

NAVAL STEM STRATEGIC PLAN

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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 MISSION

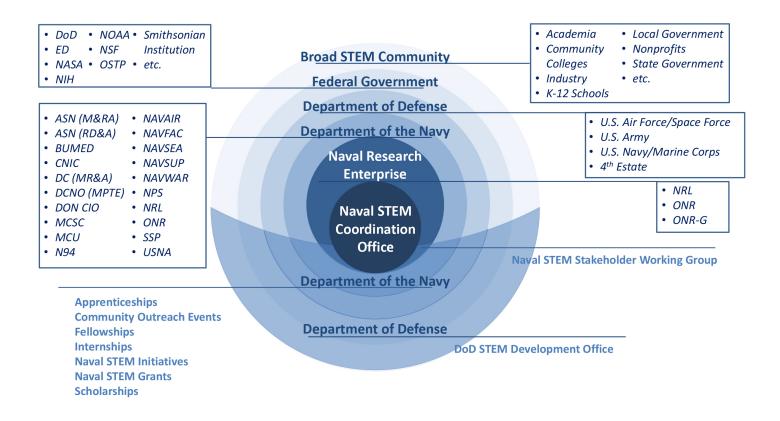
Deliver Naval STEM education and outreach opportunities that inspire curiosity and shape a generation of talent prepared for future global challenges.



"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

NAVAL STEM ECOSYSTEM



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 VALUE OF STEM

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.

future and can STEM workforce. Deliberate investments in STEM education and outreach initiatives are a critical duty of the DON and are essential to America's continued stra technological dominance. A coordinated approach will we within the department is imperative to optimize grassry 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.

	SPIRE		
INSPIRE	EMPOWER	ADVANCE	CELEBRATE
INSPIRE communities through Naval STEM opportunities for students and educators	EMPOWER meaningful connections between Naval STEM and the next generation	ADVANCE Naval STEM excellence through diversity, equity and inclusion	CELEBRATE best practices and successes that shape our future
Objective 1.1 Spark interest in STEM within schools, families and communities	Objective 2.1 Encourage the DON workforce to engage the next generation as allies that support STEM journeys	Objective 3.1 Mitigate barriers to enhance success and broaden opportunities	Objective 4.1 Improve communication to highlight Naval STEM successes
Objective 1.2 Increase awareness of the role of STEM within the DON	Objective 2.2 Enhance STEM networks that sustain a talent pipeline	Objective 3.2 Foster a sense of belonging by nurturing a diverse community of problem solvers	Objective 4.2 Strengthen Naval STEM community through collaboration and connectedness
Objective 1.3 Support a continuum of integrated STEM learning experiences at all stages, e.g. elementary-PhD	Objective 2.3 Provide connections to Naval STEM employment opportunities	Objective 3.3 Expand outreach so that all participants can see themselves represented within STEM	Objective 4.3 Increase awareness of Naval STEM opportunities for both students and the public

TARGET AUDIENCE

WHO WE SERVE			Т	EXPECTED OUTCOMES
ELEMENTARY SCHOOL STUDENTS				Inspire students to
MIDDLE SCHOOL STUDENTS	IIS			pursue STEM Increase student awareness of Naval
HIGH SCHOOL STUDENTS	PARENTS			STEM
2 YEAR INSTITUTION STUDENTS (e.g. trade and community college students)				Prepare students for STEM careers and/or skilled technical workforce
4 YEAR INSTITUTION STUDENTS (e.g. undergraduate students)		EDUCATORS ITY		
GRADUATE STUDENTS				Advance curriculum relevant to Naval STEM
CURRENT WORKFORCE		COMMI		Retain and develop Naval STEM workforce

MOVING FORWARD

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 fiveyear 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.

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SERVICE FREINELER



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