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 and a defense graduate university. We are defense educators, subject matter experts and staff serving those who serve our nation.

What we do

Defense education & research:

NPS develops warrior talent and 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.
Responsive: to the needs of the Fleet/Force

Curricular reviews ensure NPS meets both current and emerging needs of operational forces.

- Curricula designed with direct participation by flag officer sponsors.
- Core educational outcomes aligned to Fleet/Force input.
- Strategically aligned and always relevant.
- Experienced military Warfare Chairs infuse insight and perspective.
Interdisciplinary: research aligned to priorities

**Decision Sciences**
- Ops Analysis
- Contracting, Acquisition
- Wargaming, Simulations
- Resource Management
- OR, DM, MOVES
- **TF Sea Control**

**Cyber and Info Science**
- Cyber and Info Systems
- Cyber and Info Ops
- Electronic Warfare
- IS, CS, ECE, Physics
- **TF OVERMATCH**

**Meteorology**
- Oceanography
- Space Domain
- Undersea Domain
- METOC, Space, USW
- **TF Arctic**

**Decision Sciences**
- Ops Analysis
- Contracting, Acquisition
- Wargaming, Simulations
- Resource Management
- OR, DM, MOVES
- **TF Blue-Green Integration**

**Great Power Competition**
- Regional Studies
- Irregular Warfare
- Information Warfare
- DA, NSA
- **TF Maritime Gray Zone**

**Weapons, Platforms**
- Autonomous Systems
- Material Science
- Systems Integration
- Undersea Domain
- Physics, Mech Eng, Sys Eng, ECE
- **TF Hybrid Fleet 2045**
Applied: 100% defense focused

A fully accredited, graduate university with expert defense faculty and relevant research programs

- Student focused... Transforming leaders to think critically and solve modern warfighting problems.
- Applied research... Delivering solutions through interdisciplinary curricula and relevant student-faculty research.
- A capability to optimize... Graduate degree programs, certificates, applied research and Exec-Ed develop leaders and deliver solutions.

Graduate Programs:
- Computer Science
- Cyber, AI/ML
- Electrical, Computer Engineering
- Energy Security
- Information Sciences
- Mechanical and Aerospace Engineering
- Meteorology
- Oceanography
- Operations Research
- Applied Physics
- Space Systems
- Defense Analysis
- National Security Affairs
- Defense Management
- Systems Engineering
- Undersea Warfare
Innovative: a location to leverage

Proximity to the Silicon Valley, industry partnerships, top research universities and labs enable relevant solutions

- Internships give uniformed students experience at the speed of industry, insights into commercial best practices and technical breakthroughs.

- Ecosystem: Stanford, UC Berkeley, UCSC, Fleet Numerical Meteorology and Oceanography Center, Naval Research Laboratory, Defense Language Institute

- Open ocean range, one-of-a-kind facilities/labs and full access to controlled airspace (Camp Roberts Field Lab)
Classified: solving real operational problems

Maintain the facilities, clearances and infrastructure to provide classified research and educational programs.

- 25% of sponsored research is classified
  - Cyber Battle Lab / Electric Weapons Lab / NPS Field Labs / Prototyping
- Sensitive Compartmented Information Facility (SCIF) and the Systems Technology Battle Lab (STBL)
- Classified and secure collections in the Dudley Knox Library
- More than 60% of research directly supports Fleet operational problems
Secure: on-base campus & labs

- FLEX classrooms of the Future (reconfigurable)
- Cyber and Electric Weapons labs
- Adaptive Optics lab, a National Center of Excellence
- Classified facilities (SCIF, STBL, Library)
- 12 Systems engineering labs (Robotics, M&S)
- 68 Mechanical & Aerospace labs (Autonomy, 3D printing)
- 9 Space Systems labs (CubeSats, Spacecraft robotics)
- Quantum Sensing Lab
- Energy and Energetics Lab and more...
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.
Education: our students are the priority

Operationally experienced students apply their insight and academics to solve real problems.

