

Ten reasons to become a chemical engineer

(From the [ChemEng blog](#))

1. A global profession

A degree in chemical engineering allows you to work in many different job roles, in a variety of industries, all over the world. The Institution of Chemical Engineers (IChemE) has a membership exceeding 40,000 members in around 100 countries, indicating a thriving and like-minded global profession.

2. Make a difference

Some professions attract the word “vocation”. Nurses and teachers are often associated with the view that it’s not just about the money, but the satisfaction of knowing that you’ve helped someone personally and profoundly. Chemical engineers have this opportunity too – better nutrition and improved health; greater social mobility; warmth and light; protection of the environment, and many other measures valued by society are the result of chemical and biochemical engineers’ hard work.

3. Job choice

Undergraduates always have a tricky decision about which course to choose, and there's always a danger that the course they decide on could narrow their future job prospects. That isn't the case with chemical engineering – it opens doors to biochemical engineering, chemicals, consultancy, education, food and drink, health, safety and environment, mining and minerals, oil and gas (exploration and production), oil refining, paper and packaging, petrochemicals, pharmaceuticals and toiletries, plastics, power generation (fossil fuels/nuclear generation or decommissioning/renewable), water, waste management. The list is vast.

4. Great (big) companies

Some of the world’s largest companies and biggest brands operate in the chemical and process sector. Not surprisingly, oil and gas features heavily in the top 50 companies ranked by revenue, along with energy companies and pharmaceutical suppliers.

5. Travel and lifestyle

Chemical engineering provides some great opportunities for travel and working in different countries, helped by the high proportion of multinational companies operating in the sector. So if you want to see the world, choose chemical engineering – you'll have plenty of chance to work abroad throughout your career.

6. Future proof

Where there are problems to solve, engineers will always be needed. For chemical and biochemical engineers, the search for sustainable solutions to our future energy, water, food and pharmaceutical needs (to name a few) will keep them busy for years to come.

7. On hand when it matters

In times of trouble, like natural disasters, emergency teams are on the ground as soon as possible. Once their work is over, teams of people – often volunteers – replace them to help establish vital services and infrastructure like clean water, warmth and food. It's always great to know that charities involving chemical engineers are part of these invaluable teams.

8. Career progression

With so many large employers in the sector, there is plenty of scope to progress your career as a chemical engineer. Even if you prefer to work for a smaller company, or on your own as a consultant, there is always an opportunity to choose your own career path. The China National Petroleum Corporation reportedly employs 1.6m people, and food giant the Compass Group employs over 420,000 people. Chemical engineers also work in areas such as risk and insurance, business and finance – even politics. The result is a world of opportunity for those looking for an interesting and varied career.

9. Money

Although money shouldn't be the number one reason to enter a profession, getting paid a good salary for doing a job that's interesting and rewarding is a pretty good position to be in. Chemical engineers generally feature at the top end of high earners, with graduate starting salaries in the UK of around £30,000. Median salaries for Chartered Chemical Engineers reach over £70,000 and are even higher for those working in certain industries, which all leads to a great quality of life.

10. Diversity

The chemical engineering profession is incredibly diverse. Take, for example Shell's Gamba site in Gabon, Africa. In addition to French-speaking Gabonese personnel, it employs a mix of staff from Europe, North and South America, the Middle East, Asia and other African countries. The senior engineers and student interns form a multi-cultural, multi-disciplinary team, which is common within our profession.

Read more from IChemE's [ChemEng blog](#)

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