

# Chemical Engineering and Technology

**Program Code: 081700**

## 1. Program Objectives

The program of Chemical Engineering and Technology cultivates students morally, intellectually and physically to become high-level specialists in the chemical engineering area. The program will equip students with basic theoretical knowledge, related professional knowledge, research methodology and experimental skills. The students will be trained to proficiently use computer and related modern information tools, as well as with innovation initiatives and capabilities to do research independently. After graduation, the students are qualified to carry out teaching, research, technology development and production management careers in the field of chemical engineering and technology.

## 2. Program Directions

- (1) Petroleum Chemical Engineering
- (2) Biochemical Engineering
- (3) Fine Chemical Engineering
- (4) Chemical Engineering

## 3. Program Duration :

3-5 years

## 4. Credit Requirements

The minimum total credits are 30 and the credits of compulsory courses should not be less than 16.

## 5. Course Schedule

Course Type	Course Code	Course Name	Teaching hours	Credits	Semester
Compulsory courses	L6000002	Survey of China	36	2	1
	L6000012	Primary Chinese Language	80	4	1
	L6000025	Numerical analysis	56	3	1
	L6031003	Transport phenomena	48	3	2

	L6030002	Principles of catalysis	48	3	2
	L6035004	Instrumental analysis technology and application	48	3	2
	L6031002	Chemical system engineering	32	2	2
	L6030001	Chemical reaction engineering	48	3	1
	L6032001	Petroleum Chemistry	48	3	1
Compulsory sections	L7030101	Attend 10+ seminars, make 1 academic presentation		1	1-3
	L7030103	Literature review and research proposal		1	3
Elective courses	L6035011	Advanced Biochemistry	32	2	1
	L6035019	Basis of structural and quantum chemistry	32	2	1
	L6034012	Chemical safety and technology	32	2	2
	L6035014	Methods and application of Molecular simulation	32	2	1
	L6035020	Progress on bioscience and biotechnology	32	2	1
	L6030005	C1 chemistry and technology	32	2	1
	L6096102	Colloid and interface chemistry	48	3	1

**Notes: The students must pass HSK level 3.**