

# 3+2 China Program

## MS in Chemical Engineering

**Admission Requirements:** The department reviews each applicant on an individual basis. Complete transcripts of all undergraduate work must be submitted. Applicants must also meet the following program requirements:

- **Baccalaureate Field** Chemical Engineering or Equivalent.
- **Grade Point Average** At least 3.00/4.00 (or equivalent in Chinese Universities) for undergraduate study. In exceptional cases, applicants with averages below 3.00 but above 2.75 may be admitted if they show evidence of substantial ability to complete the program successfully.
- **Minimum English Competency: Determined by Test**

**Degree Requirements:** Students must meet the following program requirements:

- **Minimum Semester Hours Required** 36 (MS Program) + 16 (Design 1 & 2).
- **Course Work** At least 12 semester hours must be at the 500-level.

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• **Required Courses (Design (16 hours) plus 5 courses (20 hours))**

<u>CHE 494</u>	Design I and II; Theory I and II (Total 16 hours)
<u>CHE 410</u>	Transport Phenomena
<u>CHE 431</u> or <u>CHE 445</u>	Numerical Methods in Chemical Engineering Mathematical Methods In Chemical Engineering
<u>CHE 501</u> or <u>CHE 502</u>	Advanced Thermodynamics Fluid Phase Equilibria
<u>CHE 510</u> or <u>CHE 511</u> or <u>CHE 512</u>	Separation Processes Advanced Mass Transfer Microhydrodynamics, Diffusion and Membrane Transport
<u>CHE 527</u>	Advanced Chemical Reaction Engineering

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**Electives = Four Courses at 400 or 500 level (16 hours)**

• **Following is a schedule for the China 3+2 Program**

Yr.	Fall	Spring	
1. Certificate	→ CHE 494 – 3+2 Undergraduate Design I → CHE 494 – 3+2 Undergraduate Theory I Elective (422, 438, 433, 438, several 494s) Elective (422, 438, 433, 438, several 494s)	→ CHE 494 – 3+2 Undergraduate Design II → CHE 494 – 3+2 Undergraduate Theory II Elective (from 456, several 494) Elective (from 456, several 494)	→ = FIXED # = Select One
2. MS Degree	→ CHE 410 – Transport Phenomena → CHE 502 – Fluid Phase Equilibria → CHE 445 - Mathematical Methods in ChE	→ CHE 527 – Adv. Chemical Reaction Engineering # CHE 510 – Separation Processes # CHE 511 – Advanced Mass Transfer	

The course numbers for the 3+2 students in the first year will be different from other students.