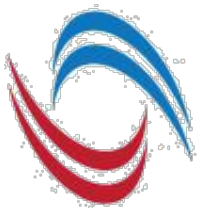


განათლების ხარისხის განვითარების ეროვნული ცენტრი
NATIONAL CENTER FOR EDUCATIONAL QUALITY ENHANCEMENT

Accreditation Expert Group Report on Higher Education Programme

Higher Education Programme Name: Maritime Engineering
HEI's Name

Date(s) of Evaluation: September 24th 2019

Report Submission Date: November 20 2019

Tbilisi
2019

HEI's Information Profile

Name of Institution Indicating its Organizational Legal Form	LEPL - Teaching University –Batumi State Maritime Academy
HEI's Identification Code	245427337
Type of Institution	Teaching University

Higher Education Programme Information Profile

Name of the Programme	Marine Engineering
Level of Education	Bachelor
Qualification Granted Indicating Qualification Code	0716
Language of Instruction	Georgian
Number of Credits	240
Programme Status (Authorized/ Accredited/New)	Accredited

Expert Panel Members

Chair (Name, Surname, University/organization/Country)	Prof.dr.ir. Sape A. Miedema, Delft University, The Netherlands
Member (Name, Surname, University/organization/Country)	Zaza Makharadze, Maritime Transport Agency, Georgia.
Member (Name, Surname, University/organization/Country)	Givi Sanadze, National Defence Academy, Georgia.
Member (Name, Surname, University/organization/Country)	Kristina Rzgoeva, Maritime Transport Agency, Georgia.
Member (Name, Surname, University/organization/Country)	Nika Tikanashvili, Georgian Aviation University, Georgia.

Accreditation Report Executive Summary

- General information on the education programme

  3 BEng programmes were analyzed:
  1. Maritime Engineering
  2. Electrical Engineering
  3. Maritime Navigation

  The BEng program Maritime Engineering educates students to be professional cadets for shipping companies with the possibility to finally be promoted to captain.

- Brief overview of the accreditation site-visit

  The committee consisting of:
  Prof. Sape Andries Miedema
  Givi Sanadze
  Capt. Zaza Makharadze
  Ms. Kristina Rzgoeva
  Mr. Nika Tikanashvili

  Had interviews with, on September 24th 2019:
  The University Administration
  The Self Evaluation Team
  The Academic and Invited Staff
  Students and Alumni
  Employers of Graduates
  The Head of Studies

  In addition the different facilities were visited

- Summary of education programme's compliance with the standards

  Since this program has to comply with many international shipping regulations, standards and customs, being successful in this means the learning goals are met.

- Summary of Recommendations

  N/A

- Summary of Suggestions

  Most suggestions are valid for all 3 programs.

  Since, once on board of a ship, the cadets of the 3 programs have to cooperate, a multidisciplinary project is suggested in order to let the students learn cooperation and communication (for all 3 programs of course).

It was noticed that the English of the students of the other two programs is better compared to Maritime Engineering. It is suggested to pay some attention to this.

Control Engineering is the basis of automation. Some fundamental Control Engineering is suggested for all 3 programs, maybe not the same, but applied to the program.

It is suggested to have more structured links with industry.

Leadership/ethics have to many credit points, it is suggested to mix this with more technical topics.

Consultation hours exist on paper, but it is suggested to make this more visible to the students.

It is suggested to reward teachers individually if they perform well, for example letting them go to an international conference or take a course for personal development.

Also stimulate students to go to conferences and let them get acquainted to the international shipping world. Also pay attention to possibilities of exchange programs.

It is suggested to involve students more in decision making processes.

It is suggested to create a webpage for alumni for Q&A, since there are often questions of alumni about new developments in shipping.

Since the 3 programs belong to 1 institute/academy, a number of standards, like quality control, will be identical in the 3 programs. It is suggested to have a mutual accreditation for this the next time.

- Summary of best practices (If Applicable)

  Related to the experience of the chairman with accreditations in the Netherlands, the quality control system in Batumi is already at a very good level. But be careful it is about content and not just about numbers (spreadsheet management).

- In case of accredited programme, summary of significant accomplishments and/or progress (If Applicable)

  The facilities are up to date and impressive, especially all the different simulators. It is considered a great accomplishment to have such good international facilities.

Compliance of the Programme with Accreditation Standards

1. Educational programme objectives, learning outcomes and their compliance with the programme

A programme has clearly established objectives and learning outcomes, which are logically connected to each other. Programme objectives are consistent with the mission, objectives and strategic plan of the institution. Programme learning outcomes are assessed on a regular basis in order to improve the programme.

1.1 Programme Objectives

Programme objectives define the set of knowledge, skills and competences the programme aims to develop in graduate students. They also illustrate the contribution to the development of the field and the society.

Descriptive summary and analysis of compliance with standard requirements

There are total 7 objectives described in the educational programme "Marine Engineering".

Programme objectives are clear, realistic and achievable. They define the knowledge, skills and competence to be acquired by the students after completion the programme. The programme aims preparation of Ship's Engineers of support, operational and management level according to National standards (National frame document "Marine Engineering") and international standards (STCW convention A-III/1, A-III/2, A-III/3) with a qualification of "Bachelor of Engineering in Maritime Engineering".

