MOTT MACDONALD

Create your journey with Mott MacDonald

Imagine what it would be like to help shape the future.

Be part of the solution

Mott MacDonald is a management, engineering and development consultancy which works on projects across the world. Put simply – we like to solve humanity's most difficult challenges. Our people are equipped with a diversity of skills including science, technology, engineering and mathematics (STEM). They make a huge difference around the world and you could be part of it.

So, what exactly is STEM?

Science, technology, engineering and mathematics are core subjects that help to shape our world today. Whether you choose to take the university route or go for an apprenticeship, these subjects could open numerous career opportunities for you.

Here's five of the reasons why a career in STEM can be awesome!

1.

Our world revolves around the problems we solve: Who wouldn't want to help solve problems such as world hunger and poverty?

Did you know? One in nine people around the world do not have enough to eat.

2.

Be in demand: As these problems continue to grow, so does the demand for those who have the STEM skills to help.

Did you know? Research shows that 265,000 people with engineering skills will be needed annually between now and 2024.

3.

A diverse industry that will keep you on your toes: Let your imagination flow and be creative while constantly experiencing something new.

Did you know? Our staff work on a range of global projects. From classrooms and power stations to offices in big cities and community centres in rural villages.

4.

The world is your oyster: Work on unique projects and meet a variety of different people around the world. It's a win-win situation.

Did you know? With the knowledge and skills you gain, you can volunteer your time to many community initiatives such as Building Bridges.

5.

A variety of roles at your fingertips: Having STEM skills gives you a range of career opportunities in any industry.

Did you know? 72% of UK businesses rely on people with STEM skills, and women who work within STEM careers earn more than women working in other fields.

It’s a tech savvy ballgame

Engineering is an ever-evolving, innovative industry. It’s an industry that constantly embraces new immersive technologies, and it’s getting more exciting by the day.

Being able to incorporate the use of immersive technologies into your project work can not only be fun but also extremely rewarding! Here are just some of the ways that the daily use of technology is helping to reshape the world of engineering:

- Virtual reality (VR) enables anyone involved in a project to virtually experience the end result long before it has been completed.
- Before work on site begins, risks and challenges are being detected in advance using VR, providing a safe working environment and avoiding key problems.
- Computer simulation is being used to better understand and empathise with the needs of the end user so that elements such as how to be more inclusive of physical disabilities and visual impairment can be better considered.
- Experts can now digitally inspect project sites in detail from anywhere – at any time – to ensure that everything is on track, saving time and money.

