

College of Humanities and Sciences



Bachelor of Science (Honours) in Chemistry

Department of Chemistry
Faculty of Science
College of Humanities and Sciences



NUS Chemistry

You might have heard: Chemistry is the central science. The interactions of atoms and molecules that make up all matter – merging with biology on one end (such as biochemical processes in organisms) and physics on the other (the chemical-physical changes all around us).

At NUS Chemistry, we do more than synthesise chemicals in the lab. We study and understand matter on the molecular level, synthesising complex knowledge from different domains to make these matters better. In the process, we uncover new materials for modern devices, produce insightful analysis to protect our environment, and even synthesise new drugs for better cancer treatment.

As the central science, chemistry is relevant to every aspect of life. That is why under the new College of Humanities and Sciences (CHS), you get to integrate your chemistry knowledge across disciplines with greater flexibility than before. Pick up a minor or second major - whether it's from another scientific discipline or humanities subject of your interest. Rounded out with CHS' distinctive Common Curriculum, you will graduate well-equipped to tackle challenges of the future.

Why NUS Chemistry?



Strong expertise

At one of the highest-ranked Chemistry departments in the world, you will learn firsthand from professors with a wide range of expertise. They are some of the most influential researchers in their fields – and committed to share their knowledge with you.

QS World University Rankings by Subject 2023: Chemistry Clarivate Analytics' Highly Cited Researchers List 2022



Social impact

Our students and graduates engage in **translational research** that benefit society – including tackling environmental issues, synthesising novel drugs, and developing materials for nextgeneration semiconductors.



Hands-on learning

Chemistry is an experimental science – and here, you will gain technical skills using the most advanced chemical technologies and instrumentation. You get to test samples in the **Chemical**, **Molecular and Materials Analysis Centre** and work on real-world projects with our industry partners during an internship.



Career opportunities

NUS Chemistry graduates are known for their **analytical skills** and **ability to synthesise complex information**

 essential traits for a wide range of careers in both public and private sectors. Besides becoming research scientists, process managers and QA/ QC officers in the industry, many go on to pursue graduate studies or join the civil service.



Academic Programmes



Primary Major in Chemistry **Specialisation** in

Chemical Research



Second Major in Chemistry



Minor in

- Chemistry
- Analytical Chemistry
- Nanoscience

 (jointly offered with the Department of Physics)

Research Opportunities

Put theory into practice at one of our world-leading laboratories – either by doing a **Final Year Project (FYP)** or participating in the **Undergraduate Research Opportunities Programme in Science (UROPS)**. If your interest lies in research, complete both FYP and UROPS* to graduate with a BSc (Hons) with Specialisation in Chemical Research.

Our research areas include:

- advanced materials
- chemical biology and biochemistry
- computational chemistry
- environmental and analytical chemistry
- inorganic and organometallic chemistry
- microscopy and spectroscopy
- surface chemistry
- synthesis chemistry and catalysis







"My undergraduate studies here helped to develop my confidence and discipline in undertaking self-directed learning, which was an extremely important skill set for my PhD studies."

 Dr Tan Yaw Sing, Assistant Principal Investigator, Bioinformatics Institute, Agency for Science, Technology and Research (A*STAR)
 BSc (Hons) in Chemistry and Life Sciences (2009) "My science training encouraged me to be innovative and adaptive.
These attributes serve me well in navigating the complex and fast-paced world of entrepreneurship."

 Kelvin Ling, Co-Founder, Oleum Levo Pte Ltd BSc (Hons) in Chemistry (2011);
 Master of Business Administration (2021)



Admission Requirements

Programme	Admission Requirements
Primary Major in Chemistry	A good H2 pass (or equivalent) in Chemistry
Primary Major in Chemistry with Specialisation in Chemical Research	
Second Major in Chemistry	
Minor in Chemistry	
Minor in Analytical Chemistry	
Minor in Nanoscience	A good H2 pass (or equivalent) in Chemistry or Physics

For applicants without H2 Chemistry, simply read the bridging course CM1417/CM1417X Fundamentals of Chemistry.

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