

# Chemical Engineering and Technology

## **Objectives**

Students who complete the undergraduate program in Chemical Engineering and Technology will:

1. Acquire the basic professional knowledge in chemical engineering and technology and know the cutting edge development of chemical engineering.
2. Demonstrate the ability to carry out research and development, engineering design and process optimization on petroleum processing, petrochemical engineering, coal-to-liquid chemical engineering, environmental monitoring and management, and oilfield chemistry.
3. Use basic computer knowledge and general software to solve simple chemical problems.
4. Master a foreign language.

## **Core Courses**

<b>Title</b>	<b>Hours</b>	<b>Credit</b>
Inorganic Chemistry and Analytical Chemistry	72	4.5
Organic Chemistry	64	4
Physical Engineering	96	6
Principles of Chemical Engineering	128	8
Chemical Engineering Thermodynamics	64	4
Chemical Reaction Engineering	56	3.5
Chemical Engineering Design	4 weeks	4
Chemical Safety & Environment	24	1.5
Petroleum Processing Engineering	88	5.5
Organic Chemical Process	40	2.5

### ***Graduation & Degree Requirements***

Students have to gain at least 178.5 credits to graduate, among which 90 credits from compulsory courses, 38 credits from selective courses and 50.5 credits from practice teaching. Students have to pass CET-4 to gain the Bachelor degree.

### ***Career Prospects***

Most of graduates find jobs in oil and petrochemical companies such as CNPC, Sinopec, and CNOOC or work as researchers, designers and technical managers in research institutions. And some graduates participate in Master's programs in Chemical Engineering in China or abroad universities.