## <u>化學科 - 課程簡介</u> Brief Introduction of Chemistry Curriculum

課程包括必修和選修兩部分。

必修部分涵蓋的內容,有助學生理解基本化學原理和概念,並掌握科學過程技能。其中的課題包括「原子結構」、「鍵合、結構與性質」、「金屬及非金屬」、「週期律」、「摩爾及計量學」、「酸和鹽基」、「電化學」、「碳化合物的化學」、「化學能量學」、「化學動力學」和「化學平衡」。

為了照顧學生的不同興趣、能力和需要,本課程亦包括**選修**部分。 選修部分旨在讓學生對必修部分內某些課題有更深入的理解,或對某些範疇作延伸學習。

選修部分由三個課題組成:「工業化學」、「物料化學」和「分析化學」。 另外,此部分更包括「綠色化學」。

The curriculum consists of **compulsory** and **elective** parts.

The **compulsory** part covers a range of content that enables students to develop an understanding of fundamental chemistry principles and concepts, and scientific process skills. Topics such as "atomic structure", "bonding, structures and properties", "metals and non-metals", "periodicity", "mole and stoichiometry", "acids and bases", "electrochemistry", "chemistry of carbon compounds", "chemical energetics", "chemical kinetics" and "chemical equilibrium" are included.

To cater for the diverse interests, abilities and needs of students, an **elective** part is included in the curriculum.

The elective part aims to provide an in-depth treatment of some of the compulsory topics, or an extension of certain areas of study.

The elective part consists of three topics: "Industrial Chemistry", "Materials Chemistry" and "Analytical Chemistry". In addition, "green chemistry" is introduced in this part.