NAVAL SURFACE WARFARE CENTER

CRANE DIVISION



ExcitingOpportunities

Emerging

Technologies



U.S. CITIZENSHIP REQUIRED

SEND QUESTIONS TO:
CRANE_RECRUITING@NAVY.MIL

The FUTURE depends on what YOU DO TODAY.

— Mahatma Gandhi

prospective teammate...

I would like to THANK YOU for considering a career at Naval Surface Warfare Center Crane.

Our organization is built on finding and retaining the finest intellectual and innovative talent in the country. With over 3,800 employees of which 65% are scientists, engineers, or technicians, Crane is known for its deep subject matter expertise and culture of innovation in solving the Navy's and the Nation's toughest technical challenges. Over the next decade, we envision workforce growth to 5,000 employees and continue to stake our claim as the 3rd largest employer in southern Indiana.

It Is My Sincere Hope That You Join Us On Our Journey To Excellence.

In joining an organization that values HONESTY, SERVICE, UNITY and EMPOWERMENT in all that we do, be prepared to be challenged daily and given responsibility to perform your job. When you are truly empowered, the job is substantially more enjoyable and rewarding. Our goal is for you to have a rewarding career, enter a workplace environment that you will be proud to call home, and join us in solving problems for the men and women of the armed services that are supporting us even at this moment.

I look forward to meeting YOU!



CAPT Duncan McKay
Commanding Officer, USN



mission areas

NSWC Crane provides technical engineering solutions for many of the systems that protect and enable the Warfighter so they can successfully carry out their missions and return safely. NSWC Crane has concentrated its resources and core competencies in three mission areas which best support the Warfighter. These are our critical mission areas:

STRATEGIC MISSIONS

NSWC Crane Strategic Missions Center delivers technical solutions to detect threats, provide a layered, integrated missile defense and offer global strike capability. Strategic Missions professionals work to develop, deploy and sustain the technologies to ensure that weapons systems are fully reliable and always available to the Warfighter.

DETER
DEFEND
DEFEAT





EXPEDITIONARY WARFARE

Focused on agility, maneuverability, individual weapons, munitions, and technical training, NSWC Crane's Expeditionary Warfare Center equips the most elite warriors for the combat environment. With more than 1 million square feet of offices and laboratories, NSWC Crane provides a distinct advantage in sensors and communications, mobility and special munitions, and weapons.

RAPID RESPONSE PROVEN SOLUTIONS

ELECTRONIC WARFARE

As the largest multi-service facility within the Department of Defense for Electronic Warfare (EW), EW sensors and electronics. NSWC Crane's EW Center is critical to the success of many military operations and is designated as the Naval Sea Systems Command Center of Excellence for Electronic Warfare.

CONTROL THE SPECTRUM
CONTROL THE FIGHT



about us ...

DESCRIPTION:

- NSWC Crane is one of 10 Warfare Center Divisions within the Naval Sea Systems Command (NAVSEA).
- Located on the third largest naval installation in the world in Southern Indiana.
- Our total focus is to support the Warfighter by leveraging cutting edge technical capabilities for the rapidly changing combat environment.
- NSWC Crane personnel and preeminent facilities set the standard for excellence in **reseach and engineering** for military systems.

FACILITIES:

- Situated on 100 sq miles, NSWC Crane is home to critical military testing and evaluation facilities.
- Over 100,00 square feet of state-of-the art and well-equipped laboratories for test, evaluation and research and development.
- DoD's largest multi-service facility for electronic warfare, sensors and electronics.
- Navy's premier facility for the design and testing of radiation hardened electronics.
- Nation's only location for environmentally benign, self-contained, high-energy testing.
- Training ranges for weapons, ordnance, night vision/electro-optics/laser and electronic warfare.

HISTORY:

- In 1941 NSWC Crane was commissioned under the Bureau of Ordnance as the Naval Ammunition Depot for production, testing and storage of military ordnance.
- In the 1950s and 1960s NSWC Crane's capability grew to include technical expertise in small arms, sonobuoys, microwave tubes and POLARIS SLBM missiles.
- Five decades later, NSWC Crane has advanced its technology expertise
 to complex cutting edge military systems while becoming the "go
 to" source for Strategic Missions, Expeditionary Warfare, and
 Electronic Warfare for the Department of Defense.