Programme objectives define the contribution to be made by the graduates in the maritime field. They meet the mission, objectives and strategies of Batumi State Maritime Academy.

The programme also aims to prepare the qualified leaders with the competence complying requirements of the Maritime labor market. Graduates will have an ability to identify and solve professional problems, potential of self-realization and communication skills in order to ensure their competitiveness and career success in the local and international labor markets.

Programme objectives are shared by the people involved in the programme. Objectives are familiar to faculty members, academic staff, invited personnel and administration. Programme objectives are public and can be found on the BSMA web page.

Information about the programme and its objectives has been collected from the self-evaluation report and enclosed documents. Relevant personnel have been interviewed during the site visit. Programme objectives found compliant to standard requirements.

Evidences/indicators

1. Educational Program - „Marine Engineering"
2. Programme Sylabusses
3. Examination organization and student assessment
4. BSMA web-site: http://bsma.edu.ge
5. Academic and invited Staff survey analyze
6. Statistic analyze of labor market and employers
7. Graduates survey analyze
8. Students assessment analyze
9. Academic and invited staff auditorial activity monitoring analyze
10. Approval of Working group for programme development
11. BSMA mission: http://bsma.edu.ge/main/page/2-5/index.html

12. Strategy Development plan 2018- 2024: http://bsma.edu.ge/upload/Strategic%20Plan%202018-2024.pdf
13. Internationalization Policy: http://bsma.edu.ge/upload/ND%202-Q01-01.pdf

Recommendations: NIL

Suggestions for programme development: NIL

Best Practices (if applicable): NIL

In case of accredited programme, significant accomplishments and/or progress
NIL

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

X Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

1.2. Programme Learning Outcomes

- Programme learning outcomes describe knowledge, skills, and/or the sense of responsibility and autonomy, students gain upon completion of the programme;
- Programme learning outcomes assessment cycle consists of defining, collecting and analysing data;
- Programme learning outcomes assessment results are utilized for the improvement of the programme.

Descriptive summary and analysis of compliance with standard requirements

The outcome of Education programme is in compliance with the programme objectives.
Combination of learning components (learning courses, teaching methods, knowledge assessment system etc.) allow the graduate students to obtain the relevant knowledge, skills and attitude to the Bachelor level as it is defined by the brogramme objectives.

Map of Learning outcomes of curricula exist and shows that outcomes are reasonable, each learning component of the program includes the following :

- objectives to be achieved (1 to 7)
- learning outcomes (Knowledge and understanding / skills / responsibility and ability)

Learning outcomes are based on requirements of National Qualification framework as well as STCW convention.
The programme, as well as its learning outcomes have been developed by the working group consisting from academic staff, invited staff, students, alumny and representative from the industry. Learning outcomes take into the consideration an industry requirements, field specifications and labor market needs.

The program contains a mechanism for effective evaluation of learning outcomes and it is in line with national legislation requirements. Evaluation is done in the prescribed intervals (5 weeks period). The system enables to define how the leaning outcomes are achieved at various stages. The system is transparent and measureable Direct and indirect assessment methods are applied. The students have access to the results of knowledge assessment.
BSMA provides an electronic log book system, which allows the users to find the relevant information about the learning process including learning components and knowledge assessment results. The system is protected and every user is able to access his own account/page using personal credentials. The system allows the students to appeal for the assessment results if necessary.
QAS of the Maritime Engineering faculty analyzes the evaluation results on a regular basis and makes relevant report. Analyzes results can be used for further development of the Academic Program when applicable.

Evidences/indicators

1. Educational Program - „Marine Engineering";
2. Syllabuses;
3. Examination organization and assessment procedure;
4. Education program learning outcomes evaluation rule
5. Academic and invited Staff survey analyze;
6. Labor Market and Employers Statistical Analyze
7. Graduates survey analyze;
8. Students assessment analyze
9. Academic and invited staff auditorial activity monitoring analyze;

Recommendations: NIL

Suggestions for programme development: Number of employers/shipowners cooperate with BSMA. They conduct an interview and employ those students/graduates who successfully pass an interview. BSMA invites the crewing representative in the program development process, however increasing the number of representatives from employer/shipping companies will create more clear picture for the field requirements and positively affect the learning outcomes.

Best Practices (if applicable): NIL

In case of accredited programme, significant accomplishments and/or progress: NIL

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

X Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

Programme's Compliance with Standard

Standard	Complies with Requirements	Substantially complies with requirements	Partially Complies with Requirements	Does not Comply with Requirements
Educational programme objectives, learning outcomes and their compliance with the programme	X			

2. Teaching methodology and organization, adequate evaluation of programme mastering

Programme admission preconditions, programme structure, content, teaching and learning methods, and student assessment ensure the achievement of programme objectives and intended learning outcomes.

2.1 Programme Admission Preconditions

Higher education institution has relevant, transparent, fair, public and accessible programme admission preconditions.

