

MS in Chemical Engineering

Admission Requirements

The department reviews each applicant on an individual basis. Complete transcripts of all undergraduate and any graduate work must be submitted. In addition to meeting the Graduate College minimum requirements, applicants must meet the following program requirements:

- **Baccalaureate Field** All engineering and natural science disciplines. Applicants with undergraduate degrees outside of engineering may be admitted on limited standing.
- **Grade Point Average** At least 3.00/4.00 for the final 60 semester hours (90 quarter hours) of undergraduate study, for the master's program, and at least 3.50 for the doctoral program. In exceptional cases, applicants with averages below 3.00 but above 2.75 may be admitted on limited standing if they show evidence of substantial ability to complete the program successfully.
- **Tests Required** None
- **Minimum English Competency Test Score**
 - **TOEFL** 80, with subscores of Reading 19, Listening 17, Speaking 20, and Writing 21 (iBT Test); 60, with subscores of Reading 19, Listening 17, Writing 21 (revised Paper-Delivered Test), **OR**,
 - **IELTS** 6.5, with subscores of 6.0 for all four subscores, **OR**,
 - **PTE-Academic** 54, with subscores of Reading 51, Listening 47, Speaking 53, and Writing 56.
- **Letters of Recommendation** Three required.
- **Personal Statement** Required.

Degree Requirements

In addition to meeting the minimum requirements of the Graduate College, students must also meet the following program requirements:

- **Minimum Semester Hours Required** 36.

Code	Title	Hours
Required Courses (5 courses; 20 hours)		
CHE 520	Transport Phenomena	
CHE 501	Advanced Thermodynamics	
or CHE 502	Fluid Phase Equilibria	
CHE 510	Separation Processes	
or CHE 511	Advanced Mass Transfer	
or CHE 512	Microhydrodynamics, Diffusion and Membrane Transport	
CHE 527	Advanced Chemical Reaction Engineering	
CHE 531	Numerical Methods in Chemical Engineering	
or CHE 545	Mathematical Methods in Chemical Engineering	

Electives

Select one of the following:

One course (4 hours) (thesis option)

Three courses (12 hours) (project option)

Four courses (16 hours) (course-work-only option)

Research Credit

CHE 598	M.S. Thesis Preparation (12 hours for thesis option)
CHE 597	Project Research (4 hours for project option)

- **Comprehensive Examination** Not required.
- **Thesis, Project, or Course-Work-Only Options** Thesis, project, or course-work-only options are available.