NAVAL POSTGRADUATE SCHOOL

WHERE SCIENCE MEETS THE ART OF WARFARE

MISSION

Provide defense-focused graduate education, including classified studies and interdisciplinary research, to advance the operational effectiveness, technological leadership and warfighting advantage of the Naval service.

FOR DECISIVE ADVANTAGE

RESPONSIVE | INTERDISCIPLINARY | APPLIED | INNOVATIVE | CLASSIFIED | SECURE

Who we are

We are who we serve:

NPS is a Naval command with a defense graduate university mission. We are defense educators, subject matter experts and staff serving those who serve our Nation.

What we do

Education, Research, Innovation:

NPS develops warrior talent and innovative research solutions through Master's and Ph.D. programs for the Department of the Navy, DoD, U.S. Government, partners and our allies.

Why it matters

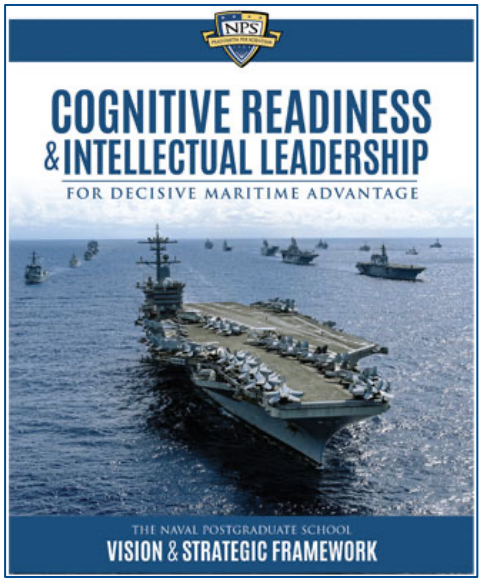
For decisive advantage:

NPS ensures the technological leadership of the future force. Our graduates have the technical and intellectual edge to deter and prevail in the all-domain battlespace.

The Naval Postgraduate School will become the nation's leading institution for defense higher education and applied research, delivering transformative solutions and innovative leaders for decisive U.S. seapower and national defense.

"the world is entering a new age of warfare, one in which the integration of technology, concepts, partners, and systems — more than fleet size alone — will determine victory in conflict."

CNO NAVPLAN 2022



EDUCATION
Extend reach and increase the focus of defense-unique and naval-relevant education

RESEARCH
Increase the impact of applied research that is fully informed and directly contributes to warfighting solutions

INNOVATION
Lead naval innovation via a collaborative ecosystem connecting warrior-scholars with academia and industry

INSTITUTION
Enabled by a learning organization with a shared mission-focused culture developing defense leaders in modern and technologically relevant facilities.

Our Comparative Advanatge

WARFIGHTER DEVELOPMENT

Critical and strategic thinkers able to problem-solve, adapt, innovate, and lead

- Naval Engineering
- Combat Systems
- Cyber and Information Systems
- Data Science and Decisions
- Global Security & Strategic Competition
- Defense Systems Management
- Space Technology and Operations
- Maritime Battlespace Environments
- Modeling, Simulation, & Visualization

Minimum Viable Solutions

Rapid Prototyping *and* Field Experimentation

WARFIGHTING DEVELOPMENT

Classified and applied research and innovative solutions

- C-C5ISRT
- Long Range Fires
- Terminal Defense
- Contested Logistics
- Maritime Domain Awareness
- Artificial Intelligence
- Intelligent Autonomous Systems
- Naval Operational Architecture
- Modeling and Simulation GEMS/LVC
- Energy and Climate Security

The Department of the Navy is driving innovation across every corner of the enterprise.

"The best way to deter our adversaries is for the department to restore its technological superiority...Education is the key connector for this work. Our educational institutions hold great promise and opportunity." — Secretary of the Navy Carlos Del Toro

Education: our students are the priority

Operationally experienced students apply their insight and academics to solve real problems. 2023 Enrollment: ~2,500

