



# **Arab AASTMT for Science, Technology and Maritime Transport**

## **Campus Catalog**



**2020-2021**

**AASTMT Branch in Sharjah**

Every effort has been made to ensure the accuracy of this publication at the time of going to press; however, AASTMT reserves the right to alter any program or course. Students should check for any amendments prior to enrollment. All amendments or updates will be published in the official online version at [www.aast.edu](http://www.aast.edu).

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## MESSAGE FROM AASTMT PRESIDENT

Since its establishment in 1972, AASTMT has achieved a remarkable and sustained progress as a specialized organization, a top-level house of expertise and a highly reputable technical arm for the Arab League. Today, our vision for AASTMT is to be recognized as a worldwide center of excellence for maritime and college education according to international standards of education, scientific research, innovation and training. While fulfilling its community service responsibilities, it seeks to maintain its status as a distinguished Arab house of excellence and first choice for students regionally and internationally.



It has served the Arab community by providing education for both undergraduate and graduate students in over 35 specializations, including maritime transport, engineering, computers and information technology, international transport and logistics, management, language, media, law, pharmacy, fisheries and aquaculture technology, archeology and finally dentistry and artificial intelligence. This has been carried out by applying state-of-the-art technological methods in the above fields.

AASTMT has expanded inside and outside Egypt by establishing headquarters and branches in Alexandria, Cairo, Aswan, Port Said, Latakia (Syrian Arab Republic), in addition to its new branch in Sharjah, UAE. Taking the lead in development and seeking natural expansion, AASTMT has headed west and opened its latest branch in New Alamein City.

AASTMT brings together both staff and students from all over the world. They gather and interact within the same campus. This cultural exchange enhances students' mental maturity. Given the vast technological progress in today's world, AASTMT provides a healthy atmosphere for creation and innovation and a perfect learning environment for futuristic thinking, academic motivation, as well as cultural enrichment and promoting scientific research.

Last but not least, I would like to express my sincere gratitude in tribute for all those who contributed to the success of AASTMT since its establishment until the present day, the pioneers who paved the way modestly and selflessly for the present generation. Thanks are also due to all administrative and academic AASTMT staff whose fruitful efforts shape a bright future for our beloved academy. Finally, my best wishes for success and prosperity for all AASTMT current and future students, as well as graduates, for whom AASTMT has created a better future.

**Prof. Ismail AbdelGhafar Ismail Farag**

**President,  
Arab Academy for Science, Technology and Maritime Transport**

## PREFACE

This catalog is divided into three sections.

The first section gives an overview of AASTMT and its history. Information is also provided about AASTMT's organizational structure and governance, accreditation, academics, learning resources and student services.

The second section provides information about AASTMT's admission and registration regulations, as well as academic policies, including grading and academic progress. The policies are more detailed in the policies and procedures manual.

The third section provides information about academic programs offered by AASTMT branch in Sharjah. Information is provided about each program's learning outcomes, study plan with the recommended sequence of study, degree completion requirements, course descriptions, and academic staff.

## ACADEMIC CALENDAR 2020/2021

Day	Week	Description
14 Jun 2020		Beginning of admission: Fall Semester 2020/2021
20 Aug 2020		New Hijri year
6 Sep 2020		Beginning of registration
6 Sep 2020		New students' orientation
10 Sep 2020		Last day of admission
10 Sep 2020		Last day for new students to postpone their admission
13 Sep 2020	1	Beginning of classes: Fall Semester
17 Sep 2020	1	Last day for incomplete exam (previous semester)
24 Sep 2020	2	Last day for: adding/dropping courses/registration
25 Oct. 2020	7	Mid-term exams (7 <sup>th</sup> week )
29 Oct 2020		Prophet's Mohammed's Birthday
29 Nov 2020	12	Pre-final exams (12 <sup>th</sup> week )
1 Dec 2020	11	Martyr's Day
02-03 Dec 2020	11	UAE National Day
6 Dec 2020	12	Beginning of admission: Spring semester 2020/2021
10 Dec 2020	13	Last day to withdraw with a grade of "W"
24 Dec 2020	15	Last day of classes
27 Dec 2020	16	Final exams
01 Jan 2021	16	New Year
10 Jan 2021		Fall Break begins
21 Jan 2021		New students' orientation
24 Jan 2021		The last day of admission
24 Jan 2021		Last date for new students to postpone their admission
24 Jan 2021		Beginning of registration
31 Jan 2021	1	Beginning of classes: Spring Semester

<b>Day</b>	<b>Week</b>	<b>Description</b>
<b>4 Feb 2021</b>	1	Last day for incomplete exams
<b>11 Feb 2021</b>	2	Last day for: adding/dropping courses/registration
<b>14 Mar 2021</b>	7	Mid-term exams (7 <sup>th</sup> week )
<b>18 Apr 2021</b>	12	Pre-final exams (12 <sup>th</sup> week )
<b>29 Apr 2021</b>	13	Last day to withdraw with a grade of "W"
<b>13 May – 15 May</b>		Eid Al-Fitr (Lesser Bairam) holidays
<b>20 May 2021</b>	15	Last day of classes
<b>23 May 2021</b>		Final exams
<b>6 Jun 2021</b>		Spring Break begins
<b>20 Jun 2021</b>		Beginning of summer registration
<b>27 Jun 2021</b>	1	Beginning of classes: Summer Semester
<b>1 Jul 2021</b>	1	Last day for: adding/dropping courses/registration
<b>19 Jul – 22 Jul</b>		Eid Al-Adha (Greater Bairam) holidays
<b>25 Jul</b>	3	Mid-term exams
<b>12 Aug</b>	5	End of summer classes
<b>15 Aug</b>	6	Final exams

## OVERVIEW OF AASTMT

The idea of the academy was initiated in 1970 as a non-governmental, non-profit university, as a regional center for training in the Maritime Transport field. On the 9th of November 1974, the representatives of the governments of the Arab countries signed an agreement for the establishment of the Arab Academy for Maritime Transport, at the headquarters of the Arab League, as one of its specialized organizations. The strong launch of the academy was in 1979, with the creation of an Exam Center in collaboration with the International Maritime Organization (IMO) and The United Nations Development Program (UNDP), which aimed at qualifying sea captains, marine officers and engineers to obtain certificates of eligibility onboard High Seas ships.

In 1994, as a consequence of the diminishing number of learners willing to work in the field of maritime transport, the increase in the tuition and maritime training fees, as well as the Arab fleets and ship owners resorting to cheap Asian labor and in accordance with the self-funding policy approved of by the board of Arab Ministers of Transport in November 1989 in Sharjah, UAE, it was high time for the AASTMT to start looking for sources of funding through new activities and novel routes to maintain its basic and fundamental mission in maritime education and training so as to encounter the Arab and international changes. In addition, the AASTMT's expansion in the fields of engineering and management was sprouting from its belief in providing good educational services depending on its strengths as well as its Arab and international reputation in devotion.

This has led to adding up to the AASTMT's name and activities to be a major attraction for learners and also to guarantee the required sources of funding to sustain the high-expense maritime education and to reflect the AASTMT's real image. Hence, according to the decision of the Economic and Social Council in its fifty-fourth session, AASTMT's name has become the Arab Academy for Science and Technology: "A university specialized in maritime transport" and its certificates have been made equivalent to those granted by Egyptian universities. The AASTMT has received Arab and international recognition due to its acknowledged and unique achievement.

AASTMT offers 35 Bachelor degrees and 35 Masters degrees in different specializations, such as Maritime Transport, Engineering and Technology, Management, Computing and Technology, Information Technology, International Transport and Logistics, Language and Communication, and Fisheries Technology and Aquaculture.

AASTMT is recognized as one of the best educational providers in the field of maritime transport world-wide. Moreover, its awarded degrees in Engineering, International Transport and Logistics are equated with their counterparts in Egyptian universities in addition to their accreditation from well-known local and international certifying bodies in the field of higher education.

The postgraduate system encompasses a specialized College for Postgraduate Studies in Management, in addition to 9 specialized institutes that offer educational programs such as Masters and PhDs in Quality, consultancy and different training courses.

Since its establishment, AASTMT has always been a pioneer in providing distinguished academic programs as demonstrated in an educational vision that aims mainly at providing



the best education service there is. It also aims at equipping the Egyptian and the Arab market with the best graduates in its fields of study.

### AASTMT Vision

To be a world class university in Maritime Transport and Higher Education in compliance with the international standards of Education, Scientific Research, Innovation and Training while fulfilling its Social Responsibilities to maintain its position as a distinguished Arab House of Expertise and to be the first choice of students in the region.

### AASTMT Mission

Contributing to the social and economic development of the Arab region by graduating distinguished calibers who are able to effect change after being qualified through comprehensive educational programs in addition to highly qualified faculty and centers of excellence in research, training and consultancy while being strictly committed to the highest levels of quality.

### AASTMT Core Values

#### **“1st. CHOICE”**

<b>1</b>	One Team, One Goal.
<b>C</b>	Continuous Improvement
<b>H</b>	Human Capital Development
<b>O</b>	Originality
<b>I</b>	Integrity
<b>C</b>	Creativity and Innovation.
<b>E</b>	Excellent Performance

