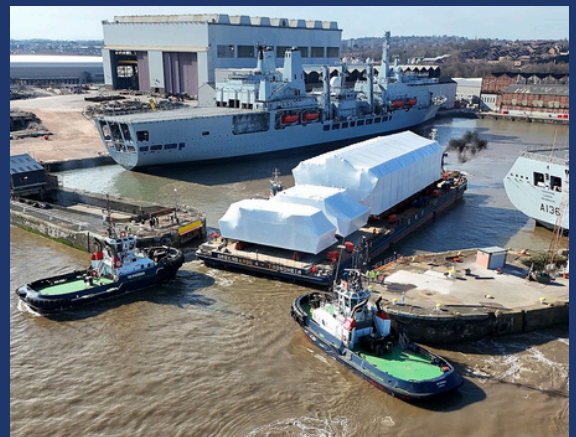
Osprey completed the transportation of the second Reactor Pressure Vessel (RPV) for Hinkley Point C.

START YOUR ENGINEERING CAREER WITH THE OSPREY GRADUATE PROGRAMME

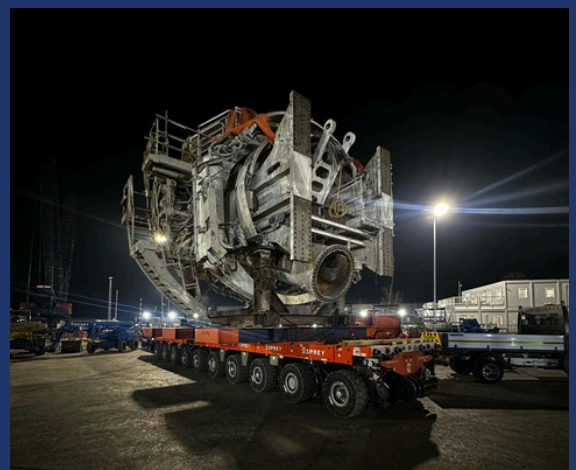
The Osprey Graduate Programme offers an exceptional foundation for ambitious engineers seeking to make a real-world impact on some of the UK's most significant infrastructure projects.

Our two-year programme bridges the gap between theory and practice, placing you at the heart of live, high-impact engineering projects. From supporting the construction of Hinkley Point C Nuclear Power Station to delivering precision heavy-lift solutions for HS2's high-speed rail infrastructure, you'll gain hands-on experience across the nuclear, renewables, civil engineering and defence sectors.

Recent graduates have contributed to extraordinary projects, including the transport of 520-tonne steam generators, the installation of tunnel boring machines at Old Oak Common, and complex marine operations supporting the Royal Navy's Type 26 Frigate programme.



Osprey supports the Type 26 Frigate programme by transporting steel megablocks between UK shipyards.



Osprey transported and assembled tunnel boring machine (TBM) gantry sections for HS2.



Osprey installed the tallest onshore turbine in England (150 m) to generate clean power for 3,000 homes in Bristol.

Real-World Experience:

Work on multidisciplinary engineering projects involving heavy lifting, marine logistics, and modular construction. Apply your academic learning to challenges that demand precision, safety, and technical excellence.

Continuous Learning:

Access comprehensive training courses, e-learning modules, and workshops designed to develop your engineering, business, and management capabilities while working towards chartered status.

Structured Growth:

Benefit from dedicated mentorship and a clear development framework. From day one, experienced engineers will guide your progression, helping you identify and develop your leadership strengths.

Make an Impact:

Contribute to projects that shape the nation's critical infrastructure, from nuclear power stations to defence assets and major transport networks.

At Osprey, potential becomes a rewarding engineering career. Join us to craft your future while delivering solutions that matter.

Ready to take the first step? Visit <http://osprey.group/careers> or contact careers@osprey.group.



Osprey launched Orbital's 680-tonne O2 turbine, harnessing tidal energy to generate clean power.

A GRADUATE'S PATH AT OSPREY

Hear about Engineer Will Stevenson's journey so far.

Will Stevenson has completed the Osprey Graduate Scheme in Bristol, following a degree in Mechanical Engineering at Dundee University. His route into engineering began with a structured STEM education at RGS Newcastle, where he focused on maths, physics and German. After taking a gap year to consider his options, he joined Dundee, attracted by its campus environment, course structure, and extracurricular opportunities such as Formula Student.

Will chose to study mechanical rather than automotive engineering to keep his career options broad. He described mechanical engineering as a strong generalist foundation, allowing entry into multiple sectors without being too narrowly focused.

In 2021, during his degree, Will secured a two-month summer internship with Osprey. His first project involved developing a stability calculator for Self-Propelled Modular Transporters (SPMTs), gaining early experience with the types of equipment central to Osprey's work.

After graduation, Will joined the company full time and moved into marine engineering.

His responsibilities included vessel acceleration calculations, stowage planning, and sea fastening designs. His first major project involved supporting the transport of a subsea umbilical system for Baker Hughes. When the lead naval architect moved on from the business during the project, Will assumed day-to-day engineering liaison duties, working directly with external engineers and clients under tight time constraints.



He has since worked across marine, nuclear and defence projects. He provided the engineering for a key defence move at Cammell Laird shipyard, involving the roll-on of a large hull section of the Type-26 Frigates for BAE Systems. In the nuclear sector, he has delivered the marine engineering design for multiple barge movements supporting the Hinkley Point C project, including EDG gensets, MSR shells, and other large components.

Will aims to pursue chartership and progress into a senior engineering role in the future. While he recognises opportunities to move into project management, he remains focused on technical development. His advice to students is to seek early industry exposure. "That two-month internship made a big difference; it meant when Osprey launched its graduate programme, I was already known to them." He also highlights that degree apprenticeships and delayed university entry are valid and worthwhile routes into the profession.

ALUMNI NEWS

New ENG DES start-up: Mulan Hood founded by Linda Zuo

Linda Zuo, ENG DES graduate in 2017, has founded a new company: Mulan Hood – an interdisciplinary company which curates small events designed to encourage connection across disciplines. Here's what Linda had to say about her experience so far:

My name is Linda Zuo. I am originally from China, graduated from Engineering Design with a specialisation in Aerospace in 2017, and am now based in London. After graduation, I began my career in finance, working in a large financial institution. I later moved into a strategy and investments role at an international publishing group, working closely with science, research, and technology-led businesses, including well-known academic publishing brands. These corporate experiences helped me understand how complex organisations operate in the real business world: how decisions are made, how risk is managed, and how long it can take for ideas to become reality.

At the same time, I began to feel constrained by the distance between decision-making and execution. While large organisations offer structure and scale, they can limit how directly individuals see their ideas brought to life. In 2025, I decided to start my own company, Mulan Hood. While the company is interdisciplinary by design, science and technology remain a central focus of our work, particularly in how emerging technologies shape research, decision-making, and collaboration across fields. In practice, my work involves curating small, in-person events designed to encourage deeper thinking, meaningful exchange, and genuine connection across disciplines. This allows me to stay closely connected to scientific and technical communities while bringing in perspectives from finance, strategy, and media. Looking back, my career path may appear diverse, but there is a consistent theme running through it. I noticed a recurring pattern: many capable people struggle to be properly seen and heard. This often happens for three reasons. First, markets tend to rely on standardised frameworks to maximise efficiency, which can overlook individual nuance and long-term potential. Second, opportunities are often confined within existing networks, making it difficult for people to connect across disciplines. Third, although social media and AI have made information more accessible, they have also amplified fast judgement and surface-level evaluation.

