## SUNY Maritime College Degree Overview



That is:

Students in the Regiment can choose any one of our three "professional experience" options: Deck License, Engine License, or Intern. Students not in the Regiment are limited to the Intern option.

Alternately: Students seeking a license *must be* in the Regiment. Students not seeking a license *may choose to be* in the Regiment.

(Note: At Admissions, license students have priority re joining the Regiment. Those admitted in license programs are automatically in Regiment. For those admitted in intern programs and requesting to be in Regiment, Regimental slots are not guaranteed to be available.)

Availability of the three professional experience options also depends on degree choice.

Here are our degrees:

All ABET-accredited degrees with students preparing to design engineering systems of various types (as indicated by degree name). All degrees are standard B.E. programs supplemented by license courses or internships. Lower division curricula largely identical throughout, with one course difference for Electrical Engineering program.

Note that students choosing Deck License option (for Naval Architecture and Electrical Engineering only) are expected to take (at least) nine semesters to complete their program.

Marine Engineering (Engine)

Mechanical Engineering (Engine, Intern)

Facilities Engineering (Engine, Intern)

Naval Architecture (Deck, Engine, Intern)

Electrical Engineering (Deck, Engine, Intern)

Details about the different engineering systems emphasized in each of these degrees can be found at:

www.sunymaritime.edu/Academics/Undergraduate%20Programs/Engi neering/BE.aspx Marine Transportation (Deck)

Traditional Deck License program, combining license courses with standard business/management courses and a few shipping-related business courses.

Marine Operations (Deck)

A variation on MT degree, with some of the standard business/ management courses replaced by additional shipping-related courses, including a couple of Engine license courses for familiarity with engine side of operations.

Marine Operations (Engine)

Only program with Engine License outside of B.E. degrees. Thus, good for student interested in Engine License but not in math/science/ engineering course load that prepares for students for designing (as opposed to operating) systems. Engine license courses with some shipping-related business courses.

International Transportation & Trade (Intern)

A business administration degree with upper division courses emphasizing international transportation and trade. Marine Environmental Science (Deck, Intern) with minor in Marine Biology or Meteorology & Oceanography

Pretty much self-explanatory.

Maritime Studies (Deck, Intern)

Sort of our variation of a general liberal arts degree, but really even more general than that. (Excluding license courses for those doing Deck License) Majority of courses in the humanities but also science and business courses, with many courses maritime-related.

# A.A.S.

### Marine Technology: Small Vessel Operations (Limited Deck, Limited Engine)

Largely license courses, including one Maritime Summer Sea Term and much commercial shipping.

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#### **USCG License Requirement**

For bachelor's degrees with license options, students take courses qualifying them to sit for USCG exam for unlimited license; passing the exam is *required* for awarding of this degree. For A.A.S. degrees, students become qualified to sit for limited license exam, but passing the exam is not a condition for awarding of the degree.

# Math and Science Requirements

#### B.E. degrees

Have very strong math and science requirements:

-- 4 terms of mathematics (Calc I, II, III; Differential Equations)

- -- 2 terms of engineering physics
- -- 2 terms of chemistry

-- Engineering courses throughout curriculum continually make use of all this material and include additional math/science as needed.

### **B.S. Marine Environmental Science degrees**

Also have strong math and very strong science requirements:

- -- 3 terms of mathematics (Applied Calc I, II; Statistics)
- -- 2 terms of general physics
- -- 4 terms of chemistry

-- Numerous courses in biology, meteorology, oceanography depending on minor

# B.S. Marine Operations with Engine License degree

Also has strong math and science requirements:

- -- 3 terms of mathematics (Applied Calc I, II; Statistics)
- -- 2 terms of general physics
- -- 2 terms of chemistry
- -- Some additional engineering courses making use of above

### Other degrees

Varying math and science requirements depending on degree, but all include at least one semester of calculus (all B.S. license degrees) or precalculus (all B.S. intern and A.A.S. degrees) and at least one semester of science.