

DEPARTMENT OF TRANSPORTATION STUDIES

The Department of Transportation Studies offers courses in the academic discipline of **Maritime Transportation Management and Security (MTMS)**. Through curricular offerings provided, students are able to earn the **Bachelor of Science (B.S.) in Maritime Transportation Management and Security, and the Master of Science (M.S.) in Transportation Planning and Management. An undergraduate minor is offered in Maritime Transportation Management and Security for students majoring in other academic disciplines.** Members of the Department are housed in the College of Science and Technology.

For detailed information on the Master of Science in Transportation Planning and Management, students should refer to the Graduate School Bulletin of Texas Southern University.

The curriculum of study for the Bachelor of Science (B.S.) in **Maritime Transportation Management and Security** provides students with three concentrations: Logistics/Freight, Security, and Environment. A detailed listing of these requirements is given below. **Students selecting to pursue the B.S. in Maritime Transportation Management and Security are not required to declare a minor in another academic discipline. However, there is a track with for students who desire to choose a minor. Additionally, grades of "C" or better must be earned in all Maritime Transportation Management and Security courses required leading to completion of the degree. Grades of "C-" are unacceptable. Prior to graduation, majors must pass an exit examination during their senior year.**

The mission of the B.S. Program in **Maritime Transportation Management and Security** is fourfold: (1) to produce graduates for a variety of administrative and managerial positions in maritime transportation and port operations, (2) to produce graduates to function effectively in a number of diverse careers in three critical areas of maritime transportation: logistics, security, and environment, (3) to provide students with the academic background and preparation for pursuing advanced studies in the field of maritime transportation or affiliated areas, (4) to provide training programs and individual courses to individuals already in the maritime profession. In the fulfillment of this mission, students selecting the Maritime Transportation Management and Security program as a major will be prepared for a number of career specialization options including but not limited to: Freight Logistics Specialist, Shipping Manager, Port Manager and Operator, Port Security Officer, Maritime Policy Maker, Maritime Transportation Planner, Environmental Compliance Coordinator/Specialist, and Emergency Response Specialist. To that end, graduates of the Maritime Transportation program will also be academically prepared for graduate studies in the discipline of maritime.

Students wishing to pursue the **B.S. in Maritime Transportation Management and Security** must first gain admission to the University, must satisfy ASSET requirements and eradicate identified deficiencies through the General University Academic Center (GUAC), must contact the Department Office while satisfying ASSET requirements for advisement, and must petition the Department for admission once ASSET requirements have been completed and deficiencies removed. **Students wishing to change their major to Maritime Transportation Management and Security must be in good academic standing (not on academic probation, academic monitoring or suspension).**

In addition to academic course work, **a student pursuing the B.S. in Maritime Transportation Management and Security must undertake a three semester credit hour Practicum (Internship) (MTMS 495) to meet degree requirements and gain practical experience.** For further information on internships, students should contact either the Internship Coordinator in the College of Science and Technology, the Office of the Dean of the College of Science and Technology, or the University Director of Cooperative Education in the Placement Center at the University.

For the minor in Maritime Transportation Management and Security offered through the Department, students are required to complete 21 semester credit hours in the following courses: MTMS 101 (3 credits), MTMS 202 (3 credits), MTMS 303 (3 credits), MTMS 321 (3 credits), MTMS 322 (3 credits), MTMS 341 (3 credits), MTMS 342 (3 credits), MTMS 361 (3 credits), MTMS 423 (3 credits), MTMS 424 (3 credits), MTMS 425 (3 credits), MTMS 443 (3 credits), MTMS 444 (3 credits), MTMS 445 (3 credits), MTMS 462 (3 credits), MTMS 463 (3 credits), MTMS 481 (3 credits), MTMS 482 (3 credits), MTMS 483 (3 credits), and MTMS 495 (3 credits).

For additional information on the Bachelor of Science in Maritime Transportation Management and Security, students are asked to contact the Department Office at (713)-313-1841.