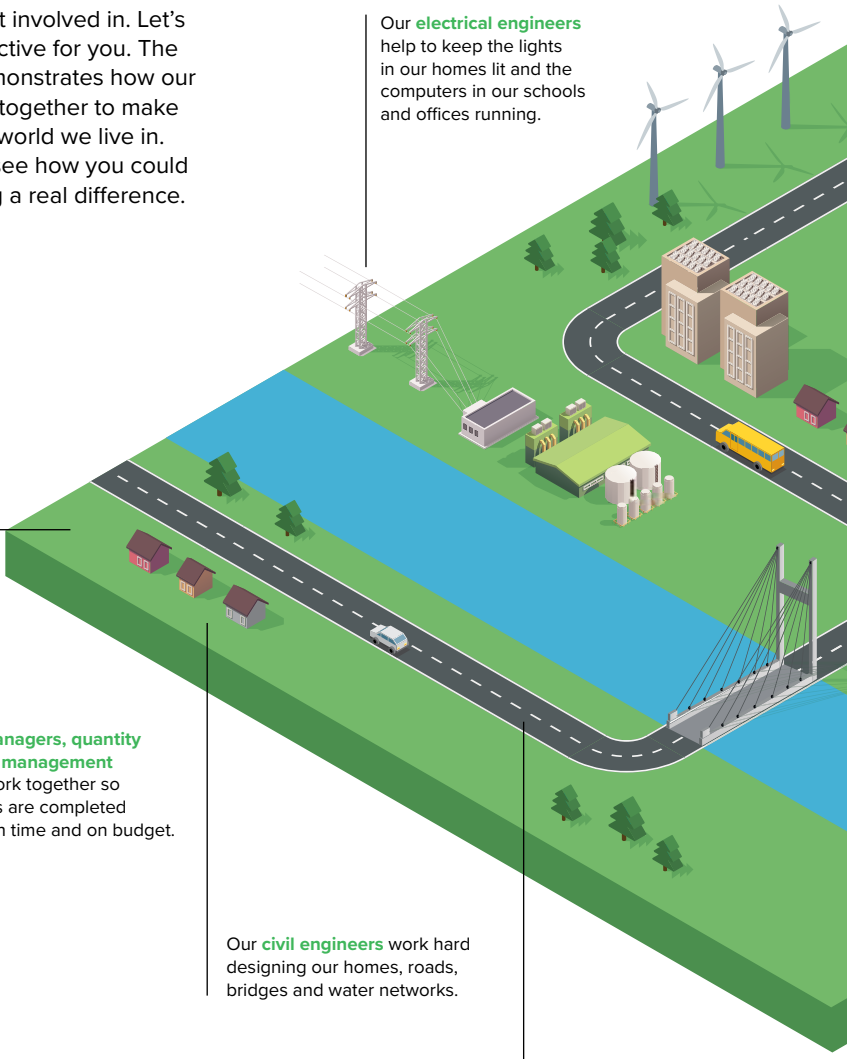
Technology is constantly changing and developing so it can only get better and more exciting from here. Be part of the change.

Did you know?

Immersive technology creates a whole new exciting, simulated world by merging the physical/real world with a digital world. Some examples that you may be familiar with are virtual reality (VR), augmented reality (AR) and mixed reality (MR).

The Mott MacDonald city of sustainability

With a career in STEM, there is so much you can get involved in. Let's put it into perspective for you. The image below demonstrates how our employees work together to make and improve the world we live in. Take a look and see how you could be part of making a real difference.



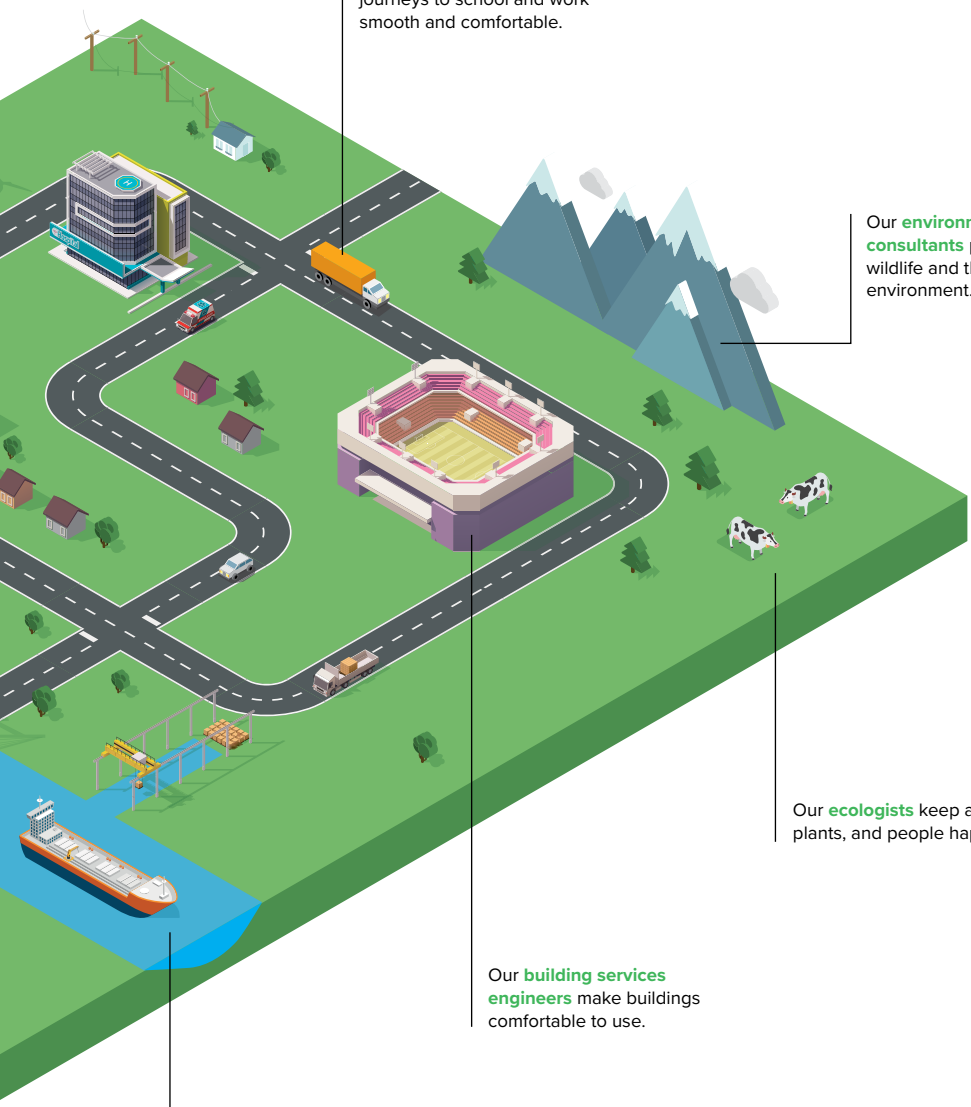
Our **electrical engineers** help to keep the lights in our homes lit and the computers in our schools and offices running.