Descriptive summary and analysis of compliance with standard requirements

o The admission preconditions to the Marine Engineering undergraduate educational program is given on the basis of the complete general education, in compliance to the regulations determined by the Legislation of Georgia as well as on the basis of the Unified National Exams results.

o Information concerning to the program admission prerequisite is available for the enrollee on the web-site of the BSMA as well as in the handbook issued by the Examination and Assessment National Centre. The BSMA representatives hold the familiarization meetings at schools every year before the future enrollee registration.

o The program admission prerequisites are determined by taking into consideration the learning outcomes, analyses of the questioning process of the persons involved in the program implementation. The Maritime Faculty Council composes the program admission prerequisites on

the basis of the given data every year, place them on the web-site and deliver to the Assessment and Examination National Centre.

o Taking the program contents, learning outcomes, qualification award into consideration, the Council form the list of the priority examination subjects and criteria of the program:

- Basic Skills - 5;
- Mathematics and / or Geography - 4;
- English Language -2 (minimum level of competence 20%+1);
- Georgian Language and literature -1;

On the basis of educational program resources the enrolled student number is up to 75.

o All the above-mentioned provides the current procedures' legality, publicity, transparency and availability of the program admission Preconditions.

Evidences/indicators

- BSMA web-site: http://bsma.edu.ge/

Recommendations:

Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

Non-binding suggestions for programme development

Best Practices (if applicable):

- Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

- Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

☒ Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

2.2 Educational Programme Structure and Content

Programme is designed according to HEI's methodology for planning, designing and developing of educational programmes. Programme content takes programme admission preconditions and programme learning outcomes into account. Programme structure is consistent and logical. Programme content and structure ensure the achievement of programme learning outcomes. Q/ualification to be granted is consistent with programme content and learning outcomes.

Descriptive summary and analysis of compliance with standard requirements

o Undergraduate educational program „Marine Engineering" consists of 240 ECTS credit and is distributed so:

180 ECTS – General Specialty Learning Components;
42 ECTS - Compulsory/Mandatory Learning Components;
18 ECTS - Elective/Free Learning Components.

o The presented program is designed according to the rules of "Educational program planning, designing and developing" of BSMA and Industry Specification ("Maritime Engineering"), foreseeing ECTS of educational program – transfer of credits and principles of European guide book of accumulation credits as well as stages and components.

o The content, volume, aim and learning outcomes of the program are in accordance with the bachelor learning level, also foresees the program admission prerequisite and learning outcomes.
o The program foresees up-to-date achievements and the requirements of labor market.

o The structure of the educational program ensures principle of a consistent transition from simple to complex, from fundamentals to general learning courses and learning courses of basic specialty taking in to account content based sequence. Implementation of the program is be represented according to the following phases:

- I-II Terms are dedicated to preparing the students in Exact and Natural Sciences;
- III-IV terms are dedicated to preparing the students in general engineering and industry Sciences:
- VI Term is devoted to navigation practice;
- VII Term is dedicated to mastering of the Specialty Learning Components, which is necessary for occupying the vessel management Engineer's position;
- In VIII Term maritime engineering professional knowledge and competences are taught.

o The program components are disposed successively, preconditioned logically according to the semester and admission prerequisite on further suitable components.
o Program and learning courses structure meets international standards.
o Granted Qualification Bachelor of Engineering (BEng) in Maritime Engineering is compliance with program content and learning results. So content and composition provides of achievement of learning results.
o It should be noted recommendation for the learning course "Mechanics and hydromechanics" to be added prerequisite course "General Physics MF I".

Evidences/indicators

1. BSMA web-site: http://bsma.edu.ge;

2. „Rule for planning, design and development of educational program";

3. Brief Description of Educational Program "Marine Engineering";

4. Educational Programme - „ Marine Engineering".

Recommendations:

- For the learning course "Mechanics and hydromechanics" to be added prerequisite course "General Physics MF I".

Suggestions for programme development:

o It would be better that the name learning course "Construction Materials Technology" Depending on its content to be changed in "Material Science and Construction Materials Technology" ore "Construction Materials and Technology";

o It would be better in the future for the learning course "Engineering Graphics ME/TP" to be added „Computer Graphic/Drawing" themes, ore to be added separate course "Computer Aided Design";

o It would be better learning course "Mechanics and hydromechanics" to be divided in two separate learning courses "Mechanics" and "Fluid Mechanics";

o For the learning course "Ship's Internal Combustion Engines and Systems" would be better prerequisite "Theory of Ship's Internal Combustion Engines";

o It would be better in the program to be taken into account "Corse project" ore "Corse work";

o It is advisable to include in the program a graduation thesis;

o The title of the learning course "Professional Knowledge and Competencies" is very general. It really includes "operation of ship power equipment and safety works". It is advisable to be changed the title.

Best Practices (if applicable):

- The whole semester for seagoing practice is one of the strong side of the program.

In case of accredited programme, significant accomplishments and/or progress

Improving the learning practical component caused by the renovation of teaching laboratories.