Although my work today looks different from traditional engineering roles, I have never felt disconnected from engineering. I still approach problems as an engineer: understanding systems, identifying constraints, and designing environments where better outcomes can emerge. One strength I continue to draw on is practical execution, i.e., the ability to move from concept to implementation, which I believe was shaped strongly by my engineering training. Engineering Design gave me confidence in tackling unfamiliar and complex problems, and the discipline to ground ideas in what is feasible and actionable. This mindset has become even more important as I build my own business.

For current students considering non-traditional or interdisciplinary paths, my advice is to start preparing early, particularly through internships and practical experiences. Do not be discouraged if others question your efficiency or choices. As AI continues to reshape traditional roles, career paths will become less linear. Stay patient, stay persistent, and keep reflecting on what genuinely motivates you. Over time, clarity does emerge.

Linda Zuo



Linda at an event before Christmas



Roundtable discussion on brand growth along the value chain – Mulan Hood

ALUMNI NEWS - Congratulations!

Ruth Shilston MBE

Congratulations to Ruth Shilston for being awarded an MBE for services to sustainable engineering in the 2026 New Year Honours List.

Ruth was part of the very first Engineering Design cohort, and continues to do ENG DES proud as the Global Practice Lead for Engineering Sciences at Mott MacDonald, where she looks after technical excellence for specialist engineers in the buildings sector.



Ruth at an awards event

Oscar Radevsky Award Win

Congratulations to Oscar Radevsky for winning the 'Emerging Entrepreneur' and 'Best New Business' awards at the Squamish Chamber of Commerce Business Excellence Awards in British Columbia. This is based on the amazing work Oscar has done in founding and developing CreateMakerspace, a hub for creativity, innovation, and community in the heart of Squamish. You can read more about Oscar's work in developing CreateMakerspace on page 19 of the newsletter.

Jack Miller Award Win

Congratulations to Jack Miller and his risk assessment start-up Nettle for winning the best Insurtech company at the FinTech Finance Awards 2025, after just one year of launching the company.

The Insurtech Award recognizes innovative solutions that transform the insurance industry using next-generation technology and consumer-driven innovation.



Jack collecting his award



Oscar with his awards

ENG DES AROUND THE WORLD



Paul Harper has reached out to ENG DES alumni and placement students who are now living / working outside the UK. This special feature provides updates and advice from these international ENG DES-ers, in their own words. Many thanks to all contributors.

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Liz Arnold (Placement): Completing a structural engineering internship in Missouri, USA

I'm currently undertaking my year-in-industry as a structural engineering intern at Case Engineering Inc. in St. Louis, Missouri, USA. The company employs around 100 people, and since beginning my placement in August, I have worked on a wide range of projects. These have ranged from restaurant chains such as Chipotle to more specialised projects, including animal shade structures at St. Louis Zoo.

Liz at a site visit for a company home building project



My interest in structural engineering developed in university, where I particularly enjoyed my second-year Structural Materials and Design module. I wanted to build on this interest through industry experience, and working in the U.S. appealed to me because the materials and construction methods differ significantly from those taught and used in the UK. I saw this as a valuable opportunity to broaden my technical knowledge and challenge myself.

One of the most rewarding aspects of my placement is the professional experience gained at Case Engineering. The office environment is supportive, and management is relaxed and trusting. As year-in-industry placements are uncommon in the U.S., my role has developed over time. I am now trusted with individual projects with a similar difficulty level to those assigned to the new graduate engineers, whilst still receiving guidance when tasks or concepts are new to me.

On a personal level, living in the U.S. has been very rewarding. My mum is from America, and I also have family in St. Louis, so this placement has allowed me to spend more time with them while experiencing American life first-hand. Living in the U.S. has helped me gain a better understanding of American culture and has shown me that many American beliefs are very different to how they are often portrayed in the UK. Being based in the U.S. has made exploring new places much more accessible, and weekend trips have made the experience truly exciting. I have also been able to visit friends across the country whom I met when travelling prior to university, which has really added to the experience.

There have been challenges when adapting to professional practice in the U.S. The largest one has been learning to use American design codes and understanding how to apply them in practice. There have also been smaller challenges that I had not considered prior to working abroad. For example, although I understood imperial measurements academically, my first site visit surprised me by how different it is to read measurements from a tape measure and confidently say fractions like "three thirty-seconds of an inch" out loud.

For students considering working internationally, I would strongly encourage them to embrace the opportunity. Professionally, it's a great way to expand your knowledge in the field. Personally, it requires openness and adaptability, qualities that will be beneficial in all aspects of life. Living far from home can be difficult at times, especially when you miss important events in the UK, so building a strong support network is essential. Being approachable and open to new experiences makes the experience extremely rewarding.

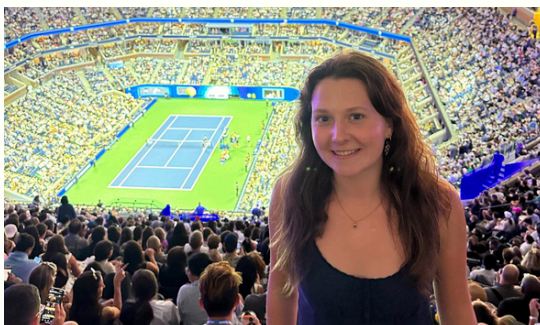
Liz Arnold



Liz (bottom row, centre) at a rodeo on Thanksgiving in Scottsdale, Arizona

Victoria Kelly (Placement): Working as a tennis systems operator across the globe

I am currently six months into my placement year with Hawk-Eye Innovations, working as a Tennis Systems Operator. The role has taken me across the globe following the ATP and WTA tours, travelling from tournament to tournament and supporting live professional tennis events. So far, I have worked at seven tournaments in countries including Croatia, the USA, the Netherlands, China, France and the UAE.



Victoria in the Centre Court crowd at the US Open

As a system's operator, my role involves travelling to each event to install Hawk-Eye's multi-angle camera tracking systems before the tournament begins. This includes setting up hardware, configuring networks and troubleshooting technical issues. During live play, I monitor system performance in real time and work closely with Review Officials to ensure accurate and reliable decision-making. Once the tournament concludes, the system is dismantled and we move on to the next location.

I was motivated to apply for this placement as it perfectly combines my interests in sport and technology. Hawk-Eye is such a well-known name within sports engineering, and the opportunity to contribute to elite-level competition was incredibly exciting. The role can be both high-pressure and rewarding, requiring a calm and focused approach, particularly during major matches. One standout moment was carrying out an official video review during a US Open semi-final. Other memorable experiences include fixing a foot-fault camera mid-match, which I later spotted myself doing on television, and testing systems by playing on Centre Court at the China Open.

The nature of professional tennis means that working hours can be long and unpredictable. Matches often finish late at night or in the early hours of the morning, and system issues still need resolving before the first ball the next day. This can make it difficult to commit to plans outside of work and can be physically demanding. I also spend most of the year travelling, sometimes without returning home between events; for example, I was away continuously from July to October. While this lifestyle isn't for everyone, I personally loved it!