LISTING OF FACULTY IN THE DEPARTMENT

<p>Burns, Maria Instructor Diploma, Institute of Chartered Shipbrokers, U.K., London Metropolitan University M.S., London Metropolitan University, U.K. Ph.D. Candidate, Vrije University, Brussels</p>	<p>Qiao, Fengxiang Associate Professor B.S., South East University, Nanjing Jiangsu Province M.S., South East University, Nanjing Jiangsu Province Ph.D., Hong Kong University of Science and Technology</p>
<p>Lewis, Carol A. Professor B.S., M.S., University of Iowa Ph.D., University of Houston</p>	<p>Williams, Ursula A. Maritime Program Coordinator B.A., Huston-Tillotson College M.C.R.P., University of Texas at Arlington M.S, Texas Southern University</p>
<p>McKamie, Reginald Adjunct Instructor B.S., U.S. Merchant Marine Academy M.B.A., University of Southern California J.D., University of Houston</p>	<p>Yu, Lei Dean, Professor B.S., Beijing (formerly Northern) Jiaotong University M.S., Nagoya Institute of Technology Ph.D., Queen's University</p>
<p>Miller, Michael Visiting Instructor B.S. Texas A&M Galveston</p>	
<p>Morgan, Robert Visiting Instructor B.S., Southern University, Baton Rouge, Louisiana B.S., Panama Canal College, Republic of Panama M.S., National University, San Diego, California M.S., Texas Southern University</p>	
<p>Qi, Yi Chair, Associate Professor B.S., M.S., East China Normal University, Shanghai M.S., Polytechnic University of New York Ph.D., Polytechnic University of New York</p>	

MARITIME TRANSPORTATION MANAGEMENT AND SECURITY

- MTMS 101** **Introduction to Maritime Transportation** **(3)**
This course presents an introduction to the interdisciplinary study of maritime-related topics with an examination of the physical maritime environment and maritime cultures, history, and industries. Students enrolled in this course will learn what maritime transportation consists of, how it operates, how it is characterized economically, and how it is regulated. Three hours of lecture per week.
- MTMS 202** **Maritime Law** **(3)**
This course covers the process involved in the exercise of jurisdiction by nations over the maritime area. It presents the roles of major global shipping on nations' maritime policy, with special emphasis on past and present maritime legislation, business regulations, corporate governance issues, and related case studies. Three hours of lecture per week.
- MTMS 303** **American Maritime History** **(3)**
This course presents the development of American maritime enterprise from colonial times to the era of the containership, and its relationship to American political, economic, and cultural history. Three hours of lecture per week.
- MTMS 321** **International Business and Ocean Shipping** **(3)**
This course presents the global business environment and its implications for operations, management, pricing, promotion, and financial strategies. It also presents the maritime capabilities in facilitation of contemporary supply chains, the liner and tramp segments of the international marine transportation industry, and their role in international trade. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 322** **Port and Terminal Operation Management** **(3)**
This course provides an overview of the history, growth, organization, and operation of major ports and transportation terminals, including logistics processes such as on-dock rail, strategic and tactical planning, harbor drayage, terminal gate protocols, equipment and cargo movement, and integration of marine port and terminal operations with other modes of transportation. It introduces the functions of the port divided along business lines, different types of marine terminals, and the day-to-day operational, financial, and labor issues of ports and terminals. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 341** **Maritime Security Management** **(3)**
This course provides the basic framework and knowledge to perform the duties and responsibilities of a Company Security Officer (CSO), Port Facility Security Officer (PFSO), or Ship Security Officer (SSO) as defined by the ISPS Code. It presents how to implement and maintain a security plan and how to work with other security officer. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 342** **Maritime Security Technology** **(3)**
This course explores the implications and consequences of the scientific and technological issues in terms of maritime security in the social and political context. It presents instruction and discussion on current security issues and technologies. For example, containers now coming out of a port terminal are scanned for radiation; what can the scanners detect and if radiation is detected, what does that mean? How would a city be evacuated in the event a nuclear device was detected? Another example of technology with far reaching implications is that of biometrics; suppose everybody had their retina patterns in a national database? When is personal information too intrusive for government access? Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 361** **Maritime Environmental Management** **(3)**
This course presents an overview of the basic environmental regulations as they pertain to the maritime industry. The environmental management strategies (EMS) to be covered include knowing the fundamental structure of environmental strategies, EMS alternatives, alternative dispute resolution, how an effective EMS can reduce costs and increase profits, and what environmental laws may be triggered by relevant activities. Sections of the following laws pertaining specifically to Vessel

Operations are used: MARPOL, Resource Conservation and Recovery Act, Clean Water Act, Montreal Protocol, and State Statutes. Three lecture hours per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*

