



საქართველოს  
ეკონომიკისა და მდგრადი განვითარების  
სამინისტრო



# BATUMI STATE MARITIME ACADEMY

## ბათუმის სახელმწიფო საზღვაო აკადემია



### *Maritime Navigation*

Brief Description of the Educational Program



European Commission  
**TEMPUS**



INTERNATIONAL  
MARITIME  
ORGANIZATION





<b>Educational Level</b>	<i>Bachelor</i>
<b>Educational Program Title</b>	<i>Maritime Navigation</i>
<b>Qualification to be Awarded/Academic Degree</b>	<i>Bachelor of Nautical Sciences</i>
<b>Educational Program Leader</b>	<i>Alexander Tsetskhladze, Associate Professor</i> <a href="mailto:a.tsetskhladze@bsma.edu.ge">a.tsetskhladze@bsma.edu.ge</a> <i>Givi Tsitskishvili, Associate Professor</i> <a href="mailto:g.tsitskishvili@bsma.edu.ge">g.tsitskishvili@bsma.edu.ge</a>
<b>Place of the Implementation of the Program</b>	<i>Batumi, 53 Rustaveli Avenue</i> E-mail: <a href="mailto:info@bsma.edu.ge">info@bsma.edu.ge</a>
<b>Teaching Form</b>	<i>Full – time study - 4 academic years (8 academic semesters)</i>
<b>Program Volume</b>	<i>240 ECTS</i>
<b>Prerequisites/Entry Standards</b>	<i>The right to study without passing the Unified National Exams is defined in accordance with the Law on Higher Education</i>
<b>Teaching Language</b>	<i>English</i>
<b>Teaching Format</b>	<i>Lecture, group work, seminar, practical training, laboratory works, sea-going training</i>





*The program aims are:*

- 1. To prepare national (industrial characteristic “Maritime Navigation” ) and assistant and marine vessel handling navigator, who on the bases of recognized experience and appropriate training can gradually gain a position of the high rank of an ocean-shipping vessel in accordance with the requirement of international standard convention - STCW (A-II/1, A-II/2, A-II/3).*
- 2. To prepare a specialist oriented on practical work, who can identify navigational threats, solve problems and have critical thinking in the scopes of his/her competence.*
- 3. To equip a graduate with professional skills of ship constructions, stability and technical service, to give the knowledge of acting marine conventions and accomplish safe navigation control and management according to the legislation, to develop leadership and group working skills.*
- 4. To prepare a specialist having navigational, watch keeping, communication and cargo shipping organizational planning skills, also safe cargo professional shipping skills, in accordance with the international requirements for sea pollution prevention and safe navigation.*
- 5. To prepare a specialist, who will have readiness and reaction over emergency situations, managing a vessel safely and efficiently, having knowledge in safe management system, acknowledgment and practical usage skills in accordance with the quality legislative essentials, codes and guidebooks.*
- 6. To prepare a specialist who can evaluate situations, analyze and assess data using traditional and other methods.*
- 7. To develop learning and research planning and organizational skills.*
- 8. To advance a graduate with general and industrial competences on the basis of which s/he will be able to get personal development, career growth and continue further learning levels at higher education institutions.*

### **Aim of the Program**





### **Knowledge and Understanding**

1. Describes according to the construction types of vessels, sizes, cargo and cargo shipping facilities; determines classification of cargo types and their safe transportation technologies foreseeing international norms.
2. Enumerates types of rescue means of a vessel and their characteristics, crew activities in rescue situations, firefighting rules, and procedures for the prevention of environmental pollution by a vessel according to the requirements of the International Maritime Conventions.
3. Describes physical and chemical properties of atmosphere and marine environment of a vessel; determines the classification of hydro meteorological phenomena and their influence on a vessel handling.
4. Enumerates the principles of safe navigation handling and operation, organizes navigational watch keeping, rules of a vessel towing at sea and removal of ran aground vessel; determines the integrated management system requirements;
5. Describes the criterion of vessel's stability, enumerates theoretical fundamentals of handling and steering; Determines types of vessel facilities and the methods of their technical support.
6. Explains fundamentals of marine astronomy and according to the usage of astronomical methods determines location of a vessel and methods of compass correction; enumerates the rules of using and reading of digital cartography; describes the principles of determining location of a vessel through navigational methods.
7. Describes the functionality principles of navigation and radar systems of a vessel, working regime and operation rules.
8. Describes the basic principles of functioning vessel's power and electrical systems and the safe methods of technical operation.

