

BUILDSUBMARINES

CAREERS THAT BUILD THE FLEET

A FAMILY GUIDE TO UNDERSTANDING **THE SUBMARINE INDUSTRIAL BASE**



CONTENTS

Start Here: A Quick Guide for Families 3

The Nation Behind the Navy: What is the Submarine Industrial Base 6

Careers with Purpose: Building Ships, Submarines, & Futures 13

Many Paths, One Future: Exploring Post-Secondary Options 19

Charting the Course: How Families Can Support Career Exploration 27

BuildSubmarines.com: Explore Careers, Skills, and Opportunities 34

Next Steps: Inspiring Futures, One Step at a Time 35



START HERE:

A QUICK GUIDE FOR FAMILIES

WHAT IS THE SUBMARINE INDUSTRIAL BASE?

The submarine industrial base supports a nationwide network of companies and workers who design, build, repair, and sustain the U.S. Navy's ships and submarines. This work is done by more than 20,000 businesses in all 50 states, from small manufacturers and machine shops to high-tech engineering and software firms. While ships are assembled at shipyards, most jobs are located inland, in local communities across the country.

Important to know: These are civilian careers, not military enlistment.

WHY THIS MATTERS FOR YOUR CHILD

The submarine industrial base offers one of the strongest career ecosystems in the U.S., providing:

- Purpose-driven, high-demand careers that support national security and offer competitive wages and benefits
- Opportunities available nationwide, allowing students to build meaningful careers anywhere
- Multiple pathways and future-ready skills, including skilled trades, technical training, two- and four-year college, and advanced manufacturing and technology

The submarine industrial base must hire tens of thousands of workers each year, creating long-term opportunities for today's students.

KEY CAREER PATHWAYS

Students with any interest can find a fit, including:

- Skilled Trades – welding, machining, electrical, maintenance, quality control, 3D printing
- Engineering & Technology – mechanical, electrical, software, cybersecurity, robotics
- Business & Operations – supply chain, logistics, project management, finance, HR

These careers are essential to innovation, safety, and readiness—and many include paid training and clear advancement.

SIMPLE STEPS FAMILIES CAN TAKE

- Focus on interests, not job titles
- Encourage hands-on experiences (CTE, clubs, robotics, job shadowing)
- Explore all pathways together - apprenticeships, two-year, four-year, or later-in-life training - Reinforcing that all paths are valid and respected

WHERE TO LEARN MORE

Visit **BuildSubmarines.com**, the official hub for maritime careers and education pathways. Families can explore careers, salaries, training options, videos, and tools designed specifically for students and parents.



THE BOTTOM LINE

The submarine industrial base offers students purpose, stability, and long-term opportunity in communities across the country—no enlistment required. This guide is designed to help families see what's possible and confidently explore career and education pathways that support America's fleet. Use this page as your starting point, then explore the full guide to learn more.



THE NATION BEHIND THE NAVY:

WHAT IS THE **SUBMARINE INDUSTRIAL BASE?**

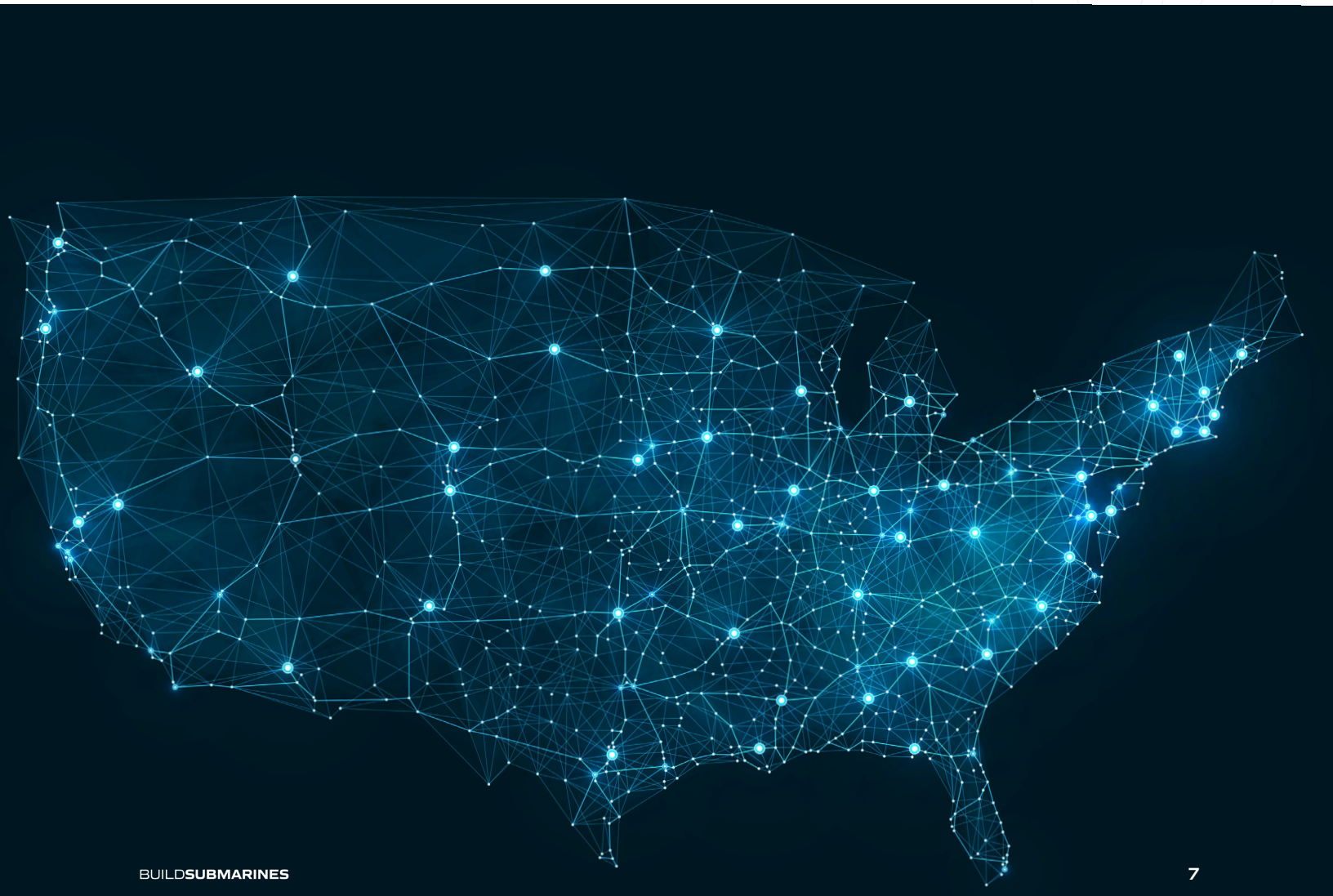
The submarine industrial base is the vast, interconnected supply chain network of companies, suppliers, manufacturers, innovators, and skilled professionals responsible for building, repairing, and sustaining the U.S. Navy's submarines.

