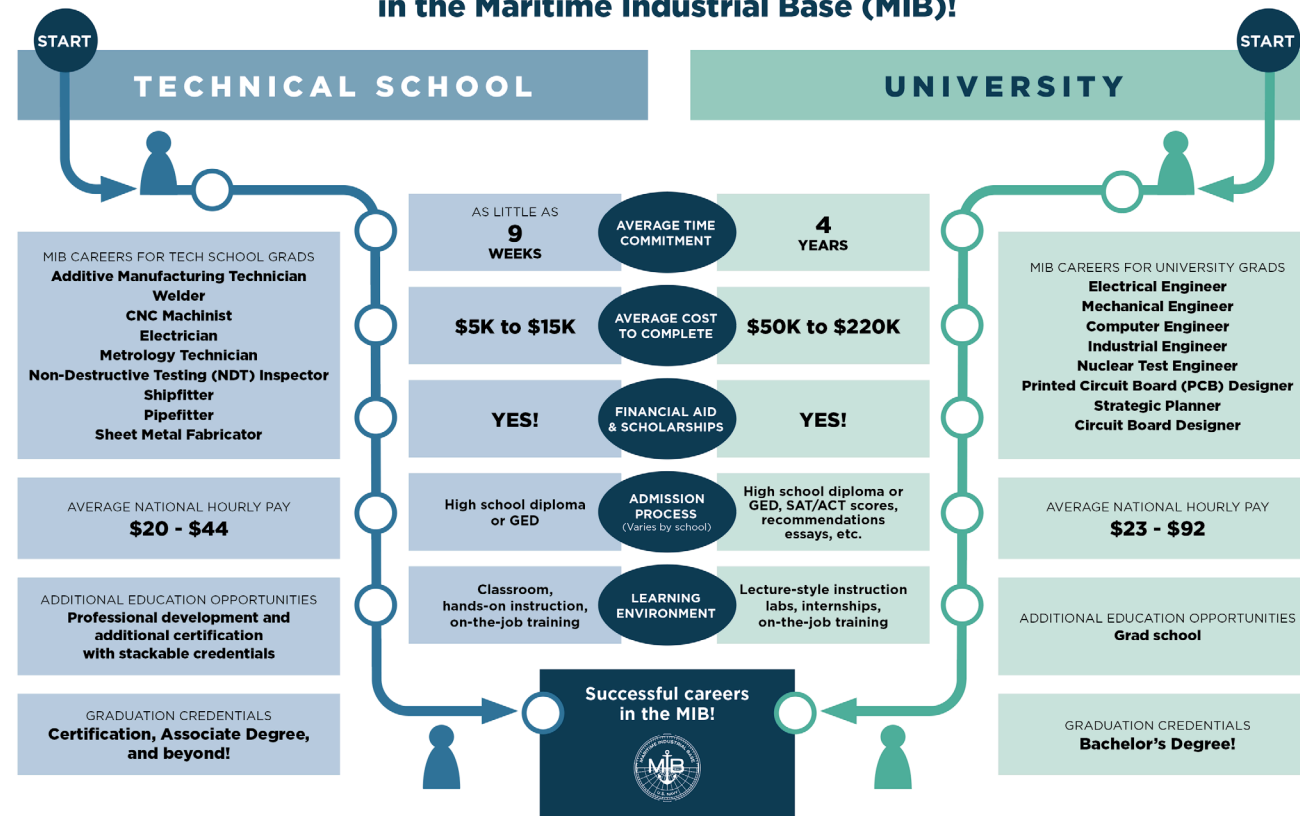


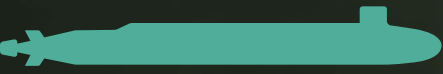
Pathways to high-paid, stable careers in the Maritime Industrial Base (MIB)!



Interested In Pursuing a Maritime Manufacturing Career?

If you are interested in pursuing a career in maritime manufacturing, here are a few next steps you can take toward your career goals.

