

# MARINE TRANSPORTATION - BS

The Department of Maritime Transportation program combines instruction and training in maritime disciplines with studies in the humanities and sciences to ensure students satisfy the institution's higher education accreditation requirements for a Bachelor of Science degree in Marine Transportation. The program also meets all the training and education requirements to prepare students to hold a U.S. Coast Guard Third Mate's license of any gross tonnage upon oceans, steam, or motor vessels and for issuance of an International Standards of Training, Certification and Watchkeeping (STCW) endorsement as Officer-In-Charge of a Navigation Watch (OICNW). Earning a deck merchant mariner credential means students will learn to navigate a vessel, handle cargo, and operate and maintain a variety of ship systems. Skills are learned through extensive theoretical education that is applied practically via navigation, seamanship, ship construction, ship handling, and stability training on campus in state-of-the-art ship simulators as well as aboard training vessels and commercial vessels. The Marine Transportation core provides a broad maritime education to produce a well-trained and knowledgeable ship's officer.

Cadets are also provided with solid fundamentals in business topics related to the maritime industry, ashore and afloat. Cadets take courses which provide a broad understanding of management issues and specific skills required for critical thinking and decision making in business. These skills complement the maritime operations education and strengthen their performance as shipboard officers. Cadets gain a foundation in business administration allowing them to pursue shore-side opportunities in maritime business, logistics, and operations.

The department also offers advanced elective courses in relevant subject areas. These courses can be grouped by cadets interested in pursuing an academic minor to gain a more in-depth exposure to a particular subject area. Students should contact their academic advisor for specific information and advice.

The department's program must also comply with domestic and international laws and standards related to maritime education. The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), as amended, sets qualification standards for masters, officers, and watch-keeping personnel on seagoing merchant ships. The STCW Code and the U.S. Code of Federal Regulations establish the standards that the U.S. Coast Guard uses to license U.S. Merchant Mariners. Courses earning USCG or STCW qualifications, sea-time, or STCW competency certification require a minimum grade of C (70%). In addition, all STCW proficiencies must be satisfactorily completed with a grade of 70% or better (See applicable course outlines available through the department).

Cadets who enroll in and apply to graduate in Marine Transportation must successfully complete the license examination for Third Mate to graduate from Texas A&M University.

## Program Requirements

### First Year

Fall		Semester Credit Hours
MART 103	Basic Safety and Lifeboatman Training <sup>1,2</sup>	3
MART 115	Seamanship I <sup>1,2</sup>	3
American History ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> )		3
Communication ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication</a> )		3
Life and physical sciences ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#life-physical-sciences">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#life-physical-sciences</a> )		1
Mathematics ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics</a> )		3

**Semester Credit Hours 16**

### Spring

MART 201	Vessel Structure and Ship Knowledge <sup>1,2</sup>	3
MART 204	Terrestrial Navigation <sup>1,2</sup>	3
NVSC 200	Naval Science for the Merchant Marine Officer <sup>1,2</sup>	3
American history ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> )		3
Mathematics ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics</a> )		3

**Semester Credit Hours 15**

### Summer

MART 200	Deck Sea Training I: Basic Communications, Navigation and Seamanship <sup>1,2</sup>	4
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**Semester Credit Hours 4**

### Second Year

#### Fall

ECON 203 or ECON 202	Principles of Economics or Principles of Economics	3
MART 212	Marine Dry Cargo Operations <sup>1,2</sup>	3
MART 215	Seamanship II <sup>1,2,3</sup>	3
MART 303	Celestial Navigation <sup>1,2</sup>	3
PHYS 201	College Physics	4

**Semester Credit Hours 16**

#### Spring

MART 202	Ship Stability and Trim <sup>1,2</sup>	3
MART 210	Integrated Navigation I: RADAR/ARPA/ECDIS <sup>1,2</sup>	4
MART 321	Navigation Rules, International and Inland <sup>1,2</sup>	2
PHYS 202	College Physics	4