The submarine industrial base includes more than 20,000 businesses across all 50 states—large corporations, small manufacturers, machine shops, robotics companies, weld shops, engineering firms, and high-tech startups. Although many people imagine shipyards on the coast, most of the work that makes our Navy possible actually happens in local communities far from the shoreline.

THE SUBMARINE INDUSTRIAL BASE PRODUCES AND SUPPORTS

- High-tech electronics, sensors, and control systems
- Advanced materials, composites, and specialized metals
- Precision-machined parts and weldments
- Robotics and automation systems
- Software, cybersecurity tools, and digital engineering
- Supply chain and logistics operations
- Skilled trades such as welding, machining, electrical work, and fabrication
- Professional engineering, design and naval architecture

Every part, bolt, wire, microchip, and system that goes into a submarine comes from this nationwide network.



WHAT THE **SUBMARINE INDUSTRIAL BASE PROGRAM OFFICE** DOES

The Submarine Industrial Base (SIB) Program Office strengthens the nation's ability to build and sustain the U.S. Navy's submarines by supporting the companies, technologies, and people that make up the submarine Industrial base.

While the Navy recruits sailors, shipbuilders and suppliers across America build the ships. The SIB Program Office was created to address challenges that directly impact our ability to build ships and submarines on time. The Program focuses on three major lines of effort—each essential to national security, economic strength, and career opportunity for American families.

1. STRENGTHENING AMERICA'S SUPPLIERS (SUPPLIER DEVELOPMENT)

The SIB Program Office invests directly in the companies that produce the critical parts and materials that keep submarine production on track. This includes more than 20,000 suppliers across all 50 states—from machine shops and weld shops to engineering firms, robotics companies, and high-tech manufacturers.

THROUGH SUPPLIER DEVELOPMENT, THE SIB PROGRAM OFFICE

- Supports suppliers to improve performance and increase efficiency
- Adds new capability and capacity to existing suppliers so they can do more
- Helps develop new suppliers so we have more companies supporting the supply chain
- Improves first-time quality to make sure our ships meet strict standards which keep our sailors safe
- Continuously assesses how our suppliers are doing with the products they are producing for the Navy

This effort ensures the Navy has a stable, reliable flow of parts—every bolt, wire, circuit, casting, forging, and component needed to build the fleet safely and on schedule.

2. ACCELERATING INNOVATION THROUGH ADVANCED MANUFACTURING

The SIB Program Office is leading national efforts to modernize shipbuilding using technology such as additive manufacturing (3D printing), digital engineering, robotics, and other smart technology such as Artificial Intelligence (AI). These tools reduce slowdowns in manufacturing steps like shaping and forming metal (casting and forging), shortening timelines from years to just months. Modernizing shipbuilding will help build submarines faster.

KEY INITIATIVES INCLUDE

- Produce replacement parts using 3D printing to reduce the amount of time a ship is docked for maintenance.
- Supporting the AM Center of Excellence in Danville, VA, which is the hub of 3D printing and testing for the submarine industrial base
- Enabling the installation of 15+ additively manufactured parts on Navy vessels that meet the same standard as formerly machined parts
- Deploying digital solutions—robotics, automated inspection, advanced sensors—to improve quality, speed, safety, and readiness

These innovations create new types of careers for students, careers in automation, robotics, AI-enhanced manufacturing, and digital engineering.

3. BUILDING THE WORKFORCE OUR NATION NEEDS (WORKFORCE DEVELOPMENT)

The submarine industrial base must hire 25,000 workers every year—more than 250,000 workers in the next decade—to sustain shipbuilding and repair. With an aging workforce and a shrinking manufacturing sector, the SIB Program Office invests heavily in developing the next generation of talent. While the Navy continues their efforts to recruit sailors, the SIB Program Office focuses on skilled trades education and training.

WORKFORCE DEVELOPMENT EFFORTS INCLUDE

- Launching 150+ workforce initiatives, including training programs, regional training pipelines, and expanded trade school and university partnerships
- Reaching 2.3 million career seekers nationwide through BuildSubmarines.com
- Providing hands-on, early learning experiences—reaching over 25,000 K–12 students across 30 states through school curriculum, camps, activities, kits, and maritime career programs

These efforts ensure students—from elementary school to early career adults—are aware of the many opportunities available in submarine manufacturing.

SEPARATING MYTH FROM MISSION

Myth: “This is a Navy recruiting program.”

Fact: It’s not.

Students exploring submarine manufacturing can utilize these skills in civilian careers, working for American companies—private businesses, manufacturers, engineering firms, and technology companies—not for the military. While many of these careers can be found within the Navy’s ranks, there is no enlistment, no military service requirement, and no obligation to join the Navy.

Myth: “You have to move to a shipyard or live near the coast.”

Fact: You absolutely do not.

Because nearly every component of a submarine or surface ship comes from companies spread across the entire country, most submarine industrial base careers are located inland, often in small and mid-sized communities. Students can build meaningful, stable careers right in their home state, contributing to national security without relocating.

Myth: “These are only welding or heavy construction jobs.”

Fact: Skilled trades are essential, but the submarine industrial base includes hundreds of career types, including engineering, cybersecurity, robotics, business operations, drafting, logistics, quality assurance, and more.