- MTMS 423** **Marine Cargo Operations** **(3)**
This course is an introduction to the objectives and problems with break-bulk cargo handling during loading, discharging, and in-transit carriage. It presents the role of the ship in integrated transportation systems, the methods of cargo loss prevention, and the maximum cargo efficiency with relation to space, cargo gear, crew, and labor costs. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 424** **Containerization and Modern Cargo Storage** **(3)**
This course presents the principles and regulations for transporting special refrigerated and hazardous cargo. It addresses the security of shipments from a regulatory, operational, and global business perspective. Students enrolled in this course will be trained to identify dangerous goods and know that they are to be stowed and separated according to the requirements. Students will also learn the hazards related to bulk cargoes and the precaution to take during their loading and carriage. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 425** **International Intermodal Transportation** **(3)**
This course is designed to examine the modern inter-modal transportation and distribution systems used in the movement of international and domestic cargo. It presents the evolution, development, and use of rail, air, truck, and maritime transportation systems, and their dynamic impacts on international trade. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 443** **Maritime Transportation Security** **(3)**
This course focuses on the International Ship and Port Security Code (ISPS) and domestic maritime security policies. It presents an introduction of port and ship vulnerability assessments, security plan implementation procedures, various levels of shipboard security responsibilities, and security administration. It also explores elements of chemical, biological and radiological defense (CBRD), and crisis management. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 444** **Lectures in Contemporary Maritime Security Issues** **(3)**
This course invites prominent experts in maritime and intermodal security to give special lectures on various topical issues of the day in their field of security. Students enrolled in this course are required to submit a term paper that integrates the information from different speakers and their research project experience. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 445** **Maritime Risk Assessment and Management** **(3)**
This course is designed to develop the concepts required for maritime risk-based planning and analysis, and the methods used to conduct vulnerability assessment for natural disaster, technological hazards, and terrorist threats. The topics to be covered included: 1) Introduction and Analysis, such as Process Descriptions, Hazard Identification, Source Models, Consequence Analysis; 2) Assessment, such as Exposure Assessment, Does Response and Risk Characterization, Radiation Risk Assessment, Environmental Assessment; and 3) Management, such as Structural Activity Relationships, Risk Management, ISO 14000. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 462** **Marine Environmental Protection** **(3)**
This course offers an interdisciplinary approach to ways in which human beings control adverse effects to the marine environment. It presents various environmental situations and the methods of applying scientific knowledge about the coastal areas to the human, economic, and political dimension. Three lecture hours per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*
- MTMS 463** **Maritime Environmental Law** **(3)**
This course is designed to familiarize students with the concepts and mechanisms of international and U.S. federal environmental law and policy. It presents the role of the American legal system as it functions to control and remediate maritime environmental problems and evaluates the

opportunities to use judicial, administrative, and legislative processes to address those problems. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*

MTMS 481

Seminar in International Maritime Business (3)

This course provides an opportunity for students and the instructor to discuss the effects of multi-national operations on business strategy and decision making by exploring the economic, political, financial, legal, and social nature of the international environment. It examines maritime and transport related formulation, selection, and implementation of multi-national strategies in the context of business environment. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*

MTMS 482

Advanced Transportation Management (3)

This course presents perspectives on carrier organization and management. It examines national transportation policy, regulation, and the changing environment of transportation. Topics to be covered include transportation operations, marketing, financing, purchasing, information systems and maintenance, as well as human resources management and labor relations. Students enrolled in this course are required to involve in original research on problems in transportation management with emphasis on maritime transportation. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*

MTMS 483

Maritime Studies Senior Seminar (3)

This course facilitates discussions between students, the instructor, and invited speakers to discuss topical themes related to diverse aspects of society and commerce in coastal and oceanic zones, the maritime experience, and the political, economical, cultural, and environmental perspectives of maritime management. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*

MTMS 495

Field Work Practicum in Maritime Transportation (3)

This course provides students with field work opportunities to gain hands-on experience in various maritime transportation related work. Students enrolled in this course are required to submit a written report of the practicum or project experience, detailing the specific tasks performed. Three hours of lecture per week. *Pre-requisite MTMS 101 with a grade of "C" or better.*

**CURRICULUM SUMMARY FOR THE
BACHELOR OF SCIENCE DEGREE
IN
MARITIME TRANSPORTATION MANAGEMENT AND SECURITY
(With Minor)
TOTAL CREDITS REQUIRED: 121**

