

MARITIME EDUCATION AND TRAINING SYSTEM IN GEORGIA

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Abstract. The article deals with the problems of Maritime Education in Georgia, perspective ways of the Higher Education reform implementation in connection with the requirement of IMO, National Legislation and Lisbon Strategy. The place of maritime education in the system of education of Georgia and the legislative documents on which maritime education is based are shown in the article. System of education of Georgia and, particularly, system of higher education are described. On the example of reform of maritime education in Georgia, we have shown the ways to harmonize the requirements of general documents of Bologna Process with IMO requirements to maritime education. We are certain that general qualification requirements to the levels of higher education described in Dublin Descriptors fully conform to training of seafarers of different levels of responsibility described in STCW convention.

1. A BRIEF HISTORY OF MET IN GEORGIA

Maritime education has a century history in Georgia. The first maritime courses were founded in Poti in 1901. The Military Maritime College was functioning in Batumi since 1921, and Maritime Industrial Technical Secondary School was functioning since 1929.

In 1944 Batumi Maritime Technical Secondary School was reorganized into Batumi Maritime College. During its 50-years history Batumi Maritime College played an important role in development of Maritime Business in Georgia. About 5 thousand specialists with high qualification were educated at Batumi Maritime College for Marine Fleet.

In 1990 on basis of Batumi Maritime College the Training-Consultation Centre was opened. It received the status of Consultation Point of Novorossiysk Higher Maritime-Engineering College which since 1992 was functioning as Batumi Higher Maritime College.

In 1994 on basis of decision taken by the Government of Georgia this college received current status – status of Batumi State Maritime Academy.

In 2006 when the process of education reforms started in Georgia, on basis of decision taken by government of Georgia Batumi State Maritime Academy received today's status – Legal Entity of Public Law – Batumi Maritime Academy (BMA).

There are three MET institutions (all institution located in Batumi) in Georgia:

1. Legal Entity of Public Law – BMA.
2. Maritime Training Centre – ANRI (LTD).
3. Batumi Navigation Institute (LTD).

All BMA and other MET institutions activities are regulated not only by National Legislature but also by International Norms and Standards. Requirements of International Maritime Organization regarding qualification of maritime staff are given in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW 78/95). Maritime education in Georgia is regulated by three laws (see Fig.1):

1. Law of Seafarer's Training and Certification of Georgia (2000);
2. Law of Higher Education of Georgia (2005);
3. Law of Vocational Education of Georgia (2007).

The control of IMO requirements realization in the sphere of Maritime Education in Georgia is under the control of the Maritime Transport Department and National Legislative issues are in the competence of Georgian Education and Science Ministry.