THE BOTTOM LINE

THE SUBMARINE INDUSTRIAL BASE PROGRAM OFFICE EXISTS TO

- Strengthen the companies that build our fleet
- Modernize manufacturing through cutting-edge technology
- Recruit, train, and inspire the workforce our nation needs

It is an investment in American manufacturing, American workers, and American communities—offering high-quality, purpose-driven careers that support national security without requiring relocation or military service.

WHY THIS MATTERS FOR FAMILIES

The submarine industrial base represents one of the nation's most important—yet often unseen—career ecosystems. For families, it means access to opportunities that are stable, future-focused, mission-driven, and available in communities across all 50 states. These are not abstract or far-off careers; they are real, hands-on, high-tech, and high-opportunity jobs that students can pursue through multiple post-secondary pathways.

The submarine industrial base matters for families because it offers students the chance to:

01. **WORK WITH ADVANCED TECHNOLOGIES**
Students can engage with robotics, automation, additive manufacturing, digital engineering, cybersecurity, and other cutting-edge tools shaping the future of American innovation.

02. **CONTRIBUTE TO NATIONAL DEFENSE AND PUBLIC SERVICE—WITHOUT MILITARY ENLISTMENT**
By helping build and sustain the Navy's fleet, students are part of a powerful mission that protects the country while working in civilian careers at American companies.

03. **BUILD A STABLE, MEANINGFUL LONG-TERM CAREER**
Submarine manufacturing jobs offer competitive wages, benefits, career ladders, paid training, and tuition-supported pathways that lead to lifelong professional growth.

04. **STAY ROOTED IN THEIR HOME COMMUNITY**
The submarine industrial base needs talent everywhere. Because suppliers operate in all 50 states, students can support the Navy's mission and build a great career from almost any community in the country.

05. **CHOOSE THE PATHWAY THAT FITS THEM BEST**
Whether a student is hands-on, analytical, creative, technical, or entrepreneurial, there is a pathway—CTE programs, apprenticeships, two-year degrees, four-year degrees, or reskilling opportunities later in life.

06. **GROW IN AN INDUSTRY THAT NEEDS THEM**
The submarine industrial base must hire tens of thousands of workers annually over the next decade. This demand creates strong job security and significant advancement potential for students entering the field.

For families, the message is simple: submarine industrial base careers offer purpose, stability, and opportunity, blending cutting-edge innovation with real-world impact. These careers support national security, strengthen local economies, and provide students with a sense of belonging and pride—knowing their work contributes to something bigger than themselves.



CAREERS WITH PURPOSE:

BUILDING **SHIPS**, **SUBMARINES, & FUTURES**

Students with a wide range of interests, strengths, and learning styles can find a meaningful pathway in the submarine industrial base. Whether they enjoy building things, solving problems, designing systems, using technology, or working through complex problems, there is a role for them. Thousands of companies nationwide support the submarine industrial base, and many of these careers can be explored through the following career categories.

SKILLED TRADES CAREERS

Students who enjoy working with their hands, solving practical problems, building or repairing things, or operating tools and machinery can thrive in skilled trades careers within the submarine industrial base. These roles are essential to turning engineering designs into real, mission-ready submarines—and they offer strong wages, paid training, and excellent long-term stability. The examples below highlight some of the most in-demand skilled trades that support submarine manufacturing today.

CAREERS	AVERAGE ANNUAL WAGE	RESPONSIBILITIES
Welders, Cutters & Brazers	**~$51,000**	Build and join metal components used in submarines, engines, and structural assemblies
Machinists & CNC Operators	**$47,000 –$55,000**	Use advanced machinery to create precise metal and composite parts.
Industrial Maintenance & Mechatronics Technicians	**$60,000 –$75,000+**	Repair and maintain robots, factory equipment, and automated systems.
Electrical & Electronics Technicians	**~$64,790**	Install, troubleshoot, and test electrical systems, sensors, and controls.
Quality Assurance Inspectors	**$45,000 –$60,000**	Ensure every part meets safety and performance standards—a critical role for national security.
Additive Manufacturing / 3D Printing Technicians	**$50,000 –$70,000+**	Produce complex components using cutting-edge manufacturing technologies.

WHY THESE ROLES MATTER

Skilled trades professionals are the backbone of submarine production. They cut, weld, shape, assemble, install, wire, test, and inspect the thousands of components that make each vessel safe and mission ready. Without these hands-on experts—welders, machinists, electricians, fabricators, inspectors—no engineering design could ever become a working ship. Their craftsmanship directly affects the quality, reliability, and safety of every vessel in the fleet.



EDUCATION PATHWAYS

Most skilled trades careers **do not** require a four-year degree. Students can start through a combination of:

- Career & Technical Education (CTE) programs
- Registered apprenticeships (earn while you learn)
- Trade and technical schools
- Industry-recognized certifications (AWS, NCCER, NIMS, OSHA, etc.)
- Two-year associate programs in technical fields
- On-the-job training through employers

Many workers advance quickly, gaining higher pay, leadership roles, and specialized credentials over time.

ENGINEERING & DESIGN CAREERS

Students inclined toward math, science, design, systems thinking, or high-tech work can grow into engineering and STEM roles with strong compensation and long-term growth.

CAREERS	AVERAGE ANNUAL WAGE	RESPONSIBILITIES
Mechanical Engineers	**~$99,510**	Design, test, and improve mechanical systems and components used in submarines and manufacturing
Electrical & Electronics Engineers	**~$99,510**	Develop and maintain electrical systems, controls, sensors, and power distribution
Industrial Engineers	**~$108,950**	Improve manufacturing processes, efficiency, safety, and workflow
Industrial Engineers	**~$101,140**	Analyze systems and data to reduce waste and optimize production
Materials & Chemical Engineers	**$106,000–$120,000**	Develop and test materials, coatings, and processes for performance and durability
Computer Scientists & Software Developers	**$120,000–$150,000+**	Build software, automation, and digital tools that support design and manufacturing
Cybersecurity Analysts	**~$120,360**	Protect systems, networks, and data from cyber threats
Naval Architects & Marine Engineers	**~$99,960**	Design submarine structures, systems, and performance characteristics

WHY THESE ROLES MATTER

Engineers and technologists design and integrate the complex systems—propulsion, electronics, hull design, automation, digital control, cybersecurity—that make modern naval vessels effective, safe, and future-ready.

