中国石油大学（华东）来华留学硕士研究生
化学工程与技术（全英文）培养方案
Master's Program for International Students
Chemical Engineering and Technology (English-Taught)

一级学科代码 First-level Discipline Code:	0817	**一级学科名称 First-level Discipline:**	化学工程与技术 Chemical Engineering and Technology
二级学科代码 Second-level Discipline Code	081700	**二级学科名称 Second-level Discipline:**	化学工程与技术 Chemical Engineering and Technology
校内专业代码 Program Code:	081700	**校内专业名称 Program Name:**	化学工程与技术 Chemical Engineering and Technology
学制、学习年限 Duration、Maximum Study Period::	学制 3 年；Duration: 3 Years 学习年限 3-5 年；Maximum Study Period: 3－5 Years	**所属院系 School:**	化学工程学院 College of Chemistry and Engineering

培养目标 Program Objectives:

1）具备一定的批判性思维和创新性思维，具有较强的工程规划、工程设计与运行、工程分析与集成、工程研究与开发、管理与决策等能力，具有国际视野，能够胜任专业领域研发和工程管理工作，可从事化学工程与技术相关的教学、科研、技术开发、生产管理及市场销售等工作。系统掌握化学工程与技术学科基础理论和专业知识，具备较强创新意识和创新能力，能够独立从事科学研究或专业技术工作；在本学科领域具备较好的国际视野，学业要求、学术水平、学位论文标准与中国学生相同。

Possess critical and innovative thinking, and demonstrate strong capabilities in engineering planning, engineering design and operation, engineering analysis and integration, research and development, management, and decision-making. Students are expected to have an international perspective and be capable of undertaking research and development as well as engineering management in specialized fields. Graduates may engage in teaching, scientific research, technology development, production management, and marketing related to Chemical Engineering and Technology.Students shall systematically master the fundamental theories and professional knowledge of Chemical Engineering and Technology, possess strong innovative awareness and creativity, and be capable of independently conducting scientific research or specialized technical work. They shall also develop a broad international perspective in the discipline, while meeting the same academic requirements, academic standards, and thesis requirements as Chinese graduate students.

2）熟悉中国历史、地理、社会、经济等中国国情和文化基本知识，了解中国政治制度和外交政策，理解中国社会主流价值观和公共道德观念。

Be familiar with China's history, geography, society, economy, and cultural fundamentals; understand China's political system and foreign policies; and comprehend the mainstream social values and public ethical standards of Chinese society.

3）初步掌握中文，达到《汉语水平考试》三级水平。具备文化多样性的认知、适应和沟通技能，能够在跨文化环境中发挥积极作用，成为促进中外交流的友好使者。

Acquire a basic command of the Chinese language and achieve at least HSK Level 3 proficiency.

Develop the awareness, adaptability, and communication skills necessary for culturally diverse environments, and be able to play a positive role in intercultural settings as a friendly ambassador promoting exchanges between China and other countries.
4）在本学科领域中具有较好的国际视野，能够在多个国家的实际环境中运用和发展本学科的知识、技能和方法，并具备参与国际事务和国际竞争的能力。同时注重培养知华、友华的高层次人才，将学科专业水平、中国国情认知与跨文化交流能力有机结合。
Possess a broad international perspective in the field of Chemical Engineering and Technology, and be able to apply, develop, and innovate the discipline's knowledge, skills, and methodologies in practical environments across different countries. Students shall demonstrate the capability to participate effectively in international affairs and global competition.
At the same time, the program is committed to cultivating high-level international talents who understand China and maintain friendly relations with China by integrating professional competence, knowledge of China's national conditions, and intercultural communication abilities.

课程设置 Curriculum Structure：

类别 Course Category	分组情况 Grouping	课程编号 Course Code	课程名称 Course Title	学时 Class Hours	学分 Credit	开课学期 Semester Offered	备注 Remarks
公共必修课 Public Compulsory Courses		L7000001	中国概况 Survey of China	36	2	1	
		L7000011	汉语言基础 Fundamental Chinese Language	48	3	1	
专业基础课 Specialized Foundation Courses		L6000025	数值分析 Numerical Analysis	48	3	1	
		L6030001	化学反应工程 Chemical Reaction Engineering	48	3	1	
		L6030002	催化原理 Principles of Catalysis	48	3	2	
		L6032001	石油化学 Petroleum Chemistry	48	3	1	
专业选修课 Specialized Elective Courses		L6030005	C1 化学与工艺 C1 Chemistry and Technology	32	2	2	
		L6034012	化工安全与技术 Chemical Safety and Technology	32	2	2	
		L6035004	仪器分析技术与应用 Instrument Analysis Technologies and Applications	32	2	2	
		L6035011	高等生物化学 Advanced Biochemistry	32	2	1	
		L6096102	胶体与界面化学 Colloid and Interface Chemistry	48	3	1	
必修环节		L7010101	参加 10 次以上学术报告，	0	1	1-3	

Compulsory Academic Requirements			作 1 次公开学术报告 Attend More Than 10 Academic Seminars and Deliver One Public Academic Presentation				
		L7010103	文献阅读与开题报告（硕士） Literature Review and Research Proposal (Master's Level)	0	1	3	

备注 Notes::

总学分最低 30 学分，必修课不得低于 16 学分。
The minimum total credits are 30 and the credits of compulsory courses should not be less than16.