



United States Naval Academy School of Engineering & Weapons



The **School of Engineering & Weapons** provides midshipmen an education in fundamental engineering principles that equips them to address the technical needs of the Navy and Marine Corps. The School of Engineering & Weapons at the U.S. Naval Academy is composed of five departments, encompassing ten academic majors.

Midshipmen are immersed in a hands-on, project-based environment geared toward teaching real world engineering problem solving skills by combining practical knowledge and a thorough understanding of mathematical and scientific fundamentals. The complexity of today's Naval weapon and engineering systems mandates a multidisciplinary approach in which revolutionary advancements in applied engineering and technology are brought to the classroom to prepare our graduates for service in the technically advanced Navy and Marine Corps of the 21st Century.

#1

Top Public Schools

#3

National Liberal Arts Colleges

#5

Undergrad Only Engineering Programs

Academics

- Aerospace Engineering
- Electrical Engineering
- Computer Engineering
- General Engineering
- Mechanical Engineering
- Naval Architecture
- Marine Engineering
- Nuclear Engineering
- Ocean Engineering
- Robotics Engineering
- Control Engineering



Engineering Students

976

Enrolled



Female



Minority

Average Class Size

16

USNA HOME



USNA OPENINGS



ENGINEERING & WEAPONS



UNITED STATES
NAVAL ACADEMY
Annapolis, Maryland

The School of Engineering and Weapons is supported by an array of sophisticated laboratory facilities, with state-of-the-art equipment.



- ★ Satellite ground station capable of communicating with orbital spacecraft and the International Space Station.
- ★ The Directed Energy Research Center (DERC) with IPG fiber lasers, beam characterization tools, scientific cameras, field test equipment, and optical benches.



- ★ Subsonic wind tunnels and a supersonic wind tunnel capable of Mach 4.2.
- ★ Maker Space with dedicated 3D metal, polymers, and ceramic capability.
- ★ Robotics labs with air, surface and subsurface autonomous vehicle research.
- ★ Engines laboratory with test equipment for analysis and alternative fuel research.



- ★ Machine shop with integrated wood and composites shop capable of designing, machining, welding, and manufacturing.
- ★ Materials & Mechanics laboratories with a tensile, hardness, impact, and fatigue testers, a drop tower, and a Scanning Electron Microscope (SEM) with X-ray microanalysis.



- ★ Helicopter rotor test cell, for turbine, reciprocating and rocket engine research.
- ★ Hydrodynamics laboratory with a 380-foot tow tank, smaller tanks, and a circulating water channel.



- ★ Electrical engineering laboratories supporting signal processing, fiber optics, communications and biometric research.
- ★ Surface and Underwater Robotics Facility (SURF) for experimentation of unmanned autonomous and remotely operated underwater and surface vehicles.