## Facilities Engineering

Degree awarded: Bachelor of Engineering

Professional experience: Engine License, Intern Option

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



Facilities Engineering is an emerging application area with great promise for engineers with a maritime background. Key technologies for this discipline are heating, ventilating, and air conditioning together with computerized controls and techniques of energy management and conservation. This discipline requires knowledge of mathematics, thermal/fluid science, and electrical engineering. This is a good choice for students with significant managerial potential, people skills and an understanding of economics. Facilities Engineering was approved by the New York State Education Department in 2002, and is designed to permit a student to experience two Industrial Internships, or to obtain a U.S. Coast Guard License as Third Assistant Engineer by taking on three Summer Sea Term I, II & III.

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 major facilities, buildings, or other infrastructure, and (2) to have the ability to take professional leadership positions that require an extensive engineering background

## **Student Outcomes**

Facilities Engineering 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 constraints 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 <sup>†</sup> 1st 2nd 3rd 4th 5th					Full- or Part- Time	Total Undergrad	B.E. Degrees Awarded
Latest						FT	50	
year 2015-16	6	10	12	15	11	PT	4	28
1	10	1.2	12	22	10	FT	66	2.4
2014-15	10	13	13	22	12	PT	4	24
2	1.4		20	0.1	10	FT	72	21
2013-14	14	9	20	21	13	PT	5	21
3						FT	67	
2012-13	7	14	14	20	16	PT	4	28
4	1.0					FT	80	
2011-12	10	11	16	24	20	PT	1	30

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