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NAVAL STEM

SCIENCE - TECHNOLOGY - ENGINEERING - MATHEMATICS

STRATEGIC PLAN
An inclusive science, technology, engineering, and mathematics (STEM) culture that pioneers innovation and propels the Department of the Navy and Nation’s workforce forward.

**VISION**

Deliver Naval STEM education and outreach opportunities that inspire curiosity and shape a generation of talent prepared for future global challenges.

“Let us state it up front and in unmistakable words: Strong Naval STEM efforts are critical to America’s future, and are a matter of national security.”

-Chief of Naval Research Rear Adm. Lorin Selby, Naval STEM Executive
The Department of the Navy (DON) comprises two uniformed services: the United States Navy and the United States Marine Corps. The Navy and Marine Corps science, technology, engineering and mathematics (STEM) initiatives are collectively referred to as Naval STEM. Naval STEM executes and supports strategic opportunities that inspire, engage, educate, employ, develop, and retain the current and future workforce through a diverse portfolio of initiatives and investments. The DON workforce includes civilians, active duty Sailors and Marines, and Navy and Marine Corps Reserve components.

Beyond the DON exists a larger STEM ecosystem comprising but not limited to academia, community colleges, federal agencies, industry, elementary, middle and high schools, state and local governments, as well as nonprofit organizations, each of which focuses on many different aspects of educational and workforce challenges. These external stakeholders are important Naval STEM partners. Increased coordination and collaboration among DON organizations and external stakeholders will promote the effectiveness and efficiency of Naval STEM programs and initiatives. This strategy provides the framework and vision for Naval STEM efforts and highlights the opportunities for internal and external stakeholders to contribute to and engage with these efforts.
The Department of the Navy (DON) has a rich history of providing science, technology, engineering and mathematics (STEM) education and outreach opportunities that cultivate a diverse and well-trained pool of talent for the Navy and Marine Corps. Our warfighters’ superiority depends on scientific and technological innovations and breakthroughs of today and in the future. To promote an environment where these breakthroughs continue, the DON must foster initiatives and collaborations to promote the development of the future and current Naval STEM workforce.

Deliberate investments in STEM education and outreach initiatives are a critical duty of the DON and are essential to America’s continued technological dominance. A coordinated approach within the department is imperative to optimize resources and achieve greater impact.

The Naval STEM network comprises the Naval STEM Executive Board, the Naval STEM Coordination Office (NSCO), and Naval STEM Stakeholder Organizations (NSSOs), each represented by DON civilians, military personnel, or both. Together this team ensures the alignment and execution of a department-wide strategy.

The Naval STEM five-year strategic plan provides a shared roadmap for NSSOs engaged in STEM efforts. NSCO developed the strategic plan in partnership with representatives from the Naval STEM Stakeholder Working Group (NSSWG) and under the guidance of the Naval STEM Executive Board.

NSCO is uniquely positioned to serve as a coordinator between localized STEM efforts and leadership’s strategic priorities — and in this capacity, we will work together to clarify demand signals, grassroots needs, and sharing of best practices. Therefore, this strategy is intended to be agile and capable of addressing the dynamic challenges and opportunities incumbent in the evolving Naval STEM environment.
## GOALS AND OBJECTIVES

### INSPIRE
- communities through Naval STEM opportunities for students and educators

- **Objective 1.1** Spark interest in STEM within schools, families and communities

- **Objective 1.2** Increase awareness of the role of STEM within the DON

- **Objective 1.3** Support a continuum of integrated STEM learning experiences at all stages, e.g. elementary-PhD

### EMPOWER
- meaningful connections between Naval STEM and the next generation

- **Objective 2.1** Encourage the DON workforce to engage the next generation as allies that support STEM journeys

- **Objective 2.2** Enhance STEM networks that sustain a talent pipeline

- **Objective 2.3** Provide connections to Naval STEM employment opportunities

### ADVANCE
- Naval STEM excellence through diversity, equity and inclusion

- **Objective 3.1** Mitigate barriers to enhance success and broaden opportunities

- **Objective 3.2** Foster a sense of belonging by nurturing a diverse community of problem solvers

- **Objective 3.3** Expand outreach so that all participants can see themselves represented within STEM

### CELEBRATE
- best practices and successes that shape our future

- **Objective 4.1** Improve communication to highlight Naval STEM successes

- **Objective 4.2** Strengthen Naval STEM community through collaboration and connectedness

- **Objective 4.3** Increase awareness of Naval STEM opportunities for both students and the public
**TARGET AUDIENCE**

**WHO WE SERVE**

- **ELEMENTARY SCHOOL STUDENTS**
- **MIDDLE SCHOOL STUDENTS**
- **HIGH SCHOOL STUDENTS**
- **2 YEAR INSTITUTION STUDENTS** (e.g. trade and community college students)
- **4 YEAR INSTITUTION STUDENTS** (e.g. undergraduate students)
- **GRADUATE STUDENTS**
- **CURRENT WORKFORCE**

**EXPECTED OUTCOMES**

- Inspire students to pursue STEM
- Increase student awareness of Naval STEM
- Prepare students for STEM careers and/or skilled technical workforce
- Advance curriculum relevant to Naval STEM
- Retain and develop Naval STEM workforce

**TARGET AUDIENCE**

- **PARENTS**
- **EDUCATORS**
- **COMMUNITY**

**NAVAL STEM STRATEGIC PLAN**
The Naval STEM five-year Strategic Plan was written by the NSSWG with the support of NSCO. The plan was written in alignment with Secretary of the Navy Instruction 3900.45A, the DoD STEM FY2021 – FY2025 Strategic Plan, and the 2018 Federal Government’s five-year strategic plan for STEM education titled Charting a Course for Success: America’s Strategy for STEM Education.

This plan is a decree that, when leveraged by all stakeholders, will affect outcomes and, ultimately, build a stronger DON. While considerable strides have been made in each objective, this Strategic Plan will serve as a catalyst to create more effective and efficient STEM outcomes. This document will be revisited every five years or as needed to increase alignment, foster a culture of continuous improvement, and adapt to environmental conditions.