### **Skill**

1. Implements duties on a vessel and watch keeping procedures, plans and organizes navigational work, crew activity and their training process, carries out log books, documentation bookkeeping, recording and keeping.
2. Plans and implements cargo operations, prepares the report documentation, ensures fulfillment of the safe cargo shipping norms, including shipping hazardous cargo in accordance with the established legislative requirements.
3. Prepares the report of vessel's stability in accordance with the established IMO criterion.
4. Finds and uses information engaged with the weather, carries out observation on the atmosphere and current marine hydro meteorological events, takes the precise interpretation results of factual and expected changes of the weather.
5. Uses IMO standard communication phrases; knows the working (English) language in the capacity of fulfilling navigator's efficient obligations in order to communicate with shore and marine authorities.
6. States vessel location using navigational and digital cartography; performs basic marine astronomical and navigational tasks; determines the collision risks and reacts accordingly using radar and other navigational methods.
7. Carries out search and rescue operations at sea, vessel handling while rescue operations.
8. Analyzes the issues of the vessel classification and inspection.
9. Carries out environmental procedures in accordance with the international requirements and norms.

### **Responsibility and autonomy**

1. Recognizes the importance of effective authority in marine field foreseeing the professional ethic norms; Takes responsibility for fulfilling team work and leadership principles by foreseeing the rights and obligations imposed upon him/her;
2. Updates knowledge and skills, recognizes the need for professional standards of ethic, the necessity of development transferable outcomes and industry skills. Independently plans one's own learning and research process, objectively evaluates the achieved competences, and takes responsibility for one's own career growth.

## ***Learning Outcomes***



### **Program Structure**

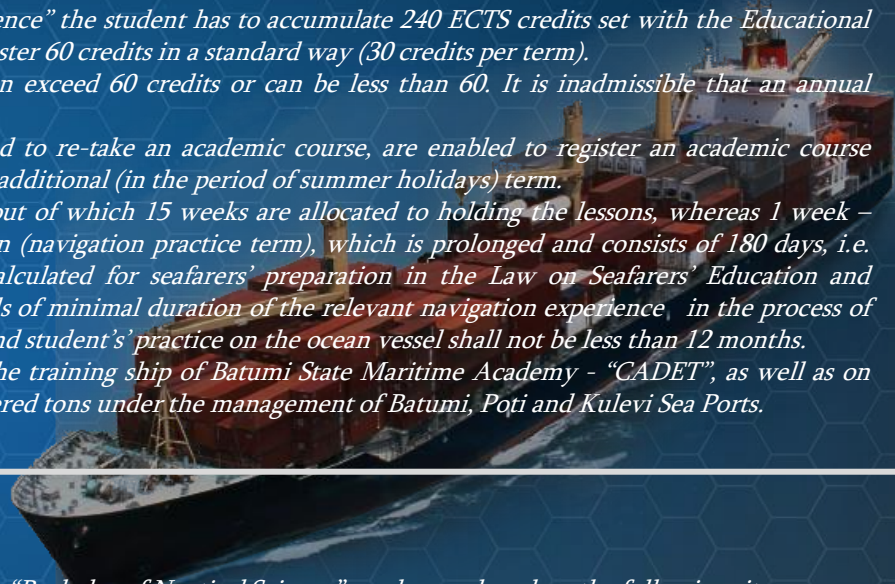
*In order to obtain a degree of the “Bachelor of Nautical Science” the student has to accumulate 240 ECTS credits set with the Educational Program. Every academic year, the student is enabled to master 60 credits in a standard way (30 credits per term).*

*It is admissible that an annual workload of the student can exceed 60 credits or can be less than 60. It is inadmissible that an annual workload of the student exceed 75 credits.*

*The students with academic indebtedness, being authorized to re-take an academic course, are enabled to register an academic course during the basic academic term (calendar), as well as during additional (in the period of summer holidays) term.*

*The duration of each academic term comprises 20 weeks, out of which 15 weeks are allocated to holding the lessons, whereas 1 week – repetitive (Fx) exams. Only V Term represents an exception (navigation practice term), which is prolonged and consists of 180 days, i.e. 6 months. Duration of the navigation practice term is calculated for seafarers’ preparation in the Law on Seafarers’ Education and Certification in STCW Convention and to meet the demands of minimal duration of the relevant navigation experience, in the process of Certification. The duration of learning navigation practice and student’s’ practice on the ocean vessel shall not be less than 12 months.*

*The students undertake a learning navigation practice on the training ship of Batumi State Maritime Academy - “CADET”, as well as on other larger displacement vessels with more than 500 registered tons under the management of Batumi, Poti and Kulevi Sea Ports.*