One of the highlights of the role has been the people. My colleagues have become a huge part of my experience, both professionally and socially. Hawk-Eye is filled with young, driven and sporty individuals, and the team environment has made the challenges worthwhile. Outside of work, I've had unforgettable experiences, from hiking the Great Wall of China to jet skiing on the Hudson River and dune bashing in the desert.

For students considering similar roles, I would highly recommend gaining experience that demonstrated teamwork, adaptability and a willingness to learn. Technical knowledge, particularly in networking, is beneficial, but not essential, as I had no prior experience in this area before starting my placement. More than anything, being open to new challenges and comfortable working in a fast-paced environment is key - and you do not need to play tennis!



A sunrise in the desert in Abu Dhabi

Victoria Kelly

Nicola Graham (Alumni): Working as a water resources engineer in Stockholm, Sweden

I'm approaching three years in Stockholm, Sweden, as an Experienced Water Resources Engineer at WSP – and what an incredible journey it has been.

After graduating in Engineering Design in 2021, I moved to London and rejoined WSP, where I had interned throughout university. I spent a year and a half there, enjoying life in a new city, but I had always dreamt of moving abroad. When I visited Stockholm in 2022 for the World Water Conference I knew instantly that I could see myself living here.

Fast forward a few months, plenty of uncertainty, a serious skiing accident, and knee surgery, and I had relocated with my partner to Stockholm with the help of WSP, and was living on the edge of a lake.

My work here focuses on planning and designing flood alleviation and drainage systems for major infrastructure projects, similar to what I did in the UK. But there is one catch... everything is in Swedish. Despite preparing for a few months with night classes, podcasts and books, I was by no means fluent by the time I arrived. I was thrown into meetings, emails and reports entirely in Swedish, and had a moment of panic. It took about 18 months to feel confident, and now, another year on, working in Swedish feels almost as natural as English. It was the hardest part of moving abroad, but also the most rewarding. I'm proud to have persevered.



Nicola learning to cross country ski in a snowy town outside of Stockholm

The upshot of living in Stockholm is simultaneously living in a capital city whilst being 20 minutes from the archipelago and ancient forests. In the winter I cross-country ski; in summer, I swap pool swimming for open-water swimming in one of the lakes.

There were moments of doubt and times I felt out of my depth. But the rewards have far outweighed the challenges. This experience has strengthened my technical skills, improved my adaptability, and enriched my life through the people I've met and the opportunities I've had.

For any student or engineer considering working abroad, I strongly recommend it. Working for a global company like WSP makes the process easier, but you'll likely need to advocate for yourself and find a sponsor who will support your move.

Nicola Graham



Nicola cycling the world's largest cycling race – Vätternrundan – with teammates from the Stockholm triathlon club

James Clark (Alumni): Working as a design engineer in The Netherlands

I've had a bit of a wild ride since graduation; I founded a startup right out of the gates of merry old Bristol, aiming to make a mark on sustainable food production with an innovative sustainable fish farm. This was a pretty incredible experience; I got to present to ambassadors, won several awards, and then ran straight into the teeth of Covid, Brexit, and cost of living crisis. This was, suffice to say, a bit of a turbulent time. Just as the numbers were starting to look rather concerning my partner got a great job offer in the Netherlands, and so I wound things up and off we trundled.



James (left) with Joseph Prusa, CEO and founder of Prusa Research which makes industry leading 3D printers. He's holding a part James designed that they used to beta test their new industrial resin printer line.

The Dutch have an enviable reputation as great engineers with a sustainable bent, and I managed to land a job at a design consultancy as a design engineer. Our core business is developing kinetic energy harvesters (think self-powered watches or smart devices) to replace batteries and it's been an absolute blast. Each client is a unique challenge and due to the size the design work is more of an art akin to watchmaking. My favourite to date has been a self-powered GPS tracker built into a cowbell, but the portfolio includes smart locks, emergency keys, watches, showers, bikes, you name it.

Working with the Dutch has also brought its own entertainment as in certain ways the culture feels remarkably similar to the UK, but they are polar opposites when it comes to directness! Having the janitor earnestly explain why my new haircut made me look old at 8 am was nothing compared to the brutality of a Dutch design review, and over time I can honestly say I've come to truly appreciate it. The Dutch have a very flat hierarchy so it's perfectly expected for a junior to challenge a senior on something, and it's a fantastic way to test design assumptions, teach junior colleagues, and have everyone on the same page. I'm now one of the R&D Project Leads and have recently started managing and expanding our rapid prototyping capabilities, with some exciting things in the works.

Living abroad has a magic of its own and I'm so glad I took the plunge as the Dutch are a wonderful people; friendly, straightforward, and have a great sense of humour. Finding a flash of familiarity like your favourite biscuits from blighty or discovering a new favourite (shoutout to bitterballen and Dutch beer in general) can be so much fun, however it does bring its challenges. Commuting home surrounded by language you don't understand before you've found your group can be quite lonely, and I've really missed my friends (and Eng Des <3). The great news is that there are expat communities full of similar people in the same boat and regular events to meetup if you look for it, so get out there! If I can offer any advice to those considering working abroad, I would say make sure it mostly makes sense, then just go for it. You'll never know if it will work out perfectly, but you will make so many incredible memories and gain really valuable perspective. The Eng Des course and internship were invaluable in getting me here, make the most of them and ask as many questions as you can. Believe in yourself, chase what gives you that spark inside, and most importantly have fun!

James Clark

Edward Ando (Alumni): Working as a scientist in Lausanne, Switzerland

I'm currently the Principal Scientist in the EPFL Center for Imaging, which is in Lausanne, on Lake Geneva in Switzerland (facing France across the lake!).

I did the civil stream of Engineering Design (to avoid doing the apparently hard tensor maths in mechanical engineering) specialising in geotech because I was inspired by the teachers (E. Ibraim, DM Wood, D Nash) and liked the topic. However I felt my love of informatics was not quite satisfied so I ended up doing my year in industry in Motorola. In my fourth year, after a long cycle ride going through France, I decided that it would be nice to discover this country. After someone suggested "Why not try a PhD?" - just like that - I asked DM Wood, who pointed me to two possible colleagues, and those in Grenoble (esp G. Viggiani and J. Desrues) just seemed (and turned out to be) perfect. I was lucky enough to get a scholarship and started my PhD after the summer of my last year (I spent that summer working with George Hartley - another Eng Des student - in Bernard Stark's inspirational lab to turn our final year project into a paper!).

I got my PhD which combined geotechnical testing and x-ray imaging, then got a job in the same place as a full time "Research Engineer" (very lucky, but slightly bad practice not to move after your PhD). Job for life as a French Civil Servant, doing mechanical experiments with x-ray imaging and writing open source code to analyse them. I could have gone on doing that a long time...

...but someone came along who eventually got her PhD and then itchy feet and was eventually recruited by the EPFL (École Polytechnique Fédérale de Lausanne and ETHZ's sister institution) in Lausanne, also in the Alps. I commuted for a very short while and then was very lucky to land a job in the newly-created EPFL Center for Imaging, where I dropped my geotech hat and am now just doing image analysis on all sorts of different topics, and continuing to learn a lot. I'm happy I made the change.