EDUCATION PATHWAYS

These careers typically require associate or bachelor's degrees (or higher)—but many also value technical certifications, apprenticeships, and hands-on experience.

BUSINESS, LOGISTICS & OPERATIONS CAREERS

Not all valuable submarine industrial base jobs are “on the shop floor” or “at the bench.” Behind the scenes, strong business, logistics, and operations professionals are critical to keep the supply chain, procurement, manufacturing, and project delivery running smoothly.

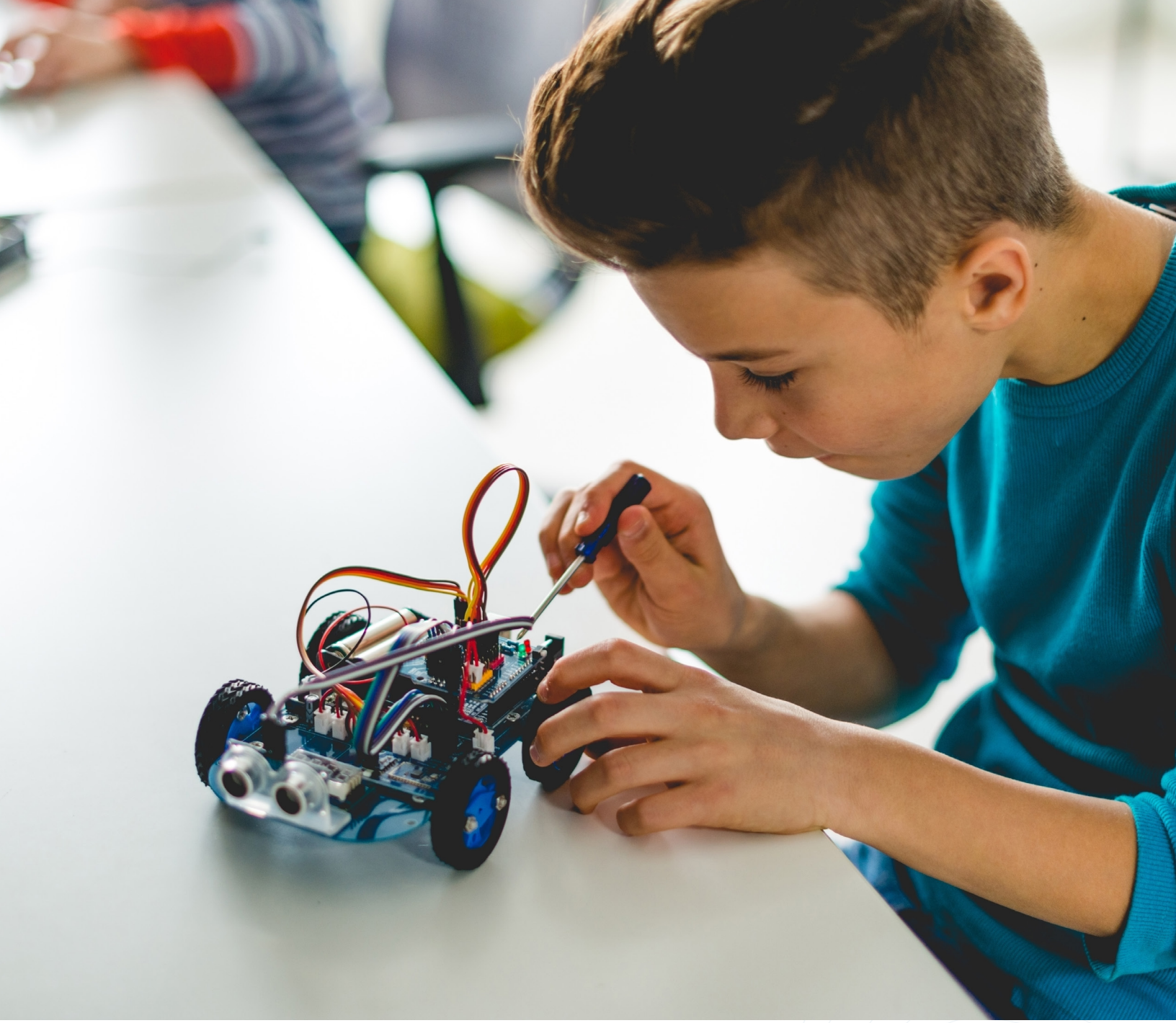
CAREERS	AVERAGE ANNUAL WAGE	RESPONSIBILITIES
Logisticians / Supply Chain Specialists	**~$80,880**	Plan and coordinate the flow of materials, parts, and information
Project Managers	**$75,000 –$120,000**	Plan, schedule, and oversee projects from start to completion
Procurement & Contracting Professionals	**$70,000 –$100,000**	Source materials, manage contracts, and work with suppliers
Electrical & Electronics Technicians	**~$64,790**	Install, troubleshoot, and test electrical systems, sensors, and controls.
Quality Assurance Inspectors	**$45,000 –$60,000**	Ensure every part meets safety and performance standards—a critical role for national security.
Business Operations, Finance & HR Specialists	**$60,000 –$90,000**	Support daily operations, finances, and workforce management

WHY THESE ROLES MATTER

Even the most advanced submarine depends on a robust network of suppliers, timely delivery of parts, careful project scheduling, quality assurance, and efficient coordination. Business and operations specialists ensure that components are available when needed, budgets are met, and projects deliver on time—making them as critical as welders or engineers.

CAREER ENTRY PATHS

Some roles may require a bachelor’s degree (e.g., business management, logistics, supply chain management) or relevant certifications; some may grow from technician or administrative roles into leadership over time.



HOW TO USE THIS INFO WHEN **TALKING WITH YOUR CHILD**

When you share submarine industrial base career options with your child—whether at parent-teacher nights, career fairs, or casual conversations—you can highlight that:

- Careers in these fields offer stability, growth, and purpose (building parts of submarines, contributing to national security, working with cutting-edge technology).
- Students with a range of skills and interests—mechanical, electrical, analytical, technical, business-minded—can find a place in the submarine industrial base.



