SENSE Enterprise
Strategic Education through Naval Systems Experiences

DATE: 5/1/16
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SENSE Enterprise Advisors

Underwater Acoustics
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Controls, Robotics,
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What is SENSE Enterprise?

- **Strategic Education through Naval Systems Experiences**
- Funded through the Office of Naval Research (ONR)
- Design, Build, and Test systems with a focus on Navy applications
  - Space
  - Air
  - Land
  - Sea
  - Under-Sea
  - Cyber

Air (UAV)  Cross-Domain Integration

Sea (ASV)  Undersea (AUV)
SENSE Focus Areas

• Autonomous/unmanned vehicle design
• Multi-domain communications
• Underwater/under-ice acoustics
• Maritime threat detection/surveillance
• Noise control for noise-induced hearing loss in the military
• Joining the SENSE Enterprise program does not require you to join the uniformed service in any aspect
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Why join SENSE Enterprise?
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Develop cutting-edge defense technologies

• Multi-domain
• Directly impact the safety and success of our armed forces
Why join SENSE Enterprise?

Apply Knowledge from classes:
- Fundamentals
- Engineering Design Process
- Controls
- Dynamics
- Vibrations
- Acoustics
- Instrumentation and Signal Processing
Why join SENSE Enterprise?

Enterprise is run like a real business:

• Work in multidisciplinary team to solve real-world problems
• Student driven and managed
• Responsible for projects each semester
Why join SENSE Enterprise?

Attractive for hiring companies.

- Huge resume item
- Learn about civilian-military employment opportunities
- Unique networking opportunities in DoD fields

MTU Career Fair >
Why join SENSE Enterprise?

Exciting Testing on Lake Superior! – Research Vessel *Agassiz*

- Partnering with *GLRC*
All Majors and Disciplines Welcome:

- Engineering
- Computer Science
- Physics
- Mathematics
- Business
- Marketing
- And More!
Sample Projects:

Adapt existing ROUGHIE platform to carry acoustic payload (hydrophones)
ROUGHIE VIDEO

Research-Oriented Underwater Glider for Hands-on Investigative Engineering

https://www.youtube.com/watch?v=0i8WItTo6hY
How to Join SENSE?

• Please put your name, major, and email on the signup sheet.

• Submit a resume and a personal statement (why you want to join SENSE and description of your intended contribution to the team) to Dr. Barnard.

• If approved by the Enterprise Executive Board, fill out the Undergraduate Enterprise Enrollment Approval form to register.
  • You will be added to the enterprise class for FALL 2016
Questions?

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