### AASTMT Branch in Sharjah Goals

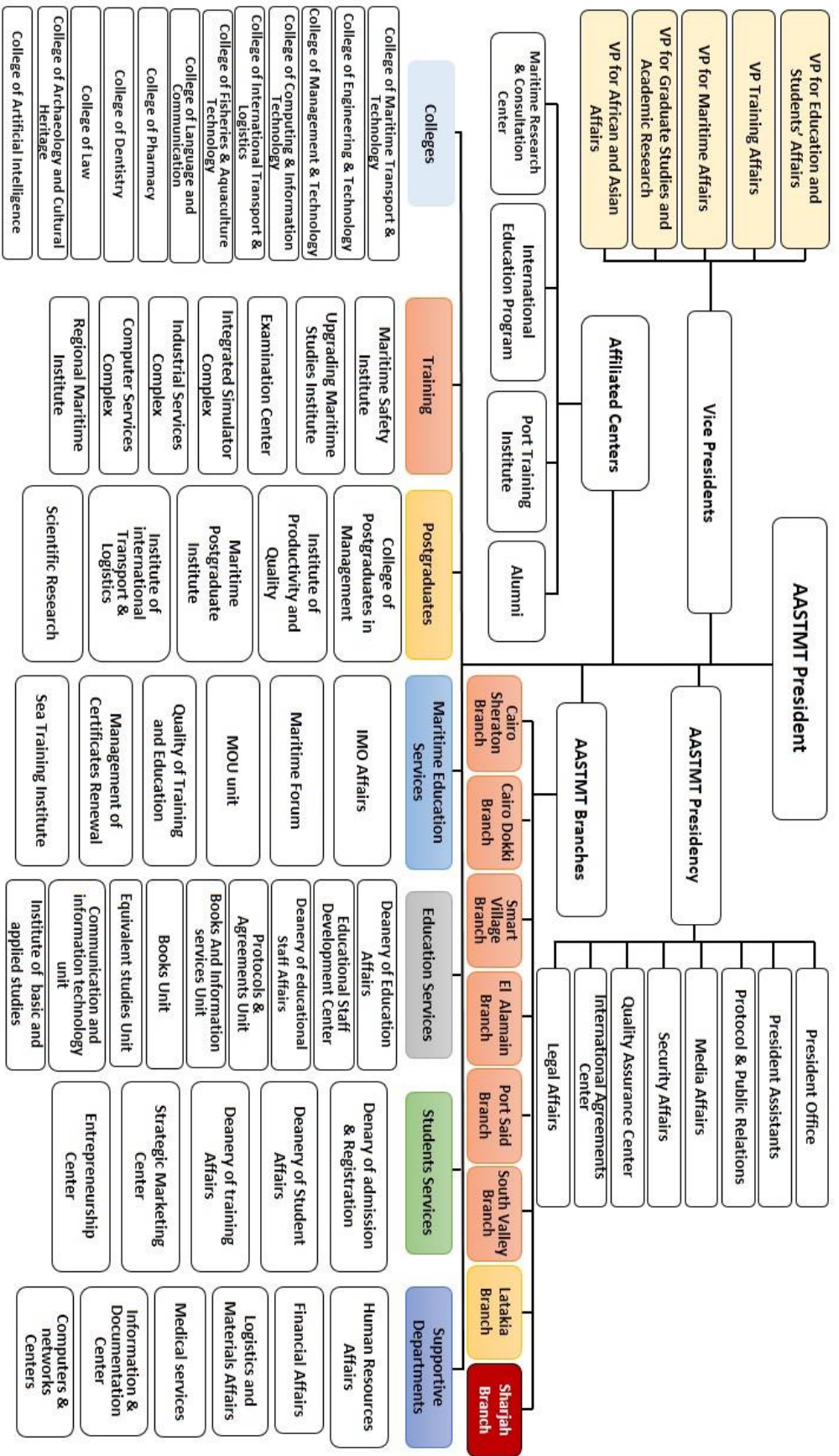
1. Introduce and develop educational programs in Science, Technology and Maritime Transport in order to achieve institutional excellence in accordance with the policies and plans of AASTMT Branch in Sharjah that are emanated from AASTMT General Plan.
2. Support and develop the maritime transport sector and prepare qualified cadres to work with it in various fields according to the latest scientific systems.
3. Supporting scientific and research activity in the fields of science, technology and maritime transport.
4. Consolidating scientific links and connections, and exchanging expertise and technical and cultural information with local and international institutions in accordance with the goals and competences of the Academy and the branch.

### AASTMT Branch in Sharjah Objectives

1. Applying AASTMT accredited educational, training and scientific research programs approved in the fields of science, technology and maritime transport.

2. Introducing and developing educational and training programs in line with the goals of the Academy and branch, in light of the obtained accreditations in the corresponding educational entities at the headquarters of AASTMT in Alexandria.
3. Providing professional training programs in the field of science, technology and maritime transport.
4. Preparing a high-level scientific research and projects in science, technology and maritime transport in partnership with specialized national and international institutions.
5. Organizing and participating in exhibitions, conferences and scientific and cultural activities related to science, technology and maritime transport.
6. Establishing strategic partnerships and cooperation agreements with local and international academies, universities, organizations and institutes for the purpose of supporting the branch's programs in the fields of science, technology and maritime transport.
7. Promoting AASTMT Branch in Sharjah to be a scientific, cultural, National, Arab and International center for science, technology and maritime transport.
8. Preparation and qualification of Academic cadres in the field of science, technology and maritime transport.
9. Development of the infrastructure needed for the social research, education, training and orientation in the branch in accordance with the best internationally accredited applied practices and standards.
10. Any other objectives decreed by the Board of trustees in coordination with AASTMT.





AASTMT Organization Chart

## Board of Trustees

The Board represents the supreme authority in the AASTMT Branch in Sharjah. It consists of a Chairman and no less than six of the members who are equally nominated by the government of the Emirate and AASTMT. Their nomination is issued by a decision decree from His Highness the Ruler of the Emirate of Sharjah, the Board includes in its formation the AASTMT President as per his office.

The term of membership in the Board is three years, it may be extended for a similar period or periods, starting from its first meeting, The Board shall continue to conduct its duties upon the expiry of its term until a new board is formed and it is allowed to reappoint those members whose membership period has expired.

## The Executive Committee

It will be chaired by the AASTMT President and the membership of Senior Top Management Academic and Non-Academic representatives from the parent sectors in the main campus in Alexandria, in addition of two UAE members, who are well-experienced and hold high qualifications in Higher Education, whom shall be assigned by the Board of Trustees. The Branch Director shall be a member of the Executive Committee as per his office. Major recommendations or decisions made by the Executive Committee must be raised to the AASTMT Executive Council for approval and then to the General Assembly for adoption.

## ACCREDITATION AND LICENSURE

Arab Academy for Science, Technology and Maritime (AASTMT) is a specialized organization of the Arab League working in the field of Higher Education Sector through its AASTMT branch in the Emirate of Sharjah is firmly confirming to the requirements of the Ministry of Education in the United Arab Emirates and is officially licensed from 6<sup>th</sup> of August 2019 to 17<sup>th</sup> of June 2024 by the Administrative Ministerial Decree (224) issued by the Ministry of Education's Higher Education Affairs Division in the United Arab Emirates.

<https://www.caa.ae/caa/DesktopModules/Institutions.aspx>

In addition to being licensed by the UAE Ministry of Education, AASTMT is a fully accredited member of the Association of Arab Universities (AAU) and the International Association of Universities (IAU) as well as the International Association of Maritime Universities (IAMU).

The bachelor degree programs in Maritime Transport Technology with offshore operations technology concentration, shipping and port concentration and Marine Engineering Technology offered by the College of Maritime Transport Technology are in the ongoing process of being accredited by the UAE Ministry of Education Commission for Academic Accreditation (CAA).

The bachelor degree programs in Maritime Transport Technology and Marine Engineering Technology offered by the College of Maritime Transport Technology are accredited by the Central Evaluation and Accreditation Agency (ZEvA) in January, 2017, Germany for five years.

<https://www.zeva.org/international/information-in-english/projects-and-references/>

Both the educational and maritime training systems, and the certification systems adopted by AASTMT were accredited by the European Commission. Moreover, the recognition of AASTMT as an academic nautical institution in accordance with the requirements of the European Union Parliament allows AASTMT graduates to work on EU vessels.

## COOPERATIVE RELATIONSHIPS

### ISO 9001 Certificate for Educational Processes

The Arab Academy for Science, Technology and Maritime Transport has been awarded the ISO 9001:2015 certificate for its educational processes since September 1999, after following formal quality assurance procedures to maintain the educational quality level received by students.

### Standards of Training, Certification and Watch keeping for Seafarers (STCW)

The adoption all maritime courses taught at the Academy complies with the requirements of the new standards adopted by **STCW 1978** and its amendments and the State headquarters ministerial decision.

### European Commission

Both the educational and maritime training systems, and the certification systems adopted by the Academy were accredited by the European Commission. Moreover, the recognition of the Academy as an academic nautical institution in accordance with the requirements of the European Union Parliament allows Academy graduates to work on EU vessels.

### Approved Center of Marlins Certificates

The International Forum for Maritime Transport (IFMT) under the lead of the Arab Academy for Science, Technology and Maritime Transport (AASTMT) has recently expanded its range of training and services as the one and only approved test center of “Marlins” existing in Egypt and Africa. Marlins are the leading provider of Maritime English Language Testing and Training solutions to the maritime industry.

- Bourbon Offshore MMI, Dubai UAE
- Rijeka University, Croatia
- Shanghai Maritime University, China
- Nippon KaijiKyokai (ClassNK), UAE
- World Maritime University WMU, Sweden
- International Maritime Organization (IMO)
- Aristotle University of Thessaloniki, Greece
- City University EX (Al-Manar University), Lebanon
- United Arab Shipping Company, UAE
- Baltic & International Maritime Council
- World Meteorological Organization
- Egyptian Authority for Maritime Safety
- International Hydrographic Organization
- Japan International Cooperation Agency
- Egyptian Meteorological Authority
- TRANSAS
- City Unity – Greece -Athena





[www.bourbonoffshore.com](http://www.bourbonoffshore.com)



[www.uniri.hr](http://www.uniri.hr)



[www.shmtu.edu.cn](http://www.shmtu.edu.cn)

**ClassNK**

[www.classnk.com](http://www.classnk.com)



[www.wmu.se](http://www.wmu.se)



[www.imo.org](http://www.imo.org)



[www.auth.gr](http://www.auth.gr)



**CITY  
UNIVERSITY**  
[www.city.edu.lb](http://www.city.edu.lb)



[www.uasc.net](http://www.uasc.net)



[www.bimco.org](http://www.bimco.org)



[www.wmo.int](http://www.wmo.int)



[www.eams.gov.eg](http://www.eams.gov.eg)



[www.iho.int](http://www.iho.int)



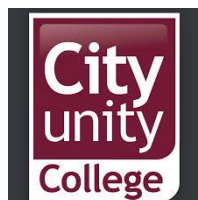
[www.jica.go.jp](http://www.jica.go.jp)



[www.ema.gov.eg](http://www.ema.gov.eg)

**TRANSAS**

[www.transas.com](http://www.transas.com)



[www.unipage.net](http://www.unipage.net)



## ACADEMIC FRAMEWORK

AASTMT branch in Sharjah offers undergraduate programs in Marine Engineering Technology and Maritime Transport Technology, through the College of Maritime Transport and Technology (CMTT). All programs offered by CMTT are four years study programs.

The two academic programs leading to Bachelor Degrees in Maritime Transport Technology and in Marine Engineering Technology are:

1. Bachelor in Marine Engineering Technology: Delivered in English with a total of 147 credits.
2. Bachelor in Maritime Transport Technology: Delivered in English with a total of 148 credits.

### Credit Hour

A credit hour is a unit of measurement defining the student's overall effort towards attaining a qualification. AASTMT adopts the US system, where 1 semester credit equals approximately 1 hour of time in class per week over a semester of typically 15 weeks. For laboratory or tutorials, 1 semester credit is normally given for two hours of laboratory or tutorial time per week over a 15-week semester.

### Semester/Term

A semester is a period of time, typically a minimum of 15 weeks, during which an institution offers courses. Some courses may be offered in intensive-modes, a summer term, which is typically 5-weeks, in addition to the final examination.

The number of credit units of each course is calculated in accordance to the time that students are expected to spend under direct contact with the lecturer in order to achieve learning outcomes. All courses are one semester long.

### Graduation Requirements

The educational program consists of obligatory courses for the completion of the academic degree according to the approved study plan for each educational program. An educational program may include a number of educational tracks.