MANY PATHS, ONE FUTURE:

POST-SECONDARY **OPTIONS**

The submarine industrial base thrives because its workforce is built from many different experiences, educational backgrounds, and entry points. There is no single path into this industry. Students can begin their journey through the post-secondary option that best aligns with their interests, learning style, and family circumstances—and grow from there.

Modern manufacturing and maritime technology demand a wide range of skills: technical ability, digital literacy, communication, problem-solving, teamwork, and adaptability. Because these skills can be developed in many ways, our understanding of "post-secondary education" must expand. Today's workforce is shaped by multiple pathways, flexible timelines, and lifelong learning, not a one-size-fits-all model.

RETHINKING POST-SECONDARY EDUCATION
A MODERN, FLEXIBLE APPROACH

For decades, "college" was narrowly associated with attending a four-year university immediately after high school. But today, post-secondary education is far more diverse and accessible. Students and adults can build skills through:

- Trade schools
- Community colleges
- Technical institutes
- Registered apprenticeships
- Industry-recognized certification programs
- Competency-based and skills-based training
- Online and hybrid learning
- Workforce development programs
- Military education and training
- Four-year universities
- Returning to school later in life

All of these are valid, valuable, and respected pathways into high-wage careers in the submarine industrial base.

EDUCATION ISN'T LINEAR—IT'S LIFELONG

Research from the National Center for Education Statistics (NCES) shows that post-secondary learning is no longer a one-time event:

- Nearly 40% of undergraduates are now considered "nontraditional" students—adult learners, part-time students, parents, veterans, and career changers.
- Enrollment among students aged 25+ continues to increase, especially in community colleges and online programs.
- Millions of Americans return to school for retraining and upskilling as technology and workforce needs evolve.
- The average apprenticeship participant is 28, showing that technical training often happens later in life—not just right after high school.

These trends reinforce a powerful message for families: There is no "too late" and no single timeline for success.

Students might begin their careers right after high school, enter through military service, take time to work before continuing their education, or return years later to change careers. Every pathway is valid.



GROWTH PATHWAYS
START ANYWHERE, GROW EVERYWHERE

Submarine manufacturing careers are built on continuous learning, and every entry point offers room to grow. A student might:

- Start in a CTE welding program and later earn an advanced manufacturing certificate
- Begin as a machinist apprentice and work their way into robotics or mechatronics
- Earn a two-year degree as an engineering technician, then complete a bachelor's degree later
- Start in logistics or admin roles and grow into project management or procurement
- Transition from military technical training into high-demand civilian roles
- Return to school as an adult to shift into cyber, automation, or engineering tech careers

In the submarine industrial base, skills stack, experience compounds, and employers value workers who continue to learn. No matter the starting point, every career in the submarine industrial base requires ongoing professional development to keep pace with evolving technologies.

MORE THAN ONE WAY TO GET THERE

Students have multiple paths into high-wage, high-demand maritime careers. Whether they choose technical training, a two-year degree, a four-year degree, or military experience, each route builds skills that the industry needs.

CAREER & TECHNICAL EDUCATION (CTE) PATHWAYS

CTE programs give students hands-on experience and direct connections to industry needs—often while still in high school.

COMMON CTE AREAS THAT SUPPORT SUBMARINE INDUSTRIAL BASE CAREERS

- Welding, machining, fabrication
- Construction, HVAC, maritime trades
- Robotics, mechatronics, automation
- Aerospace, engineering technology
- Cybersecurity, IT, networking
- CAD, drafting, digital design

CREDENTIALS MAY INCLUDE

- NIMS (metalworking)
- AWS (welding)
- NCCER (construction & trades)
- OSHA (safety)
- CompTIA (IT/cyber)

CTE students can often graduate career-ready, with internship experience, industry certifications, and a head start on post-secondary pathways.



TWO-YEAR POST-SECONDARY PATHWAYS

Community and technical colleges offer flexible, affordable programs that lead to high-demand positions within the submarine industrial base.

EXAMPLES INCLUDE

- Engineering technologies
- Mechatronics and industrial automation
- Electrical and electronics systems
- Machine tool technology
- Advanced manufacturing
- Cybersecurity and information systems
- Maritime technology

Graduates often move into roles with salaries well above the national median. These programs frequently articulate into bachelor's degrees if students choose to continue later.





FOUR-YEAR POST-SECONDARY PATHWAYS

Four-year programs are ideal for students interested in design, systems thinking, analysis, and leadership roles.

PROGRAMS ALIGNED WITH SUBMARINE INDUSTRIAL BASE NEEDS

- Mechanical, electrical, and civil engineering
- Chemical and materials engineering
- Computer science, IT, software development
- Cybersecurity
- Systems engineering
- Naval architecture
- Business management, supply chain, finance

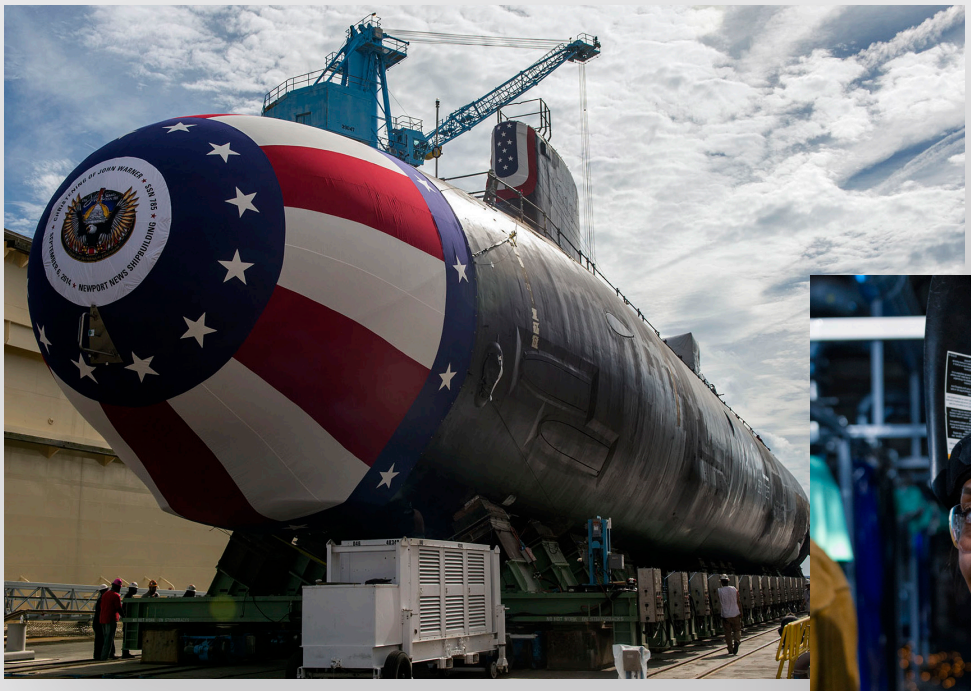
Graduates contribute to innovation, research, complex system integration, and leadership within the maritime sector.