Engineering Design students don't often end up as an academics (if I understand correctly), so regarding academia in general and zooming all the way out, the working environment is not the same as industry: the fundamental drivers are education and understanding through research, not generating revenue. Salaries (even Swiss ones!) are less than industry, however: you work on what you want (or what you can find money for if your research is expensive), you work with who you want, and your job entails the educating and guiding of younger people, which is great.

I was in French academia for about 13 years, and now trying to get used to doing science in Switzerland; The administrative side is amazingly efficient, the institution runs a slick operation with communication and it's a lot more visible. However, jobs here are a lot more precarious (I'm fighting hard to retain younger members of my team) and the environment is a little too focused on quantity over quality. Research groups are too big for my liking.

The living environment is excellent; living on a lake, in the Alps for skiing and mountain biking, and Swiss salaries help to be comfortable. However Switzerland can be a little boring, with with a three year old on our hands, maybe that's OK for now.

Some advice... go for it! If you want to keep learning for decades instead of applying your knowledge to make the machine of capitalism turn, this is the way to go.

The next step for an Engineering Design student would be a PhD, and for this I think there are a number of misconceptions: cool topics are great, but what you need is a non-overloaded supervision team with whom you have a good feeling, and with whom you can communicate. You go into the process as a masters student and come out as a researcher, it's quite the transition. Academia can be hard to enter after the PhD, for this I say "Good luck!!!"

Edward Ando



Edward (left) and his team of engineers

Alex Sheard (Alumni): Working in software automation in Madrid, Spain

I moved to Madrid in April 2025. I was previously living in London, where I moved straight after university. Coming out of university, I was already keen to move abroad but despite a few promising applications nothing came through - COVID was still very much a hot topic back then!

In London I worked as a product manager at a fintech firm. The company and role were great, but I wanted to shift to a role with a bigger impact on people and the planet. Having been running my previous company's environmental task force for several years I had several contacts at Octopus Energy and, after an email thread lasting two years with over 40 email exchanges, I landed a role in Kraken, Octopus' soon-to-be-separated tech arm. The role was remote in Spain, so I left London and prepared for the move.



Alex (right) in full San Fermín garb for the Pamplona bull run

I'm now living in Northern Madrid. I work in the automation arm of Kraken, building a no-code automation software - think Zapier - but highly specialised for automating processes within energy companies. Our software - Flow - can manage everything from phone support (the "press one for this" service), to preparing forms for engineers installing heat pumps, to managing meter market processes such as registering new meters to a property. I lead a team of five engineers and one designer, owning a portion of the product.

I love the product manager role and would highly recommend it to any "jack-of-all-trades" engineer who doesn't feel like they fit in a specific area of product e.g. design, data analysis, or engineering. It is fun speaking to users, collaborating with highly skilled individuals daily, and releasing new features to a customer base. Being in tech, this all happens quickly and sometimes we'll go from a problem to an implemented solution in a day.

Being remote is challenging, my team are distributed across Europe, and the wider product group spans the USA to Australia. This means you often open your laptop to a full day of messages to digest from the other side of the world. It also means forging relationships with Spanish people at work is harder - I only meet Kraken people in Madrid every month or so as most workers here are from Octopus.

As for Madrid, I can't recommend it enough: sun, good food, and friendly people. Getting change from €10 for a round of drinks is also a plus! Madrid uses city tax to fund cheap or free events throughout the year so there is always something going on.

For those looking for a product role, I'd recommend heading to your local ProductTank to meet people and learn more. Classic podcasts like Lenny's will also give you an insight into the day-to-day work. I'd be happy to chat to anyone if interested too, you can find me on LinkedIn. Be prepared for a lot of competition though, especially for entry roles.

Please drop me a line if you are passing through Madrid and need a recommendation!

Alex Sheard



A plushie-filled welcome for Alex in the Valencia office

Joanna Phillips (Alumni): Working in airport ground operations in Colorado, USA

Hello EngDes past and present! My name is Joanna and I'm from the cohort who graduated in 2018.

After the course I moved back to London and worked for a short time making SCADA systems to fund 6 months of travel. After that I wanted to focus my career in Robotics, and landed a role as QC and Applications Engineer at Shadow Robot. That position was so much fun - I was able to play with the robot, polish it into being market-ready, and travel with it all over the world.

In 2022 I decided to move to the USA where my partner is from and his family are based. I wanted to join another robotics startup - I had heard horror stories about corporate America with their long hours and limited time off - and found Pattern, who at the time had just 14 employees. We automate airports with self-driving bag carts and fleet orchestration software, and now have 35 employees and are expanding to 10 major airports next year.



Joanna busy at work at Pattern

My role started in QC improving their testing processes, which fit well with my experience, and the company culture was similar to what I had experienced in the UK. It has since developed into a management and scaling position, where I lead a team of 5-10 people and manage our deployment sites. I love how I am able to work across all our products, from software services to integrated hardware and robot builds.

My quality of life has greatly improved - the salaries for engineers in the US are much higher and I love being so close to the mountains and living closer to my friends. The drawbacks exist when you zoom out more. There is significantly less social security (no health care, no job protection etc), and a volatile political landscape. Something I hadn't appreciated is the significant cultural variance between states. Colorado aligns well with my values, and it makes more sense to treat each state as a separate entity than try and paint the whole country with one brush.

My main piece of advice for moving abroad is to do your research and not to underestimate the undertaking. For me it cost thousands of dollars (immigration fees, not being able to work for a while, moving costs etc) and took about 6 months for me to get settled. I was lucky to have support from my husband's family, and don't know if I would have been able to do it without them. The UK has great visa exchange programs with New Zealand, Canada and Australia which might be easier if they interest you.

That being said it has all been worth it. I've made friends for life I wouldn't have met otherwise, and built a life I never imagined for myself. I love my job and am grateful for the shake-up I got in my late 20s. If moving abroad is something that you want to do then go for it! Be prepared for some discomfort, but nothing worth having comes easily. For me it was the best decision I've made.

If you have any questions feel free to email me at joanna.phillips95@gmail.com. Otherwise, good luck!

Joanna Phillips



Joanna's proximity to the mountains is one of the biggest positives of her move

Oscar Radevsky (Alumni): Founding an arts and fabrication space in Squamish, Canada

I'm currently based in Squamish, BC, where I'm the Founder of Create Makerspace, a community arts and fabrication space that supports people in learning hands-on skills across ceramics, woodworking, metalwork, textiles, and more.

Since leaving Engineering Design at the University of Bristol, my career has taken a few unexpected but formative turns. After graduating, I moved to Vancouver and co-founded a small company with a friend focused on solar energy building permitting. That early experience gave me a first taste of entrepreneurship and working in the renewable energy space. From there, I joined Portable Electric as a manufacturing engineer. The company builds portable lithium-ion battery banks, and the role was both technically challenging and genuinely fun. I spent time delivering clean power solutions to film sets and festivals and designing portable solar kits. Most importantly, it's where I developed strong hands-on tool skills and learned how to turn designs into real, functional products.