My mentors at NSWC Crane encourage me to take on more responsibility, which allows me to lead projects that most new hires in the private industry would never have had the chance to do without several more years of experience. I get to travel both in the US and internationally, I have the ability to lead and do hands on projects, and my team is constantly helping me grow and learn as an engineer. I have had the privilege of working and learning from some of the most intelligent, patient and kind engineers I know and I am so grateful I chose to work at NSWC Crane.

- Hannah, Electrical Engineer

civilian technical opportunities

DESIRED SCIENTISTS AND ENGINEER QUALIFICATIONS:

- Entry-level (ND-o2): Bachelor's degree in professional engineering from an ABET accredited university or an applicable scientific discipline
- Intermediate-level (ND-03): Master's or PhD degree in the related career field
- Journeyman-level (ND-04): Degree in the related career field and specialized experienced (if research position, PhD in related career field without experience is qualifying)

TECHNICAL OPPORTUNITIES:

NSWC Crane's skilled professionals put technical solutions directly into the hands of the Warfighter, ensuring safer missions. Our broad customer base includes the Navy, Marine Corps, Army, Air Force, United States Special Operations Command, Coast Guard, NASA, and many other military, civilian, and foreign military organizations.

NSWC Crane has exciting opportunities for scientists and engineers in the following technical capability areas:

- Advanced Electronics and Energy Systems
- Electronic Warfare Systems Research, Development, Test, and Evaluation (RDT&E)
- Infrared Countermeasures and Pyrotechnic RDT&E
- Surveillance and Reconnaissance Sensor Systems
- Special Warfare and Expeditionary Systems Hardware
- Strategic Systems Hardware

ELECTRICAL ENGINEER:

Electrical engineers research, develop, test, evaluate, operate, maintain, decommission, and/or direct the fabrication, manufacture, and installation of electronic devices. Electronics engineers work on systems and devices including: flight systems, communication systems, tactical jamming systems, including radios and antenna systems; navigation systems, including global positioning systems; acoustical measurement systems; radar and sonar systems; tracking and scheduling systems; weapon systems, target systems; control systems for test operations; display systems.

MECHANICAL ENGINEER:

Mechanical engineers perform technical design and development project work, program management work for a significant technological field or particular emphasis area, and engineering advisory services. Work situations for these mechanical engineers usually include some of the following: providing agency program management for a mechanical engineering emphasis program area and performing and executing a variety of engineering projects from conception to completion. Systems and products would include small arms, radar systems, electro-optic and weapons mounts, power system integration, launcher systems, aircraft dynamics and vehicle systems integration.

COMPUTER ENGINEER:

Computer engineers devise software to integrate a number of devices (e.g., systems, equipment, application programs, and components) into a computer or weapons system. They also design firmware defining the behavior of a system. Computer engineering requirements are for the development of: embedded computers in weapons or weapons-support systems; systems for complex scientific applications; simulation systems; communication systems; computer-aided engineering and design systems; and large-scale information systems with worldwide infrastructure.

COMPUTER SCIENTIST:

Computer scientists develop new and improved concepts, principles, and techniques that will advance the body of knowledge of computer science, and adapt and apply advanced computer science methods and techniques to solve complex computer processing requirements.

PHYSICIST:

Physicists advise, administer, supervise, or perform research or other professional and scientific work in the investigation and application of the relations between space, time, matter, and energy in the areas of mechanics, sound, optics, heat, electricity, magnetism, radiation, or atomic and nuclear phenomena.

ENGINEERING TECHNICIAN:

Engineering technicians work in a variety of unique work situations, often aligned with professional engineering fields and each with a fairly distinct set of knowledge and skill requirements. The work involves functions such as research, development, design, evaluation, construction, inspection, production, application, standardization, testing, or operation of engineering facilities, structures, systems, processes, equipment, devices, or materials.

