

What does International Women in Engineering Day mean to you?

(MB) *For me it is a chance for the world to see that there are women out there doing all that engineering has to offer. I think as a female engineer it is easy to feel like the minority, the exception rather than the rule, and it is reassuring to see that there are other women out there too.*

(RF) *To me, it's about celebrating and connecting with the amazing community of female engineers across the globe – a former colleague in Brisbane, a friend from uni in London, someone I used to mentor in India, and all the fantastic women I work with every day. Supporting and being part of that community, and helping it grow is a real privilege.*

(JL) *International Women in Engineering Day is a celebration highlighting the need for greater gender diversity. To me, it's a chance to amplify the voices of women in engineering, and to encourage the younger generation by showing that engineering is a field where everyone ideas, creativity, and leadership are not only welcome but truly valued. It's also a reminder of how diverse perspectives can lead to more thoughtful, inclusive solutions that better serve our communities.*

(TS) *To me, International Women in Engineering Day is a moment to celebrate the incredible contributions of women in our profession and shine a light on the stories that too often go unheard. I've had the privilege of working alongside brilliant women whose talent, determination, and leadership are shaping the future of infrastructure. This day is a chance to reflect, but more importantly, to take action—to mentor, to encourage, and to inspire. Whether it's through outreach, sharing my experiences, or simply being visible in my role, I want young women to see that they can lead major infrastructure projects, innovate in transport systems, and help shape engineering solutions that truly change lives.*

What inspired you to become an engineer, and what was your path into the field?

(MB) *I grew up in a family where engineering was a common career path, both my grandad and dad are Chartered Civil Engineers and so I have been exposed to the industry all my life. When I was at school, I knew my love of problem solving was leading me to a career in engineering, so after sixth form I chose to study Civil Engineering at the University of Greenwich.*

(RF) *I was brought up by my dad – we lost my mum to breast cancer when I was very young. When I was younger, I was always helping my Dad fix things and build things – combined with my love of maths and physics, engineering felt like a good choice. When I was in sixth form, I signed up to a number of engineering taster residentials, including a weekend on Dartmoor with the Royal Academy of Engineers. The weather was atrocious, but we still did all the activities and had great fun doing them – engineers felt like my kind of people.*

(JL) *I have always been curious about how things work, and that curiosity naturally led me to enjoy Maths and Physics in high school. That interest sparked my passion*

for engineering. Although I initially had some hesitation due to the common stereotype that boys might perform better in STEM, I chose to pursue engineering because I was drawn to its real-world impact and the satisfaction of solving problems.

My path into the field has been quite clear. I decided to study Civil Engineering for my bachelor's degree, which gave me a solid foundation. During university, internships helped me gain hands-on experience and a better understanding of the industry. After graduating, I began working in engineering consultancy, where I've continued to grow and apply what I've learned.

(TS) *My inspiration began at home in a small village in India, where my father worked as a contractor building homes and village paths. I still remember him pointing to his work and saying, "I built that." And I'd always reply, "One day, I'll build something like that too." That early connection—rooted in both pride and purpose—sparked a lasting interest in how things are designed and constructed. I studied civil engineering through a formal academic route, gradually specialising in highways and transport.*

My career began at a small consultancy, and from there I gained hands-on experience in design, construction, and project management. Today, as a Senior Highways Engineer, I lead projects that improve safety, sustainability, and connectivity—on a much larger scale, but with the same sense of pride that started it all.

Were there any mentors, role models, or experiences that shaped your career?

(MB) *For me it has always been my family who have inspired me, I remember as a child them pointing out little design details to me. These creative solutions inspired me, and I remember thinking that I wanted to be someone who made a difference when I was older.*

(JL) *Yes, early in my career, I had the opportunity to learn from experienced engineers and collaborate with professionals from different countries and diverse backgrounds. Working with such a diverse group taught me not only how to approach technical challenges, but also how to value and advocate for different perspectives and ideas.*

Their leadership, professionalism, and technical expertise left a strong impression on me. They showed me that successful engineering is built on collaboration, open-mindedness, and continuous learning. These experiences continue to inspire me as I grow in my career.

What is a common misconception about being a woman in your field?