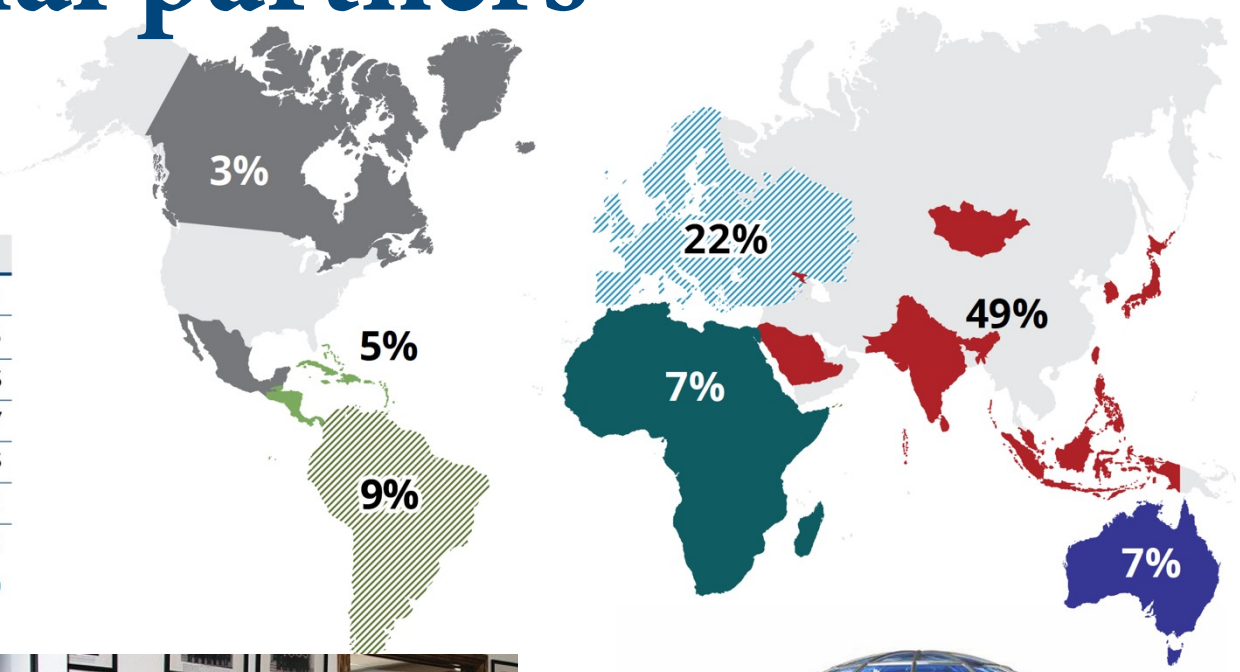
- **Masters: 1856**
- **Ph.D: 99**
- **Cert./Non-degree: 543**
- **Exec Ed/Prof Dev: 10,062**

- **By Service:**
  - Navy: 932
  - USMC: 355
  - Army: 177
  - Air Force: 95
  - USCG: 9
  - Civilian: 760
  - International: 172

International partners

- Partners and allies study alongside, fosters coalitions

Degree Students	
Africa	13
Asia	83
Caribbean & Central America	5
Europe	37
North America	5
Oceania	12
South America	15
Total	**170**



Academic Program Areas:

Responsive education programs designed to meet relevant warfighting knowledge and skills requirements.

Combat Systems

Cyber and Information Systems

Data Science and Decisions

Defense Systems Management

Global Security and Strategic Competition

Maritime Battlespace Environments

Modeling, Visualization & Simulation

Naval Engineering

Space Technology and Operations

Research Pipeline:

Strategically aligned, operationally focused.

Operationally informed applied research develops talent and technology solutions to increase net warfighting advantage:

Naval Warfare Studies Institute

Central Connector between the Service HQ, Fleet, and Fleet Marine Forces to academic expertise for collaborative problem solving.

– Translate –
– Integrate –
– Advocate –

Office of Research & Innovation

Supports NPS education with relevant defense-focused basic and applied interdisciplinary research and innovation.

