WSI 440 - ADVANCED MARINE PLATFORMS

Course Description

This course focuses on the use of complex marine platforms in multiple marine environments including multiple sonar systems, unmanned underwater vehicles and remotely operated vehicles. Students will learn mission planning, platform mobilization, launch and recovery techniques, remote guidance, and advanced troubleshooting of autonomous and remote systems. Subsea applications will include scientific study and research, subsea exploration and industrial applications. Group 2 course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Required Prerequisites

WSI 200, WSI 210, WSI 215, WSI 240 and instructor permission.

General Education Outcomes supported by this course

Quantitative Reasoning

Course Learning Outcomes

Knowledge:
- Demonstrate skills specific to complex operations of marine platforms.

Application:
- Remotely and autonomously collect subsurface data using data collection software.

Integration:
- Demonstrate the execution of complex marine operations across multiple scenarios.

Human Dimension:
- Operate as a technical lead for a cross-functional team through complex operating environments.
- Provide peer supervision during laboratory exercises.

Caring - Civic Learning:
- Evaluate Great Lakes health through interpretation of marine data.

Learning How to Learn:
- Analyze data collected for determining bottom classification.