



## Basics of Electrochemistry

### MODULE

#### About the Skill Module

This skill module covers basic nomenclature like anode, cathode, electrodes, electrolyte, current density, polarization, open circuit voltage, and influences of operating pressure and temperature.

The skill module covers the following topics:

- Definitions and concepts - atomic and molecular structure and the nature of ions
- Explanation of electrodes and electrolytes, and ionic mobility
- The transition from electronic to ionic conductivity in an electrochemical cell
- Redox reactions in terms of ion exchange
- Faradays laws; potential and voltage
- Free energy and its relation to the equilibrium cell voltage



**Target Audience**

Process engineers, non-electrical engineers, technical subject matter experts and technical managers interested in electrochemical engineering, electrolyzers, and fuel cells.

**You Will Learn**

- The terms used in electrochemistry
- The basic processes occurring in electrochemical systems
- How to calculate equilibrium cell voltage from thermodynamic data

**Product Details**

Categories: [Energy Transition](#)

Disciplines: [Hydrogen](#) [Net Zero & Renewables](#)

Levels: [Basic](#)

Product Type: Individual Skill Module

Format: On-Demand

Duration: 2 hours (approx.)

**\$250.00**