

## **B.S.Ch.E.** in Chemical Engineering

### Overview

**Degree Requirements** 

### Description

The B.S. in chemical engineering provides the student with a fundamental knowledge of chemical engineering science and prepares graduates for a variety of careers in industry and government, or for advanced study in engineering, business, or professional school.

### **Minimum Total Credit Hours: 128**

# Goals/Mission Statement Program Educational Objectives

Graduates from the Department of Chemical Engineering of the University of Mississippi will be: 1. Globally competitive in the professional world; 2. Prepared for leadership and success in their chosen career or in continued education; 3. Equipped with flexible problem-solving skills to address complex professional and societal issues.

#### Student Outcomes

In accordance with ABET accreditation requirements, BSChE students at the University of Mississippi should demonstrate the attainment of the following student outcomes: (a) an ability to apply knowledge of mathematics, science, and engineering (b) an ability to design and conduct experiments, as well as to analyze and interpret data (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability (d) an ability to function on multidisciplinary teams (e) an ability to identify, formulate, and solve engineering problems (f) an understanding of professional and ethical responsibility (g) an ability to communicate effectively (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context (i) a recognition of the need for, and an ability to engage in life-long learning (j) a knowledge of contemporary issues (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

### Other Academic Requirements

Students in the Department of Chemical Engineering are encouraged to take the Fundamentals of Engineering examination prior to awarding of the baccalaureate degree.

### **Specializations**

- Emphasis Biotechnology
- Emphasis Environmental
- Emphasis Manufacturing
- Emphasis Materials
- Pre-Med Option
- Standard Option