At the start of the pandemic, I was laid off and then joined Clir Renewables, where I worked on grid-scale wind data analysis to optimize the performance of large renewable energy assets. It was rewarding remote work, and being part of a fast-growing company was exciting—until a downturn led to another layoff. That role, however, enabled me to move to Squamish, where I live now. During my final months at Clir, I had already begun working on what would become Create Makerspace. When I was laid off, it became the push I needed to commit fully.

Fast forward three years and Create Makerspace now has four full-time staff, over twenty instructors, and more classes than I can count—sometimes as many as six in a single day. We've recently been honoured with Squamish's Best New Business award, and I was named Emerging Entrepreneur of the Year, which was incredibly meaningful recognition.



Oscar enjoying outdoor life in Squamish

What I love most about my work and living environment is the tangible impact. People regularly tell me how valuable it is to have a community arts space in Squamish, and that sense of contribution is a real privilege. We're also at a thrilling stage of growth, with a new pottery studio around the corner and our total space about to double. What I don't love is the constant feeling of task overwhelm and being behind—but that's part of starting and growing something from scratch.

For students considering a similar path, my advice is simple: be patient. Meaningful things take a long time to materialize. Luck tends to find people who are prepared and who put themselves in the right situations. Once you're on the right path, momentum builds, things start to click, and you'll know you're doing exactly what you're meant to be doing.

Oscar Radevsky

Dmitro Khroma (Alumni): Freelance between London and Toronto, Canada

I'm currently based between London and Toronto, living and working seasonally across both cities with my partner. My work today doesn't fit neatly into a single job title — I'm freelance as a fractional founder, executive coach, and YouTuber, building a personal business and brand focused on supporting founders, leaders, and communities.

Until the end of last year, I spent eight years as Co-Founder and CTO of Swytch Bike, scaling an e-bike conversion company from an early prototype into a global business shipping over 100,000 kits worldwide, reaching ~£15M annual revenue and a team of 75 people. My role covered everything from product design, engineering and manufacturing in China, to building teams, operational systems, filming marketing videos, and structuring the company for scale.

That journey began during my Engineering Design degree and a year-long internship at Cambridge Consultants, where I met my co-founder. I knew early on I wanted to build something real in the world — not just design it — and Swytch became the vehicle for that ambition.

At the peak of growth, I also hit significant burnout. The intensity of scaling a fast-growing hardware startup pushed my nervous system, health, and identity to their limits. What helped me recover — and ultimately evolve — was coaching, movement, men's groups, mindfulness practices, and creative expression. Those experiences fundamentally reshaped how I think about leadership, performance, and what a meaningful life actually looks like.

Today, I support founders and executives with both the hard systems of scaling — product strategy, operations, organisational design — and the inner systems that determine long-term success: mindset, nervous system regulation, identity, and sustainable performance. Alongside this, I facilitate movement and wellbeing experiences, men's circles, and creative spaces involving dance, poetry, and freestyle expression. I also share my journey publicly through YouTube, building in the open rather than pretending there's a perfect roadmap.

My long-term vision is to build a business and lifestyle I never want to escape from — location-flexible, creatively nourishing, commercially sustainable, and deeply aligned with who I am. The biggest challenge in this transition has been learning to thrive without the structure and certainty of a single company or role. Freedom is powerful, but it demands new levels of self-leadership and intentional structure.

For current students considering entrepreneurial paths: start before you feel ready. Don't wait for the perfect plan — run small experiments, follow your curiosity, and learn by doing. Find great humans to build with. If you can build things, learn to sell them — or partner with someone who can. Direction emerges through movement.

If you'd like to follow what I'm building, you can find my work through my linktree — <https://linktr.ee/khromazone> — Feel free to follow, to connect and to reach out for a chat — I'm always happy to share my experience and support Engineers on their journey.

Dmitro Khroma



Living in Toronto, Canada for Dimi's first real winter season



Surprising Lessons From Ali Abdaal's Mastermind



Dimi Dives Deep
34 subscribers

Analytics

Edit video

1 of 10

Building in public through the Dimi Dives Deep YouTube channel

Lizzy Herratt (Alumni): Completing a SCUBA diving internship in Jamaica

Hello Eng Des! I am just over half way through a SCUBA diving internship. In September, I arrived in Mexico as a newbie open water diver with 15 dives. I have since been posted out to Jamaica and am now a Divemaster with 100 dives and counting. It has been an incredible experience so far. I don't know when I'll get to swim in the Caribbean Sea on the daily again.

But with the crazy highs, also come some crazy lows. Jamaica was hit by a natural disaster at the end of October; a category 5 hurricane with sustained windspeeds of up to 295 km/hr. The aerospace engineers amongst you may recall this is equivalent to the take-off speed of a Boeing 747. Fortunately, my housemates and I had days to prepare and thanks to the National Hurricane Center, we followed hurricane Melissa's spaghetti predictions obsessively. We each prepared a go-bag with our passports and essential supplies, stocked up on tinned food and water, and prepared our house as best as we could, taping our windows and unplugging electronics. Then we sat with our dog and our radio and waited.

Hurricane Melissa was the worst hurricane to make landfall in Jamaica in recorded history. In the week prior, it went through a period of rapid intensification due to the above average surface sea temperatures in the region (1.4C warmer), then we saw the predications converge on the most probable path, right over our parish. At what point does a natural disaster become un-natural when human contributions to climate change are at play?

Post-Melissa, we were without water for 2 weeks and without electricity for 6 weeks. Additionally, the girls and I are having to deal with noticeably increased rates of sexual harassment both on the streets and at the workplace from local men. It has been a very challenging two months and I expect the remaining two will continue to be too. However, now that we have our electricity back, things are looking... brighter. We no longer spend our evenings after work staring into the light of our emergency candle reminiscing over our pre-Melissa luxuries/basic human rights



Flash flooding outside Lizzy's house

I am so grateful to have a roof over our heads and a reliable water supply but many people in Jamaica still do not. Despite Jamaicans having bags of resilience that I would argue the British mind simply could not comprehend, a positive mindset is unfortunately not enough to bring back water, power, and vital supplies to those without. If you would like to support recovery efforts and aid distribution, I urge you to make a donation to the Red Cross Jamaica Appeal. The UK Government will match public donations to the appeal with up to £1 million.

Link to donate: <https://donate.redcrossredcrescent.org/ifrc/hurricane-melissa/~my-donation? cv=1>



Photo of Lizzy and Bery, fellow intern from the Czech Republic, messing around professionally

Despite things not going exactly how I imagined, moving to a new country and doing something unconventional after graduating has been a pretty great decision for me. Doing an engineering degree is hard and taking a break is just what I needed. I am also pleased to be able to say that on my return to the UK, I plan to relocate to Exeter and start work as a graduate modelling analyst at Regen. Having experienced energy insecurity first hand, I am more motivated than ever to work in the energy sector. But for now, instead of stressing over equations, syntax errors and excel sheets, I will enjoy wondering whether I'm going to see the sharks today in their usual spot or not (hopefully yes, I love sharks).