ELECTRONICS TECHNICIAN:

Electronics technicians assist in many work situations that involve electronic equipment; including maintenance, installation, fabrication, testing and evaluation/research and development, sustainment, and troubleshooting. When technicians develop, test, or perform other work on an unfamiliar piece of electronic equipment they apply their knowledge of electronic theory, circuit design, and the operating characteristics of more familiar equipment.



civilian business opportunities

DESIRED BUSINESS QUALIFICATIONS:

- Entry-level (NT-2): Bachelor's degree in a related career field from an accredited university or one year of specialized experience at the NT-1 level depending upon the career field.
- Intermediate-level (NT-3): Bachelor's degree in a related career field from an accredited university or one year of specialized experience at the NT-2 level depending upon the career field.
- Journeyman-level (NT-4): PhD in a related career field from an accredited university or one year of specialized experience at the NT-3 level depending upon the career field.

BUSINESS OPPORTUNITIES:

NSWC Crane has a yearly business base of almost \$2 billion with over a billion dollars of funding utilized to provide the Warfighters with the required technical equipment, weapons and systems to execute their mission. The Corporate Ops Department, along with Contracting and Comptroller make up NSWC Crane's Business Services support. These departments provide on-time reliable delivery and a team-focused approach to balancing client compliance with the overarching mission readiness of NSWC Crane to support the Warfighter.

Career Fields Include the Following Disciplines:

FINANCIAL MANAGEMENT & ACCOUNTING:

Work includes analyzing and recommending costs and benefits of alternative methods of financial management of organization's programs and administrative operations; implementing legal and regulatory controls over approved budgets; and providing advice on effective and efficient methods for the acquisition and use of funds to support the organization's programs and activities.

CONTRACT & ACQUISITION SPECIALIST

Work in developing contract strategy considering the availability of funds, extent of competition, urgency, production lead time, delivery requirements, need for Government furnished material/property, option requirements and other factors. This job series also reviews specifications and work packages to assure clarity, adequacy and completeness, and advises planning when deficiencies are noted. The incumbent analyzes contractor cost proposals prepares and/or reviews technical advisory reports.

HEALTH & SAFETY SPECIALISTS:

Plans and directs special occupational health/industrial hygiene studies based upon validated need or detected variance from established standards. Evaluates and analyzes accident frequency, cause data, accident reports, safety survey reports, unit operations, and other activities having a direct impact on accident prevention, and directs countermeasure programs to correct unsafe procedures or conditions.

HUMAN RESOURCES MANAGEMENT:

Plan and execute human resources planning by providing advice and counsel to managers/supervisors on human resources laws, rules and regulations involving recruitment, benefits, position management and/or compensation.

INFORMATION TECHNOLOGY:

Expand your knowledge while working on the cutting edge of information technology security. In this occupation you may supervise, lead or perform duties that pertain to planning, developing, implementing, and maintaining programs, policies and procedures to protect the integrity and confidentiality of systems, networks, and data.

ENVIRONMENTAL & FACILITIES MANAGEMENT:

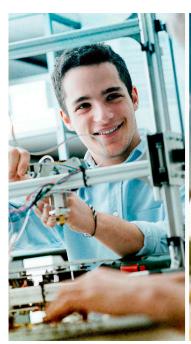
Accomplish long range environmental planning, budgeting and programming activities that impact installations or a region that would affect other states. Review planning and construction documents for environmental considerations as required.

LOGISTICS MANAGEMENT SPECIALIST:

In this occupation you may supervise, lead or perform duties concerned with providing logistical support to an assigned organization. Your duties may include planning, coordination or evaluating logistical actions in support of a specific mission. Additional duties may include identifying the specific requirements for money, manpower, material, facilities and services that are needed to support the program and correlate these requirements with program plans to assure that the needed support is provided at the correct time and place. You may also function as the overall manager of the logistical effort.

BUDGETING & BUSINESS MANAGEMENT:

Plans, coordinates, and conducts all phases of budget/financial formulation, presentation, justification and execution. Interprets budget policy, manages resources, and forecasts budget trends. Develops current and long-range budgetary requirements in compliance with regulatory directives, translates requirements into resource plans, and ensures resource plans match objectives and directives. Develops current-year execution and long-term spending plans for program budgets.









employee benefits

VACATION TIME (ANNUAL LEAVE):

The following table shows the vacation accrual rate for Federal Employees:

- o-3 yrs of service = 13 Days
- -3 15 yrs of service = **20 Days**
- 15+ yrs of service = 26 Days

Note: Employees with previous military or Federal service may receive credit toward annual leave accrual. Part-time schedules have pro-rated accrual rate.

