



Peter Fidczuk
IB Global Centre, Cardiff
Peterson House, Malthouse Avenue
Cardiff Gate
Cardiff, Wales
CF23 8GL

Friday, 28 July 2023

Dear Peter

Recognition

I am writing to confirm the University of Leeds would accept the International Baccalaureate HL Certificate in Chemistry (AAQ) for entry onto the related programmes below, alongside two appropriate A Levels including any other subject specific requirements. This is subject to our annual review of qualifications suitable for entry to our courses. Please check [Course Search](#) for our most up to date entry requirements.

- Chemistry BSc/MChem
- Medicinal Chemistry BSc/MChem
- Chemistry and Maths BSc/MChem
- Biochemistry BSc
- Medicine and Surgery MBChB
- Chemical Engineering BEng/MEng
- Materials Science and Engineering BEng/MEng
- Aeronautical and Aerospace Engineering BEng/MEng
- Automotive Engineering BEng/MEng
- Mechanical Engineering BEng/MEng
- Medical Engineering BEng/MEng
- Environmental Science BSc
- Geology BSc
- Geophysics BSc
- Sustainability and Environmental Management BSc
- Food Science BSc/MSci
- Food Science and Nutrition BSc/MSci
- Nutrition BSc/MSci
- Natural Sciences BSc/MNatSci

The courses listed above reflect those that can accept this qualification as meeting subject-specific requirements. Where any such requirements are met through A Levels, the AAQ can be considered as a third subject.

How the content aids progression to HE programmes in related subjects

We have found that the grades achieved by applicants holding the IBO Level 3 Certificate in HL Chemistry are an accurate guide to potential achievement in undergraduate courses at the university and are an effective part of the selection process.

We will consider applicants who present three HL courses, or a combination of HLs with A-Levels, in which case three unique subjects must be undertaken. Please note that subject-specific requirements may apply to some courses.

The IBO Level 3 Certificate in HL Chemistry (AAQ) provides a firm foundation in the principles of chemistry allowing candidates to progress successfully to undergraduate courses where a deep



knowledge of chemistry is a pre-requisite. The course content covers the fundamental principles of chemistry which we expect candidates to have learnt:

- Models of the particulate nature of matter: the nuclear atom and electronic configurations
- Ideal gases
- Bonding and structure: ionic, covalent and metallic bonding
- Applying models of bonding to materials
- Classification of matter: the Periodic Table and the classification of elements. Functional groups and the classification of organic compounds.
- Quantitative chemistry. Counting particles by mass: The mole
- Inorganic and organic chemistry
- What drives chemical reactions – enthalpy, entropy and spontaneity
- Energy from fuels
- Rates of reaction and equilibrium
- The mechanisms of chemical change: Proton transfer reactions; Electron transfer reactions; Electron sharing reactions; Electron-pair sharing reactions
- Acids and bases: Brønsted–Lowry acids and bases, pH, POH, pKa & pKb, salts, buffers
- Electrochemistry

Additionally, the course develops the key skills necessary for students to access undergraduate chemistry and other undergraduate science courses:

- Experimental techniques
- The use of appropriate technology to collect, analyse and model data
- The use of mathematics

In our undergraduate courses we expect our students to take an inquiring approach to their studies. The IBO Level 3 Certificate in HL Chemistry (AAQ) qualification supports this aspect through its inquiry process through which candidates demonstrate independent thinking, initiative, and insight through the following:

- Exploring and designing
- Collecting and processing data
- Concluding and evaluating

Current recognition of similar qualifications

We currently accept the full International Baccalaureate Diploma. We also accept HL Diploma Courses in lieu of A Levels, provided any specific level 2, English or subject specific requirements have been met from other recognised qualifications.

The University uses the following equivalence scale to compare the IBO Level 3 Certificate in HL Chemistry (AAQ) to A level Chemistry:

IBO Level 3 Certificate in HL Chemistry (AAQ) grade	A Level Chemistry grade
7	A*
6	A
5	B
4	C

The University of Leeds is registered with the Office for Students.

We understand that this letter of support will be publicly available via IBO's MyIB Portal for as long as we recognise the qualification. We are happy for a copy to be shared with the DfE.



UNIVERSITY OF LEEDS

I have consulted with the relevant faculties, and we have agreed this at our Admissions Group meeting and have the authority to sign on behalf of our institution.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Jeff Grabill".

Professor Jeff Grabill

Deputy Vice-Chancellor: Student Education