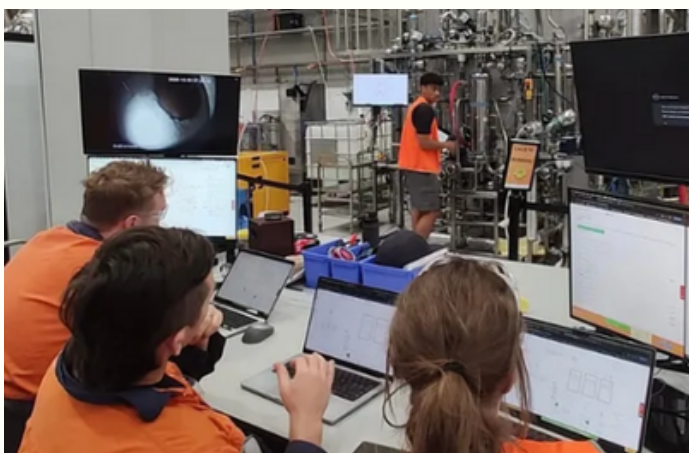
Lizzy Herratt

Lara Tulloch (Alumni): Working as a Systems Engineer in Sydney, Australia

I am currently based in Sydney, where for the past 18 months I have worked as a Systems Engineer at Vow, a climate-tech startup producing cultured meat as a sustainable alternative to livestock farming. We recently launched our first products in Australia ([link to mini documentary](#)). I work in the automation team, reducing cost of goods and increasing production capacity through process automation and system improvements. Most recently, I led the implementation of a factory-wide fluid distribution system enabling equipment to communicate and transfer fluids - including cleaning chemicals, cell growth media, and cell broth. I was drawn to Vow to gain hands-on startup experience and make a direct contribution to tackling climate change.

After graduating from Eng Des in 2017, I took a gap year volunteering with Engineering World Health in Rwanda, working as a ski instructor in Switzerland, and travelling. I then joined Frazer-Nash Consultancy, spending around 3 years in Glasgow working on wind energy projects, particularly loads and control for floating offshore wind, followed by 2.5 years in Sydney focused on Reliability, Availability and Maintainability (RAM) for large rail projects across Australia. While the rail work was less engaging for me personally, it significantly strengthened my systems engineering skills, which I rely on heavily today, and ultimately motivated me to seek out a fast-moving climate-tech startup like Vow.

Testing the multi-device communication on Vow's largest bioreactor (Andromeda) for the first time



Working in a startup is very different to corporate life. The pace is fast, bureaucracy is minimal, and the focus is on solving the most important problems quickly. You learn rapidly, fail often, and prioritise "good enough" solutions over technical perfection. Responsibility is high - you are expected to find, define, design, build, and commission solutions yourself - which has been both challenging and rewarding.

That said, startup life comes with downsides. It can be stressful, priorities shift quickly, and the environment is often messy and chaotic. I've had to become comfortable delivering lower-quality solutions than I was used to, and maintaining work-life balance can be difficult in a culture full of people willing to give everything to the job. In this setting, visibility is often rewarded more than quiet delivery, which does not come naturally to me.

Outside of work, living in Sydney has been fantastic. The lifestyle is relaxed, with a strong focus on spending time outdoors, and I spend a lot of time hiking and camping. The access to beautiful landscapes, wildlife, and consistently good weather has been a real highlight.



Lara's recent trip to Uluru with husband Sam

For students considering similar paths, my main advice would be to think carefully about what motivates you. If you're interested in moving to Australia, it's often easier to join a company in the UK with Australian offices and transfer internally. If you're considering a startup, do your research and make sure you genuinely believe in the mission and align with the culture - startup life can feel more like a vocation than a job, and that alignment makes all the difference.

Lara Tulloch

Matt Mears (Alumni): Energy market risk and trading in Sydney, Australia



*Matt *trying*
to blend in*

Three years after completing the five-year slog, my partner and I said 'why not' to taking a year out and see the world. Our first six months would be spent in Sydney, where we would experience life down under.

After working for two months in a kitchen, I quickly remembered why I spent five years at university and managed to land a more 'skills-appropriate' job. A month later, covid lockdowns hit and six years on, we're still in Sydney.

Since leaving university, my career has solely focussed on risk and trading within energy markets. I have spent all my time in Australia at SmartestEnergy, a UK retailer who moved out to Australia at a similar time as myself. Five years of this was helping to set up the risk function as the market risk manager where I was responsible for valuing the portfolio, monitoring risk limits and assessing new deals. Recently I have moved into a front office role as an Originator, structuring long-term offtake agreements for renewable and battery projects. Much of my time is spent bridging the gap between physical asset behaviour and financial outcomes, working with developers, financiers and the wholesale market to support the financing of renewable projects and development of the business.

The Australian market is a great place to be doing this work because of the huge changes driven by the shift to variable renewable generation. With batteries in particular, the challenge is how to make money from short-duration flexibility – balancing arbitrage, volatility trading and system services while prices, congestion and policy settings keep shifting. Helping shape new virtual tolls, capacity-style products and ways of sharing risk has been one of the most enjoyable parts of the job, particularly when you see ideas move from modelling exercises into bankable transactions.

Outside of work, Sydney is an excellent place to live. You do have to put up with Australians gloating about cricket, although past that, the year-round decent weather and relaxed lifestyle is hard to beat. The main downside is distance, and we really miss family and friends. Being 17,000 kilometres from home makes relationships harder to maintain and means trips back are planned months rather than days in advance.

Whilst I have moved away from traditional engineering, I wouldn't change my time spent in Engineering Design. Electricity markets, infrastructure finance and energy transition roles reward people who can understand the physics of an asset, the economics of its operation, the incentives created by market design, and then explain that clearly to non-specialists. Those translation skills are what ultimately open doors to the more interesting parts of the industry, and it is those translation skills that were at the core of the engineering design course. I would strongly recommend anyone to come out and try Australia. Yes, it is far away, but it really is a fantastic place to live and work.

Matt Mears



Matt's new 'footy' team, the Sydney Swans

Joe Crabtree (Alumni): Working on driver assistance systems in Kawasaki, Japan

I graduated from the EngDes course only last year in June 2025 and after a bizarre 1st and 2nd year which were entirely overshadowed by the covid pandemic it's been a real treat to expand my horizons and start my post-graduate career abroad. I moved to Tokyo, Japan in late October last year and have been working as an Advanced Driver Assistance Systems (ADAS) engineer for Mitsubishi Fuso since then and since celebrating the new year I am now fully responsible for the Active Brake Assist function in all Vehicles (the feature that slams on the breaks automatically if you haven't realized you're driving straight into a kid crossing the road or any other hazard).

The path that led me to the other side of the world wasn't straightforward, but it started with the internship I did while at Bristol. I did my internship with Daimler truck in Stuttgart, Germany in 2023 and had the best time- I can't say enough how choosing and interesting and exciting internship can open so many doors for you in the future. My initial plan was to return to Germany after graduation but quickly found out this wasn't possible due to an external hiring pause which lead to a recommendation that I apply to Mitsubishi Fuso (a sister company of Daimler truck at the time) in Japan, and here I am typing this on a cold but sunny winters day in Tokyo. Having had experience living and working in a foreign country prior to moving to Japan was definitely a big help in mentally preparing for the big move. Since moving, working for Mitsubishi Fuso has been great and I'm lucky that the company doesn't subscribe to the more traditional Japanese work practices of working until the last train home at night. I work from home about 3 days a week and 2 in the Kawasaki office, which is extremely multinational with only about 60-70% of the staff being native Japanese.