- ~2,500 resident and distance students, many with combat experience (~14k more through certificates, workshops, and Exec Ed)
- Students continuously bring real-time recognition of needs/threats
- Student research co-discovers and disseminates new knowledge
- Graduates apply their solutions and learning upon returning to the Fleet
## Education: total engagement

### Total Degrees Conferred (Full Time Resident & Distance Learning)

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<tbody>
<tr>
<td>Degrees</td>
<td>696</td>
<td>798</td>
<td>771</td>
<td>940</td>
<td>1,059</td>
<td>1,122</td>
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<td>1,373</td>
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<td>1,269</td>
<td>1,358</td>
<td>1,193</td>
<td>1,260</td>
<td>1,161</td>
<td>1,275</td>
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*EE/PD is Executive Education and Professional Development*

### Total Student Engagement in 2021

- **17,208**

- **1,446** Resident Degree
- **808** Distance Degree
- **513** Certificate/Non-degree
- **14,441** EE/PD
Education: with our global military partners

- Partners and allies study alongside to foster understanding and coalitions

<table>
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<tr>
<th>Degree Students</th>
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<tr>
<td>Africa</td>
<td>4</td>
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<tr>
<td>Australia &amp; New Zealand</td>
<td>8</td>
</tr>
<tr>
<td>Caribbean, Central &amp; South America</td>
<td>11</td>
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<tr>
<td>Central/East Asian &amp; Middle East</td>
<td>11</td>
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<tr>
<td>Europe</td>
<td>32</td>
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<tr>
<td>Far/Near East</td>
<td>48</td>
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<tr>
<td>North America</td>
<td>4</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>118</strong></td>
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Numbers may not sum to total due to rounding.
Research: Faculty expertise in defense

Faculty research informs unique curricula aligned to Naval needs and defense missions

- Naval Research Program (NRP) funds faculty research aligned to priorities
- Diverse mix of tenured, research, instructional, and military experts
- Graduate curricula integrates hands-on student applied research
- 11 of 13 departments ranked within top 20% in the nation

Faculty Highlights

569 Civilian Faculty
213 Tenure Track Faculty

Non Tenure Track Faculty:
- 165 Instructional Faculty
- 174 Research Faculty
- 17 Administrative Faculty

7:1 Student/Faculty Ratio
Tenure/non-tenure instructional faculty

$100 million+ Revenue generated for reimbursable Education and defense Research

Cutting Edge
10-20 patents every year

Reaccredited in 2020
By the Western Association of Schools and Colleges
Senior College and University Commission
- 10 year maximum

(2021 annual report)
Mission positive, budget neutral:
- Operational relevance through Fleet resource sponsors
- Deepens faculty defense expertise
- Leveraging reimbursables doubles the value of NPS
Research: connects people, enables solutions

- Our ecosystem of research and facilities includes:
  - Consortium for Robotics and Unmanned Systems Education and Research (CRUSER)
  - 5G-enabled Sea Land Air Military Research Initiative (SLAMR)
  - Joint Field Interagency Experimentation (JIFX)
  - Consortium for Intelligent Systems Education and Research (CISER)
  - MOVES (Modeling, Virtual Environments and Simulation) Institute
  - The Common Operational Research Environment (CORE) lab

Additional expertise in: (see all: https://nps.edu/web/guest/departments)
  - Additive Manufacturing and Materials
  - AI/ML Data Science and Cyber Security/Operations
  - Spacecraft Research and Design
  - Directed Energy Weapons and Quantum Sensing
  - Infrastructure Defense and Wargaming
  - Crew Endurance and Human Systems Integration
  - Executive Education

- NavalX Central Coast Tech Bridge connects to industry
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 Navy:
Xerox chose NPS to install its first liquid metal 3D printer, the ElemX, to collaborate on shipboard use cases through student-faculty research. The NPS-Xerox team and CNSP will install the second ElemX aboard an LHA in support of RIMPAC.
Working with NPS: Naval Warfare Studies Institute

A gateway to the NPS ecosystem
The NPS difference

Only NPS synchronizes student operational experience and graduate education with applied research and faculty expertise, to deliver twice the return on investment:

Relevant 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

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.