Our **project managers, quantity surveyors** and **management consultants** work together so that all projects are completed successfully, on time and on budget.

Our **civil engineers** work hard designing our homes, roads, bridges and water networks.

Our **mechanical engineers** design equipment to keep the transport and water systems moving efficiently.

Our **transport planners** keep everything moving, making journeys to school and work smooth and comfortable.



Our **environmental consultants** protect wildlife and the environment.

Our **ecologists** keep animals, plants, and people happy.

Our **building services engineers** make buildings comfortable to use.

Our **water consultants** control our water and wastewater systems and find ways to limit the damage from flooding, helping us to have clean, safe water.

Exciting projects that make a difference

Transforming communities and building a smarter world

Here are some of the projects our teams have collaborated on. We apply a range of skills, expertise and knowledge ensuring our solutions benefit as many people in the local community as possible.

Did you know?

In the last five years alone, we've won a total of 340 industry awards

Hong Kong International Airport Midfield Concourse
We designed the main terminal and worked with Arup on the new HK$10bn Midfield Concourse, providing 20 new aircraft parking stands and enabling 10M more journeys a year.

The San Francisco Bay Bridge
We helped manage risk, control costs and accelerate the construction timetable for this stunning project.

Natchez Pipeline
Our environmental expertise helped to protect the threatened Louisiana black bear (a sensitive species) during our client's construction work while realising substantial savings.

Khalid Hossain Ayon

Blue Gold, Bangladesh
This ongoing programme provides Bangladesh's southwestern coastal region with benefits including horticulture training, leading to better harvests, clean water and valuable skills for local villagers.

Did you know?

We've delivered sustainable solutions to projects in over 150 countries.

Tarbela Dam Extension, Pakistan
Our detailed design at Tarbela, the largest earth-fill dam in the world, is helping the expansion of its hydroelectricity generating capacity which is essential to meet Pakistan's rising energy needs.

Apprenticeship or graduate scheme?

Interested in a career in STEM but unsure of which path to take? Take a look at our handy summary below:

Did you know?

Whether you join us as an apprentice or a graduate, you can guarantee that our accredited schemes will give you a professionally recognised qualification.