MILITARY PATHWAYS (OPTIONAL—NOT REQUIRED)

SOME STUDENTS PURSUE TECHNICAL EXPERIENCE THROUGH THE MILITARY, GAINING SKILLS IN

- Nuclear operations
- Mechanical and electrical systems
- Cybersecurity
- Electronics and communications
- Leadership and logistics

This pathway is entirely optional; submarine industrial base careers do not require enlistment, and most workers enter through civilian post-secondary routes. However, for students who choose it, military service can be an excellent way to gain technical experience, leadership skills, and advanced training that translate directly into high-demand civilian careers.







THE BOTTOM LINE FOR FAMILIES

Education today is flexible, adaptive, and built for different learners. Students can begin their journey through CTE programs, apprenticeships, two- or four-year colleges, military training, or by returning to school later in life—and arrive at strong, high-wage careers in the submarine industrial base. Families play a critical role in helping students recognize these options and feel confident choosing the path that aligns with their talents, values, and goals.



CHARTING THE COURSE:

HOW FAMILIES CAN SUPPORT **CAREER EXPLORATION**

Parents and caregivers play one of the most influential roles in a child's career development. The conversations you start, the opportunities you encourage, and the messages you reinforce can shape how your child sees their own skills, interests, and future possibilities. The goal is not to choose a career for your child, but to help them discover what excites them, what they're naturally good at, and what paths can lead to a fulfilling and stable future. As much as we need people to build Navy submarines, it is more important to attract the right people who are aligned with the mission and want to make a meaningful contribution while earning a livable wage.

Below are meaningful ways parents can support exploration—especially in high-demand fields like maritime manufacturing, engineering, advanced technology, and skilled trades.

Today's workforce is shaped by multiple pathways, flexible timelines, and lifelong learning, not a one-size-fits-all model.

01.
TALK ABOUT THEIR INTERESTS IN MEANINGFUL WAYS

Conversation is one of the most powerful tools for career discovery. Instead of asking, "What do you want to be when you grow up?"—which can feel overwhelming—ask questions that help your child think about their strengths and preferences.

HELPFUL QUESTIONS INCLUDE

- What types of problems do you enjoy solving?
- Do you like building things, fixing things, or understanding how things work?
- Do you prefer working with your hands or on a computer?
- What kinds of challenges make you feel excited or motivated?
- Do you like designing, organizing, coding, leading, or creating?

You may start to see patterns—mechanical thinking, creativity, curiosity, leadership, detail orientation—that align well with many submarine industrial base careers.

TIP:
Don't pressure them to choose a specific career; instead, help them identify themes in their interests.



02.
ENCOURAGE HANDS-ON EXPERIENCES AND **REAL-WORLD LEARNING**

Career exploration becomes meaningful when students can **experience** careers, not just read or hear about them. Hands-on and real-world experiences help students build confidence, discover their strengths, and see how their interests connect to actual jobs. Many of these opportunities are **free or low-cost**, and families can access them right in their own communities.

CONSIDER ENCOURAGING PARTICIPATION IN

- Talking with professionals in your network—friends, family members, neighbors, coaches, or community leaders who work in skilled trades, technology, engineering, logistics, business, or manufacturing.
- Visiting local businesses during open houses, community events, or manufacturing day activities.
- Touring nearby training centers or community colleges, which often host free public events and demonstrations.
- Exploring online career videos on BuildSubmarines.com, YouTube channels from reputable STEM organizations, or manufacturer career pages.
- Encouraging students to repair or build things at home—bike repair, small woodworking projects, basic electronics kits, or DIY projects.
- Using free digital tools that teach coding, design, robotics, or engineering concepts.
- Participating in school-led clubs or teams, many of which are free or very low cost.

