



# WHY IT MATTERS... CHEMICAL ENGINEERING



# Loughborough University

## Jack

### Process Engineer

Chemical Engineering is uniquely positioned to take advantage of the way the world is moving in the next decades. The subject has the breadth to provide the flexibility to develop into these areas as the world moves.

For example, traditionally oil and gas has been a big employer and that's changing now; as the world moves to renewables, hydrogen generation and processing or carbon capture.

The energy landscape is changing and nobody knows exactly where the new areas will be from nuclear, gas, hydrogen or renewables.

A degree in Chemical Engineering is likely to set you up well to be involved in these changes.



Post 16 Education	Higher Education
AS Levels Further Maths & Biology A Levels Maths, Chemistry, Physics, General Studies	MEng Chemical Engineering

## Why did you choose to study Chemical Engineering?

Since around GCSE I enjoyed my science and maths subjects. I had thought about pursuing a single subject at university but wanted to apply it directly so was more pulled to engineering.

From engineering, chemical seemed to have the largest breadth and covered a wide range of areas. I spoke to a few chemical engineers and their work and industry sounded interesting.

Chemical Engineering as a subject covers topics that are the basis for industrial processes and plants. For example, chemical reactions to form new products and the processes involved such as heating, mixing and separation. If you were asked to make a new chemical, chemical engineering would cover the aspects involved. This would be everything from designing the plant and the economics to make it profitable. It would include the methods of operating and controlling the plant to keeping it safe.





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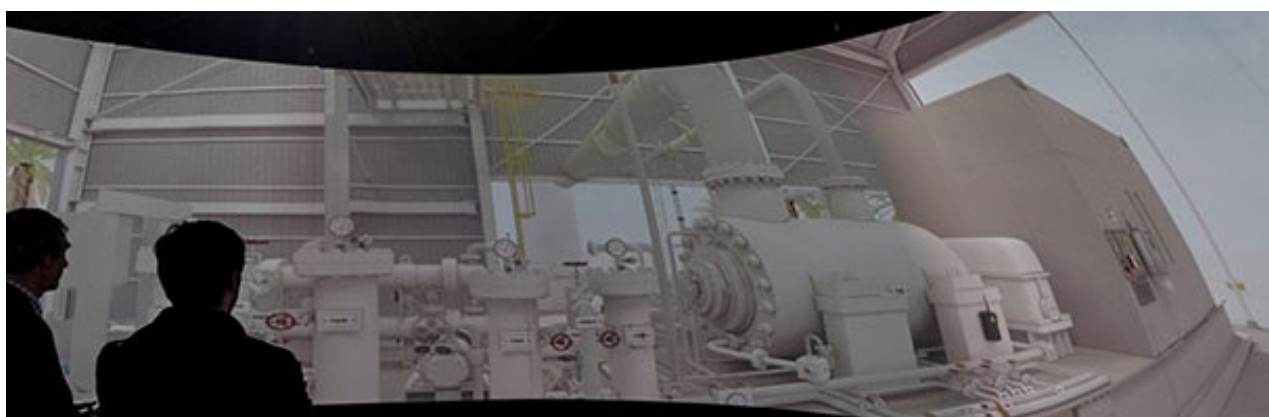


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### Jack's experience as a student

I really enjoyed it. University suited me better with lectures and more independent learning. I was studying subjects that I was interested in rather than at GCSE where I was studying everything.

The social side was great as living away from home was exciting.



### Jack's Career

I'm a few years in with BP as a process engineer and the roles have included operation of plants and fixing issues. I've supported maintenance periods where we turn everything off and pull the plant apart. I've been involved with projects where we try to make more product at a cheaper price and modify the plant to make it happen.

I think the best part is that no two days are the same so the last few years have flown by.

**Jack's advice:** Ask questions and try and speak to as many different people as you can. Everyone has their own opinions on what's best and it varies from different ages to different industries.

As the world is moving faster than ever, speaking to people will help you make up your mind where you think the world may move in the future.

**Loughborough University offers undergraduate degrees in**

Chemical Engineering

All Loughborough's undergraduate degrees offer the opportunity to take a placement year.