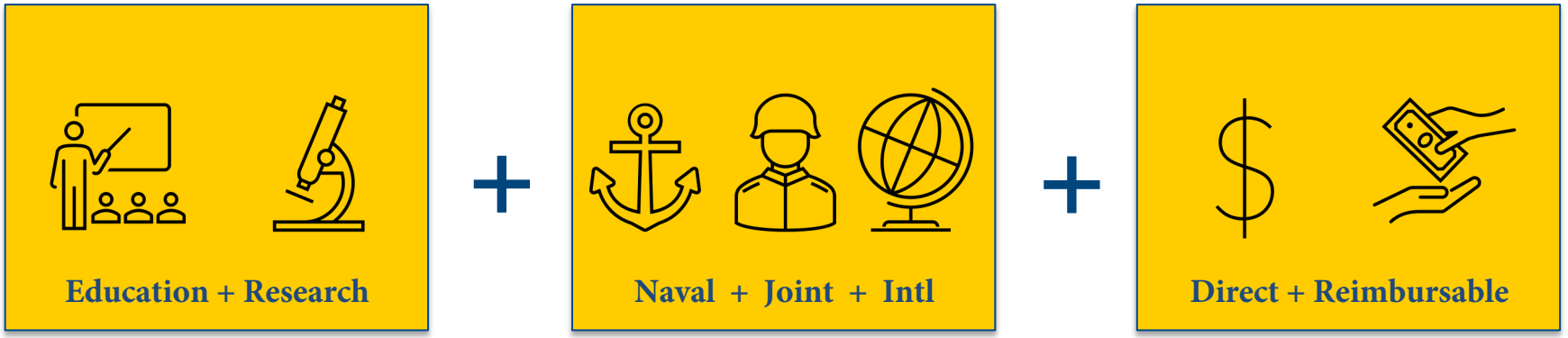
– Align –
– Elevate –
– Enable –

Academic Departments

Provide defense-focused, naval-unique advanced technical, professional, and graduate education for warfighting advantage.

– Responsive –
– Relevant –
– Accredited –

How we do it



The Business of NPS:

- NPS utilizes a University Operating Model (UOM) with reimbursable operations for education and research leverage in a resource-constrained environment.
- Reimbursable operations, while complex, deliver diverse grad-ed and research results.
- High value: **Twice the school for half the price**. ~$100m direct funding augmented by ~$100m from sponsored reimbursable education and research.

Innovation: "ideas to impact"

OFFICE OF RESEARCH & INNOVATION

NAVAL WARFARE STUDIES INSTITUTE

WHAT

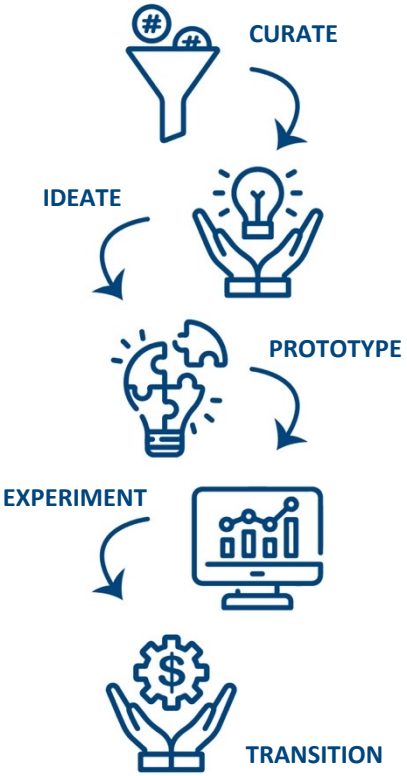
Challenges faced by the fleet and force are considered for solutions through engagement with fleet and force customers.

Potential solutions identified during the creation process are produced for further exploration.

Concepts are thoroughly researched and developed in preparation for evaluation and testing.

Developed concept prototypes are evaluated in a field or laboratory environment.

Researched and tested concepts are forwarded for acceptance and adoption by the Navy and Marine Corps.



HOW

NWSI's yearly Warfare Innovation Continuum (WIC) workshops define viable concepts that meet capability challenges.

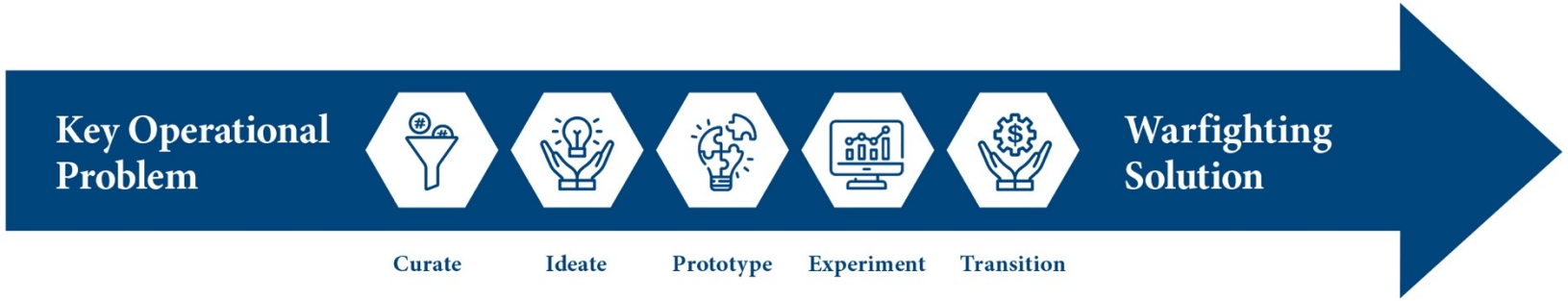
NWSI's Warfare Innovation Workshops (WIW) explore WIC-defined concepts which are in of interest to DOD stakeholders.