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

☐ Complies with requirements

☒ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

2.3 Course

- Student learning outcomes of each compulsory course are in line with programme learning outcomes; Moreover, each course content and number of credits correspond to course learning outcomes;
- Teaching materials listed in syllabi are based on the core achievements in the field and ensure the achievement of intended programme learning outcomes.

Descriptive summary and analysis of compliance with standard requirements

o The capacity and scope of the undergraduate program approved by the Academic Council of the Maritime Academy is relevant with the level of study and is relevant with the qualifications awarded; o Learning outcomes are visible and measurable. Learning outcomes can be assessed within the learning component. Criteria for evaluating learning outcomes are quite diverse: activity, group work, five-week assessment, test, seminar, presentation and more. All courses are based on three learning outcomes "knowledge and understanding", "skills" and "responsibility and autonomy".

o Achieving of learning outcomes within a given timeframe and under existing resources is realistic. o Learning materials in the syllabus and the professors' involvement in the conferences provides teaching on achievements in the field. New literature is used in the syllabuses, such as:

- HSQE (Health, Safety, Quality & Environmental Management System Manual) Sea Team Management, Revision: 01 Jun 2018;
- Occupational health and safety management systems —Requirements with guidance for use, ISO 45001:2018;
- IMDG code ИМО IL200E, 2018 Edition (amendment 39-18), 2 Vol.
- Safety, Security, Quality, Environment (SSQE) Department CROWLEY MARITIME CORPORATION 5th Edition Rev 1: March 2015;
- Academic Writing, Kikvadze M., Tsetskhladze N., Phartenadze N., Khakhutaishvili M., Akhvlediani D., Publishing House "Iverioni," Tbilisi, 2016;

- H. Telia, J. Motskobili. Lecture Course in Information Technology in Maritime – 2019;
- Kakhadze - Ship Communication Systems.Reader in electronic form. 2019.

o The learning outcomes of the basic courses of the "marine engineering" undergraduate program ensure that the learning outcomes of the program are achieved. The learning outcomes chart presented in the program clearly shows, which learning learning course to which outcomes and goals covers.

o The compatibility of the teaching courses outcome contents of the educational program, teaching/ learning and assessment methods is provided by the external and internal program assessment mechanisms.

o The undergraduate program "Marine Engineering" corresponds to "the Field Specification of Higher Education in Marine Engineering" approved by the National Center for Educational Quality Enhancement (30.05.2017. Protocol #5). It Responds to purpose, specific requirements, competency requirements and educational resources. For egzample 180 ECTS is recommended for the major specializing in the field of marine engineering. Consequently, the same amount of credit is given to the major specialty training courses.

Evidences/indicators

1. Rule for planning, design and development of educational program";

2. „Rules for development and design of Educational Program Learning Course (syllabus)";

3. Educational Program : „Marine Engineering";

4. Syllabuses.

Recommendations:

Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

It is not necessary, that all learning courses must cover all three learning outcomes. For example learning outcomes "Responsibility and Autonomy" can cover learning such courses as "Leaderships and Ethics", "Educational Technological Practice", "Seagoing practice", but for the course "Industrial chemistry", "Mechanics and Hydromechanics, General Physics" is not recommended.

Best Practices (if applicable):

The learning outcomes written by "Bloom Taxonomy" methodology are much clearer, anderstable and convenient for students.

In case of accredited programme, significant accomplishments and/or progress

The program is much more relevant to European educational standards.

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

☒ Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

2.4 The Development of practical, scientific/research/creative/performance and transferable skills

Programme ensures the development of students' practical, scientific/research/creative/performance and transferable skills and/or their involvement in research projects, in accordance with the programme learning outcomes.

Descriptive summary and analysis of compliance with standard requirements

o The students of the Academy are actively involved in the local and international research projects; o Students can participate in scientific conferences organized by other colleges and organizations; o The program provides practical navigation skills on boats and simulators;
o The study spaces are adapted for educational purposes and provide students with extracurricular activities and independent initiatives.

Evidences/indicators

1. Students Services and Career Support Department provision";

2. MOU and Agreements with International and Georgian institutions;

3. Rules for managing Training Record Book. http://bsma.edu.ge/upload/TRB%2029.03.2019.pdf.

Recommendations:

Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

Non-binding suggestions for programme development

Best Practices (if applicable):

- Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

- Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

☒ Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

2.5 Teaching and learning methods

Program is implemented using student centered teaching and learning (SCL) methods. Teaching and learning methods correspond to the level of education, course content, student learning outcomes and ensure their achievement.

Descriptive summary and analysis of compliance with standard requirements

- The syllabus of each course clearly states the teaching and learning methods based on the content and specificity of the course, which are adequate for the results of the internal and external assessment analysis.
- The educational process consists of lectures (theoretical), practical, seminar and laboratory courses, which are combined with training-simulation, training and swimming practices.
- The teaching and learning methods of the courses offered in the educational program are varied. In most cases, several teaching methods are used. The above methods are in full compliance with the teaching level.

o The teaching method in each component determines the content of the learning outcome. For example, the following teaching methods used in the course "Applied Mechanics": lecture, group work and laboratory work. These three methods are completely adequate and sufficient to produce the learning outcomes given in the course syllabus.