**A student obtains the bachelor degree when meeting the following graduation requirements:**

- The student must pass all course hours in the study program with a GPA not less than 2.0 upon graduation.
- The minimum duration of study must be fulfilled as stipulated by the Supreme Council of Education Affairs. For the College of Maritime Transport and Technology, the minimum duration of study is 8 semesters.

**A student is eligible for graduation and obtains his/her degree after fulfilling the following requirements:**

- The student has passed all the required and relevant courses according to the approved study plan.
- The student has achieved a GPA of not less than 2.0.
- The student has not exceeded the maximum number of years (8 years) for graduation stated in AASTMT regulations.
- The student has spent the minimum study duration (8 semesters) and time in learning for the degree.
- The student must be registered at AASTMT during his/her graduation semester.

Every student is responsible for meeting all graduation requirements as indicated

### **Passing Grade Requirement**

The minimum passing grade requirement for any course is the letter grade D.

### **General Studies**

All Bachelor degree students must complete the General Education Program with a minimum grade of D in order to graduate. General education courses may be transferred from other universities if they meet the program learning outcomes of the General education program.

#### **Bachelor in Marine Engineering Technology**

**To earn a Bachelor Degree in Marine Engineering Technology from AASTMT, a student must:**

1. Pass all courses in the study program with a minimum GPA of 2.0 upon graduation.
2. Complete 147 credit hours including:
  - a. 22 credit hours of general education courses.
  - b. 125 credit hours for program core courses.

#### **Bachelor in Maritime Transport Technology**

Concentrations in:

1. Offshore Operations Technology
2. Shipping and Port Operations

**To earn a Bachelor Degree in Maritime Transport Technology from AASTMT, a student must:**

1. Pass all courses in the study program with a minimum GPA of 2.0 upon graduation.
2. Complete 148 credit hours including:
  - a. 33 credit hours of general education courses.
  - b. 99 credit hours for program core courses.
  - c. 16 credit hours for elective courses (concentration courses).

## The Qualification Framework for the Emirates (QFE)

The Qualifications Framework for the Emirates (QFE) provides details about different skills required from graduates. AASTMT programs are designed in alignment with the QF Emirates requirements, with program learning outcomes to guarantee the required level of knowledge, skills, and competencies required of graduates in the UAE. The programs offered by the College of Maritime Transport and Technology are mapped to level 7.

Level	Generic Nomenclature	Principal Qualification titles used in the QF Emirates (each with its own profile)		
		Vocational Education and Training (VET)	Higher Education (HE)	General Education (G 12 – GE)
10	Doctoral Degree	—	Doctoral	—
9	Master Degree	Applied Master	Master	—
8	Graduate Diploma	Applied Graduate Diploma	Postgraduate Diploma	—
7	Bachelor Degree	Applied Bachelor	Bachelor	—
6	Diploma	Advanced Diploma	Higher Diploma	—
5	Diploma / Associate Degree	Diploma	Associate Degree	—
4	Certificate	Certificate 4	—	Secondary School Certificate (G 12)
3	Certificate	Certificate 3	—	TBA
2	Certificate	Certificate 2	—	—
1	Certificate	Certificate 1	—	—

Source: QF Emirates Handbook

## The Learning Model

AASTMT branch in Sharjah is committed to providing excellence in education through the provision of latest and up to date education to all students.

**AASTMT branch in Sharjah Learning Model is based on the following core values:**

- Creative and critical thinking
- Education quality assurance
- Educational integrity and honesty
- Entrepreneurship and self-learning.

AASTMT sets the highest standards for developing content of curricula and cutting edge tools in learning, and KPIs for assessment.

## ACADEMIC LEARNING RESOURCES

### Library

The library at AASTMT provides all means required to support the students in their study. The collections of educational resources in the library are categorized into physical resources and online resources. Online resources can be accessed through the student portal. Online resources include 13 databases, including around 156,408+ e-books, 3,130+ conference proceedings, 11,609+ e-journals, 1,600,000+ images, in addition to 11 individual e-journal subscriptions. The library at the main campus contains 85,000 printed books. Printed books can be accessed inside the library or borrowed by the students for off campus reading.

The library at AASTMT branch in Sharjah owns a collection of around 803 printed books and 61 e-books. The library includes places for study groups as well as areas for quiet study. Library website: <http://www.aast.edu/en/sites/library/>

### Internet Resources and Services

AASTMT branch in Sharjah provides all the required resources to the students to excel in their education. Internet access is one of the resources provided to develop the ICT skills that are needed for learning. Students are only required to have computers and/or laptops required to support their learning.

## CAMPUS LIFE

### Healthcare Services

The health center at AASTMT branch in Sharjah provides essential health services to all its students. The center working hours are regular working hours on the branch and provide emergency service along the day and on weekends.

The health center is responsible for evaluating the health condition of the student and may transfer the case to hospitals in contract with the AASTMT branch in Sharjah.

The ambulance is available 24 hours a day for critical cases.

### Career Advising Services

The Career development service (CDS) supports the mission of AASTMT to empower students and alumni in their career journey.

The mission is to encourage students to explore career paths, identify and develop skills, and pursue experiential opportunities. The vision is that each member of AASTMT branch in Sharjah community will be empowered to achieve lifelong professional success.

The Career Development Service (CDS) assists students and alumni as they explore, prepare for, and make successful future decisions. The college empowers individuals to take a proactive and strategic role in finding and pursuing their personal and professional passions. The (CDS) offers a comprehensive program of professional and career services for students and alumni, and develop the professional skills they will need to achieve their goals.

### Student Counseling Service

The aim of the Student Counseling Services is to develop the skills and maladaptive thinking and communications for the students who are facing academic difficulties due to the psychological and communication problems they may be having.

The Student Counseling Services also includes group awareness sessions and free discussions covering various topics, touching on the students' daily life and interactions, concerning their moods, habits, stresses, family dynamics, social interaction, communication patterns, skills, motivation, planning and other related issues.

### Extra-Curricular Activities

The cultural and social activity is one of the most important means of developing the personality of students, as student activities aim to support the positive trends of students and eliminate negative trends and correct students' behaviors, through learning technical, cultural and social skills, increasing their creative ability, and providing opportunities to form positive social relationships with each other, which leads to active students who are capable of establishing successful relationships among their colleagues, and achieving the maximum possible adaptation of the student behavior with the surrounding environment.

The sports department provides trainers to teach physical education, fitness and swimming lessons for students of the College of Maritime Transport and Technology as well as supervisors and trainers with the sports facilities for other various sports like tennis, basketball, volleyball and prepare sports teams for AASTMT.

### **Safety and Security**

AASTMT branch in Sharjah takes all the precautions and operations to ensure all the students are safe and that all individuals are the authorized ones to enter the campus.

AASTMT branch in Sharjah campus has security gates with security personnel stationed at each entrance.

Fire Drills are carried on a regular basis and students should learn the locations of emergency exits, fire alarms and fire extinguishers.

### **Student Councils**

The Student council is a committee formed by students under the supervision of the office of student affairs that expresses the views of the students through all student activities inside the Academy away from politics, religion and nationalities and it takes into account the interests of students and solving their problems.

### **Special Needs Student Services**

AASTMT branch in Sharjah aims to ensure that applications for admission from potential students are assessed on the basis of the applicant's aptitudes, abilities and qualifications; to ensure that special need students have an access to appropriate support, advice and adaptations to enable them to be included fully in the life of the student at AASTMT where reasonably possible.

### **Student Residential Life**

The AASTMT branch in Sharjah offers a residential for all students in the first four semesters according to the Regulations of College of Maritime Transport and Technology. Moreover; Accommodation at AASTMT targets the students who wish to reside in AASTMT, as it aims to provide a social, educational, cultural and sporting environment suitable for all of its beneficiaries.

But in case of any violation of these regulations, the Deanery of Student Affairs has the right after taking all the other legal procedures with the student to terminate his/her stay and not to provide accommodation after that.

### **Student Code of Conduct**

AASTMT branch in Sharjah provides strict regulations for students through the student code of conduct. Students should abide by the code of conduct as well as the penalties enforced in the case of students committing any conduct violations. The student code of conduct is provided in details in the student handbook.

## Student Responsibilities

1. Students are responsible for knowing and following the study system at AASTMT and its regulations, in addition to being responsible for any deficiencies or wrongdoings that take place as a result of lack of knowledge or ignorance of instructions.
2. Students shall abide by the instructions and rules of ethics, public morals, decent look, customs and traditions on/away from AASTMT campus.
3. Students should work to preserve AASTMT property and adhere to an exemplary code of conduct in dealing with colleagues, staff members, other employees at AASTMT and other institutions and companies representatives who are assigned to work at AASTMT.
4. The student is abiding to have his/her student IDs when they are on campus. Also, students have to show their students' ID or personal IDs when required.
5. Students are committed to an appropriate dress code inside AASTMT campus.

## ACADEMIC POLICIES

### Admission

Admission to academic programs at AASTMT branch in Sharjah is available to highly qualified male and female students from the UAE and abroad. All applicants must meet established minimum requirements to be considered for admission to study at the University.

- First day of admission is the 14th of June 2020
- Last day for admission is the 17th of September 2020

### Undergraduate Admission Requirements

- The office of admission and registration and the college determines the number of students to be admitted every year taking into consideration job opportunities.
- The applicants must complete the application form and submit the following personal documents:
  - a. A General Secondary School Certificate/ Transcript, or its equivalent attested by the Ministry of Education in the UAE, (An attested copy may be submitted);
  - b. Copy of valid Emirati ID and passport for both the student and guardian;
  - c. A copy of valid residence for non-local students;
  - d. Birth certificate for non-local students and Family Book for local students;
  - e. A valid English Language Proficiency certificate **with a minimum score of 1100** EMSAT or 5 IELTS or 500 TOEFL 61 in international TOEFL (IBT) or 173(CBT);
  - f. (4) Passport Size Photographs;
  - g. National Service Certificate for local male students (exemption or postponement)
  - h. Certificate of Good Conduct for both local and non-local students.
- The applicants should have a high school certificate (scientific section) or its equivalent.

The High School Certificate must be attested in from the Ministry of Education in the home country from which the certificate was obtained, then attested from office of Foreign Affairs in home country and/or the home country Embassy in UAE, then MOE- UAE.

- The minimum average overall grade of high school certificate should be more than 60%. The overall grade will be calculated after performing equivalency of the certificate in accordance to AASTMT regulations.
  - The applicants must be medically and athletically fit
  - The applicants should pass the admission interview and the sports and medical tests
- If the applicant did not achieve the required score of English proficiency, the student will be required to take a preparatory course, in English in remedial semester and pass the EMASAT with a minimum score of 1100.
- Students should have completed 12 years of school education before obtaining the High School Certificate and should be able to provide the required documents of proof



## Requirements for Different Certificates

- UAE High School Certificate: Advanced Stream/General Stream/Secondary Technical School (STS) /Applied Technology (ATHS)
- Students holding an Advanced Stream High School Certificate with a minimum score of 60% are directly admitted;
- Students holding a General Stream High School Certificate with minimum score of 60% receive conditional admission to the Maritime Transport Technology and Marine Engineering Technology programs and are enrolled into a remedial semester to take preparation courses in scientific subjects.
- Students holding Secondary Technical School certificates (suitable specialization) are accepted only in the Marine Engineering Technology program and are enrolled into a remedial semester to take preparation courses in scientific subjects.
- Students holding Applied Technology School Certificates (suitable specialization) are accepted only in the Marine Engineering Technology program.

