

Shipboard Power Plant Design as Senior Design Project

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Abstract : Senior design projects teach students many important skills. One of the major goals is to prepare students to apply effective problem-solving techniques to a problem that represents a real-world situation. This includes the ability to define the problem, compare alternative solutions, identify the best solution, and design the system. This paper describes the design of a shipboard power plant as a senior project in the Marine Engineering program at the U.S. Merchant Marine Academy. The design project was supervised by faculty members who guided a multidisciplinary group of seniors. The research project was sponsored by the Office of Naval Research. Each group of seniors focused on one of the main design aspects of the project, including the electric power system, nuclear power plant, ship hull design, and economics.

Keywords : senior design project, shipboard power system, engineering education, marine engineering

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