PAID HOLIDAYS:

 Ten days have been approved as legal holidays for Federal workers.

SICK LEAVE:

- Federal workers earn **13 days of sick leave** per year at a rate of four hours every two weeks.
- No limit to amount of sick leave that can be accumulated.
- Unused sick leave can be carried into subsequent years and accumulated during the entire year of employment.
- Portion of accumulated sick leave will be calculated into your retirement as years of service.

PARENTAL LEAVE:

- Up to 12 weeks of paid parental leave for the birth, adoption or foster of a new child.

PAID OVERTIME AND COMPENSATORY TIME for hours exceeding an 80 hour pay period.

FLEXIBLE WORK SCHEDULE:

Compressed Work Schedule: A "pay period" consists of two weeks or 80 hours.

- A compressed schedule included eight nine-hour days and one eight hour day with one day off every two weeks.
- Starting time for employees working a compressed schedule ranges from o600-0800.
- Employees work all ten days during the pay period with flexible work hours, start times range from o600 to 0900.

TELEWORK:

- After one year of service you will be permitted to telework which increases personal freedom and flexibility.

FAMILY FRIENDLY LEAVE POLICY:

- Allows the employee to aide in the care of family members.

MILITARY LEAVE:

- Two weeks of military leave annually for all armed forces reservists.
- Additional paid sick leave for eligible disabled Veterans.



HEALTH INSURANCE:

- Many health plans are available for coverage.
- Most employees pay only one-fourth of total health benefit costs, depending on the plan selected.
- Annual "open season" periods permit enrollment changes.

Visit OPM for more information: http://www.opm.gov/insure

LIFE INSURANCE:

- Most civilian employees are eligible to participate in the Basic Life and other additional options offered by FEGLI.
- Basic insurance premiums are shared by the employee and the government based on the insurance amount.

Visit OPM for more information: http://www.opm.gov/insure/life

SALARY INFORMATION:

- Dependent upon education and experience.

RETIREMENT COVERAGE:

- Retirement annuity for life beginning as early as age 55
- Benefits based on length of service and salary
- Military service may be credited toward FERS (deposit required)
- Vesting after 5 years of creditable civilian service
- Eligibility for survivor and disability benefits after 18 months of civilian service
- Earn Social Security Credit

For more information on FERS, visit: https://www.opm.gov/retirement-services/fers-information/

THRIFT SAVINGS PLAN (TSP):

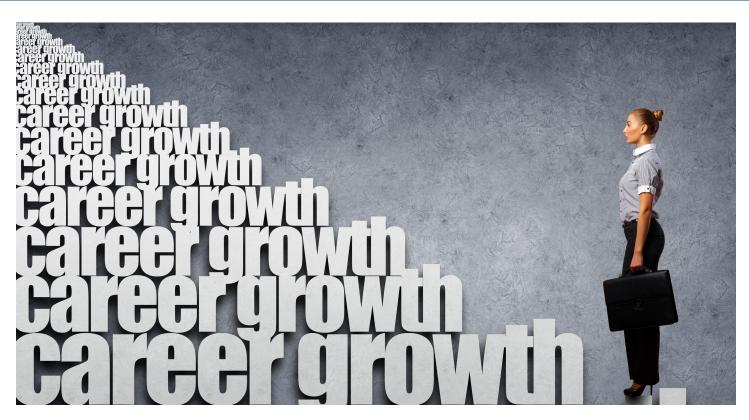
- Tax-deferred retirement savings and investment plan
- Employees offered same type of savings and tax benefits that many private corporations offer employees under 401K plan.
- By participating in the TSP, employees have the opportunity to save part of their income for retirement
- Receive matching agency contributions which reduces current taxes in TSP.
- All federal employees covered by FERS are eligible to participate in the TSP when hired.
- Once eligible to participate in TSP, there are three types of contributions that may be made to their account: (1) agency Automatic 1% contributions, (2) employee contributions, and (3) agency matching contributions.