Evidences/indicators

1. Educational Program „Marine Engineering“;
2. Syllabuses;
3. Rules for monitoring and evauation of academic and invited staff teaching activity;
4. Rules for evaluation of Academic staff scientific/research and academic activity.

Recommendations:

Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

It is desirable for fundamental learning courses (industrial chemistry, mechanics and hydromechanics, electrotechnics and electronics, thermodynamics and heat transfer) to pay more attention to the laboratory method of study.

Best Practices (if applicable):

- Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

- Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

☒ Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

2.6. Student Evaluation

Student evaluation is conducted in accordance with established procedures. It is transparent and complies with existing legislation.

Descriptive summary and analysis of compliance with standard requirements

o The students' knowledge assessment forms, criteria, methods and rules are detailed in the syllabus of the learning course.

o The syllabuses are located in the electronic database and are available for the student. Based on the knowledge gained, the student can predict the expected learning outcomes.

o This procedure ensures transparency of student assessment. The student can use the Academy's electronic services to get acquainted with the results of the assessment and respond to it at any time. o The student is protected from a single assessment by the above assessment procedure. The evaluation process is multicomponent and involves ongoing, intermediate and final evaluation.

o The evaluation criteria of some courses vary depending on the course specification. E.g. The training course on "Resource Management of Machinery" is conducted in a well-equipped study area: on the simulator and in the computer room equipped with the appropriate software. Special simulation tasks are developed assessment criteria are defined and the student's evaluation is done programmatically.

o Persons involved in the implementation of the syllabus are guided by the syllabus features, course forms, criteria and methods that are subject to internal and external evaluation. Thus the components and methods of the course evaluation take into account the course specificity and learning outcomes. o So, the student assessment system is up to date and meets modern standards.

Evidences/indicators

1. Examination organization and assessment procedure

2. Students' assessment system: http://students.bsma.edu.ge/index.php

3. Electronic system of monitoring of educational process

4. IT management and web-site administration rules

Recommendations:

Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

Non-binding suggestions for programme development

Best Practices (if applicable): o Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes
In case of accredited programme, significant accomplishments and/or progress o Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)
Evaluation o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard ☒ Complies with requirements ☐ Substantially complies with requirements ☐ Partially complies with requirements ☐ Does not comply with requirements

Programme's Compliance with Standard

Standard	Complies with Requirements	Substantially complies with requirements	Partially Complies with Requirements	Does not Comply with Requirements
Teaching methodology and organization, adequate evaluation of programme mastering	X			

3.Student achievements and individual work with them

HEI creates student-centered environment by providing students with relevant services; programme staff ensures students' familiarity with the named services, organizes various events and fosters students' involvement in local and/or international projects.

3.1. Student support services
Students receive appropriate consultations and support regarding the planning of learning process, improvement of academic achievement, employment and professional development.

Descriptive summary and analysis of compliance with standard requirements

Based on an educational program self-evaluation report and the enclosed documentation for accreditation site visit, also the interviews results with students and alumni has been shown, that students of Maritime Engineering bachelor program receive appropriate consultations and support regarding the planning of learning process, improvement of academic achievement, employment and professional development, in particular:

- Students' services and Career Support Department, as a support structural unit, supports and carries out consultative services and helps students;
- Students are informed about projects and mobility opportunities existing at the Maritime Academy by the web-site, social networks, information boards, Students' services and career support department and the Faculty;
- Students are getting information about vacancies and making an application for their desirable future jobs supporting by the organized Employment Forums;
- Students have access to the monitoring electronic system of the learning process, which combines electron register, internal university examination electronic program and e-base blanks of the library readers;
- BSMA student self-government is the member of Georgian Student Organizations Association (GSOA) which is by itself a member of European Student's Union (ESU), this fact giving students possibility be actively involved in local and international student projects;
- Students of Maritime Engineering educational program are involved in faculty council work and they are participating in the decision-making process.

During the interviews with the educational program students was mentioned, that they are taking part in local and international scientific-technical conferences, have scholarships, getting consultations by the academic and invited personal mentioned time and place in the syllabus.

It should be underlined, that students exspressed their opinion during the interview, regarding high demand of the Maritime Engineers profession in the Batumi city, high salary and chance for career development in their home Region.

Evidences/indicators

- Students guideline;
- Rules for Scholarship appointment for honor students;
- Procedure for student projects presentation and financing; o

Provision for student service and career support department;

- Open door days: „Educational program internationalization – European experience and

- Employer and partner forum 2018: http://bsma.edu.ge/main/page/1194/index.html
- „Partnership for the better employment "– forum hold by BSMA http://bsma.edu.ge/main/page/996/index.html

Recommendations:

Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

- Development of mechanisms for improving the students' motivation by increasing number of scholarships, more possibilities to take part in international projects and exchange programs, would have significant impact for the further development of the educational program quality.

Best Practices (if applicable):

- Special tutor groups set up at the BSMA for Students' support and integration at the university life, assistance in academic work, solving different problems and etc.

In case of accredited programme, significant accomplishments and/or progress

- Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

☒ Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

3.2. Master's and Doctoral Student supervision

Master's and Doctoral students have qualified thesis supervisors.

