



## Chemical and Biological Engineering

College of Engineering  
[www.aus.edu/cen](http://www.aus.edu/cen)



**Chemical and biological engineering is a multidisciplinary field that combines principles of chemistry, biology and engineering to design and develop new products and materials. By understanding the fundamentals of chemistry and biology as well as engineering principles, chemical and biological engineers are able to develop solutions to various industrial and societal challenges, from the design and development of medicine to cure disease to developing renewable and sustainable energy sources. The field involves the development of new technologies, products and materials for various industries such as food and energy, pharmaceuticals, biotechnology, energy production and more.**



### Possible Career Options

- Chemical Engineer
- Pharmaceutical Engineer
- Biotechnologist
- Environmental Engineer
- Biomedical Engineer
- Food Technology
- Product/Process Engineer



## Possible Employers

- Engineering Firms
- Consulting Firms
- Food and Drink Manufacturers
- Colleges/Universities
- Pharmaceutical Firms
- Research Firms
- Biofuel Producers



## Skills Acquired

- Ability to communicate and work well with others
- Attention to detail
- Ability to interpret data
- Problem-solving skills
- Detail-oriented
- Ability to work independently or as part of a team
- Critical-thinking skills



## Personal Attributes

- Capacity for analytical and logical thinking
- Skills with numbers
- Creative and innovative
- Resourceful
- Attentive to safety measures



## Ways to Get Experience

- Doing an internship
- Volunteering as a research assistant in a university's chemical and biological engineering department
- Develop technical skills by attending conferences and reading books and articles
- Working part-time or volunteering in an engineering firm
- Attend workshops related to the field