## American Diploma (High School Diploma)

- Students should have completed 12 years of school education before obtaining the High School Certificate and should be able to provide all required evidence.
- Students should have passed 8 subjects including English, Math, Physics, and Chemistry.
- Students complete the other four subjects in grades 10, 11, & 12 taking into consideration that students cannot take more than 2 subjects from G10 and not less than 4 subjects from G12.
- The required SAT 1 minimum score is 800, with minimum 450 in Math for foreign students.
- The required SAT 2 minimum score is 900 with the following required subject combinations: Math with Biology, Chemistry, or Physics; OR Biology with Chemistry, Physics, or Math.

## The British Certificate (IGCSE, GCSE)

- Students should have completed 12 years of school education before obtaining the High School Certificate and should be able to provide all required evidence.
- Students should have finished 8 OL subjects with a minimum grade C.
- Students should have finished one AS or AL Math or Biology with a minimum grade D from grades 10, 11, or 12.
- If the AS is Math, the required subjects are Math, English, Physics, Chemistry, and any other 4 subjects from grades 10, 11, 12.
- If the AS is Biology, the required subjects are Math, English, Physics, Chemistry and Biology.

## The Canadian Diploma

- Students should have completed 12 years of school education before obtaining the High School Certificate and should be able to provide all required evidence.
- Students should have passed 8 subjects with a minimum of 5 subjects from G12 and 3 subjects from G11.

- English, Math, Physics and Chemistry are required subjects for all students.
- Student must take Math or Biology in grade 12 and must have passed these subjects in grade 11.

### Australian High School Certificate

British Certificate requirements are to be applied

### Students Holding the French BAC

- Students should have completed 12 years of school education before obtaining the High School Certificate and should be able to provide all required evidence.
- 7 subjects are required.
- Mandatory subjects are English, French, Math, Physics, and Chemistry.
- The minimum required score is 10/20.

### International Baccalaureate (IB)

- Students should have completed 12 years of school education before obtaining the High School Certificate and should be able to provide the required evidence.
- Students should have completed 6 subjects with 3 High Level subjects that include either Math and Physics, or Biology and Chemistry.
- The English language subject is a mandatory requirement.
- The student must complete the extended essay and the Theory of Knowledge.
- Students should have achieved a Minimum score of 24.

### The Admission Decision

- Students are to be informed of admission decision personally or via email.
- The admission deadline is five days prior to start of classes.

### Registration

It is significant for students to register early in their classes to be able to register the courses they want. After the academic advisor's approval, students can register online using the student portal.

Information about closed or cancelled classes, changes and additions is updated daily during the registration period online.

### Eligibility to Register

### AASTMT Branch in Sharjah Policy on Regular Student Status

Regular students are defined as students whose registration at AASTMT branch in Sharjah has not been discontinued for two or more semesters in succession (summer session excluded). Students who lose continuing status are considered "former students." if they

wish to reregister after having lost continuing status, reregistration application form is required.

**Any student under the following conditions is not eligible to regular registration:**

- a. Loss of continuing status
- b. Dismissed for disciplinary reasons
- c. Having any financial issues

## **Withdrawal**

During add/drop period for each semester, students may withdraw using the online portal or in Person at the office of admission and registration.

Students who withdraw from all courses they are enrolled in are eligible to register for a subsequent semester unless they lose their continuing student status.

A student who has been charged with an offense that may result in a disciplinary action may not officially withdraw from the college until a decision is taken by the appropriate disciplinary committee.

## **Tuition fees**

Before the beginning of each semester, AASTMT determines the tuition fees in UAE Dirhams. Tuition fees are calculated based on the student's total marks in the secondary education stage (or any equivalent degree) according to the categories mentioned in the current financial regulations. Tuition fees are paid at the beginning of each semester. Fees payment is considered a key requirement for the completion of registration procedures and attendance. AASTMT presidency has the right to regulate payment for special humanitarian cases.

Students' status at college will determine the extent to which they are eligible for financial aid programs. Their enrollment as full-time students is essential in determining their eligibility for financial aid, and the extent to which they can be funded.

## GRADING AND ACADEMIC PROGRESS

### Grading

AASTMT students are graded according to the table below.

Grade Point Averages (GPA) are calculated at the end of every semester on a scale from 0.00 to 4.00.

The semester average is calculated by dividing the total grade points earned in the semester by the number of total credit hours taken by the student in the semester.

The cumulative GPA refers to the student's overall average and is calculated at the end of each semester by dividing the total grade points earned by the total number of credit hours completed by the student so far.

The GPA determines the student's status in terms of academic load, pursuing studies, academic probation and graduation.

The following table shows the letter grades with their corresponding grade points and percentage.

Grade	Points	Percentage (%)
<b>A+</b>	4	Honorary Grade - 97% and above
<b>A</b>	4	93% - less than 97%
<b>A-</b>	3.7	89% - less than 93%
<b>B+</b>	3.3	84% - less than 89%
<b>B</b>	3	80% - less than 84%
<b>B-</b>	2.7	76% - less than 80%
<b>C+</b>	2.3	73% - less than 76%
<b>C</b>	2	70% - less than 73%
<b>C-</b>	1.7	67% - less than 70%
<b>D+</b>	1.3	64% - less than 70%
<b>D</b>	1	60% - less than 64%
<b>F</b>	Zero	Less than 60%
<b>I</b>	Incomplete	
<b>W</b>	Withdraw	
<b>U</b>	Unspecified	
<b>Au</b>	Audit	
<b>TR</b>	Transfer	
<b>P</b>	Pass	

### Grade Appeals

Students have the right to submit an appeal regarding course grades if they believe there was any kind of academic misjudgment.

Students may submit oral appeals to the lecturer during the semester. The lecturer reviews the appeals and if approved, modifies grades accordingly.

Students may also submit a written appeal on final exams marks, and if the appeal is approved, the exam may be remarked and the grade may be modified accordingly.

## Academic Progress

- AASTMT students are considered in good academic standing if they have a minimum GPA of 2.0.
- A student is placed on academic probation if his/her GPA falls below 2.0.
- A student is placed on the underachievement list if their achieved credit hours are less than 50% of the total number of hours they were supposed to complete at their current level since they joined AASTMT.
- Students under probation or on the underachievement list must register a reduced load of no more than 12-13 credit hours in one academic semester (half load).
- The maximum duration for a student to remain on the list of academic probation or underachievement in his/her department is three consecutive semesters.
- A student is subsequently guided by the academic advisor to choose another educational path suitable for his/her capabilities, such as:
  - Transferring to another department within the same college.
  - Transferring to another AASTMT college.

## Transfer Students

AASTMT branch in Sharjah accepts students transferred from other institutions according to the following terms and conditions

### Transfer from Other Universities

1. Students are eligible for transfer admission from accredited institutions in the UAE, or from a foreign institution of higher education based outside the UAE and accredited in its home country.
2. Transferred students must meet the English language proficiency requirements (all entering transfer students have to present a valid proficiency level certification (TOEFL or IELTS or EMSAT) demonstrating the required scores for full admission.
3. Transferred students are requested to submit all official transcripts showing all post-secondary transcripts at all institutions they attended.
4. Transferred students are required to meet the admission requirements of AASTMT branch in Sharjah.

### Transfer within AASTMT Branch in Sharjah

Students may transfer from one program to another within the same college or from one college to another within AASTMT branch in Sharjah as per the student's request provided that he/she meets the admission requirements and obtaining approval from the department or college the student wishes to transfer to.

## Academic Honesty

AASTMT expects that a student abides by the codes of ethics and integrity in acquiring and presenting knowledge and documenting its original sources. Accurate data must be provided for previously published research and projects.

Faculty members and college administration members are responsible for explaining AASTMT policies to students and ensuring that students are aware of the code of conduct and the penalties related to academic honesty.

In case a student commits an offense, the disciplinary penalties range from dismissal from the examination hall to final expulsion from AASTMT. This is decided by the council of the concerned college. A student has the right to appeal against the penalty imposed on them within 30 days after being notified of the penalty. The appeal is submitted to the Dean of Student Affairs to present to the committee to make a decision, which is only finalized after approval by AASTMT President.

### **Examples of student offenses include, but are not limited to, the following:**

- Disobeying examination instructions and disrupting the discipline or quietness of the exam hall.
- Refusing to carry out instructions during examinations.
- Cheating: this includes but not limited to:
  - A switched on mobile phone that contains course information.
  - An unauthorized paper slip, table, notes or any other means or tools with course information.
  - Exchanging answer or questions sheet with a colleague during the exam.
  - Exchanging tools with information about the subject with a colleague during the exam.
  - Failing to observe the required regulations for academic integrity.
- Offending the invigilator or the exam supervision authority verbally or physically
- Impersonation of another student to sit for the exam instead of him/her.
- Plagiarism: a student using the work of someone else and submitting it as his/her own work without referencing the sources.

## Copyright Policy

AASTMT maintains a Copyright Policy that ensures compliance with UAE Laws. The policy is established to protect the ownership of AASTMT materials according to the approved policies and procedures.

## ACADEMIC PROGRAMS

### College of Maritime Transport and Technology

The College of Maritime Transport and Technology aims to graduate candidates that have the necessary education and training to become a Navigating officer and Marine Engineering officer onboard ships. The programs provided by the college covers the academic components required by the International Convention of Standards of Training, Certification and Watch Keeping for Seafarers (STCW) and under the supervision of the International Maritime Organization (IMO) until the Master's top management level.

The graduates are taught the ability to lead successfully, work efficiently, and communicate effectively in a team. Their experience during undergraduate program and seagoing services will instill ethical values and professional standards, therefore, helping them expand their knowledge and competencies through continuing education and other lifelong learning experiences. Plus, making them significant members of the shipping industry by contributing their skills and knowledge internationally.

### College Mission

The College mission is to serve the economic and national interest of the region countries by providing inclusive and flexible forms of education that meet the needs of employers and prepare maritime professionals to succeed in a fast-changing competitive environment.

### List of Programs Offered

1. Bachelor in Maritime Transport Technology, with concentrations in:
  - a. Shipping and Port Operations
  - b. Offshore Operations Technology
2. Bachelor in Marine Engineering Technology

### Admission Requirements

1. Student shall have obtained not less than 60% of the total scores in the General Certificate of Secondary Education (GCSE) or equivalent.
2. Passing the AASTMT's English Language Test.
3. Passing Physical Fitness Tests.
4. Passing Sports Tests.
5. Passing Demeanor Test (Personal Interview)

### Bachelor in Maritime Transport Technology

#### Program Mission

The aims of the program is to provide the students with the knowledge, understanding and skill necessary to prepare marine officers graduates who meet the entry requirements, for the Watch keeper Certificate of Competency (2<sup>nd</sup> officer certificate).

