

## How to become a Naval Architect

Those wishing to become a Naval Architect, will normally study for a degree in naval architecture, on an accredited university program.

Undergraduate courses are typically four-year programs that should be followed by a further four years of related experience before becoming a professional qualified Naval Architect.

More information about the work of a Naval Architects can be obtained from:

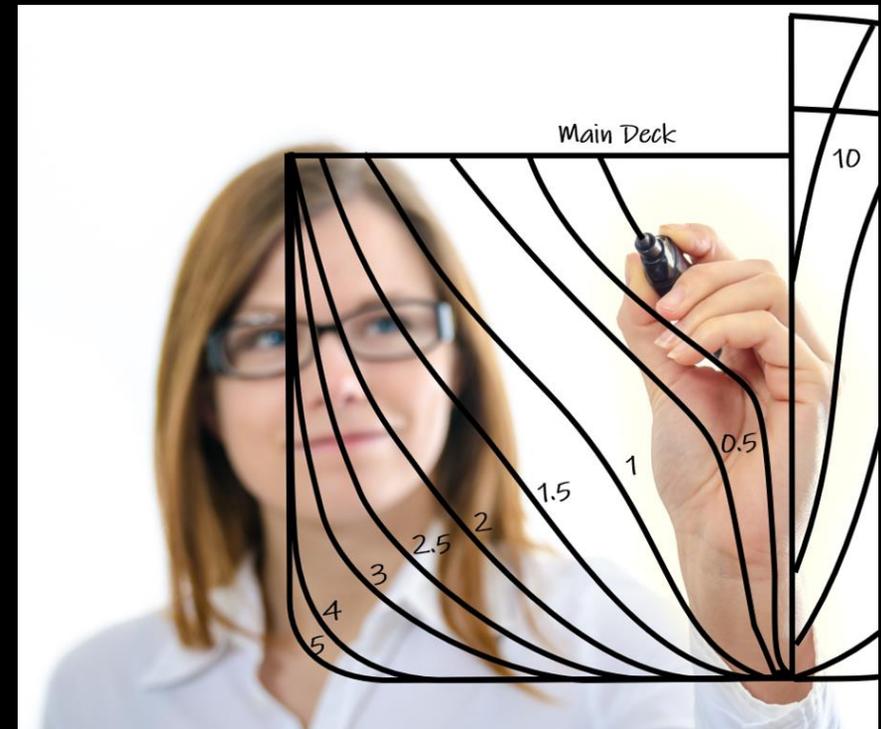
The Royal Institution of Naval Architects (Australian Division)  
PO Box 462, Jamison Centre, ACT,  
2614.

## Learn more

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[www.rina.org.uk](http://www.rina.org.uk)



## Careers in naval architecture



# Careers in naval architecture

Can you imagine a future where ships make no pollution, make no harmful emissions? Can you imagine a future where we harvest from our oceans, without harming them, the energy and food we need? How about a future where artificially intelligent robot submarines undertake research in the deep ocean, removing the need to put humans into risky situations? Perhaps even a future where humans live in giant cities beneath the sea? What we dream today we can make reality tomorrow. Will you be part of engineering that future?

A Naval Architect is a professional engineer responsible for the design, construction and repair of all types of marine vehicles and offshore structures. A Naval Architect deals with both civil and military applications, including:

- All types of merchant ships for transporting goods and passengers around the world;
- Defence applications including warships, submarines and amphibious craft;
- Surface and submarine autonomous vehicles;
- Fixed and floating offshore structures and complex subsea machinery servicing the oil and gas industry, the subsea mining sectors and the emerging aquaculture industries;
- Marine renewable energy applications including wave, tidal and flow turbines;
- High speed craft including hovercraft, multi-hull ships, hydrofoil craft;
- Workboats including fishing vessels, tugs, pilot vessels and rescue craft;
- Recreational craft including sailing yachts and power boats.

Comprising the most complex objects created by humans, operating in some of the most challenging environments, fixed and floating structures truly push the boundaries of modern engineering. Engineering on this scale is essentially a team activity conducted by professional engineers in their respective fields and disciplines. It is the Naval Architect however who integrates their activities and takes ultimate responsibility for the overall project. This demanding leadership role requires managerial qualities and ability to bring together the often conflicting demands of the various professional engineering disciplines involved to produce a product which is "fit for the purpose".

In addition to this vital managerial role, the Naval Architect has also a specialist function in ensuring that a safe, economic and seaworthy design is produced. To undertake all these tasks the Naval Architect will have an understanding of many branches of engineering and will be in the forefront of high technology areas. She or he will be able to utilise effectively the services provided by scientists, lawyers, accountants and business people of many kinds.

A Naval Architect requires: a creative, enquiring and logical mind; the ability to communicate clearly in speech and writing with others inside and outside the engineering profession; sound judgment; and qualities of leadership. The education and training given to the Naval Architect are designed to develop these skills and to lead him or her to recognised qualifications and professional status.



"It's such an exciting time to work in ship building in Australia. Large naval projects, like the future submarine project, are giving Australian naval architects the chance to work on interesting and complex engineering design problems. This year I will be traveling to France to work with Australian and French engineers on Australia's next submarine design."

**Siobhan Giles**



In my current role with the Classification Society DNVGL, I've been able to apply my knowledge and experience as a Naval Architect, when assessing designs against Class standards. I have been exposed to many interesting projects and worked with other Naval Architects in the world-leading aluminium shipbuilding industry.

**Adam Williams**



"Currently I work in the yacht design industry. Working on superyacht interiors and exteriors.

I think my degree gave me the best start in my career. Exposure to yachts designers at AMC really helped me focus my career aspirations. I went straight to Europe. I love my job!"

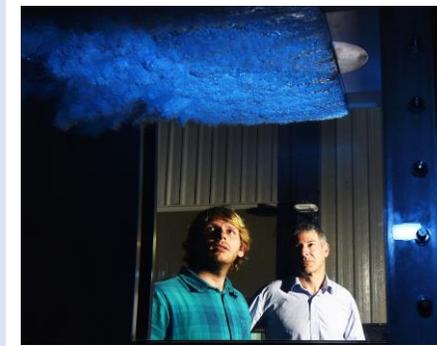
**Misha Merzliakov**



"My current career aspirations are to work in South Australia on the Future Submarines Project. This project appeals to me due to its magnitude and difficulty.

I believe that my Naval Architecture degree specialising in the design of ships and underwater craft will make me especially suited to this career, due to its specification in this area."

**Julia Blackman**



World leading Cavitation research taking place in Australia



Australian autonomous underwater vehicle in preparation for mission under Antarctic ice-shelves



The new 110 metre RoPax ferry ordered by Virtu Ferrries, built by INCAT in Tasmania