Networks, Security, & Safety Applications

ENGRTEC 4700

Credit Hours:
3.00 - 3.00

Course Levels:
Undergraduate (1000-5000 level)

Course Components:
Lecture
Lab

Course Description:
This course will provide you with an understanding of the basics of networking devices and systems along with the cyber security considerations and technology required for the deployment of these solutions. The cyber security materials will include a study of the human elements that impact this space. The course will provide an introduction to the safety control systems deployed in manufacturing.

Prerequisites and Co-requisites:
Prereq: 3600.

Course Goals / Objectives:
- Understand the network technology in the manufacturing enterprise
- Identify the cyber security risks and remediation solutions
- Understand the human elements in risk mitigation
- Demonstrate an understanding of the safety systems requirements in manufacturing operations
- Leverage information solutions, analytics and technology to deliver continuous impr
- Function effectively on a team
- Demonstrate an understanding of manufacturing terminology and process improvement methods

Course Topics:

- Introduction to networks
- Cyber security issues and remediation
- Information solutions, analytics and IoT technology
- Safety solutions for manufacturing operations
- Risk Management

Designation:

Required