

MSc Chemistry pathways

The following table summarises the typical pathways taken when choosing the MSc Chemistry degree programme:

Organic chemistry	Inorganic and materials chemistry	Physical chemistry	General pathway
<p>This area focuses on synthetic organic chemistry, total synthesis, synthetic methodology, reaction mechanism, organocatalysis, organofluorine chemistry, photochemistry and carbohydrate chemistry, both towards the synthesis of bioactive compounds and organic materials, and includes the study of organic reactions under flow conditions.</p> <p>This pathway offers the opportunity to specialise in the following areas</p> <ul style="list-style-type: none">• organic synthesis• medicinal chemistry• bio-organic chemistry <p>The advanced courses in this pathway are suited to students who already have a sound BSc-level grounding in aspects of nomenclature, stereochemistry, chemical transformations and reaction mechanisms.</p>	<p>Modules in this area describe synthesis, characterisation and properties of inorganic, solid-state, supramolecular and nanoscale systems to address challenges in energy, materials deposition, sustainability, healthcare and diagnostics.</p> <p>This pathway is suited to students who already have a thorough BSc-level grounding in the fundamentals and applications of main group, transition metal and inorganic materials chemistry.</p>	<p>This area covers a wide range of fundamental and applied topics.</p> <p>This pathway will give you the opportunity to specialise in one or several of the following areas</p> <ul style="list-style-type: none">• computational and theoretical chemistry• spectroscopy• electrochemistry• surface science• magnetic resonance <p>This pathway is best suited to students who already have a thorough BSc-level grounding in the fundamentals and applications of physical chemistry, in particular quantum chemistry, spectroscopy, thermodynamics and kinetics.</p>	<p>You can choose to further your knowledge across a blend of advanced courses from organic, inorganic and/or physical chemistry (any combination).</p> <p>This pathway is suited to those wishing to develop an interdisciplinary expertise. If you choose this pathway you should already have a sound BSc-level grounding in the areas of chemistry in which you intend to choose modules (see other boxes).</p>