

Graduate School of Chemical Sciences and Engineering Diploma Policy

In line with Hokkaido University's four philosophies (i.e., Frontier Spirit, Global Perspectives, All-round Education and Practical Learning), the Graduate School of Chemical Sciences and Engineering aims to develop future generations of outstanding researchers and engineers capable of working on the front line of various chemical and related fields.

The Graduate School has set degree conferral standards to ensure the specific abilities required of such ideal leaders on the Master's Degree Program and the Ph.D. Program. Students who develop the requisite skills, acquire the necessary credits and pass a review and examination of their master's thesis/doctoral dissertation or research results on specific subjects earn a master's degree or a Ph.D.

Degree Conferral Standards for the Division of Chemical Sciences and Engineering

In light of the diverse challenges society faces in relation to the field of chemistry, the Division of Chemical Sciences and Engineering aims to produce researchers and engineers in chemistry and related areas who can flexibly meet the needs of society. This is based on fundamental scientific principles (e.g., atomic and molecular theory) and abilities directly connected to material synthesis and production. To earn a master's degree or a Ph.D, students must fulfill the criteria outlined below.

➤ Master's Degree Program

- A wide range of advanced and in-depth knowledge ranging from the fundamentals to application in science and engineering based on chemistry
- Communication ability to support active roles on the international stage in a wide range of chemical fields
- Outstanding ability to observe and analyze phenomena as required in research and development on chemicals and their production
- The capacity to identify issues and advance research through master's thesis work
- Outstanding ability to undertake professional work requiring advanced specialist expertise in chemical fields
- A strong sense of ethics in the areas of research and engineering

➤ Ph.D. Program

- A wide range of advanced knowledge based on chemistry as required for pioneering work in cutting-edge science and engineering, and the ability to apply such knowledge
- The ability to collect and analyze information on international research trends as required for research and development on chemicals and their production
- The ability to find original research themes as required by capable researchers, and the insight and inspiration to enable the resolution of challenging issues
- Advanced research skills as required by internationally active researchers and engineers
- Leadership and the ability to implement projects necessary for research and development on chemicals and their production
- A strong sense of ethics in the areas of research and engineering