For more information on TSP, visit: http://www.tsp.gov



For questions about Health Insurance, Life Insurance, Thrift Savings Plan, or Retirement

Contact the Benefits Line: 888-320-2917 between 7:30 a.m. and 7:30 p.m. Eastern Time, Monday through Friday Email: navybenefits@navy.mil



development opportunities

PROFESSIONAL / PERSONAL DEVELOPMENT:

The training, education and professional development opportunities offered at NSWC Crane Division are made available to all levels of the organization and range from 1-day courses to fully supported programs of advanced graduate study. Courses and programs are available both on-site and offsite and cover a wide range of competencies related to our professional, technical, and administrative support work.

EDUCATION AND ADVANCED DEGREE PROGRAMS:

In order to facilitate our employees' professional growth, NSWC Crane Division offers a diverse array of educational opportunities. Degrees can be obtained in a multitude of fields, such as Engineering and Scientific disciplines, Electronic Technology, Business or Financial Management, Public Management, Accounting, etc. Numerous educational institutions are available as well as a variety of delivery methods to accommodate busy schedules of employees. Some classes are held onsite, while other options include distance learning, computer based training, correspondence courses, on-campus classroom in local colleges or community learning centers.

PUBLIC MANAGEMENT CERTIFICATE:

The Indiana University Crane Public Management Certificate Program (PMC) is an 18 credit hour Graduate Program in Public Management offered by the School of Public and Environmental Affairs (SPEA). PMC is a management development program geared toward furthering education beyond the Bachelor's Degree. It is designed for career employees aspiring to more challenging leadership and management assignments.

MASTER OF PUBLIC AFFAIRS (MPA):

The Master of Public Affairs (MPA) is a 39 credit hour professional course of study offered through Indiana University that provides the knowledge and experience necessary to operate and manage public agencies and nonprofit organizations. Its interdisciplinary courses provide familiarization with the multifaceted nature of public management. The 39 credit hour's needed for the MPA includes the 18 credit hours from the PMC Program.

NSWC CRANE DIVISION PhD FELLOWSHIP PROGRAM:

The PhD program is a corporately funded developmental program designed to foster greater participation in doctoral level education that directly supports one or more of our three strategic focus areas. It is a highly competitive program that allows employees to become full-time students with no work requirement requiring a strong commitment from each participant. Upon graduation and reintegration into the NSWC Crane workforce, participants to conduct research, publish, and garner personal and organizational recognition of technical expertise.

LEADERSHIP DEVELOPMENT PROGRAMS:

NSWC Crane provides multiple Leadership Development opportunities that are targeted for both employee and management personnel. NSWC Crane leadership also encourages NSWC Crane employees to participate in offsite Leadership Development Opportunities, such as those sponsored by Department of Navy (DoN) or NAVSEA. Leadership Development plays an important role in the career enhancement of our employees as well as succession planning for the Command.

MASTER OF SCIENCE IN SYSTEMS ENGINEERING (MSSE):

The Master of Science in Systems Engineering (MSSE) program is an interdisciplinary leadership program offered by Naval Post Graduate School. It is designed for senior engineering and technical professionals to provide a holistic perspective and knowledge base of the total life-cycle acquisition system. The MSSE is a 24-month program. Students take two courses per quarter, once a week. It consists of 16 courses and 48 credit hours, which will culminate in a Masters Degree and will apply toward Acquisition Certification. Courses are taught using a blended approach of distance learning that includes video tele-education and some web-based education. The Capstone Design Project substitutes the thesis requirement and is tailored to meet Command corporate needs. Students work as teams on the project and provide briefings and written papers to Command corporate leadership.

STUDENT PROGRAMS

SSEP – The Student STEM Employment Program is NSWC Crane's internship program for undergraduate and graduate degree seeking students enrolled in scientific, technical, engineering, or mathematics majors. Students can work full-time or part-time. Students may work year-round or during the summers and go on Leave Without Pay to return to school in the fall and spring. There is no need to reapply once selected, and your internship can continue each summer until you graduate. SSEP employees also have the opportunity to a Full-Time Government employee following graduation.

