

Naval Architect

Design ships. Hulls, stability, structure and propulsion, for the Navy, shipyards and offshore industry.

TYPICAL PAY

\$112,230

a year, full time

PAY RANGE

\$83k to \$173k

starting to experienced

TIME TO QUALIFY

4 to 8 years

after high school

DEMAND

Good

job outlook

LICENCE NEEDED

No

anyone can do it

WHERE YOU WORK

Shipyards, design firms, the Navy and Coast Guard, offshore energy...

How you get there

- 1 High school** Grades 11 and 12
Calculus, physics, chemistry and computer science. Sailing, rowing or building boats is genuinely useful context.
- 2 Bachelor's degree** 4 years
Naval architecture and marine engineering, or mechanical or ocean engineering. Fewer than a dozen schools in the country run the dedicated program.
- 3 Fundamentals of Engineering exam** One exam
Sit it in your final year while the math is fresh. Passing makes you an engineer in training and starts the clock on licensure.
- 4 Work under licensed engineers** 4 years
Four years of design experience at a shipyard, design firm, classification society or federal agency.
- 5 Professional engineer license, if you want it** One exam
The NCEES (National Council of Examiners for Engineering and Surveying) offers a Principles and Practice of Engineering exam in naval architecture and marine engineering. Your state board issues the license.

Pros and cons

- + High starting pay and a bright federal outlook
- + A small field where good engineers are known and hard to replace
- + You design objects that are enormous and last 30 years
- Very few schools teach it, so you will likely move to study
- Work is concentrated on the coasts and the Gulf
- Long defense programs mean slow feedback and a lot of paperwork

Optional boosts

Hydrodynamics. Structural analysis. Offshore and subsea. Submarines and naval combatants.

Good to know

One school gives every student free tuition

Webb Institute in New York teaches one subject, naval architecture and marine engineering, awards a full-tuition scholarship to every enrolled student who is a citizen or permanent resident, guarantees t...

Stability is the whole discipline

A ship floats because of where its weight sits relative to where the buoyancy pushes. Naval architects spend their careers on that relationship, and nearly every famous maritime disaster comes back...

Where these numbers come from

My Next Move: Marine Engineers and Naval Architects (17-2121.00)
Society of Naval Architects and Marine Engineers
NCEES: Principles and Practice of Engineering exam
Webb Institute: naval architecture and marine engineering

Numbers checked September 2026. Pay figures are typical full-time annual amounts in United States dollars, based on Bureau of Labor Statistics wage data and published pay scales. They vary by state, employer and experience. Tuition is for in-state students at public schools unless the card says otherwise. Sources, links and the click-through version: <https://career.help/us/careers/naval-architect>



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