Maritime Transport Technology program is committed to being an instrument of positive change in the maritime industry for the ultimate benefit of society. For all those who undertake education and training at the program, Maritime Transport Technology program shall facilitate acquisition of the right learning, right skills and the right attitude thereby promoting in them a passion for the profession.

## Program Objectives

**Graduates of the Maritime Transport Technology are expected to:**

1. Have successful careers in Maritime Transport Technology.
2. Advance their technical skills through continuous learning research, and/or graduate studies.
3. Enhance their skills in communication and teamwork.
4. Commit to ethical, legal, and societal considerations.

## Program Learning Outcomes (PLOs)

**Upon completion of their course, students will be capable graduate to contribute to the maritime transport industry, and able to:**

- a. Apply knowledge of mathematics, science, and information technology to support marine operations and navigation techniques.
- b. Explain the scientific, legal and regulatory framework to maintain a safe sound manner for the marine operations safety and environment protection.
- c. Demonstrate understanding of relevant information for building professionalism, capacity and work ethics.
- d. Apply the principles and theories of ship and marine operations and develop appropriate navigation methodology in different situations.
- e. Utilize data to insure optimum safe port and shipping operations.
- f. Recognize the importance of planning before carrying out a task.
- g. Show proficiency as a team member and take leadership responsibility in ship operations.
- h. Demonstrate an ability to articulate and interpret qualitative and quantitative data to develop lines of argument and make sound judgments.
- i. Utilize the appropriate resources, to assimilate new knowledge and skills in offshore operations.
- j. Demonstrate the ability to comprehend maritime multiple tasks and solve unfamiliar problems.
- k. Set team objectives and take responsibility for team performance in the workplace and be able to function on multidisciplinary teams.

## Completion Requirement

Students seeking the Bachelor in Maritime Transport Technology Program must successfully complete the following requirements:

1. A minimum of 148 credit hours (hrs) distributed are as follows:
  - a. Marine Transport Core Courses: 99 credit hrs
  - b. General Education Program: 33 credit hrs



c. Elective courses: required 16 credit hrs out of 20 credit hrs

2. Minimum cumulative GPA of 2.00

### Elective courses

#### Shipping and Port Operations

**Elective Courses:** Required 16 credit hrs

Code	Course name	Credits
SP 495	Quality Assurance Systems	2
SP 494	Commercial Maritime Law	2
SP 471	Maritime Economics	2
SP 497	Shipping Management	2
SP 452	Accounting & Investment	2
SP 473	Port Management & Operations	2
SP 402	Human Resource Management	2
SP 472	Maritime Port Economics	2
SP 493	Maritime Logistics & Marketing	2
SP 496	Maritime Environmental Management	2
A total of 8 Courses out of 10 are required with total credits of:		16

**Offshore Operations Technology****Elective Courses:** Required 16 credit hrs

Code	Course name	Credits
OS 454	Liquid Cargo	2
OS 414	Offshore Units & Handling	2
OS 417	SAR & Salvage Operations	2
OS 410	Offshore Operations	2
OS 413	Offshore engineering	2
OS 455	Offshore Cargo Handling	2
OS 416	Advanced Offshore Operations	2
OS 478	Safety Management Systems	2
OS 411	Offshore Risk Assessment	2
OS 412	Rig and Platform safety	2
<b>A total of 8 Courses out of 10 are required with total credits of:</b>		<b>16</b>

**General Education Program:** 33 credit hrs

Code	Course name	Credits
BS 171	Maritime English I	3
BS 172	Maritime English II	3
BS 273	Technical Report Writing	2
BA 111 N	Physics I	3
BA 112 N	Physics II	3
BA 121 N	Mathematics I	3
BA 122 N	Mathematics II	3
BS 141	Computer I	2
BS 142	Computer 2	2
GED 202	Islamic Culture	3
GED 101	UAE Society	3
GED 403	Innovation & Entrepreneurship	3
<b>A total credit hrs</b>		<b>33</b>

**Maritime Transport Core Courses: 99 credit hrs**

<b>Code</b>	<b>Course name</b>	<b>Credits</b>
BS 111	Seamanship Principles	2
BS 131	Introduction to Navigation	2
BS 121	Ship Construction & Marine Engineering	3
P 101	Physical Education I	0.5
L 101	Leadership I	0.5
BS 112	Marine Safety	2
BS 132	Terrestrial Navigation Part I	2
BS 133	Celestial Navigation	3
P 102	Physical Education II	0.5
L 102	Leadership II	0.5
BS 213	Watch Keeping & Marine Communication	3
BS 234	Terrestrial Navigation Part II	3
BS 222	Ship Stability	3
BS 261	Ship Compasses and Auto Pilot	3
BS 292	Maritime Law & Leadership	3
P 203	Physical Education III	0.5
L 203	Leadership III	0.5
BS 214	Ship Handling and Emergency Proc.	3
BS 251	Cargo Handling	2
BS 235	Voyage Planning & Weather Routing	3
BS 263	Radar & ARPA	3
BS 262	Navigational Aids	3
BS 281	Meteorology	2
P 204	Physical Education IV	0.5
L 204	Leadership IV	0.5
S 305	Guided Sea Training	16
S 305	Guided Sea Training	16
NS 400	Research Methodology & Statistics	3
NS 436	Integrated Navigation System	3
NS 419	Seamanship & Maritime Safety	2

Code	Course name	Credits
NS 423	Ship Construction & Stability	2
NS 438	Terrestrial Navigation (3)	2
NS 439	Celestial Navigation (2)	2
NS 456	Cargo Handling & Stowage	2
NS 401	Project	2
<b>A total credit hrs</b>		<b>99</b>

Total Required Credit hrs	148
Maximum Duration of Study	8 years
Minimum Duration of Study	4 years
Program Code	BMTT

## Study Plan of BMTT

Code	Course Title	Cr.	Code	Course Title	Cr.
<b>Year 1 Semester 1</b>			<b>Year 1 Semester 1</b>		
<b>Required Credits: 19</b>			<b>Required Credits: 19</b>		
BS 111	Seamanship Principles	2	BS112	Marine Safety	2
BS 131	Introduction to Navigation	3	BS 132	Terrestrial Navigation Part I	2
BS 141	Computer I	3	BS 142	Computer II	2
BA 111 N	Physics I	3	BA 112N	Physics II	3
BA 121 N	Mathematics I	2	BA 122N	Mathematics II	3
BS 121	Ship Construction Marine & Engineering	3	BS 133	Celestial Navigation	3
BS 171	Maritime English I	2	BS 172	Maritime English II	3
P 101	Physical Education I	0.5	P 102	Physical Education II	0.5
L 101	Leadership I	0.5	L 102	Leadership II	0.5
<b>Year 2 Semester 3</b>			<b>Year 2 Semester 4</b>		
<b>Required Credits: 19</b>			<b>Required Credits: 19</b>		
BS 213	Watch Keeping <u>n</u> Marine Communicat <u>n</u>	3	BS 214	Ship Handling and Emergency Proc.	3
BS 234	Terrestrial Navigation Part II	3	BS 251	Cargo Handling	2
BS 222	Ship Stability	3	BS 235	Voyage Planning Weather Routing	3
BS 261	Ship Compasses and Auto Pilot	3	BS 263	Radar and ARPA	3
BS 292	Maritime Law <u>n</u> Leadership	3	BS 262	Navigational Aids	3
GED 101	UAE Society	3	BS 281	Meteorology	2
P 203	Physical Education III	0.5	BS 273	Technical Report Writing	2
D 203	Leadership III	0.5	P 204	Physical Education IV	0.5
			D 203	Leadership IV	0.5
<b>Year 3 Semester 5</b>			<b>Year 3 Semester 6</b>		
<b>Required Credits: 17</b>			<b>Required Credits: 18</b>		
S 305	Guided Sea Training	16	S 306	Guided Sea Training	16
GED 202	Islamic Culture	1			
<b>Year 4 Semester 7</b>			<b>Year 4 Semester 8</b>		
<b>Required Credits: 18</b>			<b>Required Credits: 18</b>		
NS 400	Research Methodology & Statistics	3	NS 419*	Seamanship <u>n</u> Maritime Safety	2
NS 436	Integrated Navigation System	3	NS 423*	Ship Construction & Stability	2
GED 403	Innovation and Entrepreneurship	3	NS 438*	Terrestrial Navigation (3)	2
	Elective	2	NS 439	Celestial Navigation (2)	2
	Elective	2	NS 456	Cargo Handling <u>n</u> Stowage	2
	Elective	2	NS 401	Project	2
	Elective	2		Elective	2
	Elective	2		Elective	2
	Elective	2		Elective	2
<b>Offshore Operations Technology</b>			<b>Offshore Operations Technology</b>		
OS 454	Liquid Cargo	2	OS 416	Advanced Offshore Operations	2
OS 414	Offshore Units & Handling	2	OS 478	Safety Management Systems	2
OS 417	SAR & Salvage Operations	2	OS 411	Offshore Risk Assessment	2
OS 410	Offshore Operations	2	OS 412	Rig and Platform safety	2
OS 413	Offshore engineering	2			
OS 455	Offshore Cargo Handling	2			
<b>Shipping and Port Operations</b>			<b>Shipping and Port Operations</b>		
SP 495	Quality Assurance Systems	2	SP 402	Human Resource Management	2
SP 494	Commercial Maritime Law	2	SP 472	Maritime Port Economics	2
SP 471	Maritime Economics	2	SP 493	Maritime Logistics & Marketing	2
SP 497	Shipping Management	2	SP 496	Maritime Environmental Management	2
SP 452	Accounting & Investment	2			
SP 473	Port Management & Operations	2			

## Bachelor in Marine Engineering Technology

### Program Mission

The mission of the degree program is to provide high-quality education and training to cadets to enable them to pursue a career as a qualified marine engineer as well as marine engineering officer aboard ocean going vessels. As such, the degree program includes, but not limited to, required academic qualifications for the Watch Keeper Certificate of Competency (3rd engineer certificate of competency). Marine engineering program is committed to be an instrument of positive change in the maritime industry

### Program Objectives

#### Graduates of the Marine Engineering Technology are expected to:

1. Have successful careers in marine engineering technology.
2. Advance their technical skills through continuous learning, research, and/or graduate studies.
3. Enhance their skills in communication and teamwork.
4. Commit to ethical, legal, and societal considerations.

### Completion Requirements

**Students seeking a Bachelor in Marine Engineering Technology must successfully complete the following requirements:**

1. **Minimum of 147 credits that are as follows:**
  - a. Core Courses of 125 credits.
  - b. General studies requirements of 22 credits.