1. Begin researching different career opportunities that contribute to the mission. A great place to start is the Career Portal on **BuildSubmarines.com**.
2. Consider job shadowing or internship opportunities with a professional to learn more about a day in their life.
3. Research the types of education and training required once you've narrowed down a specific career pathway you would like to pursue.
4. Contact technical schools, community colleges, colleges, or universities to find an educational program that is right for you.
5. Visit **BuildSubmarines.com** and create a profile to receive information about the careers needed in the Maritime Industrial Base and get connected with employers.


BUILDSUBMARINES.COM

MARITIME INDUSTRIAL BASE

Maritime Manufacturing



What is Manufacturing?

Manufacturing is the process of converting raw materials into finished goods using various mechanical, chemical, or industrial methods. It involves labor, machines, and tools to create products, ranging from everyday items to complex machinery. Manufacturing can be small-scale, like hand-crafted goods, or large-scale with automation and mass production. The process includes design, planning, assembly, and quality control to meet standards.

What is Maritime Manufacturing?

Maritime manufacturing involves designing, producing, and assembling goods and equipment for the maritime industry, including ships, boats, and related components. This sector includes shipbuilding, marine engines, propulsion systems, navigation, communication, and safety equipment. It also covers materials like ship coatings, marine electronics, and underwater infrastructure. Maritime manufacturing is essential for defense as well as global trade and exploration.

Interview with a Professional Machinist

Ryan Rhodebeck, Training Manager at Strohwig Industries

Q: What skilled trade did you choose and why?

I chose to be a Machinist because I always enjoyed making things when I was younger. I also enjoy the complexity of it. There is never a shortage of new technology and with that, new things to learn!



Q: What does a typical workday look like for you?

A typical workday for a machinist can vary. In general, a machinist will be studying a print for the part that they are making to ensure they are holding the tolerances for the features they are machining and creating the machines program code either by inputting it manually or using advanced computer-aided manufacturing software (CAM) with 3-D models.

Q: What do you find most rewarding about your job?

When a component is finished being machined it is rewarding to have overcome all of the technical challenges to make the part. Also to be part of several industries knowing that I contributed to something bigger than myself, whether it is part of a rocket, an airplane, a submarine, or a nuclear reactor. It gives me a sense of pride to be a contributor to it.

Maritime Manufacturing & National Security

The United States Navy, in collaboration with the Maritime Industrial Base Program (MIB) and BlueForge Alliance (BFA), is undertaking the largest submarine and surface ship construction effort the nation has seen in nearly half a century. To meet the ambitious production goals, the MIB is coordinating efforts among prime shipbuilders, public shipyards, and more than 20,000 suppliers nationwide. This initiative also ensures the continued sustainment and readiness of the submarine and surface ship fleets.

However, America's manufacturing and shipbuilding capabilities have declined by over 60% since the end of the Cold War, creating significant challenges in meeting this mission. The MIB was created to address these challenges head-on, with one of its top priorities being expanding the maritime manufacturing workforce. It is estimated that meeting the required production cadence will require more than 250,000 new workers, including skilled tradespeople such as welders, machinists, and non-destructive testers, as well as technical professionals like engineers, naval architects, CAD technicians, and quality assurance specialists. Recognizing the urgency for new submarines and surface ships, government and industry leaders are united in their commitment to rebuilding and growing the maritime manufacturing workforce—an investment that is critical to reinforcing our national defense.



Fun Facts...

1. Aircraft carriers are small cities at sea, with their own ZIP codes, post offices, medical facilities, and even barbershops!
2. There are more than 300 miles of pipes in a submarine.
3. Mine warfare surface ships use special sonar and underwater robots to search for and destroy sea mines.
4. Because submarines are nuclear-powered, they can stay underwater for months at a time. The only reason they come up is to get more food for the crew.
5. You're closer to shipbuilding than you think... U.S. Navy vessels are made from parts built in all 50 states.