CHEMICAL ENGINEERING

Department Website (https://www.sc.edu/study/colleges_schools/engineering_and_computing/departments/chemical_engineering/)

Christopher Williams, *Chair*

Through discovery, design, creation, and transformation, chemical engineering is the engineering of systems at scales ranging from the molecular to the macroscopic that integrate chemical, physical, and biological elements to develop processes and produce materials and products for the benefit of society. Chemical Engineers are at the forefront of solving major societal challenges, from energy system decarbonization, ensuring environmental sustainability, and enabling flexible manufacturing for a circular economy, to discovering novel and improved materials for a variety of applications (e.g., batteries, semiconductors), and engineering targeted and accessible medicines.

The Department offers the Bachelor of Science in Engineering with a Major in Chemical Engineering, as well as a Minor in Chemical Engineering

Accelerated B.S.E./M.E. Education Plan

The Accelerated B.S.E./M.E. Plan in Chemical Engineering allows students to complete both the B.S.E. degree and a Master of Engineering degree in chemical engineering in as few as five years. The use of dual credit-courses that can be used toward both degrees-enables acceleration of the program, reducing the total enrollment of the student by one semester.

Chemical engineering students may apply for approval of an accelerated education plan in the semester in which they will complete 90 hours of undergraduate course work. In addition, students must have a sufficient foundation in chemical engineering course work to enable them to take graduate-level courses. University and department regulations stipulate that applicants must have a minimum GPA of 3.40, both overall and in chemical engineering courses. Students may apply by submitting an accelerated education plan, an application for senior privilege, and a copy of a Graduate School application to the graduate director in chemical engineering. The dean of The Graduate School has final authority for approving accelerated education plans.

Only graduate-level courses (numbered 500 and above) may be used for dual credit. No more than nine credit hours may be used as dual credit. The graduate courses used for dual credit must be taken during the student's final undergraduate year. The student graduates with the B.S.E. degree after completing the B.S.E. degree requirements. At that time, the student is admitted to the graduate program with up to nine hours of graduate credit.