GENERAL DYNAMICS
Electric Boat

Dept. 496: Hydrodynamics, Hydrostatics and Weights

Disciplines: Marine/Ocean Engineering, Naval Architecture

Engineers in this department are responsible for determining the hydrostatic and hydrodynamic characteristics of submarines. This includes determination of tank volumes, ship displacement, stability, speed, power and maneuvering characteristics using traditional and computerized methods. The work also includes determining external flow characteristics for hull and appendages, hydrodynamic loading, and trade-off studies of various hull appendage combinations. Department 496 is also responsible for waterfront support activities such as blocking, docking, submarine launching, and barge transportation of major hull sections. The department provides leadership in the concept development of new and innovative submarine platforms and leadership on the design/build teams that work through design and construction issues for new designs and modifications to current platforms. Applicants should have a B.S. or M.S. degree in Naval Architecture or Ocean Engineering.

Dept. 670: Process Engineering:

Disciplines: Mechanical, Electrical (Power, Electronic), Civil (Structural), Ocean, Marine, Aerospace Engineering, Physics, Computer Science/Engineering, Nuclear Engineering or Naval Architecture

The Process Engineering group is engaged with all of the functional organizations of the company in identifying and acting upon opportunities for improving our business processes, improving quality, reducing cost, and improving cycle time. Green Belts, Black Belts, Master Black Belts, Process Improvement Chiefs and the Process Engineering management team work with all levels of Electric Boat management to establish measurable metrics for specific areas of the business. The Belts work with their Process Improvement teams to analyze the metrics and identify opportunities to improve business processes through implementation of the Lean Six Sigma DMAIC methodology. Tools such as Value Stream Mapping, Process Modeling, Pareto Charts, and statistical analysis are used determine the few critical inputs to the process that most affect the process output. The Belts and the team employ tools like Design of Experiments (DOE) and Failure Modes and Effect Analysis (FMEA) to determine improvements. The Belts are expected to work in a hands-on team environment and identify and remove barriers that either slow or prevent the successful attainment of project goals. Belts will assist in the planning, organizing, and execution of processes to run the Process Engineering group. Belts will mentor and coach other Belts, employees, and management in Process Improvement methodologies. Green Belt and Black positions are internally posted. Interested applicants should have a proficiency in basic algebra and be comfortable with Microsoft Word, Excel and PowerPoint. Good interpersonal, organizational, planning, and project management skills are required. In addition, strong communication skills, written and verbal, are essential. Candidates should be self starters with an attention to details. Positions are open to all salaried and MDA represented personnel.