The apprenticeship route

- **Earn while you learn:** You'll be earning a salary straight away. You don't have to pay for the training and will even receive paid holidays!
- **Multiple starting points:** Apprenticeships can be for those who have completed their GCSEs and degree apprenticeships are also available for those with A Levels.
- **Support is on hand:** Starting your career and joining a new company can be daunting. However, you won't be alone; as an apprentice, you'll have the support of a mentor, line manager and your learning provider to ensure you get the most out of your new role.
- **Always something new to unearth:** With all the support available to you, your days will be spent discovering new and exciting things while meeting new people.

The graduate scheme route

- **So much choice:** There's a wide variety of degree courses available at university, so you can be sure to find a course that matches your interests.
- **Jump right in:** Once you've completed your degree you can pretty much start putting your skills and learning to use straight away.
- **The support doesn't stop there:** Just because you are out in the big wide working world, that doesn't mean that the support you receive should stop. You'll still obtain professional and personal support from your employer as well as being rewarded with a higher starting salary.
- **An ongoing stream of knowledge:** There is always something new to learn. With ongoing learning and development, the knowledge you gain doesn't stop once you leave university behind.

Apprenticeships

	The scheme	The interesting part
Advanced apprenticeships	**Civil engineering**	**In the thick of it:** You could be helping with design drawings or assisting with construction issues.
	Building services engineering	**Juggling the elements:** Be involved in everything from keeping houses warm to providing schools with lighting.
	Transport planning	**Smoother journeys for all:** Transport planning apprentices help design better journeys for all.
Degree apprenticeships	**Quantity surveying**	**The best of both worlds:** If you like numbers, quantity surveying is most likely for you.
	Civil engineering	**Shaping our communities:** You'll be making a difference to our cities by designing and improving infrastructure.
	Building services engineering	**Bringing everything together:** You'll be developing your skills while learning about different engineering principles including electrical, mechanical and plumbing.

What you'll get	Apply if...
Level 3 Diploma in Civil Engineering for Technicians BTEC Level 3 Diploma in Construction and the Built Environment Opportunity to become a qualified engineering technician (EngTech)	**England and Wales** You have already achieved or are expected to achieve five GCSE passes with grades 4-9, A*-C, or equivalent. You must have an English GCSE with grade C or 5 and maths GCSE with grade B or 6 and above. **Scotland** You have already achieved or are expected to achieve 5 National passes with grades A-C or equivalent. A National 5 in maths with grades A-C or equivalent qualification. Higher passes with grades A-C ideally in maths or science.
Level 3 Diploma in Building Services Engineering for Technicians BTEC Level 3 Diploma in Construction and the Built Environment Opportunity to become a qualified engineering technician (EngTech)	
Level 3 Diploma in Transport Planning Opportunity to become a qualified engineering technician (EngTech)	
BSc (Hons) Quantity Surveying Assessment of Professional Competence (APC)	You have already achieved or are expected to achieve 3 A level passes with grades A*-C or equivilant. You must have a maths GCSE with grade B or above, or equivalent maths qualifications as well as an English GCSE with grades A*-C.
BSc (Hons) Civil Engineering	You have already achieved or are expected to achieve 3 A level passes with grades A-C or equivilant which should include maths and science. You must have a maths GCSE with grade B or above, or equivalent maths qualifications as well as an English GCSE with grades A*-C.
BSC (Hons) Building Services	

Choose your path

Graduate schemes

Going to university? Master the art of being the best in your field with one of our schemes:

Join us as a graduate and you'll immediately be enrolled into the Mott MacDonald Academy, a development programme tailor made to enable each individual to be the best they can be. Our graduate schemes give you valuable experience and insight as well as a dedicated charted mentor to guide you towards your goals.