**General Education for Marine Engineering: 22 credit hrs.**

Code	Course name	Credits
LH 131 T	ESP I	2
LH 132 T	ESP II	2
LH 231 T	ESP III	3
BA 113	Physics I	3
BA 123	Mathematics I	3
CC 111	Introduction to Computers	3
GED 101	UAE Society	3
GED 202	Islamic Culture	3

**Marine Engineering Core Courses: 125 credit hrs**

Code	Course name	Credits
BA 118	Chemistry	2
BA 141	Engineering Mechanics I	3
BA 142	Engineering Mechanics II	3
CC 114	Introduction to Programming	3
D101	Leadership I	0.5
D 102	Leadership II	0.5
D 203	Leadership III	0.5
D 204	Leadership IV	0.5
EE 218	Instrumentation & Measurements	3
EE 239	Electrical Engineering Fundamentals	3
EE 329 T	Electrical Machines	3
EE 418 T	Automatic Control Systems	3
EE 449 T	Electrical Power in Ships	3
IM 112 T	Manufacturing Technology	2
IM 212 T	Manufacturing Processes I	3
ME151 T	Eng. Drawing & Projection	2
ME 252 T	Mechanical Engineering Drawing	3
ME 274 T	Material Science	3
ME 231 T	Thermodynamics	3
ME 375 T	Mechanics of Materials	2
ME 362 T	Hydraulics	2
ME 331 T	Heat Transfer	3
ME 423 T	Steam Plant Engineering	3
ME 434 T	Refrigeration & Air Conditioning	3
ME 454 T	Machine Design	3
ME 421 T	Maintenance Planning	3
MM 211 T	Marine Engineering I	3
MM 221 T	Marine Diesel Engines I	3
MM 241 T	Naval Arch. & Ship Construction	3
MM 323T	Marine Diesel Engines III	3

Code	Course name	Credits
MM 446T	Ship Repair Technology	3
MM 415T	Marine Engineering III	3
MM 443 T	Ship Design	3
MM 416 T	Marine Engineering IV	3
MM 424 T	Marine Diesel Engines IV	3
MM 401 T	Project	3
MT112T	Marine Safety	2
NM 391 T	Maritime Law	2
P101	Physical Education (1)	0.5
P 102	Physical Education II	0.5
P 203	Physical Education III	0.5
P 204	Physical Education IV	0.5
S 300	Guided Sea Training (AIDA IV)	14

Total Required Credits	147
Maximum Duration of Study	8 years
Minimum Duration of Study	4r years
Program Code	BMET
Major Codes	



## Study Plan of BMET

Code	Course Title	Cr.
<b>Year 1 Semester 1</b>		
<b>Required Credits: 19</b>		
LH 131 T	ESP I	2
BA 123	Mathematics I	3
BA 113	Physics I	3
CC 111	Introduction to computer	3
ME 151 T	Eng. Drawing & Projection	2
BA 141	Engineering Mechanics I	3
MT 112T	Marine Safety	2
P 101	Physical Education I	0.5
D 101	Leadership I	0.5
<b>Year 2 Semester 3</b>		
<b>Required Credits: 19</b>		
LH 231 T	ESP III	3
BA 223	Mathematics III	3
ME 252 T	Mechanical Engineering Drawing	3
ME 274 T	Material Science	3
EE 239	Electrical Engineering Fundamentals	3
ME 231 T	Thermodynamics	3
P 203	Physical Education III	0.5
D 203	Leadership III	0.5
<b>Year 3 Semester 5</b>		
<b>Required Credits: 17</b>		
S 300	Guided Sea Training (AIDA IV)	14
GED 202	Islamic Culture	3
<b>Year 4 Semester 7</b>		
<b>Required Credits: 18</b>		
ME 423 T	Steam Plant Engineering	3
EE 418 T	Automatic Control Systems	3
MM 446T	Ship Repair Technology	3
MM 415T	Marine Engineering III	3
ME 434 T	Refrigeration & Air Conditioning	3
ME 454 T	Machine Design	3

Code	Course Title	Cr.
<b>Year 1 Semester 1</b>		
<b>Required Credits: 19</b>		
LH 132 T	ESP II	2
BA 124	Mathematics II	3
BA 114	Physics II	3
CC 114	Introduction to Programming	3
IM 112 T	Manufacturing Technology	2
BA 142	Engineering Mechanics II	3
BA 118	Chemistry	2
P 102	Physical Education II	0.5
D 102	Leadership II	0.5
<b>Year 2 Semester 4</b>		
<b>Required Credits: 19</b>		
BA 224	Mathematics IV	3
IM 212 T	Manufacturing Processes I	3
EE 218	Instrumentation & Measurements	3
MM 221 T	Marine Diesel Engines I	3
MM 241 T	Naval Arch. & Ship Construction	3
MM 211 T	Marine Engineering I	3
P 204	Physical Education IV	0.5
D 204	Leadership IV	0.5
<b>Year 3 Semester 6</b>		
<b>Required Credits: 18</b>		
NM 391 T	Maritime Law	2
MM 323T	Marine Diesel Engines III	3
ME 362 T	Hydraulics	2
ME 331 T	Heat Transfer	3
EE 329 T	Electrical Machines	3
ME 375 T	Mechanics of Materials	2
GED 101	UAE Society	3
<b>Year 4 Semester 8</b>		
<b>Required Credits: 18</b>		
ME 421 T	Maintenance Planning	3
MM 443 T	Ship Design	3
MM 416 T	Marine Engineering IV	3
EE 449 T	Electrical Power in Ships	3
MM 424 T	Marine Diesel Engines IV	3
MM 401 T	Project	3

## APPENDIX (COURSE DESCRIPTIONS)

### BA 118 Chemistry (1 0 3)

This course covers the knowledge about the effects of the environment on the different forms of material. The course also acquaints students with concepts of chemistry with regard to control and protection of the used material to overcome industrial problems.

### BA 141 Engineering Mechanics I (2 2 0)

This course covers the principles of rigid-body mechanics, since it forms a suitable basis for the design and analysis of many types of structural, mechanical, or electrical devices encountered in engineering.

### BA 142 Engineering Mechanics II (2 2 0)

This course covers the principles of structural mechanics, and associated stresses and load distribution that form a suitable basis for the design of mechanical systems and analysis of many types of dynamic structures encountered in engineering.

### CC 114 Introduction to Programming (2 2 0)

This course covers the engineering skills to design and solve problems using Visual Basic structured programming.

### D101 Leadership I (0 0 1.5)

This course covers the leadership skills needed to command and control a group of subordinates (on-board crew under their command) to fulfill their task efficiently and effectively. The course increases students' self-confidence and develops their neuromuscular compatibility, which helps them to have fast and efficient response in dealing with emergency and unexpected situations. The course also increases their endurance to be able to work under pressure in severe conditions. It develops co-operation and team working skills.

### D 102 Leadership II (0 0 1.5)

This course covers the definition of Leadership, its elements, characteristics, importance and the different types and styles of leadership. Students should understand the basic principles of successful leadership and the methods of its application. They should understand the concept of an ultimate leader, his tasks, his role and the skills that should be present in any leader according to his level (from cadet to chief engineer or captain). They should know how to select an effective leader and be able to differentiate between the different leadership theories and styles. They will gain the leadership skills, which they apply throughout their marine career from cadet to chief engineer or captain.

**D 203 Leadership III (0 0 1.5)**

This course covers the definition of Leadership, its elements, characteristics, its importance and different types and styles of leadership. The basic principles for successful leadership and the methods of its application. The concept of an ultimate leader, his tasks, his role and the skills that should be present in any leader according to his level (from cadet to chief engineer or captain).

**D 204 Leadership IV (0 0 1.5)**

This course covers the definition of Neuroscience and its relation to leadership. The students should fully understand creativity, its methods, obstacles, relation to leadership and characteristics of creative individuals. The students should be able to know how to deal with their subordinates (on-board crew under their command) and superiors. They should know how to motivate others and the importance of teamwork. They should know the principles of planning, decision-making, problem solving and crisis management.

**EE 218 Instrumentation & Measurements (2 2 0)**

This course covers all relevant IMO resolutions and guidelines available at the time, the course was prepared based on (IMO model course 7.04) to meet the mandatory requirements for knowledge, understanding and proficiency in Table A-III/1 of STCW 78 as amended. (Manila, 2010), to investigate different methods for remote measuring, how transducers operate and their characteristic and how to analyze data obtained from measurements.

**EE 239 Electrical Engineering Fundamentals (2 2 0)**

This course covers all relevant IMO resolutions and guidelines available at the time, the course was prepared based on (IMO model course 7.04), to meet the mandatory requirements for knowledge, understanding and proficiency in Table A-III/1 of STCW 78 as amended. (Manila, 2010), for the function; Electrical, Electronic and Control Engineering at Operational Level. The course provides detailed skills related to the basic circuit, circuit theorems, and the laws of magnetic force, motors and alternating current.

**EE 329 T Electrical Machines (2 0 3)**

This course offers the non - electrical engineering students a basic understanding of the principles of operation and construction of direct and alternating current machines and transformers. The course also covers the theory and concept of Electric Machines (AC & DC), deriving equivalent circuit of electrical machines, performance and characteristics of machines (AC & DC).

**EE 418 T Automatic Control Systems (2 2 0)**

This course covers all relevant IMO resolutions and guidelines available at the time, the course was prepared based on (IMO model course 7.04), to meet the mandatory requirements for knowledge, understanding and proficiency in Table A-III/1 of STCW 78 as amended. (Manila, 2010), for the function; Electrical, Electronic and control Engineering at Operational Level.

The course provides the marine engineering students with a practical view of control engineering concerning controller units, analysis and tuning.

**EE 449 T Electrical Power in Ships ( 2 0 3 )**

This course covers the description of thermodynamics. It introduces and classifies heat engine cycles, steam cycles and gas turbine cycles. This syllabus covers the requirements of the STCW-78, as amended, in particular Chapter III, Section A-III/1 for the function “Marine Engineering at the Operational Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.04, version 2013, function 1.

**GED 101 UAE Society (3 0 0 )**

This course covers the UAE community in terms of geography, traditions and population. The role of the State in spreading peace between neighboring countries. Presenting the successive historical stages of the region, with a focus on the United Arab Emirates.

**GED 202 Islamic Culture (3 0 0 )**

This course covers building a solid scientific and legal basis for the student in organizing life in accordance with the curriculum of Islamic Sharj’a. The course establishes and enhance the students’ applied professional aspect of the theoretical legal sciences. The course enables the student to investigate the vocabulary of Islamic culture (bachelor level) according to the methodology of scientific research. The course develops the spirit of continuous and renewed learning. It also enables the student to spread Islamic knowledge and to use it to improve the efficiency of his personal and institutional performance. The course orients the student with the optimal values that should accompany him in the performance of his role in society.

**IM 112 T Manufacturing Technology ( 1 1 2 )**

This course covers how engineering materials are processed for manufacturing purposes. Students learn the concepts behind metal forming and casting. They comprehend how machining and welding techniques are employed in manufacturing. They learn measuring techniques and how they are used for quality control.

**IM 212 T Manufacturing Processes I (1 2 3)**

This course covers the fundamentals of the material removal processes and to optimize these processes, i.e. minimize waste and cost and maximize effecting and quality.

