

# WSI 212 - SONAR FOR MARINE ENGINEERING

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## Course Description

This course provides both classroom theory and hands-on practicum/field operations performed individually and in groups. Emphasis areas include demonstrating techniques of sonar operations critical to sonar performance, sonar data collection and data interpretation for use in marine engineering, survey and underwater construction activities. Group 2 course.

## Credit Hours

2

## Contact Hours

3

## Lecture Hours

1

## Lab Hours

2

## Recommended Prerequisites or Skills Competencies

Prior use of sonar equipment in marine engineering applications.

## General Education Outcomes supported by this course

Quantitative Reasoning

## Course Learning Outcomes

### Knowledge:

- Develop operational competencies of sonar systems.

### Application:

- Evaluate sonar returns for documentation of subsurface features.

### Integration:

- Compare acoustic data to construction drawings.

### Human Dimension:

- Observe special techniques used in sonar operations.

### Caring - Civic Learning:

- Evaluate safety and integrity of subsurface structures through the use of sonar.

### Learning How to Learn:

- Interpret acoustic returns for evaluating engineering controls.