

INTRODUCTION

Mission

The Naval Postgraduate School (NPS) was established to serve the advanced educational needs of the Navy. The broad responsibility of the school is reflected in its stated mission:

Increase the combat effectiveness of U.S. and allied armed forces and enhance the security of the United States of America through advanced education and research programs focused on the technical, analytical, and managerial tools needed to confront defense-related challenges of the future.

To fulfill its mission, the Naval Postgraduate School strives to sustain excellence in the quality of its instructional programs, to be responsive to technological change and innovation in the Navy, and to prepare officers to introduce and utilize future technologies.

The research program at NPS exists to support the primary mission of graduate education. Research at NPS:

- maintains upper-division course content and programs at cutting edge;
- challenges students with creative problem solving experiences on DoD-relevant issues;
- advances DoN/DoD technology;
- solves warfare problems; and
- attracts and retains quality faculty.

Academic Programs

To meet its educational requirements, the Navy has developed a unique academic institution at the Naval Postgraduate School through the use of specially tailored academic programs, and a distinctive organization tying academic disciplines to naval and joint warfighting applications.

The Naval Postgraduate School has aligned its education and supporting research programs to achieve three major goals: 1) academic programs that are nationally recognized and support the current and future operations of the Navy and Marine Corps, our sister services, and our allies; 2) research programs that focus on the integration of education and research in support of current and emerging national security technologies and operations, and of

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education and research in support of current and emerging national security technologies and operations, and 3) executive and continuing education programs that support continuous intellectual innovation and growth throughout an officer's career. Programs of graduate studies at NPS are grouped as follows:

Graduate School of Operational and Information Sciences

- Computer Science
- Computer Technology
- Electronic Warfare Systems
- Human Systems Integration
- Information Sciences
- Information Systems and Operations
- Information Systems and Technology
- Information Warfare
- Joint C4I Systems
- Joint Information Operations
- Modeling, Virtual Environments, and Simulation
- Operations Analysis
- Operational Logistics, Joint
- Software Engineering
- Special Operations and Irregular Warfare
- Systems Analysis

Graduate School of Engineering and Applied Sciences

- Applied Mathematics
- Combat Systems Science and Technology
- Electronic Systems Engineering
- Meteorology
- Meteorology and Oceanography
- Naval/Mechanical Engineering
- Oceanography
- Operational Oceanography
- Reactors—Mechanical/Electrical Engineering
- Space Systems Engineering
- Space Systems Operations
- Systems Engineering
- Systems Engineering Management
- Undersea Warfare
- Underwater Acoustic Systems

Graduate School of Business and Public Policy

- Acquisition and Contract Management
- Contract Management
- Executive Management
- Executive Master of Business Administration
- Financial Management
- Information Systems Management
- Defense Business Management
- Defense Systems Analysis
- Defense Systems Management, International
- Material Logistics Support
- Manpower Systems Analysis
- Program Management
- Resource Planning and Management for International Defense
- Supply Chain Management
- Systems Acquisition Management
- Transportation Management

School of International Graduate Studies

- Civil–Military Relations
- Combating Terrorism: Policy, Strategy
- Defense Decision Making and Planning
- Homeland Security and Defense
- Security Studies
- Stabilization and Reconstruction
- National Security and Intelligence:
 - Middle East, South Asia, Sub-Saharan Africa
 - Far East, Southeast Asia, Pacific
 - Europe and Eurasia
 - Western Hemisphere

The student body consists of U.S. officers from all branches of the uniformed services, civilian employees of the federal government, and foreign military officers and government civilians. The resident degree/sub-specialty student population for December 2011 is shown in Figure 1 on the following page.

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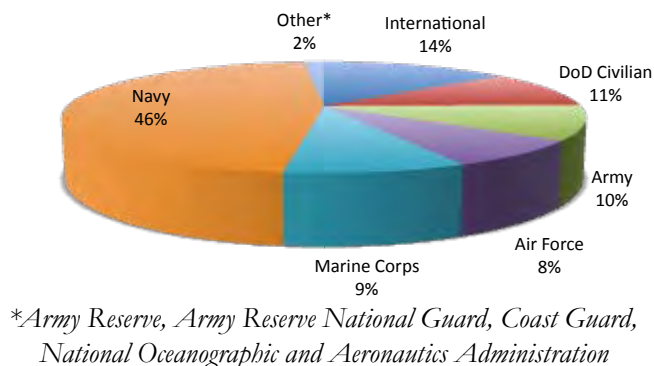


Figure 1: Resident Degrees/Subspecialty Student Population for December 2011 (1,672 total)

Academic Degrees

Curricula meet defense requirements within the traditional degree framework. All curricula lead to a master's; additional study may yield an engineer's or doctoral degree. Below is a listing of the degrees offered at NPS:

Master of Arts

- Security Studies

Master of Business Administration

Master of Science

- Applied Mathematics
- Applied Physics
- Applied Science
- Astronautical Engineering
- Combat Systems Technology
- Computer Science
- Computing Technology
- Contract Management
- Cost Estimation and Analysis
- Defense Analysis
- Electrical Engineering
- Electronic Warfare Systems Engineering
- Engineering Acoustics
- Engineering Science
- Engineering Systems
- Human Systems Integration
- Information Operations
- Information Systems and Operations
- Information Technology Management
- Information Warfare Systems Engineering
- Management
- Mechanical Engineering
- Meteorology
- Meteorology and Physical Oceanography
- Modeling, Virtual Environments, and Simulation
- Operations Research
- Physical Oceanography