**ME151 T Eng. Drawing & Projection (1 2 0)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/1 for the function “Maintenance and repair at the Operational Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.04, version 2013, and function 3. This course describes the basic information for engineering drawing and to gain in drawing, as well as knowing the different types for drawing, such as sectioning, pictorial drawing.

**ME 252 T Mechanical Engineering Drawing ( 0 3 3)**

This course covers more applications to Mechanical Engineering Drawing – to relate the applications of drafting techniques to Mechanical Engineering practice. This syllabus covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/2 for the function “Marine Engineering at the Management Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.02, version 2013, and function 1.

**ME 274 T Material Science ( 2 2 0)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/2 for the function “Marine Engineering at the Management Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.02, version 2013, and function 1. It also covers the relationship between the structure & properties of engineering materials. The course illustrates how to modify the structure to achieve specific properties with emphasis on some typical applications

**ME 231 T Thermodynamics (2 3 0)**

This course covers the description of thermodynamics. It introduces and classifies: heat engine cycles, steam cycles and gas turbine cycles. This syllabus covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/1 for the function “Marine Engineering at the Operational Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.04, version 2013, function 1.

**ME 375 T Mechanics of Materials (2 2 0)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/2 for the function “Marine Engineering at the Management Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.02, version 2013, function 1. At the end of the course student will be able to calculate and sketch normal force, shearing force and bending moment diagrams, and to determine stresses and strains in beams and simple structural members subjected to various types of loading.

**ME 362 T Hydraulics**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/2 for the function “Marine Engineering at the Management Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.02, version 2013, function 1 section 1.2.2.12. This functional element provides the detailed knowledge to support the training outcomes related to the Marine Engineering at the Management Level. This section provides the background knowledge to support the tasks, duties and responsibilities in: planning and scheduling operations (theoretical knowledge). The course also covers physical properties of hydrostatics liquid applications of hydrostatics and hydro kinematics - one dimensional steady state mass and Energy equations, and understanding the basic principles of hydrostatics.

**ME 331 T Heat Transfer (2 2 0)**

This course covers the general principles of heat transfer method, processes, heat exchangers design. This syllabus covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/2 for the function “Marine Engineering at the Management Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.02, version 2013, function 1. The course also covers operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery practical knowledge.

**ME 423 T Steam Plant Engineering (2 0 3)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/1 for the function “Marine Engineering at the Operational Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.04, version 2013, function 1. The course also provides an understanding of thermodynamics fundamentals including steam, ideal and practical cycles, superheating and regeneration. Steam boilers components & performance, turbines and plant cycles.

**ME 434 T Refrigeration & Air Conditioning (2 2 0)**

This course covers state of the art technology of Heating, ventilation and Air-conditioning (HVAC) modern systems. The problem of sizing the HVAC systems and refrigeration components will be thoroughly introduced and the student will be able to select the correct components and maintain them. The course also covers thermodynamics and steam boilers component and performance, steam turbines and power plant cycles.  
ME 454 T Machine Design (2 2 0).

**ME 454 T Machine Design (2 2 0)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/2 for the function “Marine Engineering at the Management Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.02, version 2013, function 1. It also provides sufficiently advanced understanding of machine design concept and to enable students to be creative in mechanical, marine and industrial applications.

**ME 421 T Maintenance Planning (2 2 0)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/2 for the function “Marine Engineering at the Management Level”, STCW-78, as amended. The syllabus designed to comply with IMO Model course 7.02, version 2013, and function 3. The syllabus also covers managing safe and effective maintenance and repair procedures. The course provides a tool for better maintenance & regular operations and increasing safety for both crew and equipment, including many elements such as operational planning cost control, stock control Information and instruction.

**MM 211 T Marine Engineering I ( 1 2 3)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/1 for the function “Marine Engineering at the Operational Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.04, version 2013, function 1. This functional element provides the detailed knowledge to support the training outcomes related to Marine Engineering at the Operational Level. This course provides the background knowledge to support: maintaining a safe engineering watch, operate main machinery, classify diesel engines.

MM 241 T Naval Arch. & Ship Construction

**MM 221 T Marine Diesel Engines I (1 2 3)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/1 for the function “Marine Engineering at the Operational Level”, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.04, version 2013, function 1. This functional element provides the detailed knowledge to support the training outcomes related to Marine Engineering at the Operational Level. This course provides the background knowledge to support maintaining a safe engineering watch, operate main machinery, and classify diesel engines.

**MM 241 T Naval Arch. & Ship Construction (2 0 3)**

This course is designed to comply with IMO Model course 7.04, version 2013, function 4. This functional element provides the detailed knowledge to support the training outcomes related to controlling the operation of the ship and care for persons aboard during operations. This section provides also sufficient knowledge to support maintaining the seaworthiness of a ship, e.g. ship stability and ship construction

**MM 323T Marine Diesel Engines III ( 1 2 3)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/1 for the function “Marine Engineering at the Operational Level” and the function of “Maintenance and Repair at the Operational Level, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.04, version 2013, function 1 and 3. This functional element provides the detailed knowledge to support the training outcomes related to Maintenance and Repair at the Operational Level.

**MM 446T Ship Repair Technology ( 2 2 0)**

This course covers a range of ship repair technologies utilised in modern shipyards as well as the student will gain knowledge with regard to modern docking systems and ship repair recommended procedures, including surveying.



**MM 415T Marine Engineering III (1 2 3)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/1 for the function “Marine Engineering at the Operational Level” and the function of “Maintenance and Repair at the Operational Level, STCW-78, as amended. The syllabus is so designed to comply with IMO Model course 7.04, version 2013, function 1 and 3. At the end of this course, the student possess sufficient knowledge of construction & principles of operation of the auxiliary machinery & the main systems onboard ship.

**MM 443 T Ship Design ( 2 1 0)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/1 for the function “Controlling the operation of the ship and care for persons on board at the Operational Level”, STCW-78, as amended. The syllabus is designed to comply with IMO Model course 7.04, version 2013, function 4, and section 4.2. The functional element provides the detailed knowledge to support the training outcomes related to Controlling the Operation of the Ship and Care for Persons on Board at the Operational Level.

**MM 416 T Marine Engineering IV (2 3 0)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/1 for the function “Marine Engineering at the Operational Level” and the function of “Maintenance and Repair at the Operational Level, STCW-78, as amended. The syllabus is designed to comply with IMO Model course 7.04, version 2013, function 1 and 3. At the end of this course, the student should be able to classify any trouble and to set the appropriate method of maintenance.

**MM 424 T Marine Diesel Engines IV (2 03)**

This course covers the requirements of the STCW-78, as amended. In particular Chapter III, Section A-III/1 for the function “Marine Engineering at the Operational Level” and the function of “Maintenance and Repair at the Operational Level, STCW-78, as amended. The syllabus is designed to comply with IMO Model course 7.04, version 2013, function 1 and 3. This functional element provides the detailed knowledge to support the training outcomes related to Maintenance and Repair at the Operational Level.

**MM 401 T Project (By Research + Consultation hrs)**

This course covers the requirements of the 2010 STCW Convention Chapter III, Section A-III/1. The course enables the student to apply the knowledge and skills he acquired throughout his study to solve a specific problem allocated to him, and to use available resources to collect/generate data necessary to solve the problem.

**MT112T Marine Safety (1 1 0)**

This course covers the background knowledge to support operation of life saving appliances, applying medical first aid onboard ship, prevention, controlling and firefighting onboard.



<b>NM 391 T Maritime Law ( 2 2 0)</b>	
This course covers the background knowledge to support compliance with pollution-prevention requirements, the legal obligation and responsibility concerning international provisions for the safety of life on sea. The course also covers the rights of the seaman monitoring compliance with legislative requirements, certificates and documents required to be onboard according to IMO conventions and codes, and application of leadership and team-working skills	
<b>P101 Physical Education I (0 0 1.5)</b>	
This course covers the concept and the importance of sports culture and fitness to acquire different skills in daily life and professional skills to improve physical, psychological, cognitive and physiological aspects through swimming and improving the level of fitness to achieve the requirements of the labor market.	
<b>P 102 Physical Education II (0 0 1.5)</b>	
This course covers the concepts and elements of fitness in order to understand the concept of fatigue as well as how to develop a training program for workers in the field of maritime transport, and recognize the definition of human fatigue for seafarers according to IMO, as well as sleep issues, irregular schedules, and consequences of fatigue.	
<b>P 203 Physical Education III (0 0 1.5)</b>	
This course covers the skills of identifying the drowned person, preliminary warnings, safety factors, and steps that the individual takes for safety in different situations, rescue operations and evacuations during work in the theoretical and applied aspects.	
<b>P 204 Physical Education IV (0 0 1.5)</b>	
This course covers identifying the injuries in the field of maritime transport, their classifications, how to deal with them, prevention and rehabilitation.	
<b>L 101 Leadership I (0-1.5-0)</b>	
This course covers self-confidence and develops neuromuscular compatibility which help students to have fast and efficient response dealing with emergency and unexpected situations. The course also increases their endurance to be able to work under pressure in severe conditions. It develop co-operation and team working skills.	
Prerequisites	NONE
<b>P 101 Physical Education I (0-1.5-0)</b>	
This course covers the concept and the importance of sports culture and fitness to acquire different skills in daily life and professional skills to improve physical, psychological, cognitive and physiological aspects through swimming and improving the level of fitness to achieve the requirements of the labor market.	
Prerequisites	NONE

<b>BS 131 Introduction to Navigation (1-0-3)</b>	
This course covers the basic principles of navigation. It familiarizes students with the nautical charts and its symbols and makes students capable of plotting co-ordinates, courses, bearings and distance (POSITION) on the charts as per the requirement of the STCW 78 convention as amended and its Code - chapter II section and Table A-II/1 and the IMO model course 7.03.	
Prerequisites	NONE
<b>BS 121 Ship Construction &amp; marine engineering(2-0-2)</b>	
This course covers the principle structure of a ship & the proper names of the various parts. The course provides students with the ability of intelligent observation during the ordinary course of their work & enables them to make adequate reports describing the location & nature of faults or minor damage discovered.	
Prerequisites	NONE
<b>BS 111 Seamanship Principles(1-0-3)</b>	
This course covers the basic information & awareness of the principles of seamanship for cadets and provide the student with the ability & skills for the application of the main items of practical seamanship. The course also provides the background knowledge to support: Types & Parts of ships –Parts of derricks – Anchor & Cable – Load Line marks & Draft – Ship's Maintenance – Ship's Handling & Steering orders.	
Prerequisites	NONE
<b>L102 Leadership II (0-1.5-0)</b>	
This course covers the leadership skills needed to command and control a group of subordinates (on-board crew under their command) to fulfill their task efficiently and effectively. The course increases students' self-confidence and develops their neuromuscular compatibility which helps them to have fast and efficient response dealing with emergency and unexpected situations. The course also increases their endurance to be able to work under pressure in severe conditions. It develops co-operation and team working skills.	
Prerequisites	L 101
<b>P102 Physical Education II (0-1.5-0)</b>	
This course covers the concepts and elements of fitness in order to understand the concept of fatigue as well as how to develop a training program for workers in the field of maritime transport, and recognize the definition of human fatigue for seafarers according to IMO, as well as sleep issues, irregular schedules, and consequences of fatigue.	
Prerequisites	P 101