Communication ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication</a> )	3
<b>Semester Credit Hours</b>	<b>16</b>
<b>Summer</b>	
MART 300 or MART 350 Deck Sea Training II: Intermediate Communications, Navigation and Seamanship <sup>1,2</sup> or Deck Sea Training II – Commercial Internship	4
<b>Semester Credit Hours</b>	<b>4</b>
<b>Third Year</b>	
<b>Fall</b>	
MART 208 Maritime Meteorology <sup>1,2</sup>	3
MART 307 Global Maritime Distress Safety System <sup>1,2</sup>	3
MART 310 Integrated Navigation II: Electronic Navigation <sup>1,2</sup>	2
MART 315 Seamanship III <sup>1</sup>	2
POLS 206 American National Government	3
Creative arts ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts</a> )	3
<b>Semester Credit Hours</b>	<b>16</b>
<b>Spring</b>	
MARA 301 Ocean Transportation I <sup>1</sup>	3
MART 313 Marine Liquid Cargo Operations <sup>1,2</sup>	3
MART 410 Integrated Navigation III: Bridge Watchstanding <sup>1,2,3</sup>	2
POLS 207 State and Local Government	3
Language, philosophy and culture ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture</a> )	3
<b>Semester Credit Hours</b>	<b>14</b>
<b>Summer</b>	
MART 400 Deck Sea Training III: Advanced Communications, Navigation and Seamanship <sup>1,2</sup>	4
<b>Semester Credit Hours</b>	<b>4</b>
<b>Fourth Year</b>	
<b>Fall</b>	
MARA 416 Port Operations, Administration and Economics <sup>1</sup>	3
MART 403 Advanced Topics in Shipboard Operations <sup>1</sup>	2
MART 404 The Navigator <sup>1</sup>	2
MART 498 Maritime Medical Care <sup>1,2,5</sup>	2
Directed elective <sup>1,4</sup>	6
<b>Semester Credit Hours</b>	<b>15</b>
<b>Spring</b>	
MARA 421 Admiralty Law <sup>1</sup>	3
MART 401 Maritime Security <sup>1,2</sup>	3
Directed elective <sup>1,4</sup>	6
<b>Semester Credit Hours</b>	<b>12</b>
<b>Total Semester Credit Hours</b>	<b>132</b>

<sup>1</sup> Indicates required courses in the Marine Transportation major. These courses will be used to compute the major GPA, which must be at least 2.25.

<sup>2</sup> Indicates license courses leading to a USCG/STCW license endorsement or sea time credit accrual which require a minimum grade of C or better to earn the endorsement or accrual. Students will be required to repeat the course until they earn a grade of C or better. MART 307 GMDSS requires a score of 75 percent or better.

<sup>3</sup> Indicates a course that satisfies the writing intensive course requirements of the University.

<sup>4</sup> Approved MART Directed Electives include but are not limited to ACCT 229; MARA 304, MARA 342, MARA 363, MARA 401, MARA 402, MARA 424, MARA 440, MARA 450; MART 205, MART 213, MART 308, MART 311, MART 485, MART 489.

<sup>5</sup> MART 498 must be taken within one year of graduation to receive USCG approval.

All electives must be chosen in consultation with, and approved by, the student's academic advisor. Unless courses are specifically listed, see University Core Curriculum (<http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/>) for a listing of course options for Communication; Mathematics; Life and Physical Sciences; Language, Philosophy and Culture; Creative Arts; American History; Government and Political Sciences; and Social and Behavioral Sciences. The 6-hour University Core Curriculum (<http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/>) requirement for International and Cultural Diversity (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) may be met with courses used to satisfy other degree requirements.

MART students are required to earn a grade of C or better in all MART courses, including electives in field.

The total hours may be increased if the student is required to take remedial math, remedial English, foreign language or International and Cultural Diversity (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) courses, or any of the six hour cruise options. The six hour cruise options ( NAUT 300 and NAUT 400 ) do not add any required hours to the degree plan.

This degree requires full participation in the Texas A&M University Maritime Academy Corps of Cadets as a qualified license option cadet. Refer to the University catalog section for the Texas A&M Maritime Academy for additional information. In addition to the academic requirements outlined here, the cadet must also complete the following requirements to receive the degree:

- Successfully complete required sea service and minimum training cruise requirements.
- Pass a comprehensive professional examination (either the Third Mate Unlimited- Oceans or Third Assistant Engineering Unlimited) administered by the U.S. Coast Guard (USCG).
- Successfully complete all competencies required by the International Convention on Standards for Training, Certification and Watchkeeping (STCW).

Note: STCW competency certifications expire 5 years after completion. If the cadet does not complete the degree within that time period, the cadet will be required to revalidate the expired competency prior to graduation.