

EGR 287: Corrosion Management and Control

This course examines fundamental principles behind corrosion of structures and discusses best practices in corrosion control and its management. Strengths and weaknesses of various corrosion management strategies are examined, and discussion is included of industry standards such as those of the National Association of Corrosion Management Engineers (NACE), Det Norske Veritas (DNV), and the International Organization for Standardization (ISO). Three lecture hours per week. Instructional Support Fee applies.

Course Student Learning Outcomes

1. Demonstrate an understanding of corrosion as a surface, and beneath a surface, chemical phenomenon. 2. Identify the impact of corrosion and different types of failures introduced in metals and non-metals. Design preventative and corrective corrosion control measures. 3. Apply knowledge of corrosion control in planning maintenance strategies 4. Demonstrate an understanding of principles behind inspection and monitoring methods used in corrosion control. 5. Demonstrate an ability to design a maintenance strategy to control corrosion and perform its financial analysis. **Credits:** 3

Program: Engineering