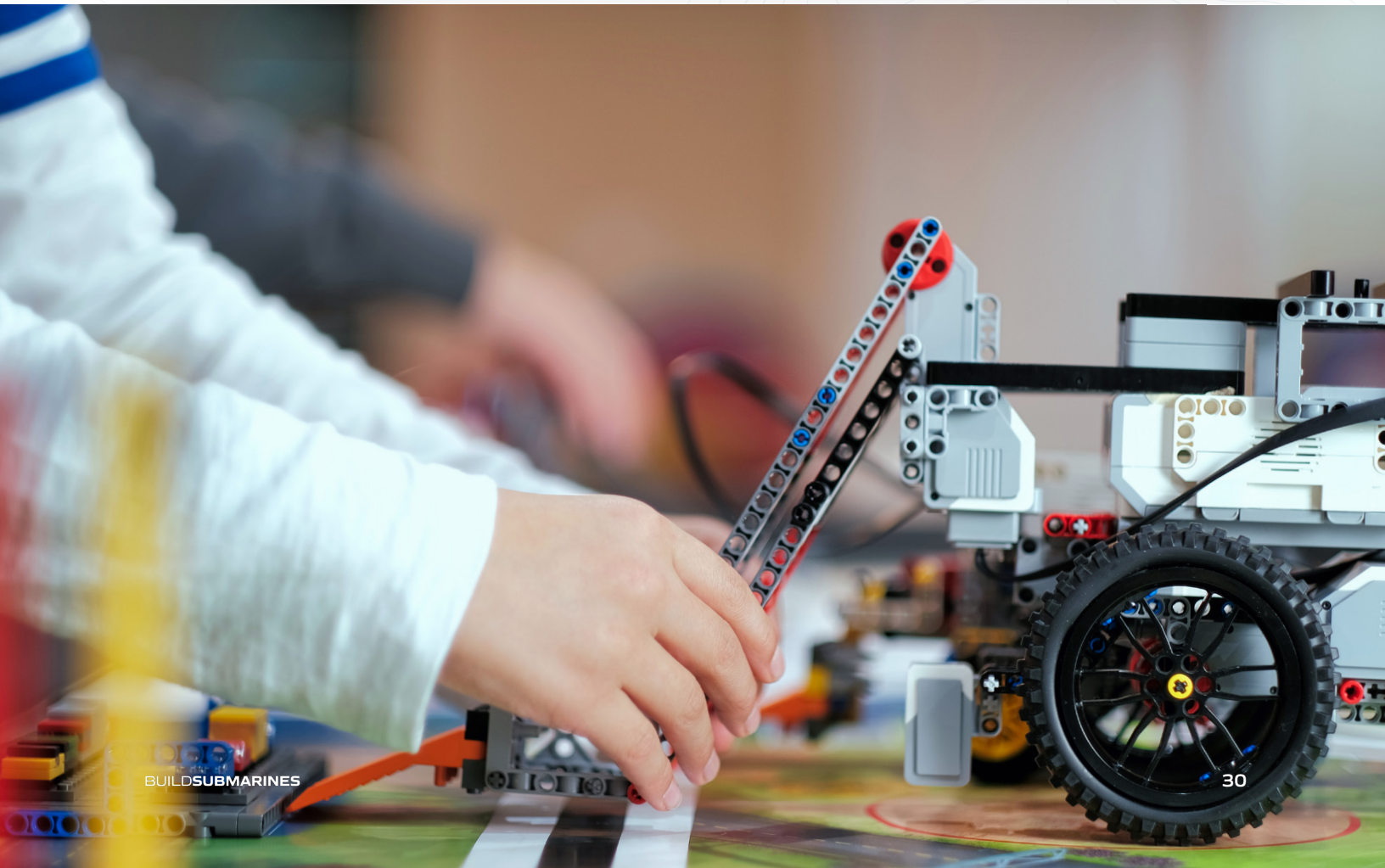


FREE OR SCHOLARSHIP-SUPPORTED PROGRAMS TO EXPLORE

- FIRST Robotics teams or local scrimmages (often free to observe or join)
- SkillsUSA events and competitions (many local chapters are free to join through school)
- Scouts BSA / Sea Cadets introductory activities or open events
- STEM nights at school, local libraries, museums, or community centers
- Maker fairs (many offer free entry and hands-on activities)

These experiences help students identify what they enjoy—whether it's building, designing, troubleshooting, coding, leading, or creating—and give them a clearer sense of the careers they may want to explore further. Parents and students can ask questions about training, wages, advancement, local opportunities, and the types of workers companies need most.

TIP:
Many organizations offer free participation, loaner equipment, or scholarships. Ask your school, library, or local community center about available support.



03.
EXPLORE **ACADEMIC AND TRAINING** OPTIONS TOGETHER

Students succeed when they can see a clear, achievable pathway. Parents can help by learning about the variety of options available in their state or region.

LOOK FOR OPPORTUNITIES SUCH AS

- Career & Technical Education (CTE) programs
  - Welding, machining, cybersecurity, robotics, maritime trades
- Dual-enrollment programs
  - Students can earn college credits while still in high school
- Career clusters and academies
  - Engineering, manufacturing, construction, IT, logistics
- Pre-apprenticeships and apprenticeships
  - Earn while you learn
- Work-based learning or job-shadowing
  - Many local companies partner with schools

TIP:
Treat academic pathways as exploration tools, not final decisions. Many students try multiple areas before settling on one.



04.
EMPHASIZE THAT ALL **PATHWAYS ARE VALID AND RESPECTABLE**

One of the most important roles parents play is shaping how students see different post-secondary options. Reinforcing that there are multiple valid, respected pathways relieves pressure and opens doors.

HELP YOUR CHILD UNDERSTAND

- Post-secondary education includes trade schools, apprenticeships, two-year colleges, online programs, military training, and/or four-year universities.
- A four-year degree is one option—not the only path to success.
- Skilled trades, technical careers, and apprenticeships offer strong wages, excellent benefits, and long-term stability.
- The submarine industrial base offers family-sustaining salaries, career advancement, and job security—**without requiring military enlistment or relocating to a coast or shipyard.**
- Many workers enter the field at 18; others retrain later in life. There is no "right" timeline.

TIP:

Celebrate all achievements equally—certifications, apprenticeships, associate degrees, military training, and bachelor's degrees all represent valuable learning.







