PROGRAM BASICS

Designing what's never been built. That's what yacht designers do. Professionals in this area of study are the future of our industry. The design, shape and materials used in the construction of a boat can make it more efficient, cost effective and aesthetically pleasing. Imagine being a designer for an America's cup yacht. Or running one of the most successful yacht building companies in the world. Or even working overseas as a naval engineer. Our graduates with a diploma or degree in Yacht Design may find a career in all of these things and more.

Before You Begin

Yacht Design is a very math intensive program. A basic understanding of high school algebra, physics, trigonometry and excel will help you succeed. In order to get a running start on your program, consider review these websites:

Math Reviews: http://khanacademy.org
http://www.webmath.com/index.html
http://www.freemathhelp.com/trigonometry-help.html

Boat Terminology: http://www.boatsafe.com/nauticalknowhow/gloss.htm

EXCEL Tutorial: http://www.excel-easy.com/

Also search these terms for general understanding: Archimedes Principle; Boatbuilding Terminology; Design Ratios; Yacht Designers

What You'll Learn to Do

Students begin the first quarter of the program employing manual drafting skills in order to gain appreciation for drawing appearance and lay-out. The remainder of the year they use CAD software using a networked PC at each student's workstation. Students use industry-standard software for calculations, two-dimensional drafting, three-dimensional hull fairing and general three-dimensional modeling.

Throughout the year the scope of the studies is supported and extended by lectures by industry experts, field trips and reviews of case studies on business practices and client relations. Students spend much of their time preparing preliminary designs for safe and practical small craft. As a final project, each student prepares a complete set of plans and calculations covering all aspects of the design for his or her own choice of a sailboat, powerboat or commercial craft. A student's designs comprise a portfolio that he or she may use to demonstrate his or her skills and experience when seeking employment. Subjects of study you will cover include:

Parametric Study	Overall Layout and Structural Design	Physics, Statics and Hydrostatics
Drawing Architectural Plans	Materials and Fabrication	Dynamics and Fluid Dynamics
CAD and 3D Modeling	Ergonomics and Aesthetics	Marine Systems and Ventilation

Careers

Yacht Designers are involved in the design, construction, and maintenance of boats and related equipment. They design and supervise the construction of various kinds of yachts from racing and cruising to power and sailing. Yacht Designers work on every aspect of a boat including shape, stability, structure, systems, powering and, above all else, safety. Careers for Yacht Designers include finding a position with a yacht design firm or becoming self-employed. Other areas that a Yacht Designer may work in include vessel safety, technical consultancy and design of fast ships, workboats and powerboats. Students who graduate with a diploma or degree in Yacht Design may find a career in Yacht Design or in an alternative such as:

3D modeling	Yacht crew	Component design
Racing yacht design	Project manager	Technical sales
Sail making/design	Teacher	

Employment Rate: 100%
Average Starting Salary: $43,680