

ELECTROCHEMICAL ENGINEERING, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

Program Description

The Electrochemical Engineering minor is designed to equip students with the knowledge necessary to achieve the following educational objectives: become valuable contributors in addressing society's clean energy needs and demands especially in the electrochemical power generation sector; and become educators, practicing engineers, and national leaders in electrochemical energy conversion and storage. The minor integrates skill sets in fundamentals of electrochemistry (e.g., chemistry, physics, mathematics, thermodynamics, and chemical kinetics) and electrochemical engineering applications (batteries, solar, flow and fuel cells, electrochemical synthesis, and corrosion) to ensure successful career opportunities and growth within electrochemical power generation industries, government agencies, and academia. The curriculum should allow students in energy related programs such as chemical, civil, electrical, environmental, mechanical, and materials science and engineering to readily take advantage of the minor and be better prepared for careers in clean power generation and future green technologies.

What is Electrochemical Engineering?

Electrochemistry is the science that focuses on the process of transforming chemical energy into electrical energy. Electrochemical engineers investigate electrochemical energy conversion and storage to create sustainable and alternative energy. They research electrochemistry for applications such as energy storage, power generation, and green energy. Electrochemical engineers seek to improve energy technology within industries, government agencies, and academia.

You Might Like This Program If...

- You are interested in energy-related programs such as chemical, civil, electrical, environmental, mechanical, and materials science and engineering.
- You are interested in pursuing a career in clean power generation and future green technologies.