Descriptive summary and analysis of compliance with standard requirements o Due to the fact that, Batumi State Maritime Academy doesn't implement Master's and Doctoral degree studies, filling standard 3.2 is **N/A.**
Evidences/indicators o Component evidences/indicators including relevant documents and interview results
Recommendations: Proposal(s), which should be considered by the institution to comply with requirements of the standards
Suggestions for programme development: Non-binding suggestions for programme development
Best Practices (if applicable): o Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes
In case of accredited programme, significant accomplishments and/or progress o Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)
Evaluation o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard ☒ Complies with requirements ☐ Substantially complies with requirements ☐ Partially complies with requirements ☐ Does not comply with requirements

Programme's Compliance with Standard

Standard	Complies with Requirements	Substantially complies with requirements	Partially Complies with Requirements	Does not Comply with Requirements
Student achievements and				

individual work with them	X

4. Providing teaching resources

Programme human, material, information and financial resources ensure programme sustainability, its effective and efficient functioning, and achievement of intended objectives.

4.1 Human Resources

- Programme staff consists of qualified people who have necessary competences in order to help students achieve programme learning outcomes;
- The number and workload of programme academic/scientific and invited staff ensures the sustainable running of the educational process and also, proper execution of their research/creative/performance activities and other assigned duties. Balance between academic and invited staff ensures programme sustainability;
- The Head of the Programme possesses necessary knowledge and experience required for programme elaboration. He/she is personally involved in programme implementation;
- Programme students are provided with an adequate number of administrative and support staff of appropriate competence.

Descriptive summary and analysis of compliance with standard requirements

The programme completed with qualified people who possess the necessary competence to achieve the learning outcomes which is provided by practical experience, which is regulated by the rule and methodology for defining academic personnel.
Appointment to the academic position is conducted by the competition.
The program is consist of 29 academic personnel and 30 invited lecturers. Total amount of academic staff for the program is 59 which is sufficient number for delivering the program to the students the amount of which for the given program is 100 out of the total number of students at HEI which is 482.
The workload of the academic staff, type of activity is determined be the rules determining the workload and payment for academic staff and invited personnel.
The Head of the program coordinates the activity of implementing the program, performs the regular analysis of the program and provide assistance and consultations to the students. The Head of the program coordinates the process of development of the program and all other related activities.

Evidences/indicators

1. Methodology and rules for determination number of academic staff;
2. Human recources policy and management procedure;
3. Rules for open election of academic staff;
4. Invited teaching staff selection rules;
5. Rules for determination of workload and payment for academic staff and invited teachers;
6. Academic and invited staff registry;
7. Academic staff contracts;
8. Invited personal preliminary contract.

Recommendations:

Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

Non-binding suggestions for programme development

Best Practices (if applicable):

- Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

- Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

x Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

4.2 Professional development of academic, scientific and invited staff

- HEI conducts the evaluation of programme academic, scientific and invited staff and analysis evaluation results on a regular basis;
- HEI fosters professional development of the academic, scientific and invited staff. Moreover, it fosters their scientific and research work.

The Academy conduct evaluation of the academic and invited personnel regularly. Evaluation includes the checklists, self-assessment reports, attendance to the lectures and observation of the work of the personnel by the authorized personnel. Also it includes analysing the performance of the personnel.

On the basis of the analysis of the overall evaluation of the personnel there could be positive or negative outcome of the evaluation. If evaluation shows that the personnel does not fully meet the existing requirements the actions should be taken for the improving the situation by either discussing the problematic issues with the personnel or the negative evaluation will be issued. If the evaluation is positive than according to the existing in the HEI rules there is the possibility to grant the person either with the certificate or by financially. However, during the interview with academic and invited personnel it appeared that during the period of their work they never had a negative assessment but also never received any financial award or certificate based on the evaluation. Financial grants take place only generally for everyone at once not for the merits.

Academy actively i n v o l v e d i n professional development of academic, scientific and invited personnel by ensuring them with appropriate trainings and qualification enhancement courses such as English Language Course trainings, Teaching of Teachers trainings where invited personnel was trained to improve the teaching methodology and enhance their professional qualification.

Academy also supports personnel in scientific/research activities. Annually the Maritime Faculty conducts conference, where professors and teachers, academic personnel are able to present their scientific researches.

Evidences/indicators

1. „Rules for evaluation of efficiency of academic and invited staff research / scientific activity“:
2. Academic staff CV;
3. Invited Staff CV;
4. Academic and invited staff trainings / certivicates
5. Academic / invited staff register

Recommendations:

Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

As during the interviews it appeared that based on positive evaluation of staff not any of the personnel have been awarded either financially or by certificate. Institution is encouraged to pay attention to this issue in order to motivate its personnel and comply with the procedures set out by it.

Best Practices (if applicable):

- Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

- Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

x Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

4.3. Material Resources

Programme is provided by necessary infrastructure and technical equipment required for achieving programme learning outcomes.

