## **0817化学工程与技术**

## **0817 Chemical Engineering and Technology**

**一、学科简介**

**1. Introduction**

Established in 1978, the School developed from the oldest engineering department distinct in petrochemical engineering. The department’s outstanding research areas include advanced catalytic materials and technology, functional composites, green chemistry, applied electrochemistry & new energy, and resource utilization & clean production technology.

The School offers five undergraduate programs, including Chemical Engineering & Technology, Applied Chemistry, Light Chemical Engineering, Food Quality & Safety, and Energy Chemical Engineering. For the student seeking an advanced degree in chemical engineering, the School also offers two postgraduate programs in Chemical Engineering & Technology as well as Chemistry. Chemical Engineering & Technology is not only the preponderant discipline in Jiangsu province, but also a national characteristic specialty which is certificated by the Ministry of Education. Moreover, we are so proud that our Chemistry discipline ranks top 1% in the world ESI.

始建于1978年，石油化工学院是我校最早成立的工程学院之一。本院在新型催化材料及催化工艺、多功能复合材料、绿色化学、应用电化学、新能源、资源利用及清洁能源等领域均取得了显著的研究成果。

本院现有化学工程与工艺、应用化学、轻化学、食品质量与安全、能源化学五个本科专业。学院同时还设有化学工程与技术及化学两个一级学科硕士点。其中化学工程与技术不但是江苏省优势学科，同时还通过国家教育部认证，为国家一类特色专业。本学院的化学学科进入全球ESI学科排名前1%。

**二、培养目标**

**2. Objective**

a.to enable overseas students to have a comprehensive understanding of China, including its politics, economy, history as well as culture and to enable them to have basic capability to understand and communicate with others in Chinese.

b.to equip overseas students with all-round basic theories and systematic and professional knowledge in disciplines concerned, and with skills to do scientific research independently so as to make creative contributions in science and technology.

c.to benefit students’ physical and mental health, and to provide them with good academic ethics and spirits and to cultivate their scientific and practical learning attitude and working style.

1．了解中国的文化、政治、经济与历史，掌握一定程度的汉语。

2．掌握所在学科坚实的基础理论和系统的专门知识，具有从事科学研究工作或独立担负专门技术工作的能力。

3．具有良好的学术道德和敬业精神，身心健康。

**三、学习年限**

**3. Program Time Limitations**

参照《常州大学学术学位硕士研究生培养方案（总则）》实施。

Refer to “Changzhou University Academic Graduate Program Policies (General)”

**四、主要研究方向**

**4.Research Areas**

（1）新型分离材料及分离过程研究

（2）新型催化材料及催化反应工艺

（3）精细化学品绿色合成技术

(1) Advanced materials and processes for separation

(2) Advanced catalytic materials and techniques

(3) Green synthetic technologies for fine chemicals

**五、课程设置及学分要求**

**5. Curriculum Structure and Credit Requirement**

| **类别**  **Type** | **课程名称**  **Course Name** | **学时**  **Hours** | **学分**  **Credit** | **开课学期**  **Semester** | **开课学院**  **College** | **授课方式**  **Teaching mode** | **考核方式**  **Assessment** | **备注**  **Note** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A公共基础学位课  A Public foundation degree course | 汉语综合1  Comprehensive Chinese I | 54 | 3 | 1 | 周有光语言学院  Zhou Youguang School of Chinese  Language and Literature | 面授讲课  Teaching | 笔试  Examination | 8学分  8 Credit |
| 汉语综合2  Comprehensive Chinese II | 54 | 3 | 1 | 周有光语言学院  Zhou Youguang School of Chinese  Language and Literature | 面授讲课  Teaching | 笔试  Examination |
| 汉语听说  Chinese Listening and Speaking | 36 | 2 | 2 | 周有光语言学院  Zhou Youguang School of Chinese  Language and Literature | 面授讲课  Teaching | 笔试  Examination |
| 汉语阅读  Chinese Reading | 36 | 2 | 3 | 周有光语言学院  Zhou Youguang School of Chinese  Language and Literature | 面授讲课  Teaching | 笔试  Examination |
| 中国概况(中英文授课)  Introduction to China (Bilingual) | 36 | 2 | 1 | 周有光语言学院  Zhou Youguang School of Chinese  Language and Literature | 面授讲课  Teaching | 笔试  Examination |
| 中国文化(中英文授课)  Chinese Culture (Bilingual) | 36 | 2 | 2 | 周有光语言学院  Zhou Youguang School of Chinese  Language and Literature | 面授讲课  Teaching | 笔试  Examination |
| B专业学位课  B Professional Degree courses | 高等分离工程  Advanced Separation Engineering | 48 | 3 | 1 | 石化学院  School of Petrochemical Engineering | 讲授/研讨  Teaching/  Workshop | 考试  Examination | 12学分  12 Credit |
| 应用催化  Applied Catalysis | 48 | 3 | 1 | 石化学院  School of Petrochemical Engineering | 讲授/研讨  Teaching/  Workshop | 考试  Examination |
| 化工过程分析与优化  Analysis and Optimization of Chemical Process | 48 | 3 | 1 | 石化学院  School of Petrochemical Engineering | 讲授/研讨  Teaching/  Workshop | 考试  Examination |
| 高等反应工程  Advanced Chemical Reaction Engineering | 48 | 3 | 1 | 石化学院  School of Petrochemical Engineering | 讲授/研讨  Teaching/  Workshop | 考试  Examination |
| C 专业选修课  Elective courses | 文献检索与阅读（必选）  Literature Retrieval (Compulsory) | 48 | 3 | 2 | 石化学院  School of Petrochemical Engineering | 研讨  Workshop | 考查  Test | ≥12学分  ≥12 Credit |
| 高等无机合成  Advanced Inorganic synthesis | 48 | 3 | 1 | 石化学院  School of Petrochemical Engineering | 讲授/研讨  Teaching/  Workshop | 考查  Test |
| 波谱分析(工)/ 现代分析技术  Spectroscopy (Engineering) / Modern Analysis Technology | 48 | 3 | 1 | 石化学院  School of Petrochemical Engineering | 讲授/研讨  Teaching/  Workshop | 考试  Examination |
| 专业英语与科技论文写作(工)  Professional English and Scientific Writing (Engineering) | 48 | 3 | 1 | 石化学院  School of Petrochemical Engineering | 讲授/研讨  Teaching/  Workshop | 考查  Test |
| 化工节能技术  Chemical Energy - Saving Technologies | 48 | 3 | 1 | 石化学院  School of Petrochemical Engineering | 讲授/研讨  Teaching/  Workshop | 考查  Test |
| 精细有机合成与工艺  Fine Organic Synthesis and Process | 48 | 3 | 1 | 石化学院  School of Petrochemical Engineering | 讲授/研讨  Teaching/  Workshop | 考查  Test |
| 实践  环节  Practice Training | 学术活动  Academic Activity |  | 1 |  |  |  | Attendance ≥15 times | 1学分  1 Credit |

**六、学位论文工作**

**6. Thesis/Dissertation**

参照《常州大学学术学位硕士研究生培养方案（总则）》实施。

Refer to “Changzhou University Academic Graduate Program Policies (General)”