Joe during an earthquake drill at work

Moving to Japan wasn't an easy decision and it hasn't come without its challenges, obviously the language barrier is extreme but luckily everyone in the office speaks English and the company pay for weekly private Japanese lessons so hopefully this barrier will soon become less significant. The cultural differences can also seem bizarre at times but learning them is a fun challenge, despite embarrassing myself with a cultural faux pas more often than I care to admit. Immersing myself in as much of the experience as possible has been an amazing way to see authentic Japan with its endless supply of delicious food, beautiful scenery and incredible people.

For anyone considering moving abroad for work/internship my practical advice would be to make sure your chosen company will assist with visa processes and that you have a clear understanding of all the admin required before the move. It's also useful if your company will allow you to exit your contract at an earlier point in case you don't end up enjoying living abroad, which can make moving feel much less daunting. But the biggest piece of advice I can give is to just do it! It's easy to stress about it before you go (I know I did) but once

Joe Crabtree



The view from Joe's apartment

Serena Farrelly (Alumni): Completing a volunteering placement in Kathmandu, Nepal

I managed to sneak in one last favour from the lovely Paul Harper before I graduated from EngDes last summer and that was an introduction to, my now manager, Biraj Gautam at the People, Energy and Environment Development Association (PEEDA) in Kathmandu, Nepal. Currently halfway through a four-month volunteering placement, I'm the most recent University of Bristol to work here. In fact I remember a first year lecture given by Dr Sam Williamson which pulled case studies from his work here and almost poetically my desk is now beneath his research poster.

I remember this lecture clearly because it was exactly the kind of impact focused engineering that I wanted to contribute to. Tackling climate change has always been my personal motivation behind becoming an engineer, and after 5 years of study I was eager to put some action behind these words.



Serena (in ENG DES merch!) on a brewery trip

My work here stretches across multiple projects, but they all come under the same broad focus of upscaling electric cooking (e-cooking) practices in Nepal. Working on e-cooking has been inspiring and radical (< see Angela Davis' definition), because cooking is one of human's most fundamental activities. It's something everyone on the planet does (to varying degrees of success) every day. Nepal is in the unique condition that 100% of its energy production is renewable, but 64% of its energy supply is from biomass. Implementing e-cooking is just such a good example of how working on the climate crisis is a path to cleaner and more abundant lives than before. It will insulate the country from expensive, volatile LPG imports; close the gender health gap as household kitchens aren't filled with wood smoke; and financially support Nepal's micro hydro power plants which suffer from low load factors. Nepal's problem isn't that it can't generate enough renewable power: it's that it isn't being used. Climate change action in the west is way too often framed in sacrifices, reductions and compromises, when in reality climate action (or more accurately climate justice) would mean better lives for the vast majority of people on earth. It's exciting to work on making such a foundational aspect of peoples lives better. I would greatly encourage you to look at the work of MECS, CCA and PEEDA to get inspired too.



Kathmandu Durba Square

Work has been incredibly rewarding because I deeply believe in the mission, however, it has not been without its challenges. The need for 'flexibility' when working in Nepal was stressed by Biraj from day one. There is a very laissez-faire approach to project planning which is, at times, frustrating to someone working on a four month deadline. The best way I can describe it is: nothing gets done until everything gets done. Not unlike some of my university work ;). But not being able to speak Nepali limits my ability to react usefully in these 'everything-at-once' scenarios. Without preparation I wouldn't be able to contribute at all so I would recommend any future students (or ex-students!!) to be prepared to set your own work and be comfortable working independently.

Beyond the work, Kathmandu is an incredible city with incredibly welcoming people. I have been very lucky to be able to stay with a friends family during my time here. Being invited to family events, trips and exploring with her cousins and friends has made the city quickly feel familiar and homely. With winter afternoons basked in sunshine and a back drop of the gleaming Himalayas always peaking over the rooftop terraces, it's a wonderfully beautiful, warm and colourful place. If you get the chance to visit (or work!) here, you should grab it with both hands.

Serena Farrelly

Joe McFarlane (Alumni): Working in foundation design in Kampala, Uganda



Joe (right) on an EA Piling Team Building Day

Happy new year everyone from Kampala, Uganda. Whilst I did miss out on the mince pies (these are not available in the Kampala supermarkets!), I did enjoy the celebrations over several BBQs and quality time with family and friends at home.

I graduated from the Eng Des Civils Steam in 2020 and completed my year in industry with a specialist geotechnical engineering contractor called East African Piling. I worked on projects across Kenya and Uganda and I was itching to go back. The company made me an offer to rejoin them after graduation to take on a project management role, and as soon as the pandemic travel restrictions were lifted, I flew to Uganda.

Since joining the company, I have managed over 50 projects, design and constructing foundation solutions for a diverse range of sectors, including transmission lines, factories, bridges, water treatment plants, coastal infrastructure, buildings, basements, oil and gas, and renewable energy. I lead the company's expansion into neighbouring countries beyond Uganda, into Rwanda, DRC and Zambia. I have taken on a steep career trajectory, and I am now working as the group managing director.

What I enjoy the most about my role is delivering infrastructure projects which meaningfully contribute to the development and growth of the economy. I am proud of the impact we are having as a company and how we can use our specialist expertise to provide much needed solutions. I also enjoy the dynamic environment of the Ugandan civil engineering industry and the pace at which it is growing. The main challenges revolve around working in a setting with a much lower understanding of specialist piling and geotechnical solutions than in the UK and operating within a much more relaxed health and safety culture. Even as a subcontractor, we are often the ones pushing our clients to raise their technical, health, safety and environmental standards. In addition, it is more difficult to pursue charterhip whilst working in a country like Uganda. This is because none of the companies have training schemes with the UK Engineering Institutions and so all CPD and work towards getting chartered is self-driven and must be achieved under the supervision of an approved mentor. However, that's not to say it's impossible; in fact, it can have its own advantages. I became chartered with the ICE at the end of 2024, and my reviewers gave me lots of positive feedback regarding my unique experiences of working abroad.

To anyone who is interested in pursuing a career abroad, I would say "Go for it!". You are capable of much more than you think you are, and as a young engineer, you possess the tools to add considerable value to the world. You don't need to have it all figured out beforehand to succeed, just the willingness to give it a go. Living and working abroad, whilst it has its challenges, is an incredible rewarding experience. Jump in the deep end and see how far you can swim!

Joe McFarlane



EA Piling Team at the Tilenga Project

STAFF NEWS

Mike McCann's Retirement

A huge thank you to Mike McCann who, after 20 years of supporting the Engineering Design course, has decided to 'retire'. We use the term 'retire' loosely because although Mike no longer plans to visit Bristol from his home in the US 2-3 times each year, we hope he'll still be keen to support students remotely;-)

Most alumni will know that Mike's voluntary contribution to the Engineering Design course has been incredible and countless students have benefited from his unwavering support to their year 4/5 research and design projects. On behalf of all students and staff, it has been a real privilege having Mike as part of the Engineering design team and we look forward to keeping in touch in the future.

Mike has kindly written the following article reflecting on his time with the course...



Wishing Mike a very happy retirement

First, a bit of necessary background.

My wife and I have now lived more than half our lives in the USA but we are still Brits.