The Academy possess its own infrastructure for conducting the program which includes didactic and training infrastructure, training vessel, etc. Presented material-technical resources are sufficient to run the programme without any obstacles which includes the following:

- Laboratories of:
  - Physics;
  - Chemistry;
  - Technical mechanics;
  - Pneuma - automatic and Hydro-automatic.
- Workshops:
  - Gas welding and electric fittings;
  - Crane;
  - Real welding and virtual welding simulator.
- Training simulators:
  - EGDIS - "Electronic Chart Display and Information System";
  - GMDSS - "Global Maritime Distress and Safety System";
  - Engine Room - "The latest simulator with a touchscreen function";
  - Cargo ballast - liquid cargo handling trainer.
- Training vessel "CADET".

During the visit the construction works were in place in the engine workshop room, where several different engines are placed for training the students in compliance with the existing rules. It should be noted that the library is equipped appropriate amount books and also possess the electronic books stock. It also has a comfortable space for working and is equipped with computers and electronic programs. It is worth to note that library is situated on the third floor but on the ground floor there is a space for people with special needs, where they can access to the necessary book catalogue and request the necessary book which will be delivered to them or upload the necessary file.

The library has alphabetic and thematic catalogue, presented as material also in electronic versions.

The library has an electronic integrated catalogue based on Evergreen MARC 21.

Evidences/indicators

1. Cambridge University press : https://www.cambridge.org/core
2. BioOne Complete : https://bioone.org/
3. e-Duke Journals Scholarly Collection: https://www.dukeupress.edu/
4. Edward Elgar Publishing Journals and Development Studies e-books :

https://www.elgaronline.com/page/70/journals

5. IMF eLibrary : https://www.elibrary.imf.org/?redirect=true
6. New England Journal of Medicine : https://www.nejm.org/

7. Royal Society Journals Collection : https://royalsociety.org/journals/

Following electronic journals and scientific bases arevailable for students of Marine

Engineering Faculty:

1. Marineinsight : https://www.marineinsight.com/
2. World Maritime News : https://worldmaritimenews.com/
3. Maritime Library : https://www.libramar.net/
4. NAVLIB: https://navlib.net/
5. Ecolregs : http://ecolregs.com/index.php?lang=en

Recommendations:

Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

To ensure timely preparedness of the engine room for carrying out the practice without obstacles.

Best Practices (if applicable):

- Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

- Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

x Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

4.4.Programme/faculty/school budget and programme financial sustainability

The allocation of financial resources stipulated in programme/faculty/school budget is economically feasible and corresponds to programme needs.

Descriptive summary and analysis of compliance with standard requirements

The Academy is financed from its training center, also it attracts additional finances from different grants, the Ministry of Economy and Sustainable Development of Georgia, Maritime Transport Agency of Georgia and Government of Adjara. The program needs are financed by the Academy budget including ensuring the material technical resources and their renewal, technical support and training.

Evidences/indicators

1. Strategy Development plan 2018- 2024: http://bsma.edu.ge/upload/Strategic%20plan%207.pdf
2. Three years action plan http://bsma.edu.ge/sub-10/page/2-24/index.html 3. BSMA budget;

Recommendations:

Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

Non-binding suggestions for programme development

Best Practices (if applicable):

- Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

- Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

x Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

Programme's Compliance with Standard

Standard	Complies with Requirements	Substantially complies with requirements	Partially Complies with Requirements	Does not Comply with Requirements
Providing teaching resources	X			

5. Teaching quality enhancement opportunities

In order to enhance teaching quality, programme utilizes internal and external quality assurance services and also periodically conducts programme monitoring and programme review. Relevant data is collected, analysed and utilized for informed decision making and programme development on a regular basis.

5.1 Internal quality

Programme staff collaborates with internal quality assurance service(s) available at the higher education institution when planning the process of programme quality assurance, creating assessment instruments, and analysing assessment results. Programme staff utilizes quality assurance results for programme improvement.

Description and Evaluation.

Quality assurance service is responsible for implementing and operations of a system for quality control. In order to discuss this, we need a definition for quality related to the bachelor's programs at BSMA. Basically, quality means you do what you promise. In order to comply with international standards, BSMA follows IMO convention requirements and ISO9001 standards and others if necessary.

The quality assurance of the Academy and faculties in conjunction with the personnel work out the necessary instruments, indicators, criteria and forms required for the assessment of the academic personnel operation. With the purpose of coordination management of the process, the persons responsible for the quality are appointed in every structural unit and it's written in their employment duties- responsibilities. The Academy and Faculty Quality Assurance Services are involved in the continuous monitoring process of the service performed. Monitoring is chiefly carried out by means of group questioning and process monitoring.

The first step in quality assurance is to determine: what is it we promise?
As mentioned earlier, BSMA promises knowledge, skills, methodologies and problem solving capabilities in order to be competitive on the international shipping market, which is the task of the curriculum committee. The self-assessment group was created through academic, administrative personnel, students an employer's participation. The duties and responsibilities between them are shared in compliance with the standards. The self-assessment group provides planned prevention of the identified errors and requirements. The learning syllabuses given in the electronic data are to adhere the inspection and assessment.

