

WSI 304 - MARINE ELECTRONICS

- Identify industry practices to reduce environmental risks due to marine technology applications.

Learning How to Learn:

- Judge the appropriate use of marine technology systems for real world applications.

Course Description

Marine Electronics focuses on the systems, applications, electronics, and safety requirements specific to the marine and ROV environments. The design, repair and integration of cabling, tether, communication devices, sensors, and components into electrical systems will be emphasized. Students will use test equipment and protocols to develop troubleshooting methods to analyze and integrate this technology. Group 2 course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Required Prerequisites

EET 104 or EET 204

General Education Outcomes supported by this course

Critical Thinking - Direct

Course Learning Outcomes

Knowledge:

- Recall cables and connectors appropriate for marine technology applications.
- Outline performance characteristics of marine technology subsystems and instrumentation.
- Define the data and power requirements for a device.

Application:

- Build a connector and cable assembly ensuring signal integrity and environmental seal.
- Terminate a fiber optic cable.
- Operate test equipment appropriate for the application.
- Select components and instrumentation for a marine technology application.

Integration:

- Connect devices insuring compatibility of components and signals.
- Integrate components and subcircuits to create a prototype based upon a set of requirements.
- Interpret signals transmitted to and from a device.

Human Dimension:

- Develop a safe practices procedure to achieve an electrically safe jobsite.
- Collaborate as members of a cross-functional team.

Caring - Civic Learning: