

Senior Naval Architect (Tysons, VA next to Metro – Silver Line)

Qualifications

Accredited degree in Naval Architecture and Marine Engineering or similar degree such as Ocean Engineering from a four-year university, and accredited by the Accreditation Board for Engineering and Technology (ABET)

15 years of relevant work experience

Requires U.S Citizenship with ability to obtain a security clearance issued by the US Government

Working knowledge of Structures, hydrodynamics, weights and stability, speed and powering, hull form design, arrangements, manning, vibration, damage control and survivability

Proficiency in the use of Microsoft Word, Excel, Access and Project

Familiarity with and use of US Navy and MIL Specifications related to ship design, classification society rules, and professional society guidance and specifications

Experience with 2D and 3D CAD software. Working knowledge and experience with common Naval Architecture design software programs and finite elements modeling and simulations

A basic understanding and use of AutoCAD, SolidWorks or Rhino is needed, as well as knowing basic drafting and drawing development standards.

Applicants will be subject to a security investigation and must meet the eligibility requirements to obtain a security clearance issued by the US Government

In addition to the security clearance, this position may require an additional background screening for base access

Ability to travel 25%

Ability to transport and lift objects up to 30 lbs

Employee will be required to perform ship checks that access remote areas of multi-level vessels

Responsibilities

The Naval Architect performs routine analyses and prepares naval architectural deliverables in support of the design of ships, craft, and other marine structures.

Has the ability to apply naval architectural knowledge in accordance with applicable regulatory body rules, regulations, and industry standards such as ABS, Mil Spec, ABYC and other commercial standards to develop analyses and design deliverables.

- Participate in the development and validation of design and engineering requirements, preparation of specifications, and provide inputs to technical reports and presentations

- Provide hull form and hydrodynamic performance predictions, including development of hull form geometry and lines plans, hydrostatics and curves of form, resistance, and powering estimates, preliminary propulsor design and performance, appendage design.
- Have experience with and at least a working understanding of maneuvering analyses, seakeeping analyses, development of model test plans, and observing and analyzing data from model tests or full-scale trials
- Provide weight and stability analyses, including development of weight and center of gravity estimates, performance of intact and damaged stability analyses, performance of deadweight surveys and inclining experiments for ships and small craft.
- Provide concept and feasibility design studies addressing whole ship sizing and performance analyses, requirements validation, and design optimization
- Perform design integration, coordinating inputs from various naval architectural and other engineering disciplines, such as marine engineering and structures, into balanced, closed solution designs to establish principal characteristics and design features such as length, beam, depth, draft, displacement, speed, and other performance parameters
- Perform structural design, developing hull girder bending moments and structural configurations and scantlings in accordance with appropriate rules or design standards, development of superstructure, mast, and local support structure to withstand primary and secondary loads
- Make general arrangements and configuration, developing requirements for area and volume, preparing overall ship arrangement concepts and drawings illustrating primary functional allocation of spaces within the ship considering location and adjacency constraints, performing special studies including access and line of sight analyses, assisting in detailed layouts of individual compartments such as living and berthing spaces, ship support spaces, storerooms, and shops Assists with the review of design proposals and specifications
- Participate in scheduled project review sessions and meetings with representatives from other engineering disciplines and customers on technical and engineering issues
- Assist in design integration with representatives from other engineering disciplines and customers on technical and engineering issues
- Assist in preparing documentation, reports, and project plans to describe activities planned and accomplished, status reports, letters, memoranda, messages, and contact reports
- Assist with the preparation and presentation of formal briefings and staff seminars
- Prepare engineering sketches to help designers and drafters to complete engineering drawings
- Assist with formal technical reports summarizing analyses, calculations and engineering studies

Position Description

- Work under the supervision of Principal Naval Architect, Senior Engineers & Project Managers to perform concept, preliminary, contract and detailed design and engineering support. Have the demonstrated ability to work in an open communicative environment and be able to adapt to changing requirements rapidly.

In this role you will:

Apply naval architectural knowledge in accordance with applicable regulatory body rules, regulations, and industry standards to develop analyses and products in one or more of the following technical areas:

- Participate in the development and validation of design and engineering requirements, preparation of specifications, and provide inputs to technical reports and presentations.
- Provide hull form and hydrodynamic performance, including development of hull form geometry and lines plans, hydrostatics and curves of form, resistance, and powering estimates, propulsor design and performance, appendage design, maneuvering analyses, seakeeping analyses, development of model test plans, and observing and analyzing data from model tests or full-scale trials
- Provide weight and stability analyses, including development of weight and center of gravity estimates, performance of intact and damaged stability analyses, performance of deadweight surveys and inclining experiments
- Provide concept and feasibility design studies addressing whole ship sizing and performance analyses, requirements validation, and design optimization
- Perform design integration, coordinating inputs from various naval architectural and other engineering disciplines, such as marine engineering and structures, into balanced, closed solution designs to establish principal characteristics and design features such as length, beam, depth, draft, displacement, speed, and other performance parameters
- Assist in design integration with representatives from other engineering disciplines and customers on technical and engineering issues.
- Perform structural design, developing hull girder bending moments and structural configurations and scantlings in accordance with appropriate rules or design standards, development of superstructure, mast, and local support structure to withstand primary and secondary loads
- Make general arrangements and configuration, developing requirements for area and volume, preparing overall ship arrangement concepts and drawings illustrating primary functional allocation of spaces within the ship considering location and adjacency constraints, performing special studies including access and line of sight analyses, assisting in detailed layouts of individual compartments such as living and berthing

spaces, ship support spaces, storerooms, and shops Assists with the review of design proposals and specifications.

- Participate in scheduled project review sessions and meetings with representatives from other engineering disciplines and customers on technical and engineering issues. Assist with preparation and presentation of formal briefings materials for distribution to staff and clients.
- Provide naval architecture/engineering to the development of technical specifications, requisition and bid documents, inspection and testing requirements, etc.
- Comply with all corporate policies and procedures, including quality assurance and security procedures, in the performance of duties.

Abbott On Call is proud to offer highly competitive salaries, a flexible work environment, and invaluable firsthand experience delivering mission-critical solutions for our customers. Our employees are our greatest asset, and our competitive benefit options are designed to support and protect our employees and their families. We offer robust Medical, Prescription, Dental, and Vision coverage, Life, Short-Term, and Long-Term Disability Insurance. We enable you to shape your financial future with a self-directed 401(k) and Tuition Reimbursement program. We promote a healthy work-life balance with flexible scheduling and PTO program. Apply to join our team and work alongside peers with unmatched expertise in a workplace environment that fosters learning and growth.