The Naval Innovation Exchange (NIX) coordinates teams to prepare various new technologies and practices for adoption.

NPS' Joint Interagency Field Experimentation (JIFX) program provides a venue for the testing and evaluation of new technologies.

The Innovation Capstone Project (ICP) uses acquisition knowledge to move solutions to programs of record or DOD end users.

Innovation Operating Concept:



Current NPS Innovation

Warfare Innovation Continuum

A campaign of analysis focused on an overarching warfighting challenge. Design teams develop minimum viable solutions.

Naval Innovation Exchange Teams

Starting student-faculty-industry teams refine minimum viable solutions, explore mature technologies and warfighting application to accelerate adoption Naval customers.

Field Experimentation (JIFX)

Identifies, influences, and accelerates early-stage technology development to enable rapid adaptation and adoption.

Interdisciplinary Transition Team

Integrates technical, acquisition, and operations to accelerate capability transition to Program Executive Offices.

Established coherence around innovation activities within existing NPS education and applied research in support of warfighter development and solutions.

The NIC at NPS enables cross-disciplinary teams, NR&DE and industry involvement throughout process leveraging in-resident student experience, faculty expertise enhancing learning, while developing fully informed prototype solutions. The NIC facility enables greater speed and scale.

Where science meets the art of warfare…

Transforming leaders who will transform warfighting:

Electrical engineering alumnus Marine Corps Maj. Michael Wade studied high-electron mobility transistors for his thesis and directly applied his research to USMC radar systems, including the counter UAS, Light Marine Air Defense Integrated System (LMADIS).

Relevant research delivers solutions:

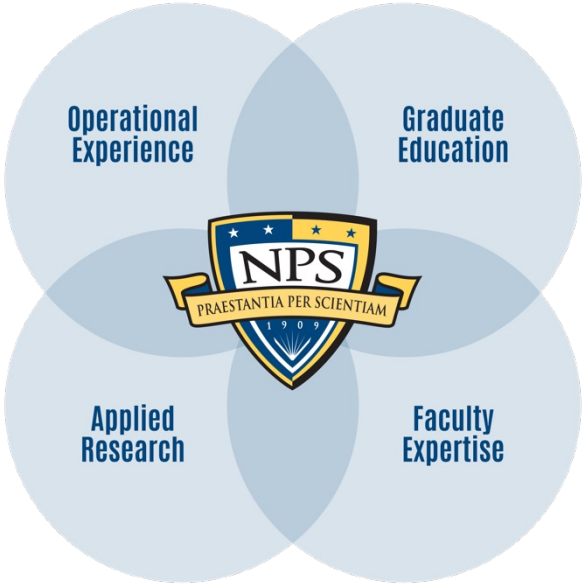
LCDR Austin West was selected for the "Rear Admiral William S. Parsons Award for Scientific and Technical Progress" for his thesis research on compensating for air turbulence on the High Energy Laser Weapon System (HELWS), delivering tactical decision aids and fire control guidance.

Industry partnerships bring emerging technology to NPS and the Fleet:

NPS' Consortium for Additive Manufacturing Research and Education (CAMRE) adapts 3D printing technology aboard Navy ships, and with deployed Marines, who in Micronesia 3D printed a shaped charge used to destroy a WWII 500lb bomb threatening a State Legislature building.

The NPS difference

Only NPS synchronizes student *operational experience* and *graduate education* with *applied research* and *faculty expertise*, to deliver innovative warfighting solutions and leaders educated to employ them.



- NPS is **Responsive** to operational needs through tailored education and research.
- NPS complements the Naval research community through **Interdisciplinary** education and **Applied** research producing **Innovative** solutions to relevant problems.
- NPS offers **Classified** coursework and research in controlled laboratories on our **Secure** campus.





Vision: Naval Innovation Center

conceptual rendering

*"…a **Naval Innovation Center at the Naval Postgraduate School** in Monterey, California – right in the heart of our nation's leading technology corridor… This will serve as a premier military education facility tailored to innovation and experimentation, serving as a technology resource for Navy and Marine Corps warfighting development commands, as well as a go-to partner of the defense industrial base, the technology sector, and academia…"*

Secretary of the Navy, Carlos Del Toro

Fleet Priorities | **Partnerships** | **Innovation Education** | **Prototyping & Experimentation** | **Funding & Management**

Immediate Impact
Future Advantage
Enduring Leadership

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