CORE CURRICULUM (STANDARD)*	TCCNS	MAJOR (MARITIME TRANSPORTATION MANAGEMENT AND SECURITY)	OTHER REQUIREMENTS	MINOR REQUIREMENTS
42 credits	EQUIVALENT	36 credits	22 credits	21 credits
Communication:		MTMS 101 (3)	ITEC 331 (3)	
ENG 131 (3) *	ENGL 1301	MTMS 202 (3)	ITEC 412 (1)	
ENG 132 (3)	ENGL 1302	MTMS 303 (3)	MGMT 300 (3)	
Mathematics:		MTMS 321 (3)	MGMT 402 (3)	
MATH 133 (3) *	MATH 1314	MTMS 322 (3)	MATH 231 (3)	
Life and physical sciences:		MTMS 341 (3)	MIS 304 (3)	
Life & Physical Sciences (6)****		MTMS 361 (3)	MKTG 306 (3)	
Language, philosophy, and culture:		MTMS 424 (3)	GEOG 132 (3)	
ENG 2xx (3)	ENG 23xx	MTMS 463 (3)		
Creative arts:		MTMS 481 (3)		
MUSI 239 (3)	HUMA 1315	MTMS 495 (3)		
American history:		MTMS Electives (3)***		
HIST 231 (3)	HIST 1301			
HIST 232 (3)	HIST 1302			
Government/Political Science:				
POLS 235 (3)	GOVT 2305			
POLS 236 (3)	GOVT 2306			
Social and behavioral sciences:				
PSY 131 (3)	PSYC 2301			
Institutional Options:				
SC 135 (3)	SPCH 1321			
CS 116 (3)	COCS 1301			

Students should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed. (N) represents the number of course credits.

* Pending English and Math examinations

*** Elective course selected from MTMS 423,425,443,445,462,482,483.

**** Life and Physical Sciences credits should be selected from the following: One from the following courses: BIOL 143 (3) or CHEM 131 (3) and one from the following courses: CHEM 132 (3), BIOL 135 (3), GEOL 141 (3), PHYS 101 (3), PHYS 237 (3), PHYS 238 (3) or PHYS 251 (3) (TCCN: BIOL1308 (3) or CHEM 1311(3) and one from the following courses: CHEM 1312(3), BIOL 2301(3), GEOL 1303 (3), PHYS 1315(3), PHYS 1301(3), PHYS 1302(3), PHYS 2325(3)).

**CURRICULUM SUMMARY FOR THE
BACHELOR OF SCIENCE DEGREE
IN
MARITIME TRANSPORTATION MANAGEMENT AND SECURITY
(Without Minor)
TOTAL CREDITS REQUIRED: 121**

CORE CURRICULUM (STANDARD)*	TCCNS	MAJOR (MARITIME TRANSPORTATION MANAGEMENT AND SECURITY)	OTHER REQUIREMENTS
42 credits	EQUIVALENT	45 credits	34 credits
Communication:		MTMS 101 (3)	ITEC 331 (3)
ENG 131 (3) *	ENGL 1301	MTMS 202 (3)	ITEC 412 (1)
ENG 132 (3)	ENGL 1302	MTMS 303 (3)	MGMT 300 (3)
Mathematics:		MTMS 321 (3)	MGMT 301 (3)
MATH 133 (3) *	MATH 1314	MTMS 322 (3)	MGMT 402 (3)
Life and physical sciences:		MTMS 341 (3)	SPAN (6) **
Life & Physical Sciences (6)****		MTMS 361 (3)	MATH 231 (3)
Language, philosophy, and culture:		MTMS 424 (3)	MIS 304 (3)
ENG 2xx (3)	ENG 23xx	MTMS 463 (3)	CS 117 (3)
Creative arts:		MTMS 481 (3)	MKTG 306 (3)
MUSI 239 (3)	HUMA 1315	MTMS 495 (3)	GEOG 132 (3)
American history:		MTMS Electives (12)***	
HIST 231 (3)	HIST 1301		
HIST 232 (3)	HIST 1302		
Government/Political Science:			
POLS 235 (3)	GOVT 2305		
POLS 236 (3)	GOVT 2306		
Social and behavioral sciences:			
PSY 131 (3)	PSYC 2301		
Institutional Options:			
SC 135 (3)	SPCH 1321		
CS 116 (3)	COCS 1301		

Students should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed. (N) represents the number of course credits.