Faculty Quality Assurance Service, educational program leader and responsible persons are involved in the process. By means of their coordination the learning syllabus of the learning components' update take place.

The quality assurance service monitor and control the process of the educational program work out and preparations for accreditation, the service gives the compulsory instructions to be followed and advice. In case of errors, provide us with recommendations and intelligent time to correct them.

Evidences/indicators

1. Academic and Invited Staff survey analyse;
2. Statistic analyse of labor market and employers;
3. Graduates survey analyse;
4. Students survey statistical analyse;
5. Rules for monitoring and evauation of academic and invited staff teaching activity;
6. Customer feedback monitoring, evaluation and review procedure;
7. Risk assessment procedure : http://bsma.edu.ge/upload/risk%20management%20O.pdf
8. Non-conformances management procedure: http://bsma.edu.ge/upload/NC%20Procedure_BLG.pdf
9. Quality Policy
10. Quality Objectives
11. Internal audit procedure
12. Non-conformances procedure
13. Management Review

Recommendations:

N/A

Suggestions for programme development:

Warning: quality control should not be spreadsheet management based on numbers and bureaucracy, but it should be based on improving the content and following international developments.

Best Practices (if applicable):

N/A

In case of accredited programme, significant accomplishments and/or progress

N/A

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

X Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

5.2 External quality

Programme utilizes the results of external quality assurance on a regular basis.

Descriptive summary and analysis of compliance with standard requirements

According to the rules of the academy, creation and development of the educational program is evaluated internaly and externaly. External evaluation is carried out by specialists from the partner or other higher education institutions, employers, graduates' polls, researchers and the National Center for Educational Quality Enhancement through Annual Self-Assessment.
All academy programs are implemented and developed based on external evaluation results Especially the Educational Program planning, implementation, and development rules should be highlighted. According to these rules, recommendations, notes and instructions received from Accreditation Council on accredited programs, the Program Manager is obliged to take into account and send the information to the Faculty and the Academic Management Authorities for the review and ensure the publicity and availability of the decisions made.
The mentioned program underwent all phases of external evaluation according to the rules in the academy.
The assessments done by academic personnel from partner institutions are valuable. External assessments provide compatibility of the program objectives and results with the requirements and needs of the labor market.

Evidences/indicators

1. „Rule for planning, designing and development " : http://bsma.edu.ge/upload/F-O9.pdf
2. External Evaluation of the educational program.

Recommendations:

N/A

Suggestions for programme development:

N/A

Best Practices (if applicable):

- Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

N/A

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

X Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

5.3. Programme monitoring and periodic review

Programme monitoring and periodic review is conducted with the involvement of academic, scientific, invited, administrative staff, students, graduates, employers and other stakeholders through systematically collecting and analysing information. Assessment results are utilized for programme improvement.

Descriptive summary and analysis of compliance with standard requirements

The current programs at the Marine Engineering Faculty adhere to the regular monitoring and assessment which is carried out in compliance with "the rule of educational program planning, working out and development" by: program leader, faculty quality assurance service, curriculum committee and academic/ invited personnel implementing the program. From this point of view, special attention is paid to the students' every year questioning. During learning process at the Academy, regular monitoring of the academic and invite personnel's contact hours takes place, as well as cross check attendance , that is given in the assessment form. The results obtained by means of monitoring are discussed at the learning department, curriculum committee, faculty council and are used in the development of the program.

Evidences/indicators

1. Academic Staff survey analyse.
2. Statistic analyse of labor market and employers.
3. Students survey statistical analyse.
4. Students Learning outcomes.

Recommendations:

N/A

Suggestions for programme development:

N/A

Best Practices (if applicable):

N/A

In case of accredited programme, significant accomplishments and/or progress

N/A

Evaluation

o Please mark the checkbox which mostly describes your position related to the programmes compliance with this specific component of the standard

X Complies with requirements

☐ Substantially complies with requirements

☐ Partially complies with requirements

☐ Does not comply with requirements

Programme's Compliance with Standard

Standard	Complies with Requirements	Substantially complies with requirements	Partially Complies with Requirements	Does not Comply with Requirements
Teaching quality enhancement opportunities	X			

Enclosed Documentation (If Applicable)

HEI's Name:

Higher Education Programme Name:

Number of Pages of the Report:

Programme's Compliance with the Standard

Standard	Complies with Requirements	Substantially complies with requirements	Partially Complies with Requirements	Does not Comply with Requirements
1. Programme objectives are clearly defined and achievable; they are consistent with the mission of the HEI and take into consideration labour market demands	X			
2. Teaching methodology and organization, adequate evaluation of programme mastering	X			
3. Student achievements and individual work with them	X			
4. Providing teaching resources	X			
5. Teaching quality enhancement opportunities	X			

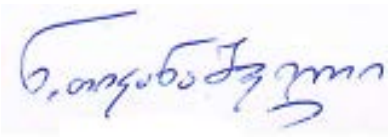
Expert Panel Chair's

Prof. Sape A. Miedema.

Expert Panel Members'

Givi Sanadze

Mr. Nika Tikanashvili



Capt. Zaza Makharadze

Ms. Kristina Rzgoeva