# Department of Chemistry

## **Contact Information**

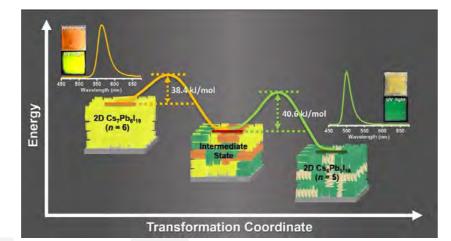
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# Introduction

The Department of Chemistry at NTNU, established in 1962 and located on the Gong-Guan Campus in Taipei, is one of Taiwan's oldest chemistry institutes. It offers a broad range of research in core chemistry fields as well as interdisciplinary areas like energy, nanomaterials, biomedical chemistry, and computational chemistry. With around 25 faculty members and 500 students, the department boasts advanced facilities and engages in international collaborations, promoting joint research, student exchanges, and global academic exposure, ensuring students gain comprehensive knowledge and international perspectives in their studies.

# Instructional Objectives

The undergraduate curriculum aims to build a strong foundation in chemical knowledge and laboratory skills. It nurtures students with research potential, preparing them for careers in chemistry-related industries or interdisciplinary technological fields. The graduate program



focuses on advancing students' professional knowledge, experimental skills, and research abilities, preparing students for interdisciplinary or high-tech careers. Graduates are equipped with scientific research or R&D skills, along with a forward-looking, international perspective.





# **Degree Requirements**

#### Indergraduate program

128 credits (including 32 credits for common compulsory, 59 credits for compulsory courses in chemistry, 16 credits for elective courses in chemistry, and 21 credits for free elective courses)

## Master graduate program

24 credits (selected courses in the field of specialization)

#### Doctoral graduate program

18 credits (selected courses in the field of specialization)

# Feature of the Curriculum

The chemistry curriculum at NTNU covers core areas like organic, inorganic, analytical, and physical chemistry, along with interdisciplinary fields such as biochemistry, and material science. Students receive a strong theoretical foundation, extensive laboratory training, and opportunities to engage in research projects. The program emphasizes problem-solving skills, critical thinking, and real-world applications, preparing graduates for diverse academic and industrial careers.

## **Career Prospects**

• Academic Education: Pursue teacher training or graduate studies to become educators or university professors.

• Industrial Applications: Work as chemical engineers or product development specialists in various industries, including pharmaceuticals and semiconductors.

•Environmental Sciences: Become environmental scientists or consultants, focusing on sustainability and environmental protection.

• Medical Field: Enter biotechnology and pharmaceuticals as clinical research coordinators or drug development specialists.

• Materials Science: Engage in new materials development as materials scientists or R&D engineers, with an emphasis on optoelectronics and nanotechnology.

