



Master Program in Chemical Engineering

The International Master Program in Chemical Engineering is based on the College of Chemical Engineering, one of the best in petroleum refining in China. The program comprises five departments including Chemical Engineering and Technology, Chemical Processing Mechanics, Environmental Engineering, Chemical Engineering and Power Engineering. Most of the courses focus on the necessary of petroleum chemical engineering, such as Petroleum Chemistry, Chemical Reaction Engineering, Transport Phenomena and Advanced Chemical Engineering Thermodynamics. The primary mission of this program is to educate graduate students and to create fundamental knowledge, pioneering technologies and international perspective in the chemical sciences and engineering. To further the pursuit of excellence, the program aims to foster an intellectually vibrant, collegial atmosphere with a keen appreciation for the value of diversity among students, staff, and faculty.

RESEARCH

The program covers four research fields in chemical engineering:

- Chemical Engineering
- Chemical Technology
- Industrial Catalysis
- Environmental Chemical Engineering

COMPULSORY COURSES

- ◆ Petroleum Chemistry
- ◆ Advanced Instrumental Analysis
- ◆ Advanced Organic Chemistry
- ◆ Chemical Reaction Engineering
- ◆ Transport Phenomena
- ◆ Process Intensification
- ◆ Numerical Analysis
- ◆ Advanced Chemical Engineering Thermodynamics
- ◆ Fluid Phase Equilibrium
- ◆ Advanced Fluidization



SOME OF THE TOPICS OF THE MASTER THESIS OF 2011/2014 EDITION

- ◆ Continuous Production of Large-area Graphene by Chemical Vapor Deposition Method
- ◆ Particle Clusters and Their Effects in RFCC Riser Reactor
- ◆ Preparation of Graphene with Supercritical CO₂ Expanded Graphite and Its Application Research
- ◆ Research for A New Composite Diesel Detergent
- ◆ Research of Realizing HETP Definition in Equilibrium Stage Separation Process
- ◆ The Gas-Liquid Two-Phase Mass Transfer Characteristics of a New Reverse Jet Washing Nozzle
- ◆ Numerical Simulation of Xylene Isomerization Reactor
- ◆ Research on Overall Optimization of One Oil Company's Crude Oil Business Chain
- ◆ The Fundamental Research for Mild Thermal Conversion of Liao He Super Viscous Crude to Produce Road Asphalt
- ◆ Feasibility Evaluation on Using Oily Sludge as Roadbed Filler for Road to Wells

COORDINATION:

Dr. YANG Fan (yangfan@cup.edu.cn)

Ms. YAO Chen (yaochencup@cup.edu.cn)