* Pending English and Math examinations

** Can be substituted by any foreign language course including Chinese, Russian, Japanese, French, etc.

*** Elective course selected from MTMS 423,425,443,445,462,482,483.

**** Life and Physical Sciences credits should be selected from the following: One from the following courses: BIOL 143 (3) or CHEM 131 (3) and one from the following courses: CHEM 132 (3), BIOL 135 (3), GEOL 141 (3), PHYS 101 (3), PHYS 237 (3), PHYS 238 (3) or PHYS 251 (3) (TCCN: BIOL1308 (3) or CHEM 1311(3) and one from the following courses: CHEM 1312(3), BIOL 2301(3), GEOL 1303 (3), PHYS 1315(3), PHYS 1301(3), PHYS 1302(3), PHYS 2325(3)).

**Bachelors of Science Degree in
MARITIME TRANSPORTATION MANAGEMENT AND SECURITY
Degree Plan – Total Credits: 121
(With Minor)**

First Year	First Semester		Second Semester	
	ENG 131 Freshman English I	3	ENG 131 Freshman English II	3
	MATH 133 College Algebra	3	NSCI 1XX* Life and Physical Sciences	3
	SC 135 Business & Professional Communication	3	PSY 131 General Psychology	3
	NSCI 1XX* Life and Physical Sciences	3	MTMS 101 Intro to Maritime Transp	3
	CS 116 Intro to Computer Science 1	3	GEOG 132 World Regional Geography	3
		15 hrs		15 hrs

Second Year	Third Semester		Fourth Semester	
	HIST 231 Social & Political History of the United States to 1877	3	HIST 232 Social & Political History of the United States since 1877	3
	POLS 235 American Political Systems I	3	POLS 236 American Political Systems II	3
	Minor XXX Minor Course	3	MUSI 239 Fine Arts & Daily Liv	3
	MATH 231 Elementary Statistics I	3	Minor XXX Minor Course	3
	MTMS 202 Maritime Law	3	ENG 2XX (Any 200 Level)	3
		15 hrs		15 hrs

Third Year	Fifth Semester		Sixth Semester	
	MTMS 303 American Maritime History	3	MTMS 361 Maritime Environ. Mgmt.	3
	MTMS 341 Maritime Security Mgmt.	3	MKTG 306 Principles of Marketing	3
	MGMT 300 Principles of Management	3	MTMS 322 Port and Term. Oper. Mgmt.	3
	ITEC 331 Technical Writing	3	MTMS XXX **Elective**	3
	MTMS 321 Inter. Busi. And Ocean Ship.	3	Minor XXX Minor Course	3
		15 hrs		15 hrs

Fourth Year	Seventh Semester		Eighth Semester	
	MTMS 424 Contain. And Mo. Cargo Stw	3	MTMS 463 Maritime Environmental Law	3
	MIS 304 Information Technology	3	MTMS 481 Seminar in Maritime Business	3
	MGMT 402 International Management	3	Minor XXX Minor Course	3
	Minor XXX Minor Course	3	ITEC 412 Senior Seminar	1
	Minor XXX Minor Course	3	MTMS 495 Practicum	3
		15 hrs	Minor XXX Minor Course	3
			16 hrs	

* Life and Physical Sciences credits should be selected from the following: One from the following courses: BIOL 143 (3) or CHEM 131 (3) and one from the following courses: CHEM 132 (3), BIOL 135 (3), GEOL 141 (3), PHYS 101 (3), PHYS 237 (3), PHYS 238 (3) or PHYS 251 (3) (TCCN: BIOL1308 (3) or CHEM 1311(3) and one from the following courses: CHEM 1312(3), BIOL 2301(3), GEOL 1303 (3), PHYS 1315(3), PHYS 1301(3), PHYS 1302(3), PHYS 2325(3)).

** Elective Options: MTMS 423, 425, 443, 445, 482, 483, 490

**Bachelors of Science Degree in
MARITIME TRANSPORTATION MANAGEMENT AND SECURITY
Degree Plan – Total Credits: 121
(Without Minor)**

First Year	First Semester		Second Semester	
	ENG 131 Freshman English I	3	ENG 131 Freshman English II	3
	MATH 133 College Algebra	3	NSCI 1XX* Life and Physical Sciences	3
	SC 135 Business & Professional Communication	3	PSY 131 General Psychology	3
	NSCI 1XX* Life and Physical Sciences	3	MTMS 101 Intro to Maritime Transp	3
	CS 116 Intro to Computer Science 1	3	CS 117 Intro to Comp. Science II	3
			GEOG 132 World Regional Geography	3
		15 hrs		18 hrs