(MB) *I think there are the usual stereotypes about muddy boots and long hours outside in the rain, which can sometimes be true, but I think for me it is the misconception that engineers are unapproachable and blunt. Yes, we are highly logical, but we are also very creative, and we can be good communicators too. When out on site, I often find*

members of the public will approach me to ask something rather than a male colleague – I think this is quite powerful and highlights the importance of women in the industry.

(RF) *That there are hardly any women. Yes, there are more men, but there are plenty of women, many of them doing great things and so that feels like there's even more.*

(JL) *One common misconception is that women are less suited for engineering, especially among those who aren't familiar with the field. While times have changed and more women are entering the industry, some stereotype mindsets still persist.*

Overcoming these assumptions takes time and consistency. It means showing up, demonstrating expertise, and contributing with confidence. I have learned that challenging these misconceptions is not just about proving others wrong, it is about showing what's possible and helping create a more inclusive environment where everyone's contributions are valued, regardless of gender.

(TS) *One common myth is that engineering—especially in highways—is all about muddy boots, hard hats, and physically demanding work that doesn't suit women. While site experience is important, it's only one part of a much broader profession.*

Another misconception is that women must choose between being technical and being leaders. In reality, we do both. As a Senior Engineer, I lead projects, manage teams, and make critical design decisions. Being a woman hasn't held me back—if anything, it's brought different perspectives and inclusive leadership to the table. Passion, skill, and commitment matter far more than gender.

What does true inclusivity in engineering look like to you?

(MB) *True inclusivity would be seeing a woman out on site, laying asphalt, arranging traffic management or as I do, commissioning traffic signals and no one commenting or thinking “ooh, it's a woman!”. If you go to the supermarket people do not notice if it is a male or female staff member, and I think that is the point engineering needs to reach.*

(JL) *To me, true inclusivity means being part of a team where everyone feels comfortable sharing their ideas and asking questions, no matter their background, gender, or experience level. It's about creating a space where people feel heard and supported, and where different viewpoints are seen as strengths, not obstacles.*

Inclusivity also means having equal access to opportunities to learn, grow, and contribute. When everyone feels like they belong and can make a difference, it leads to better teamwork and more creative solutions.

(TS) *True inclusivity is more than having an inclusive workforce—it's about creating an environment where everyone feels heard, respected, and empowered to grow. That means recognising intersectionality: how factors like race, class, disability, and gender interact to shape people's experiences.*

In an inclusive culture, people feel safe to speak up, to challenge assumptions, and to lead. Too often, those who don't fit the outdated image of an engineer are overlooked. Inclusion means changing that—so that talent is recognised and nurtured regardless of background. Inclusion opens the door; inclusion makes people want to stay.

How do you think companies or institutions can better support women and other underrepresented groups in STEM?

(MB) I think that there can be quite a lads culture in the industry, but this is certainly changing. The site facilities can also be a problem, but again this is changing. Perhaps more flexible breaks would be better, so when on site it would be possible to go somewhere with better welfare facilities during the day than the on-site portaloo.

(JL) I believe companies and institutions can make a real difference by taking proactive step like offering structured mentorship programs and organizing outreach initiatives. These efforts help create more visibility and support for underrepresented groups, especially at an early stage.

For example, I recently volunteered in an outreach program to secondary schools, including girls' schools, organized by CIHT Hong Kong. The goal was to promote engineering as an inclusive and rewarding career path. It was a great opportunity to help bridge the exposure gap and show students that engineering is a field open to everyone, regardless of gender or background. By creating more opportunities like this, we can help young people see themselves in STEM and feel confident that their ideas and contributions are valued.

Do you feel that the engineering field has changed in terms of gender equity since you started? What still needs to change?

(MB) Not having been in the industry that long I do not feel there has been much of a change, but it is certainly much better than I expected – my team is a 50/50 split of men and women. However, the difference becomes much larger when you consider the number of women who go out on site compared to men. That is definitely the area that needs to improve.

(JL) I have definitely seen improvement, there are more women entering the field now, especially in entry-level roles, and I have had the chance to work with many talented women engineers. It is encouraging to see more representation and support for women in STEM.

However, one of the challenges that remains is addressing the misconceptions some people may hold about gender and capability in engineering. True equity goes beyond numbers, it is also about changing mindsets and creating a culture where everyone, regardless of gender, feels equally respected and can succeed in this field.

