

**化学類 <学士(理学)> コンピテンス一覧**  
**College of Chemistry Competence List**  
**<Bachelor of Science>**

■汎用コンピテンス(学士課程) Generic Competences(Bachelor Program)

1	コミュニケーション能力 Communication ability	母語や外国語を適切に用いるとともに、各種メディアを利用したプレゼンテーション等を行うコミュニケーション能力 Communication ability to use the mother tongue and foreign languages properly and make presentations, etc. using various media
2	批判的・創造的思考力 Ability for critical and creative thinking	一般的・専門的知識の体系的理解をベースに批判的・創造的に思考する能力 Ability to think critically and creatively based on systematic understanding of general and specialized knowledge
3	データ・情報リテラシー Data and information literacy	様々な事象や情報を数量的手法やコンピュータ等を用いて適切に解析・処理する能力 Ability to properly analyze and process various events and information using quantitative methods, computers, etc.
4	広い視野と国際性 Broad perspective and international character	自身の専門に留まらず文化・社会と自然・物質に関して幅広く理解し、異文化を理解・尊重する能力 Ability to broadly understand culture, society, nature, and materials and understand and respect different cultures and be not only involved in one's own expertise
5	心身の健康と人間性・倫理性 Mental and physical health, humanity, and ethics	芸術やスポーツへの理解と実践等を通して心と身体の健康を保ち、人間性と倫理性を有する市民としての責任を自覚して実践する能力 Ability to maintain mental and physical health through the understanding, practice, etc. of arts and sports and be conscious of one's responsibility and put it into practice as a citizen with humanity and ethics
6	協働性・主体性・自律性 Cooperative, independent, and autonomous attitudes	チームワークやリーダーシップを通して様々な物事に対処し自己を管理しながら自律的に学び続け行動する能力 Ability to keep learning and act autonomously while dealing with a situation through team work and leadership and practicing self-management

■専門コンピテンス Specific Competences

1	基礎化学の知識と理解力 Knowledge and understanding of basic chemistry	基礎化学に関連する概念や理論を正しく理解し、応用できる能力 Ability to correctly understand and apply concepts and theories related to basic chemistry
2	無機・分析化学分野の知識と理解力、応用力 Knowledge and understanding of, and ability to apply, inorganic and analytical chemistry	無機・分析化学分野の知識を身につけ、化学現象を定性的および定量的に分析できる能力、無機化合物の物性や分子構造を正しく理解できる能力 Knowledge in the fields of inorganic and analytical chemistry, ability to analyze chemical phenomena qualitatively and quantitatively, and ability to correctly understand the physical properties and molecular structure of inorganic
3	熱力学・統計力学分野の知識と理解力、応用力 Knowledge, understanding, and application of the fields of thermodynamics and statistical	熱力学・統計力学分野の知識を身につけ、化学現象や概念を数学的、物理的に表現できる能力 Knowledge in the fields of thermodynamics and statistical mechanics, and the ability to express chemical phenomena and concepts mathematically and physically
4	量子化学・分光学分野の知識と理解力、応用力 Knowledge and understanding of the fields of quantum chemistry and spectroscopy and the ability to apply	量子化学・分光学分野の知識を身につけ、化学結合の様式を量子力学的に記述する能力、分子構造を分光学的情報から正しく理解できる能力 Knowledge in the fields of quantum chemistry and spectroscopy, ability to describe chemical bonding patterns quantum mechanically, and ability to understand molecular structures correctly from spectroscopic information
5	有機化学分野の知識と理解力、応用力 Knowledge and understanding of the field of organic chemistry and the ability to apply them	有機化学分野の知識を身につけ、化学反応機構を理解し、有機合成に応用できる能力 Ability to acquire knowledge in the field of organic chemistry, understand chemical reaction mechanisms, and apply such knowledge and understanding to organic synthesis
6	生物化学分野の知識と理解力、応用力 Knowledge and understanding of the field of biochemistry and the ability to apply them	生物化学分野の知識を身につけ、化学の法則や概念を生物領域へ応用できる能力 Ability to acquire knowledge in the field of biological chemistry and apply the laws and concepts of chemistry to the biological domain
7	化学実験の遂行能力 Ability to carry out chemical experiments	化学実験の原理および操作を理解し、その結果を正しく解析し、考察できる能力 Ability to understand the principles and operations of chemical experiments and to correctly analyze and discuss the results
8	化学英語の理解力、表現力 Ability to understand and express chemical English	化学研究に関連した英文の内容を正しく読み取り、英語で表現および議論する能力 Ability to correctly read, express, and discuss in English the contents of English texts related to chemical research





