Chemical Engineering, PhD

Program Description

Degree Awarded: PHD Chemical Engineering

The PhD in chemical engineering has areas of research emphases in:

- atmospheric aerosols
- biomolecular engineering
- biosensors
- chemical therapies for neurodegenerative diseases
- electrochemistry
- electronic materials processing
- engineering education
- flexible display technology
- fuel cells
- inorganic membranes
- process design and operations
- protein synthesis
- polymers and polymer composites
- surface, interface and colloidal science
- transport phenomena in living systems
- water purification

A graduate handbook detailing information on graduate studies in chemical engineering is available through the Graduate Advising Office of the School for Engineering of Matter, Transport, and Energy.

At a Glance

- **College/School:** [Ira A. Fulton Schools of Engineering](#)
- **Location:** [Tempe campus](#)
Degree Requirements

84 credit hours, a written comprehensive exam, an oral comprehensive exam, a prospectus and a dissertation

Required Core (9 credit hours)
CHE 533 Transport Processes I (3)
CHE 543 Thermodynamics of Chemical Systems (3)
CHE 544 Chemical Reactor Engineering (3)

Technical Electives (18 credit hours)

Other Requirements (5 credit hours)
CHE 591 Seminar (5)

Research (12 credit hours)
CHE 792 Research (12)

Additional Research/Electives (28 credit hours)

Culminating Experience (12 credit hours)
CHE 799 Dissertation (12)

Additional Curriculum Information
Technical electives are from within or outside the chemical engineering program.

Admission Requirements

Applicants must fulfill both the requirements of the Graduate College and those of the Ira A. Fulton Schools of Engineering.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree, in any field, from a regionally accredited institution.

Applicants must have a minimum of a 3.00 cumulative GPA (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum of a 3.00 cumulative GPA (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. GRE scores
4. personal statement
5. resume or curriculum vitae
6. three letters of recommendation
7. proof of English proficiency

**Additional Application Information**
An applicant whose native language is not English (regardless of current residency) is required to achieve a minimum score of 100 on the internet-based TOEFL.

Students should see the program website for application deadlines.

**Application Deadlines**

**Fall**

**Spring**

**Contact Information**

Chemical Engineering Program | ECG 207
semtegrad@asu.edu | 480-965-4979

Admission Deadlines