CORROSION ENGINEERING TECHNOLOGY (2850)

2850:100 Introduction to Corrosion Technology (2 Credits)
Prerequisite: 2030:151 or higher math. Analysis of material selection and environmental conditions on corrosion; review of corrosion types, environments and characteristics of structural materials; economic impact, control methods are explored.

2850:120 Corrosion Engineering Technology Fundamentals I (3 Credits)
Corequisite: 2820:111. Introduction to corrosion engineering topics including economic impacts of corrosion, types of corrosion, their recognition and prevention, parameters affecting corrosion, and methods of corrosion control.

2850:121 Corrosion Engineering Technology Fundamentals II (4 Credits)
Prerequisite: 2850:120. Basic understanding of steps and methods required for combating corrosion including proper design, material selection, protective coating application, inhibitors use, and cathodic and anodic protection.

2850:200 Advanced Corrosion Technology (3 Credits)
Prerequisite: 2850:100. Study of corrosion control methods through design, materials selection, protective coatings, cathodic and anodic protection; corrosion testing and monitoring; diagnosis of corrosion failures; selection of treatment options; corrosion data analysis.

2850:220 Strategies for Corrosion Prevention (4 Credits)
Prerequisite: 2850:121. Corequisite: 2820:163. This course focuses on the control of corrosion by applying coatings and cathodic protection.

2850:221 Corrosion Engineering Technology Projects (4 Credits)
Prerequisite: 2850:220. Course focuses on corrosion/failure analysis and corrosion mitigation, and discussion of regulatory compliance and resource acquisition and allocation.