### **Employment Opportunity**

*The graduate, having been granted with an academic degree “Bachelor of Nautical Science” can be employed on the following sites:*

- *Private crewing, stevedoring, consultancy and other companies related to maritime transport;*
- *State Services, where the activity is related to regulation and control of the maritime transportation;*
- *Ship Building and Ship Ordering Enterprises;*

*A person with an academic degree “Bachelor of Nautical Science” is equipped with proper knowledge and competence to continue study at the Master Level.*



### **Human Recourses**

*Elected academic staff and invited specialists are involved in program implementation:*

- Professor – 4
- Associate Professor – 10
- Assistant Professor – 1
- Assistant -1
- Invited teachers-23
- International Academic/Invited Staff -4

### **Material Recourses**

*For mastering an Educational Program, the Student is authorized to apply material-technical base of Batumi State Maritime Academy under equip conditions according to the rule set with the Statute, Internal Regulation and Regulation. They will have access to the following areas:*

- Free access to the computer Center connected to the Internet;
- Free access to the Reading Hall of BSEMA Library;
- Laboratories of Physics, Technical Mechanism and Chemistry for conducting learning research types of works;
- The Laboratories of the Vessel Structure, Operation of Energetic Equipment of the Vessel, Electric Facilities, Pneumatics and Hydraulics, electric technique and automatic laboratories;
- Training Base and Simulators of the Learning, Training and Certification Center of the Seafarers of BSEMA;
- Participation in the Scientific Conferences.

*To ensure a full students' life, BSEMA offers the students the following opportunities to ensure full students' life:*

- Opportunity to take part in various types of cultural, cognitive and sport events;

### **Assessment System**

*Students knowledge is assessed in pursuant with the "Exam and Assessment Procedure" adopted according to the Decree N3 Issued by the Minster of Education and Science of Georgia on January 5, 2007 and Decision of the Senate of Batumi State Maritime Academy №7/11 taken on April 23, 2019.*

*Assessment of Students' knowledge is held in each learning component with 100-score system. Assessment of the level of achieving learning outcome in each component of the program should include interim and final assessment.*

*The forms, methods, components and criteria for assessing the knowledge is described in details in the syllabus of the academic course.*



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<b>I Semester</b>	Elective course: 1.Business English 2.Georgian Language 3 ECTS	Physical Training I 2 ECTS	Mathematics I 5 ECTS	General Physics I 5 ECTS	Academic Writing 5 ECTS	Geography of Navigational Routes 5 ECTS	Seamanship 5 ECTS
<b>II Semester</b>	Basics of Business Administration 6 ECTS	Maritime Healthcare 4 ECTS	Physical Training II 2 ECTS	Mathematics MF II 5 ECTS	General Physics MF II 5 ECTS	Industrial Chemistry 4 ECTS	Information Technologies in seamanship 4 ECTS
<b>III Semester</b>	Maritime English MN1.1 5 ECTS	International Regulations for Preventing Collisions at Sea 5 ECTS	Marine Navigation I 5 ECTS	Ship Safety Rules MN 5 ECTS	Celestial Navigation I 5 ECTS		Ship's Types, Constructions and Technical Equipment 5 ECTS
<b>IV Semester</b>	Maritime English MN1.2 5 ECTS	Ship Handling and Maneuvering 5 ECTS	Marine Navigation II 5 ECTS	Marine Radio and Telecommunication 5 ECTS	Celestial Navigation II 5 ECTS		Ship's Stability 5 ECTS
<b>V Semester</b>	Onboard Training MN 30 ECTS						
<b>VI Semester</b>	Maritime English MN2 5 ECTS	Navigational gears 5 ECTS	Prevention of Pollution of Marine Environment and anti-pollution procedures 5 ECTS	Ship's Power and Electric Systems 5 ECTS	Marine Meteorology 5 ECTS	Maritime Law 5 ECTS	
<b>VII Semester</b>	Quality Assurance and Marine Risks Management Onboard 5 ECTS	International Maritime Organization (IMO) Conventions 5 ECTS	Ship Commercial Management 5 ECTS	ECDIS I 5 ECTS	Radar and ARPA Systems 5 ECTS	Cargo operations on liquid cargo vessels 5 ECTS	
<b>VIII Semester</b>	Professional Knowledge and Competencies MN 5 ECTS	Cargo operations on dry cargo vessels 5 ECTS	Leaderships and team work Ethics 5 ECTS	ECDIS II 5 ECTS	Ship Management 5 ECTS	Bridge Resource Management 5 ECTS	



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***Honor, Disciplina, Experientia!***