What project or career highlight are you most proud of, and why?

(MB) *Last year I completed three traffic signal refurbishments on a gyratory in Maidstone town centre. It was my first refurbishment project, and it involved temporary lights for three months. It was the first time in Kent we have connected the temporary lights to our remote monitoring system, and we changed the timings to run as dynamically as the permanent lights did. I had a lot of positive feedback which really gave me a confidence boost, it is good to know people noticed the effort.*

(RF) *For me, my proudest moments are when someone I have mentored or coached moves forward in their career. Whether that's gaining a professional qualification or promotion, pushing themselves out of their comfort zone and attending their first networking event or giving their first presentation. Feeling the fear and doing it anyway.*

(JL) *I am most proud of contributing to the projects that bring real improvements to the community. I have worked on projects involving public transport, new road infrastructure, and new town project. Seeing how our work can make daily life safer, more efficient, or more connected, and open up new opportunities for people and businesses is very rewarding. Overcoming technical challenges along the way has taught me how powerful engineering can be, not just in solving problems, but in creating positive change for people.*

What excites you most about being an engineer today?

(MB) *As engineers we like problems to solve, if there aren't any, we make our own! At the moment there are so many things that need our problem solving skills, whether it be more general like reducing carbon emissions or specific issues, such as the Lower Thames Crossing. The world is realising the important role and power engineers have regarding global warming, so now is definitely the time to be an engineer.*

(RF) *Being an engineer is fantastic – we blend creativity, logic and innovation to drive progress in technology, sustainability and infrastructure. We have the opportunity to solve some of the major problems facing our society today, shape the future and make a real difference in the world. No two challenges are ever the same, and the thrill of designing, improving and discovering never stops.*

(JL) *What excites me most is how quickly the engineering field is evolving, especially with the rise of new technologies like AI, machine learning, autonomous vehicles, and smart infrastructure. Even during university, I noticed this shift that many dissertation topics were already focused on AI and data-driven solutions. Now, I see those same technologies becoming more common and being applied in the industry, creating new opportunities and challenges.*

It's exciting to be part of a profession where there's always something new to learn. The constant innovation keeps me motivated, and it's inspiring to know that the work we do today can help shape smarter and more connected communities in the future.

(TS) *We're at a transformational point in engineering. Smarter systems, sustainable design, and innovative materials are changing how we plan and deliver infrastructure. We're not just building roads—we're building resilience, equity, and sustainability into the very fabric of our transport networks.*

What excites me most is the impact. Whether it's reducing journey times, improving safety, or making transport more accessible, our work improves lives in meaningful and lasting ways. And we're doing it in more collaborative, diverse teams than ever before. We're not just engineers—we're changemakers.

What advice would you give to women just beginning their engineering career or are considering professional registration/qualification?

(MB) *Finding a mentor is a good step, but I think starting one project and doing it well is the key to starting out. Don't spread yourself too thin too early, focus on enhancing a few key skills at a time. I think it is also important to take opportunities when they come up, regardless of if you think you are ready or not - you never know when projects might come up again. If you try and fail, you will have still learnt something new.*

(RF) *You, and only you, are responsible for your career. Seek out support and guidance in the form of positive peer groups and mentors, but you are the one who needs to drive your career forward. Actively seek out opportunities and, when you find them, grasp them with both hands. You get out what you put in.*

(JL) *I suggest starting the process for professional registration early. It does take time and effort, but it is a great way to build our confidence and open up more opportunities in our career.*

For me, I have taken a bit of a slower path with it, partly because it can feel like a big commitment when you are just starting out. But looking back, I think starting earlier would have helped me stay more focused and make steady progress. So even if it feels far off, it is worth getting familiar with the process and taking small steps toward it.

(TS) *Stay curious and adopt a growth mindset. Engineering is a lifelong learning journey—there's always something new to explore. Take ownership of your development and don't shy away from new challenges.*

Professional registration is a strong marker of your skills and professionalism. It can feel overwhelming but break it down into manageable steps. Keep good records, and seek support—especially from mentors who've been through the process.

Build your network through professional bodies and events. You'll not only gain career opportunities, but also a support system to help you grow and thrive.

What is something you wish someone had told you when you were starting out?