- Physics
- Product Development
- Program Management
- Remote-Sensing Intelligence
- Software Engineering
- Space Systems Operations
- Systems Analysis
- Systems Engineering
- Systems Engineering Analysis
- Systems Engineering Management
- Systems Technology

Engineer

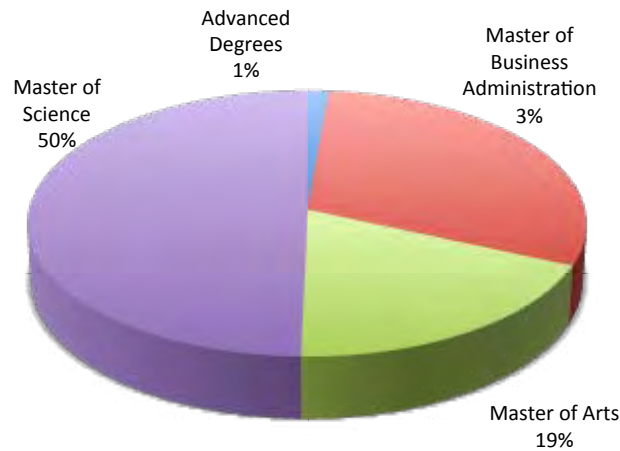
- Astronautical Engineer
- Electrical Engineer
- Mechanical Engineer

Doctor of Philosophy

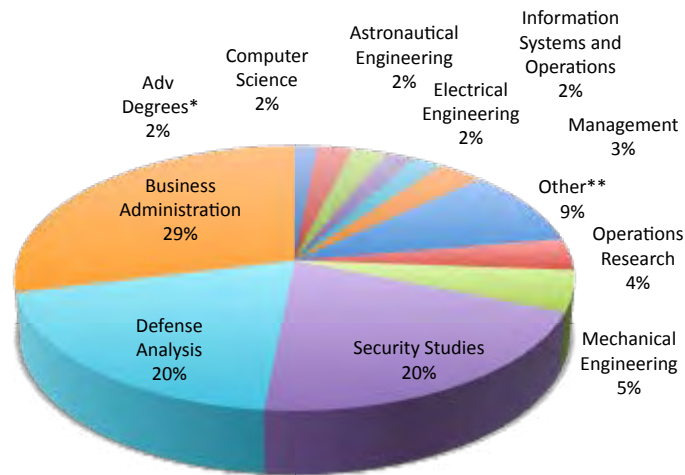
- Applied Mathematics
- Applied Physics
- Astronautical Engineering
- Computer Science
- Electrical Engineering
- Engineering Acoustics
- Information Sciences
- Mechanical Engineering
- Meteorology
- Modeling, Virtual Environments, and Simulation
- Operations Research
- Physical Oceanography
- Physics
- Security Studies
- Software Engineering

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In December 2011, 284 degrees were conferred. Figure 2 indicates distribution by type, Figure 3 by degree area.



**Figure 2. Distribution by Degree Type
(284 Degrees Conferred)**



* Advanced degrees: computer science (1), astronautical engineering (1), meteorology (1), electrical engineer (1)

**Other master's degrees: applied mathematics (1), applied physics (5), engineering science (1), information sciences (1), information technology management (2), physics (3), program management (3), space systems operations (3), contract management (5), combat systems technology (4)

**Figure 3. Degrees Conferred in December 2011
(284 Degrees Conferred)**

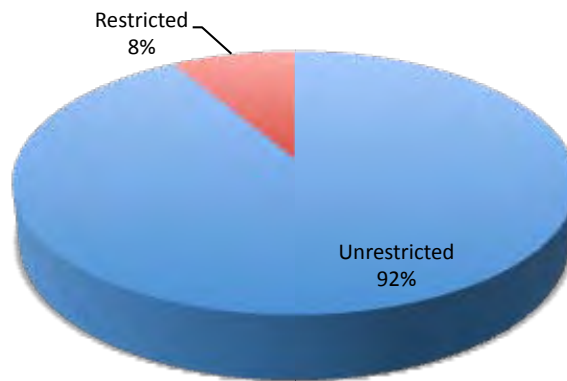
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Theses

The thesis is the capstone of the student's academic endeavor at NPS. Thesis topics address issues ranging from the current needs of the fleet and joint forces to the science and technology that is required to sustain long-term superiority of the Navy/DoD.

Aided by faculty advisors, NPS students represent a vital resource within the DoD for addressing warfighting problems, one especially important at present, when technology in general, and information operations in particular, is changing rapidly. Our officers think innovatively and possess the knowledge and skill to apply nascent technologies in the commercial and military sectors. Their firsthand grasp of operations, when combined with a challenging thesis project that requires them to apply their focused graduate education, is one of the most effective elements in solving fleet/joint-force problems. NPS graduate education encourages a lifelong capacity for applying basic principles to the creative solution of complex problems.

NPS is unique in its ability to conduct classified research. Restricted theses are available on the NPS SIPRNET.



**Figure 4. Classification of Theses
(284 Degrees Conferred)**