The UCL Chemical Engineering Programmes

The UCL Department of Chemical Engineering offers both BEng and MEng undergraduate programmes, specifically designed to be as flexible as possible. You will start on a core programme, but as you progress through your degree you will have a variety of options that you can select as you gain a better understanding of the field and what interests you.

Years 1, 2 and 3 are common to both programmes, thus allowing you time to decide on your final programme. Decisions on which degree specialisation to take can be made at the end of the second year, with route options in Year 4 varying depending on which specialisation is chosen.

As part of the Integrated Engineering Programme (IEP), you will choose an IEP Minor in Years 2 and 3 consisting of three modules either from outside your core discipline or as further specialisation.

For more info, visit: https://www.ucl.ac.uk/chemical-engineering/study/undergraduate-study
http://www.engineering.ucl.ac.uk/integrated-engineering/
http://www.engineering.ucl.ac.uk/integrated-engineering/minors/

Year 1: The aim of the first year of our chemical engineering degrees is to introduce students to chemical engineering and to provide a firm foundation upon which later years build, including courses integrated across engineering allowing students to work together across disciplines. These foundations include the enabling sciences, e.g. chemistry and mathematics, an introduction to chemical engineering and other chemical engineering modules (Fig. 2).

Year 2: The second year builds upon the first year's foundations with more core chemical engineering modules, more enabling science and the first IEP Minor option.

Year 3: The third year contains core advanced chemical engineering courses and a large design project which brings together topics taught earlier to the design of a major section of process plant. In addition, you will continue the IEP Minor option stream begun in Year Two.

Figure 1. Programme Structure (2021/22).
Year 4: If following the MEng programme, Year 4 provides most of the specialisation within your degree depending upon the programme chosen:

- **Chemical Engineering route:** As well as taking a compulsory Research Project and continuing to develop skills linked to the design process, you will also take both Depth and Breadth chemical engineering modules as well as potentially an option from other engineering disciplines, or from Chemistry, Management or Languages.
- **Chemical with Biochemical Engineering route:** You can chose to broaden your knowledge by focusing on core biochemical engineering areas, taking a set of compulsory modules from the Biochemical Engineering department.
- **Chemical with Chemistry route:** If after having studied the Applied Chemistry IEP Minor you would like to continue with a stronger focus on Chemistry by taking selected chemistry options.
- **Chemical with Engineering Mathematics route:** If after having studied the Engineering Mathematics IEP Minor you would like to continue with a stronger focus on Mathematics by taking selected mathematical options.
- **Study Abroad route:** You will spend your final year in a selected university in the USA, Australia or Europe (France, Germany, Spain, Italy). If you spend your final year at a non-English speaking country, you will need to have taken language courses earlier in the programme as a Minor or otherwise meet the language requirement.

**Year in Industry:** Other choices include supplementing the basic degree programmes (BEng or MEng) with an extra year in industry. The department is actively committed to providing formal industrial training to students who take up this option.

![Figure 2. The UCL Chemical Engineering Programme (2021/22).](image-url)