<b>BS 132 Terrestrial Navigation Part 1 (1-0-3)</b>	
This course covers highly competent handling of various Navigational tasks related to chart work and position fixing as per the requirement of the STCW 78 convention as amended and its Code - chapter II section and Table A-II/1 and the IMO model course 7.03.	
Prerequisites	BS 131
<b>BS 133 Celestial Navigation (2-0-2)</b>	
This course covers highly competent handling of various Celestial Navigational observations, ship's positioning and Compasses error determination by using celestial applications, as per the requirement of the STCW 78 convention as amended and its Code - chapter II section and Table A-II/1 and the IMO model 7.03.	
Prerequisites	BA 121 N
<b>BS 112 Marine Safety (1-0-3)</b>	
This course covers the requirements of the STCW convention Chapter II, Section A-II/I. These functional elements provide the detailed knowledge to support the training outcomes related to watch keeping at the operational level. This course provides the background knowledge to support Operation of Life Saving Appliances, Applying Medical First Aid on board ship, and Prevention, Controlling & Fighting Fire on Board	
Prerequisites	BS 111
<b>L203 Leadership III (0-1.5-0)</b>	
This course covers the definition of Leadership, its elements, characteristics, its importance and the different types and styles of leadership. Students should understand the basic principles for successful leadership and the methods of its application. They should understand the concept of an ultimate leader, his tasks, his role and the skills that should be present in any leader according to his level (from cadet to chief engineer or captain). They should know how to select an effective leader and be able to differentiate between the different leadership theories and styles. They will gain the leadership skills which they apply throughout their marine career from cadet to chief engineer or captain.	
Prerequisites	L 102
<b>P203 Physical Education III (0-1.5-0)</b>	
This course covers identifying the injuries in the field of maritime transport, their classifications, how to deal with them, prevention and rehabilitation..	
Prerequisites	P 102

<b>BS222 Ship Stability (2-0-2)</b>	
This course covers the basic information and awareness in ship stability and provides students with the ability and skills to keep the vessel under favorable condition of loading and stability. The course also enables students to assess the ship stability condition as a preparatory course to meet the mandatory requirements for knowledge, understanding and proficiency in Table A-II/1 of STCW 78, as amended, "Manila 2010" for the function; controlling the operation of the ship and care for persons on board at the operational level. Based on basic stability model course 1.17 and IMO model course 7.03.	
Prerequisites	BS 121
<b>BS 234 Terrestrial Navigation Part 2 (2-0-2)</b>	
This course covers navigational tasks related to the mathematical methods of sailing, the different tide calculations, the use of various admiralty publications and understanding the concept of Electronic Chart Display and Information System (ECDIS); as per the requirement of the STCW 78 convention as amended and its Code - chapter II and Table A-II/1 in addition to section B-I/12 and the IMO model courses 7.03 and 1.27.	
Prerequisites	BS 132
<b>BS 213 Watch Keeping &amp; Marine Communication (1-2-3)</b>	
This course covers the international regulations for preventing collision at sea, 1972, recognition and identification of buoys, bridge resource management and the prevention and control of pollution. The course aims to introduce to the students the necessary skills for maintaining a safe navigational watch.	
Prerequisites	BS 112
<b>BS 261 Ship compasses &amp; Auto pilot (2-0-2)</b>	
This course covers the magnetic compass, gyroscopic compass, fluxgate compass, automatic pilot. The course provides the student with the understanding of the theory of operation, components, errors and how to use all indicated instruments for safe and efficient navigation.	
Prerequisites	BA112 N
<b>BS 292 Maritime Law and Leadership (2-0-2)</b>	
This course covers leadership and teamwork and the relevant skills to competently carry out the duties of officer in charge of a navigational watch on ships of 500 gross tonnage or more. The course covers shipboard personnel management and training, international maritime conventions and recommendations, and national legislation, workload management, resource management, decision-making techniques related to maritime law and leadership.	
Prerequisites	NONE

<b>L204 Leadership IV (0-1.5-0)</b>	
This course covers the definition of Neuroscience and its relation to leadership. The students should fully understand creativity, its methods, obstacles, relation to leadership and characteristics of creative individuals. The students should be able to know how to deal with their subordinates (on-board crew under their command) and superiors. They should know how to motivate others and the importance of teamwork. They should know the principles of planning, decision making, problem solving and crisis management. They should be able to deal with the different cultural issues occurring in today's maritime industry.	
Prerequisites	L 203
<b>P 204 Physical Education IV (0-1.5-0)</b>	
This course covers identifying the injuries in the field of maritime transport, their classifications, how to deal with them, prevention and rehabilitation..	
Prerequisites	P 203
<b>BS 251 Cargo Handling (1-0-3)</b>	
This course covers the basic knowledge about the principal operations of ship's cargo gear, the principles of Cargo stowage and securing, the safety precautions that must be carried out during cargo operation, the loading and securing of different types of dry cargo including dangerous goods.	
Prerequisites	BS 222
<b>BS 235 Voyage Planning &amp; Weather Routing (2-0-2)</b>	
This course covers chart correction tasks and voyage planning (Coastal and Ocean), the use of admiralty publication in voyage planning, weather routing and the performance standards for electronic charts as per the requirement of the STCW 78 convention as amended and its Code - chapter II section and Table A-II/1 in addition to section B-I/12 and the IMO model courses 7.03 and 1.27.	
Prerequisites	BS 234
<b>BS 263 Radar &amp; ARPA (2-0-2)</b>	
This course covers the suitable mode and range setting for the circumstances, setting the controls for optimal performance; limitations of the equipment in detecting targets and in terms of accuracy, comparing the RADAR display with the chart, suitable conspicuous land targets and using these targets to fix positions.	
Prerequisites	BS 132+BA 112N

<b>BS 262 Navigational Aids (2-0-2)</b>	
This course covers the information on the generic use of Electronic Systems of Position Fixing and Navigation, as per the requirements of the STCW convention Chapter II, Table A-II/1., the knowledge to support the training outcomes related to Navigation at the operational level.	
Prerequisites	BA 112 N
<b>BS 281 Meteorology (1-0-3)</b>	
This course covers the earth's atmosphere and its composition, the types of air masses and understand the weather associated, types of clouds, Tropical Revolving Storm (T.R.S.) and their development, various meteorological instruments, weather charts and their symbols, relative humidity and dew point temperature, predicting the wind direction and wind speed as per the requirement of the STCW 78 convention as amended and its Code - Table A-II/1 and the IMO model course 7.03 item 1.1.7, Meteorology in Officer in charge of a Navigational watch, Cover the basic principles to be observed in keeping a Navigational watch.	
Prerequisites	NONE
<b>BS 214 Ship Handling &amp; Emergency Procedures (2-0-2)</b>	
This course covers the necessary skills for maintaining a safe navigational watch and responding to emergencies in a competent manner. The course is based on all relevant IMO resolutions and guidelines available at the time, (IMO model course 7.03), to meet the mandatory requirements for knowledge, understanding and proficiency in Table A-II/1 of STCW as amended. (Manila, 2010), for Function 3: Controlling the Operation of the Ship at the Operational Level.	
Prerequisites	BS 213
<b>NS436 Integrated Navigation System (2-0-2)</b>	
This course covers the proper use of the ECDIS, its role as anti-grounding tool, and as a navigational tool in voyage execution additional topics include; understanding the proper use of the Radar and its role as anti-collision tool, understanding and demonstrating the integrated bridge systems and voyage planning (Coastal and Ocean), as per the requirement of the STCW 78 convention as amended, and applying proper overlaying between EDIS, Radar & ARPA and AIS.	
Prerequisites	(BS 263&235&262)
<b>NS 400 Research Methodology&amp; Statistics (2-0-2)</b>	
This course covers the fundamental theory, logic of research and develops the statistical sense. In doing so, the course is intended to familiarize students with the basic research methodology concepts, main research processes, undertaking a research project related to their field, different measures of central tendency, different probability distributions with emphasis on Normal distribution, bases of linear regression and correlation coefficient, sampling distributions, error analysis and Statistical computer applications will be practiced.	
Prerequisites	NONE

<b>NS419* Seamanship and maritime safety (1-0-3)</b>	
This course covers the requirements of the STCW convention Chapter II, Section A-II/1. These functional elements provide the detailed knowledge to support the training outcomes related to watch keeping at the operational level. In addition, the course aims to introduce the International Regulations for Preventing Collision at Sea, 1972, recognition and identification of buoys. The course aims to introduce to the students the necessary skills for maintaining a safe navigational watch.	
Prerequisites	S 306 + BS 214
<b>NS423* Ship Construction &amp; Stability (1-0-3)</b>	
This course covers vessels under favorable condition of loading and stability, assessment of ship stability condition, ship types, their construction, special features and outfit equipment, ship stability data, hydrostatic particular, ship construction and stresses affecting.	
Prerequisites	S 306 + BS 251
<b>NS438* Terrestrial Navigation III (1-0-3)</b>	
This course covers chart correction tasks, voyage planning (Coastal and Ocean), and the use of admiralty publication in voyage planning, weather routing. Also, ready to set for 2nd mate exam as per the requirement of the STCW 78 convention as amended and its Code - chapter II section and Table A-II/1 in addition to section B-I/12 and the IMO model courses 7.03 and 1.27.	
Prerequisites	S 306 + BS 235
<b>NS439 Celestial Navigation II (1-0-3)</b>	
This course covers navigational duty on the operational level using celestial navigation, preparing navigational star and observation of sun for extracting the ship's position, and time of meridian passage. Students will also be able to find out the compass error. The students will be well prepared for 2nd mate competent certificate in celestial navigation per the requirement of the STCW 78 convention as amended and its Code - chapter II section and Table A-II/1 in addition to section B-I/12 and the IMO model courses 7.03 and 1.27.	
Prerequisites	S 306 + BS 133
<b>NS 456 Cargo Handling and Stowage (1-0-3)</b>	
This course covers the principal operations of ship's cargo gear, cargo stowage and securing, the safety precautions must have carried out during cargo operation, the loading and securing of different types of dry cargo including dangerous goods, and maintain effective communication during cargo handling. The course meets the mandatory minimum requirements for knowledge understanding and proficiency in table A-11/1 of STCW 78, as amended (Manila 2010) for the function of cargo handling and stowage at the operational level, In addition to IMO Model Course 7.03.	
Prerequisites	S 306 + BS 251
<b>NS401 Project (0-2-0)</b>	
This course covers knowledge and skills the student earned within his/her study to solve a specific problem allocated to them, and to use available resources to collect/generate data necessary to solve the problem.	
Prerequisites	NS 400

## ACADEMIC STAFF

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