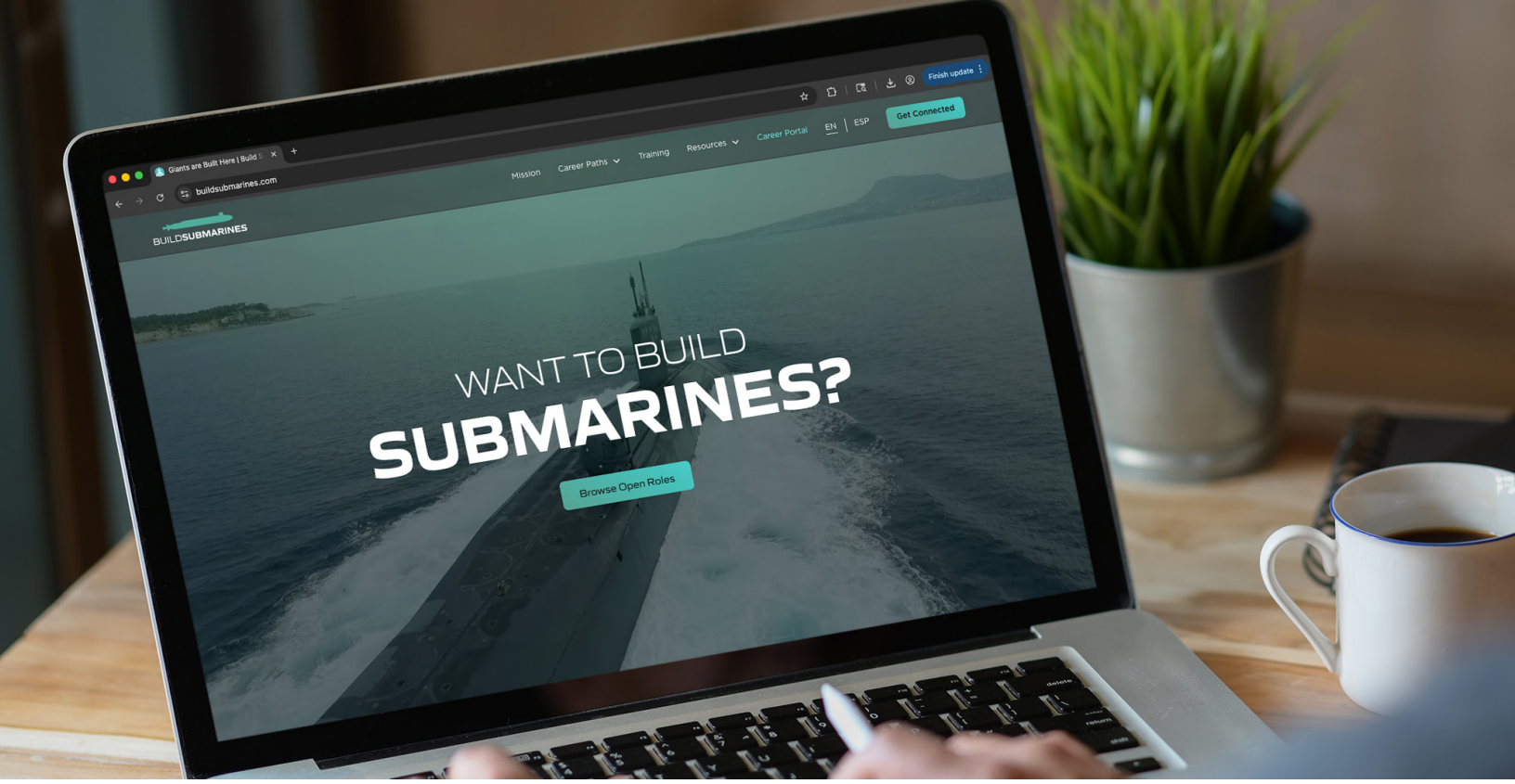
WHY THIS MATTERS

Parents don't need to be experts in submarine manufacturing or any of its related/supporting career fields. What matters most is creating a supportive environment where students feel encouraged to explore, ask questions, try new experiences, and imagine possibilities.

WITH THE RIGHT INFORMATION AND ENCOURAGEMENT, STUDENTS CAN DISCOVER CAREERS THAT

- Fit their unique strengths
- Offer purpose and meaning
- Provide financial stability
- Support national security and advanced innovation

Career exploration is a journey—and parents are one of the most influential guides along the way.



BUILDSUBMARINES.COM:

EXPLORE **CAREERS, SKILLS, AND OPPORTUNITIES**

BuildSubmarines.com is the official online hub for exploring careers, skills, and pathways across the submarine industrial base. Designed for parents, students, educators, and community partners, the site breaks down dozens of career options—from skilled trades and engineering to cybersecurity, logistics, and business operations—into easy-to-understand pathways. It gives families access to real career descriptions, salary ranges, required skills, and training routes, along with videos and stories from real workers. Students can also use interactive tools to match their interests with potential careers, explore local companies in their state, and see how classroom learning connects to real-world jobs.

Beyond career information, BuildSubmarines.com offers hands-on learning resources, digital missions, downloadable activities, and access to nationwide job postings, apprenticeships, internships, and training opportunities. The site helps families bust common myths about manufacturing, understand modern workforce needs, and discover high-wage careers available in all 50 states—not just near shipyards. The dedicated Education section provides roadmaps, skill-building activities, and clear next steps, making it an ideal starting point for conversations about interests, skills, and future goals.

Your child's future is full of possibilities—BuildSubmarines.com is a great place to begin exploring them together.

NEXT STEPS:
INSPIRING FUTURES, ONE STEP AT A TIME

The submarine manufacturing industry is growing—and it needs students with curiosity, creativity, and a desire to make a real impact. Families play a vital role in helping students understand what's possible and feel confident exploring career pathways that fit their strengths.

HERE'S HOW YOU CAN BEGIN EXPLORING OPPORTUNITIES TOGETHER

01. VISIT BUILDSUBMARINES.COM

Explore clear, easy-to-understand career pathways, salary ranges, skill requirements, training programs, and real stories from workers across the country. Students can also discover local companies in their state and use interactive tools to match their interests with potential careers. Don't miss the Education section for free activities and resources to support learning at home.

02. EXPLORE LOCAL OPTIONS

Look into Career & Technical Education (CTE) programs, dual-enrollment courses, apprenticeships, internships, and regional workforce training centers. These programs offer hands-on, real-world experiences that help students build confidence, skills, and career-ready credentials. Ask early about your student's K-12 school system's programming offered for manufacturing, STEM education, and career exploration to ensure your student can participate.

03. CONNECT INTERESTS TO FUTURE CAREERS

Talk with your child about what they enjoy—building, designing, coding, repairing, organizing, or problem-solving. Help them see how those interests translate into real careers across the submarine industrial base, from robotics and cybersecurity to welding, machining, project management, or engineering.

04. ENCOURAGE HANDS-ON EXPLORATION

Support participation in school clubs, robotics teams, maker events, STEM nights, or DIY projects at home. These activities give students a feel for what they like, builds technical and teamwork skills, and makes career exploration fun and engaging.

Every journey begins with one step—and families are essential partners in helping students discover pathways that lead to stability, purpose, and long-term opportunity.

Learn more at **BuildSubmarines.com/education**



BUILDSUBMARINES

Thank you for guiding and supporting your student. Your involvement not only shapes their future—it strengthens the mission by empowering the next generation of makers, builders, and innovators.