The scheme	The interesting part	To pursue as a career, study...
Mechanical engineering	**The brains behind the machinery:** Mechanical engineers are involved in all stages of the production of machines that impact what we do on a daily basis. This can be everything from wind turbines to wastewater machinery.	Mechanical or aeronautical engineering
Civil engineering	**Design the built environment:** Civil engineers are an essential part of the built environment, creating everything from stadiums and motorways to rail lines and waterways. Imagine where we'd be without roads to travel on or clean water coming through our taps?	Civil, structural, or environmental engineering
Electrical engineering	**The power is in your hands:** Electrical engineers light up the world by developing new technologies for the future and improving today's systems. We rely heavily on electrical technology; without it, things like telecommunications would be impossible.	Electrical engineering
Building services engineering	**Bring buildings to life:** Building services engineers bring buildings to life and turn them from empty shells to places you'd want to be. They take care of everything from the visual appearance to the lighting and temperature.	Building services, mechanical or electrical engineering
Transport planning	**Move the world forward:** Transport planners are the driving force behind our everyday journeys. Whether by train, bus or plane, transport planners keep our journeys safe and efficient.	Mathematics, geography or physics
Water and environment team	**The thinkers behind our habitat:** By caring for the environment, you will help to ensure our planet is healthy for generations to come. Water is essential for human survival; our water teams treat and dispose of wastewater while constantly investigating and developing new water resources.	Environmental science, geology, or ecology
Management consultancy	**Strategic mindset:** Management consultants increase business performance by solving problems, maximising growth and creating value. They are a major part of the positive change within a business.	Business or economics
Quantity surveying	**It's a numbers game:** High quality and low cost – two vital ingredients that make a successful construction project. Quantity surveyors take care of the numbers, ensuring construction projects are completed within budget.	Quantity surveying or construction management
Project management	**Get the job done:** Delivering outcomes, meeting deadlines and achieving objectives, these are just a few of the crucial responsibilities that a project manager has.	Project management

Did you know?

Adelaide Oval in Australia is one of the world's most picturesque sports grounds. Our detailed design and project management re-energised the stadium creating over 50,000 seats for spectators to enjoy cricket and football.

In the spotlight

Angela Lai
Consultant

Joining us via our graduate scheme, Angela says she loves problem-solving! She's the woman that gets the result.

A typical working day for you
Every day is different and no two projects are the same; we always need to find solutions to our clients' problems. It is challenging, but the rewards it brings make the job worthwhile.

What do you love about your job?
It is working on projects that have a real impact on the world that gets me excited and focused. Also, the company has really supported me in gaining extra qualifications every year to further my professional development.

Simon Perks
Graduate structural engineer

When the structures around us need to be designed, Simon's the person for the job.

Your career journey so far
I began working for Mott MacDonald after graduating from Plymouth University with an MEng in civil engineering. Since joining the company I have been provided with a great deal of training and support.

Your biggest achievement
The graduate scheme has helped me so much that I was nominated for the TARGETjobs Graduate of the Year Award, recognising the work I do daily. The award is the largest for early careers in Europe.

Doug Wilson
General manager

He went from being an apprentice to the man in charge. He's the big boss with the big ideas.

Your career journey so far

My career started at 17 when I secured a four year technical apprenticeship. My student friends envied the fact I was being trained and earning at the same time! These were hugely enjoyable and formative years, I gained experience from a variety of disciplines giving me valuable insight into how everything operated. I am convinced that the skills and attitudes I developed from those early years helped me on my road to becoming a general manager at Mott MacDonald. I am now responsible for managing projects worth £250M.

Your thoughts on apprenticeships

Apprenticeships are amazing and I would highly recommend them to anyone leaving school. They enable you to get your foot in the door and gain the essential experience you need to succeed. Being an apprentice kickstarted my career and I can see it doing the same for other school leavers.

Becky Munro
Junior technician

Starting out as an apprentice, she can now be found delivering solutions by day and winning awards by night.

A typical working day for you

My job is very rewarding because I can see tangible results from my hard work. Some days I am in the office, other days I can be out and about undertaking site visits and survey work.

The rewards

I joined Mott MacDonald as an apprentice in 2014 and I haven't looked back. The scheme offered me flexible, well rewarded and diverse career opportunities to work and travel all over the world. It has been so beneficial that I recently won the best under-25 apprentice at the Women in Construction Awards as well as the BTEC Awards Apprentice of the Year (16-18)!

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Be part of something big

We are Mott MacDonald.
Opening opportunities with connected thinking.
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