Naval Architecture

Degree awarded: Bachelor of Engineering

Professional experience available: Engine License, Deck License, Intern Option

The Naval Architecture program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

Naval Architecture is the study of ship design. This program is available at few institutions in the United States, and has been available at the Maritime College since 1972. As ship designers, naval architects must not only master a body of specialized knowledge applicable to vessel performance, but must also perform crucial system integration tasks to yield a fully functional, mission-capable vessel. Naval Architects are ultimately responsible for the strength, stability, speed, seaworthiness, and economic effectiveness of the vessels they design and build. It requires a student broadly capable in mathematics, applied mechanics, and fluid mechanics, and with a special orientation for creative design. The Naval Architecture program has three options: (1) a U.S. Coast Guard Engineering License option that requires cadets to participate in three Summer Sea Terms as an engineering cadet, (2) a U.S. Coast Guard Deck License option that require three Summer Sea terms as a deck cadet, and (2) an Intern Option that requires that the student complete two Industrial Internships in shipyards or ship design offices.

The educational objectives of this program are for graduates (1) to become engineers who have the ability to practice the design, service, or operation of ships, other marine vehicles, and marine structures, and *(2) to have the ability to take professional leadership positions that require an extensive engineering background*

Student Outcomes

Naval Architecture graduates from Maritime College will possess:

(a) an ability to apply knowledge of mathematics, science and engineering

(b) an ability to design and conduct experiments, as well as to analyze and interpret data

(c) an ability to design a system, component, or process to meet desired needs within realistic constaints such as economics, environmental, social, political, ethical, health and safety, manufacturability, and sustainability

(d) an ability to function on multi-disciplinary teams

(e) an ability to identify, formulate and solve engineering problems

(f) an understanding of professional and ethical responsibility

(g) an ability to communicate effectively

(h) the broad education necessary to understand the impact of engineering solution in a global, economic, environmental, and societal context

(i) a recognition of the need for, and an ability to engage in life-long learning

(j) a knowledge of contemporary issues

(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Student Enrollment and Graduation Data

Academic Year	Enrollment Year†					Full- or Part-Time	Total Undergrad	B.E. Degrees Awarded
	1st	2nd	3rd	4th	5th			
Latest year 2015-16	31	22	13	15	11	FT	91	13
						PT	9	
1 2014-15	26	17	17	15	9	FT	94	16
						PT	0	
2 2013-14	26	23	21	13	13	FT	93	15
						PT	3	
3 2012-13	32	26	16	24	6	FT	104	19
						PT	0	
4 2011-12	39	27	28	15	9	FT	115	10
						PT	1	

† Enrollment year data are not broken out based on FT/PT status but totals numbers are.