(MB) *Keeping an eye on the wider picture is important, particularly in local authorities the political landscape makes a difference. Equally, engineers are fundamentally here to design things that improve the quality of life for people, so never lose sight of delivering a service that benefits the users, regardless of the politics. It is all a balancing act!*

(JL) *I wish someone had told me not to be afraid to speak up. It is okay to share your ideas and ask questions, even if you are new. Being curious and openminded helps us learn faster.*

I also learned that teamwork really matters. Knowing how to work with different people, communicate clearly, and understand different working styles is just as important as technical skills. Building good relationships and learning how to collaborate effectively is important in the career.

If you could design a program or policy to make engineering more inclusive, what would it be?

(MB) *I think engineering struggles because people aren't quite sure what it is. It's not taught in schools as a subject, and I think the word engineering scares people off. A way to make it more inclusive is to introduce it at an earlier age, to be clear that it is more than being a builder, but not as scary as people might think.*

(JL) *I would like to see a mentorship program that connects junior engineers with experienced professionals, both men and women. The goal would be to provide guidance, share experiences, and help younger engineers build confidence and grow in their careers. Having someone to talk to and learn from can make a big difference, especially when starting out.*

At the same time, I believe inclusion starts early. That is why I am happy to be involved in outreach programs like the one organized by CIHT HK, where we visit secondary schools to introduce students to engineering. These programs help raise their exposure and show that engineering is a field open to everyone, regardless of gender and background.

(TS) *I'd design a programme that focuses on retention and progression—not just recruitment. It would include flexible career pathways, especially for those returning from breaks or entering the field from non-traditional backgrounds.*

Mentorship would be at its heart—pairing junior engineers with supportive leaders who can help them grow.

Importantly, it would promote a culture of openness and accountability. In my own career, having the freedom to raise concerns and be heard has made a huge difference. Inclusivity isn't a one-off initiative—it's a culture that must be modelled, supported, and lived every day.

If you could redesign a famous invention through the lens of accessibility and inclusion, what would it be and how?

(MB) *In my role, there is already a lot of equipment used to improve the quality of life for disadvantage road users. However, I think pedestrian crossings could be designed to change faster during adverse weather, when extremely hot or cold and rainy. This would be beneficial for cyclists and pedestrians.*

(TS) *I'd redesign the bicycle—a brilliant invention that promotes active, sustainable travel, but one that hasn't always considered accessibility.*

I'd develop adaptive frames for people with limited mobility, add tool-free adjustable components for different body types, and integrate audio/visual signals for those with sensory impairments.

Inclusive bike-sharing schemes would offer adaptive options and accessible docking stations. By reimagining something so every day, we can make movement and independence more equitable for all.

Has there been a moment in your career where you felt you had to challenge the status quo? What happened?

(MB) *I had a training course last year, and the instructor was explaining the components of concrete. They explained that it included a binder to bring the mixture together and looked towards me, the only woman in the room, and said it was the equivalent to eggs in a cake mix. I was the most academically qualified in the room and know far more about concrete than I do cake! There were a variety of other unnecessary comments during the day too and have fed this back to the training provider.*

(RF) *This has happened to me a couple of times – the first time was during my professional review and the second time was as the newest member of the CIHT Yorkshire & Humber committee. In both those situations I didn't feel like I could relate to the people involved so I decided to do something about it. I promised myself if I passed my review, once I had more experience I would become a reviewer myself – I did and now I am. I also founded the CIHT Yorkshire & Humber Young Professionals committee, to provide a forum and a voice for a wider demographic of the CIHT membership. Change starts with you.*

What unconscious bias about engineers or leadership surprised you the most when you entered the industry?

(MB) *Interestingly, while members of the public feel more comfortable approaching me as a woman when on site, contractors will nearly always approach a male colleague rather than myself. On multiple occasions my supervisor has said I am the one in charge and redirected them back to me, and sometimes the contractors look at me and carry on talking to my supervisor!*

(RF) *That all engineers have the same type of technical skills and similar personality types. Engineering is such a diverse industry, which attracts a huge diversity of*

people and skills. That's what makes it great, but what can also sometimes make it a challenge. It's important that we recognise and celebrate our individuality, but as engineers I think we all have a responsibility to learn how to better collaborate and work as a team. Engineering is teamwork.