I was given early retirement at 55 from Imperial Chemical Industries (ICI) while working in the USA just as it divided into ICI and Zeneca. So on April Fools day 1993 I started as an independent consultant. I was doing consulting work in, or for use in, the USA, UK, Europe, Canada, South Africa and Australia, a lot of which was initially what I had been doing inside ICI.

Why Bristol?

In 2005, my wife and I sought a flat as a pied-a-terre back in Southern England, where we had friends and relatives. On a visit to England, I started searching in Gloucester. The estate agent in praising the location pointed out that it was only 30 miles or minutes from Bristol so I drove the rental car to Bristol and found a flat which I bought 'off plan' (Being an Engineer, drawings were readable).

I considered helping at Imperial College whence my PhD.

Even then it would be a feasible commute from Bristol. But the UoB has a good reputation so I contacted the Dean of Engineering offering to help. A response came from Jon Sims-Williams who was getting the Engineering Design course going.

I took on the role of a visiting consultant to the student project teams that had been assembled and treated them like my own business clients except that students didn't get a bill and they did all the work.

Crucial Concepts, 1,2,3:

1. The teams were selected students. Jon et al were doing a good job.
2. The projects were real with industrial sponsors who could thereby get a serious look at an idea or issue that they were interested in. Variety in subject matter was an advantage, not a difficulty.
3. It was required that the project report included quantitative modelling and demonstration.

Thinking about the crucial concepts:

1. The students were already identified out of the population of incoming degree students as having potential to do well in the masters degree course. I was familiar with that sort of selection process in teaching and in industrial sponsorship.
2. When I met the students, teams were already formed, with external sponsors and faculty advisors. I joined in as an independent consultant with no hand in grading or assessing students.
3. The crucial item was the obligation to provide quantitative analysis. To me that meant being able to justify the design or problem solution with a working computable model. If you can't put numbers to it you might as well be waving your hands in the air.

I took the view that all models should obey conservation laws, for everything – Mass, Momentum, Energy, People or really anything tangible and countable. Furthermore, since heat and mass transfer and any growth processes take time, the models need to cover development of the state of the system over time. Time can be continuous (as finely as you can measure it), discrete (only evaluated at regular intervals) or event based (only considered when there's a transition in some part of the system).

What Happened?

During my visits to Bristol, I was given the use of an office in the Queens Building which was an "open door" resource for the EngDes students and I coached them in making working models which could provide answers to "How does it work?" and "What happens if you change things?".... the Function and design ideas. Happily, I was working with friends. During the 20 years or so that I was involved with the ENG DES program I saw that some of the students were taken in to the firms that had sponsored their project. Others went into quite different industrial work, into doctoral studies (e.g. Imperial College or Bristol), or into their own new enterprises which may have appeared out of the projects they worked on. One way or another they didn't have much trouble finding employment. And very few if any dropped out of the programme.

I see all this confirming my belief that Learning By Doing (LBD) is the best way. These students were all making themselves expert in some particular problem, generally each a part of the whole project solution. They can use that, of course, as well as the collaboration skills. Having mastered an area they are ready to go further with it. Also, it is apparent that they were confident enough of their own abilities to expand laterally, in an intellectual sense, by moving into a different field. There the same universal conservation laws apply but the equations of change, the driving conditions can be quite different.

Now we can see the closing of the mentor loop. Students who left are offering their company's support for a later wave of students. Let's hope this continues.

Mike.

Michael J. McCann, DeHavilland Apprentice + BSc(Eng),DIC,PhD,CEng,FIET

Theo Tryfonas' Athens Marathon

Congratulations to Theo Tryfonas for recently completing the Athens Marathon. After returning by plane from Athens in late November, Theo provided the following reflection on his experience...

Sitting on a plane, practically full of marathoners (the finisher t-shirts, the medals, the lot!) made me reflect on the past 16 very challenging weeks. Challenging, not because of the marathon training per se; that schedule was probably harder to my son Gabriel and my wife Catherine (my daughter Chrissa is in France and so escaped the long-run moods!). But because life happens and there have been more than one family emergencies, caring for loved ones, work trips, several weeks of building work and dust at home, the anxiety of multiple uncertainties and the impact of observing the cognitive decline of loved ones.



Theo completing the Athens Marathon

And, does ever training go according to plan? Maybe, but this was not one of these times. However, a journey that started at the nearby peak of Pen-y-Fan in July and went through the streets of London in September, ended successfully this past Sunday on the hills of Athens, my hometown, and its iconic Panathenaic Stadium. A journey coloured in the shades of the forget-me-not flowers of Alzheimer's Society, in recognition of and dedicated to the steadfast devotion of so many people's scientific, academic, medical and professional caring practice to improving the lives of those affected by dementia and their loved ones. Like marathoners, long may you endure in your endeavours! But also for Chrissoula, my mother, who can't always tell my age now, what time is it and sometimes confuses me with her older brother Dimitri.

I have not been fundraising formally, but just wanted to spread the message that any kind donation to the Alzheimer's Society helps provide much-needed support to people living with dementia and their families, as well as funding vital research that could help find new treatments.

Theo Tryfonas

OPPORTUNITIES AND USEFUL LINKS

Bristol PLUS Award

Got work experience this summer? It can count towards your Bristol PLUS Award.

The Bristol PLUS Award is a great scheme that adds an extra boost to your CV. It's very accessible for all years of EngDes students and especially those who are planning to complete or have already completed paid work experience.

Find out more [here](#).

Engineering Employability Blackboard

Are you looking for a summer job? Placement? Need some advice on what makes an outstanding CV? The Engineering Employability Blackboard page has all the information you need.

Login to Blackboard first then click [here](#).

Mental Health Check-In

University is stressful. Here's a long list of [mental health services](#) available that the university have compiled which include:

- [VitaMinds](#)
- [One-to-one counselling](#): provides access to support from a counsellor or adviser with a specific background, gender identity or ethnic minority.
- [TogetherAll](#): A safe space where you can share and get help from others like you. Free with a student email address.

Career Coaching Sessions

Sophie Sladen, an Engineering Design alumna, runs a business specialising in career coaching for individuals working in STEM ([Enetic](#)). Sophie is happy to offer free coaching support to Eng Des students and if you are interested, please contact Paul Harper (paul.harper@bristol.ac.uk) for further details and to be linked up with Sophie.

SME Internship Scheme

Sell yourself to SMEs with the SME internship scheme through which the university will fund a placement with small and medium sized employers in the UK, including charities, social enterprises and start-ups.

Either apply to an opening advertised on [mycareer](#) or you can source your own and apply for funding - applications for funding can be made from September.

Find out more [here](#).

THANK YOU!

ONE LAST THING FROM US...

Thank you for taking the time to read our summer newsletter! Make sure you're following us on social media to keep up to date with competitions, events, talks, socials and more! And check out [our page](#) on the SU website where you can buy membership and tickets for events throughout the year.

If you would like to join the alumni group on LinkedIn, please email paul.harper@bristol.ac.uk so he can invite you to join.



[@engdesbristol](#)



[Members group](#)
[Eng Des page](#)



engdes-committee@bristol.ac.uk



[Bristol Engineering Design Society](#)

The easiest way to get in contact with us is via email at engdes-committee@bristol.ac.uk.