SMART Scholarship Program – The SMART Scholarship Program offers scholarships for bachelors, masters and PhD students pursuing STEM. While in school, students will receive full tuition, monthly stipends, health insurance and book allowances, as well as summer internships that range from 8 to 12 weeks. Upon degree completion, scholars begin working in a civilian position with their sponsoring facility. The internships and work experience allow scholars the opportunity to learn from the greatest minds in STEM and defense. Not only do scholars pursue their passions in their respective field during their educational phase, but they begin a journey towards an empowering career to protect national security.

<u>NREIP</u> – The Naval Research Enterprise Program is a tenweek intern program is designed to provide opportunities for undergraduate and graduate students to participate in research, under the guidance of an appropriate mentor, at a participating Navy laboratory. NSWC Crane is offering summer appointments at a Navy lab to current sophomores, juniors, seniors and graduate students from participating schools.

<u>SEAP</u> – The Science and Engineering Apprenticeship Program offers select high school students a unique opportunity to explore and pursue careers in science and technology by opening to NSWC Crane's vast, varied resources and by allowing students to spend eight weeks working full-time on unclassified tasks.

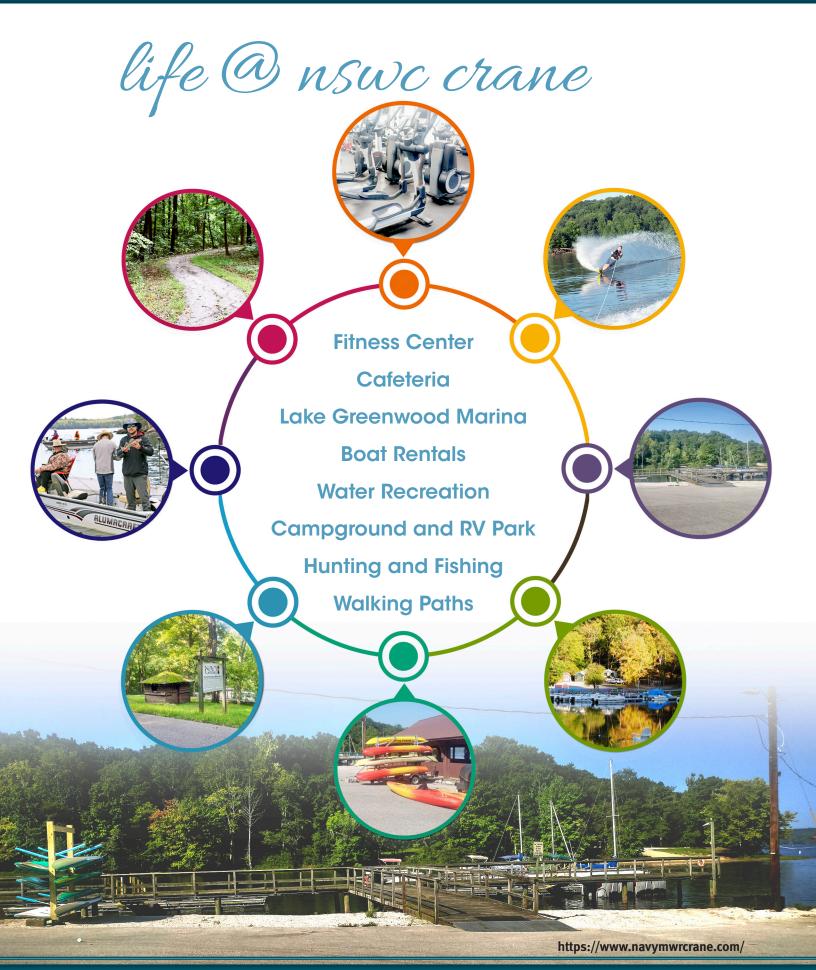
Interning at NSWC Crane has been an eye-opening experience. I was able to assimilate with professionals in my field of study, and integrate into the "professional" domain. While interning, I became competent in skills not taught at my university, and was able to network with extremely helpful engineers. A very unique aspect of Crane is their endless effort to educate, and provide endless promotion and rotation opportunities for the scientist and engineers. I thank Team Crane, the engineers, scientist, and supervisors I encountered for this new experience.

- Lauryn, Mechanical Engineering Intern

REASONS to work for the FEDERAL GOVERNMENT

Make A DIFFERENCE!