Second Year	Third Semester		Fourth Semester	
	HIST 231 Social & Political History of the United States to 1877	3	HIST 232 Social & Political History of the United States since 1877	3
	POLS 235 American Political Systems I	3	POLS 236 American Political Systems II	3
	SPAN 131** Elementary Spanish	3	MUSI 239 Fine Arts & Daily Liv	3
	MATH Elementary Statistics I	3	SPAN 132** Elementary Spanish II	3
	MTMS 202 Maritime Law	3	ENG 2XX (Any 200 Level)	3
		15 hrs		15 hrs

Third Year	Fifth Semester		Sixth Semester	
	MTMS 303 American Maritime History	3	MTMS 361 Maritime Environ. Mgmt.	3
	MTMS 341 Maritime Security Mgmt.	3	MKTG 306 Principles of Marketing	3
	MGMT 300 Principles of Management	3	MTMS 322 Port and Term. Oper. Mgmt.	3
	ITEC 331 Technical Writing	3	MTMS XXX **Elective**	3
	MTMS 321 Inter. Busi. And Ocean Ship.	3	MGMT 301 Personnel and Manpower Dev	3
		15 hrs		15 hrs

Fourth Year	Seventh Semester		Eighth Semester	
	MTMS 424 Contain. And Mo. Cargo Stw	3	MTMS 463 Maritime Environmental Law	3
	MIS 304 Information Technology	3	MTMS 481 Seminar in Maritime Business	3
	MGMT 402 International Management	3	MTMS XXX ***Elective***	3
	MTMS XXX ***Elective***	3	ITEC 412 Senior Seminar	1
	MTMS XXX ***Elective***	3	MTMS 495 Practicum	3
		15 hrs		13 hrs

* Life and Physical Sciences credits should be selected from the following: One from the following courses: BIOL 143 (3) or CHEM 131 (3) and one from the following courses: CHEM 132 (3), BIOL 135 (3), GEOL 141 (3), PHYS 101 (3), PHYS 237 (3), PHYS 238 (3) or PHYS 251 (3) (TCN: BIOL1308 (3) or CHEM 1311(3) and one from the following courses: CHEM 1312(3), BIOL 2301(3), GEOL 1303 (3), PHYS 1315(3), PHYS 1301(3), PHYS 1302(3), PHYS 2325(3)).

**Can be substituted by any foreign language courses including Chinese, Russian, Japanese, French, etc.

*** Elective Options: MTMS 423, 425, 443, 445, 482, 483, 490

TWO YEAR COURSE ROTATION SCHEDULE

X indicates when a course shall be offered

COURSE NUMBER	COURSE NAME	SCH	FALL EVEN YEAR	SPRING ODD YEAR	SUM ODD YEAR	FALL ODD YEAR	SPRING EVEN YEAR	SUM EVEN YEAR	PREREQUISITES	COREQUISITE
MTMS 101	Introduction to Maritime Transportation	3	X	X		X	X		none	
MTMS 202	Maritime Law	3	X			X			none	
MTMS 303	American Maritime History	3	X			X			none	
MTMS 321	International Business and Ocean Shipping	3		X			X		MTM S101	
MTMS 322	Port and Terminal Operation Management	3	X			X			MTMS 101	
MTMS 341	Maritime Security Management	3	X			X			MTMS 101	
MTMS 361	Maritime Environmental Management	3		X			X		MTMS 101	
MTMS 424	Containerization and Modern Cargo Stowage	3	X			X			MTMS 101	
MTMS 463	Maritime Environmental Law	3		X			X		MTMS 101 and MTMS 202	
MTMS 481	Seminar in International Maritime Business	3		X			X		MTMS 101	
MTMS 495	Practicum	3		X			X		MTMS 101	SENIOR STANDING
MTMS 423	Marine Cargo Operations	3		X					MTMS 101	
MTMS 425	International Intermodal Transportation	3				X			MTMS 101	
MTMS 443	Maritime Transportation Security			X			X		MTMS 101 and MTMS 341	
MTMS 445	Maritime Risk Assessment and Management	3	X			X			MTMS 101	
MTMS 482	Advanced Transportation Management	3	X						MTMS 101	
MTMS 483	Maritime Studies Senior Seminar	3					X		MTMS 101	SENIOR STANDING
MTMS 490	Independent Study In Maritime Transportation Management And Security	3	X	X		X	X		MTMS 101	SENIOR STANDING