Chemical Engineering, M.S.Ch.E., Ph.D.

Degrees Offered

• Masters of Science, Chemical Engineering (M.S.Ch.E.)
• Doctor of Philosophy, Chemical Engineering (Ph.D.)

Nature of the Program

The department is authorized to admit students to the following degree programs: master’s of science in chemical engineering (M.S. Ch.E.), and doctor of philosophy (Ph.D.). A problem report option is also available as an alternative to the traditional research based master’s degree. Students in these programs must comply with the rules and regulations as presented in the general requirements for graduate work in the college and in the Department of Chemical and Biomedical Engineering. Students interested in pursuing work for a master’s or doctoral degree in chemical engineering should contact the department for copies of the required guidelines and application information.

Master Requirements

Students applying for admission to the graduate program in chemical engineering (CHE) must meet the general requirements of admission of the WVU graduate school. Admission is expected to be competitive and students will be selected on the basis of their scholastic preparation and intellectual capacity as demonstrated in the application.

To be eligible for admission into the Master of Science in Chemical Engineering degree program, a candidate must fulfill the following requirements:

• Applicant has a bachelor’s degree from a recognized 4-year university, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
• Applicants have a minimum 3.0/4.0 grade point average overall, and 3.0/4.0 grade point average overall in the last 2 years of undergraduate study;
• Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
• Three letters of reference;
• Student CV;
• Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of Purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely CHE faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
• International applicants must meet the WVU requirement of English language proficiency (https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/).

Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

• Applicant has a bachelor’s degree from a recognized 4-year university, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
• Applicants have a minimum 3.0/4.0 grade point average overall, and 3.0/4.0 grade point average overall in the last 2 years of undergraduate study;
• Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
• Three letters of reference;
• Student CV;
• Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of Purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely CHE faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
• International applicants must meet the WVU requirement of English language proficiency (https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/).
Direct-Track PhD Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- Applicant has a bachelor's degree from a recognized 4-year university, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
- Applicants have a minimum 3.0/4.0 grade point average overall, and 3.0/4.0 grade point average overall in the last 2 years of undergraduate study;
- Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
- Three letters of reference;
- Student CV;
- Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of Purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely CHE faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
- International applicants must meet the WVU requirement of English language proficiency (https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/).

Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSChE Major Code: 3010
PhD Major Code: 3011

For specific information on the following programs, please see the links to the right:

- Chemical Engineering, M.S.Ch.E.

For specific information on the following programs, please see the links to the right:

- Chemical Engineering, Ph.D.