- (1) Impacting Lives Federal employees play a huge role in securing our Homeland and disrupting those who work to destroy the freedom we experience in America.
- (2) Great Benefits Average federal salaries are competitive with the private and nonprofit sectors with growth opportunities for top candidates. Federal benefits include premiere health insurance, retirement and paid time off are extremely competitive with the private sector.
- (3) The Government is Hiring The Department of the Navy has hired more than 41k employees this last year and projects to meet or exceed these numbers in the coming years.
- (4) Location, Location, Location Federal job opportunities are all over the world with the opportunity to travel from your local duty station to support the mission in a variety of ways.
- (5) Jobs for Every Major Federal jobs are not only for the scientists and engineers! Jobs exist in most career fields from administrative to business to natural resources.
- (6) Opportunities for Advancement and Professional Development Career advancement and educational opportunities are available in the federal government. Promotions and educational programs, while competitive, are open to everyone with a desire to improve their skills and knowledge base.
- (7) Interesting and Challenging Work Today's federal employees are on the leading edge of innovative technology development, often partnering with industry to develop game-changing solutions for the Nation.
- (8) Work/Life Balance Flexible work schedules, including telework are a major plus for those with busy schedules or long commutes. Generous vacation time and sick leave coupled with federal holidays make government employment attractive for successfully balancing our work and personal lives.
- (9) Job Security Federal work is secure, offering the ability to build a stable career and lifestyle.
- (10) Student Loan Public Student Loan Forgiveness of direct loans may be granted after 120 qualifying payments under a qualifying repayment plan while working full-time for the Federal government.



leading the way in technology and educational advancement

NSWC Crane takes great pride in working directly with the Warfighter during training exercises and technology application events. Innovation and Sensor Fusion events, such as the one pictured here held at NSWC Crane, Camp Atterbury in Edinburgh, Indiana and Muscatatuck Urban Training Center provides scientists and engineers the opportunity to test in a low-risk environment and evaluate their technological innovations at the research and development level before their technologies become militarized and integrated at the operational level.

NSWC Crane internally defined, designed and developed technical career paths which accelerate the learning and experience of Engineers and Scientists with 84 completing Level I Certification. The program is a technical certification approach modeled after the personnel qualification standards for entry-level engineers and scientists. The certification is a

commitment from the organization to invest in employees to offer career growth and development opportunities.

NSWC Crane has developed dedicated lab space for rapid innovation and experimentation, most notably the Rapid Innovation Prototyping Laboratory (RIPL), which consists of 8,636 square feet of open space architecture.

Future investments include a dedicated innovative and collaborative office space for Science & Technology to be used to swarm emerging technical challenges that threaten on-time delivery of critical operational mission capabilities to the fleet.









testimonials

NSWC Crane has a unique and welcoming culture for interns that is focused on our growth as students and professionals. I was never treated like "just an intern." I was placed on a real career path, got real projects with an impact, and truly felt like a part of the team. I was included in peer and intern groups that made collective decisions about our internships and hosted social events. All the while, my colleagues and supervisors made sure I was getting the support I needed and that I learned as much as I could. It was obvious that NSWC Crane cared about me and my peers!

- Jonathan, Electrical Engineering Intern

Choosing NSWC Crane was one of the best decisions I've made. As a Hispanic from Florida, NSWC Crane has been welcoming with supervisors/mentors helping me in every way possible to improve as an engineer and be inclusive in the workforce. NSWC Crane offered me exciting tasking/projects and to be involved in leadership roles. I have always been passionate on helping people making a difference and knowing that I will be supporting the Warfighter pushes me to do my best.

- Luis, Mechanical Engineer

"Interning for NSWC Crane is one of the best decisions I have made for my education. I am surrounded by friendly, well-educated people while working on projects that actually matter. I have also been connected with people across disciplines to talk to about their careers in order to help me decide what path I want to take for my career. Overall, I would highly recommend that you apply!"

- Jasmine, Computer Engineering Intern

I believe my story at Crane is a success story and I want to share my experience to help make others a success story too. Especially those from diverse backgrounds... Don't be intimidated with the mission and the work that we do because Crane is like a community, there is always someone out there to support you.

- Cherelle, Acquisition Specialist

The SECRET of Getting Ahead is

GETTING STARTED.

- Mark Twain





https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Crane/Careers



