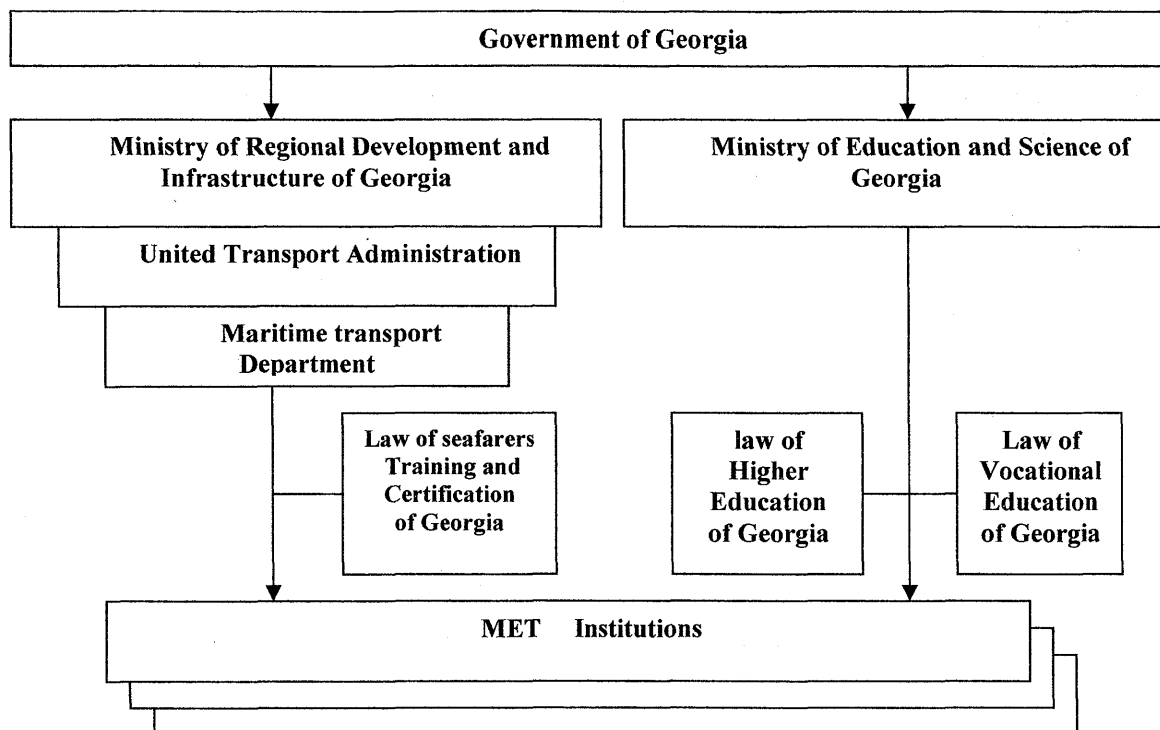


Fig.1. Regulation MET in Georgia

Maritime Transport department, together with Georgian Governemnt for 20 years actively cooperates with IMO and other international organizations:

- In June 1993 Georgia became the IMO member.
- In 1994 – 1995 Georgia joined 25 international maritime IMO and UN Conventions.
- In 1998 The Law of Georgia on Maritime Areas of Georgia (regulating the status of maritime areas) was adopted.
- In 1999 Vessels Registration Regulations, Maritime Incidents Investigation Regulations, Maritime Mortgage Registration Regulations, Harbour Master Regulations, Pilot Service Regulations were adopted.
- In 2000 the following Laws were adopted: On Training and Certification of Seafarers, in accordance with STCW78/95, and On Maritime Search and Rescue Service.
- In 2001 Georgia was included into the IMO “White List”.
- In 2002 Georgian Ports Regulations (regulating navigation rules, port customs clauses and port safety, navigation rules) were adopted, Research Centre was established in order to carry out scientific investigations, establishment of national educational literature and new technologies.
- In 2002 – 2003 32 Agreements of Undertaking on Recognition of Seafarers' Certificates of Competency were concluded and the work in this direction is still being carried out.

– In May, 2004 IMO MSC confirmed the position of Georgia in the IMO STCW “White List”.

2. THE NATIONAL EDUCATION SYSTEM

A higher education establishment is the important factor of growth and competitiveness of the country and plays a key role in reforms of EU member and partner states. Higher education upgrade was recognized as the basic condition for success of Lisbon strategy which the European Union began in March, 2000 and which aspiring the modernization of economic and social systems within EU. Upgrade of higher education of EU is clearly stated in communications of the European Commission “Mobilization of intellectual elite of Europe: granting of possibility of universities to make their full contribution to Lisbon Strategy” and “Upgrade of universities: Education, research and an innovation”.

In 2003 Georgia began the transformation of higher education system according to the principles of Bologna process which is actively supported by the European Commission.

The structure of school system – Elementary school comprises 6 years. Basic (compulsory) school comprises 3 years. After graduation of the basic school a graduate has admittance to Vocational Education.

Before 2007 (acceptance of Georgian Parliament of the Law of Professional Education, there had been three levels of professional education – Basic, Secondary and the Higher).

The existed system did not correspond the market requirements. The problem was that only 4 – 5 % of the graduates were required by the market. The profound reform in the sphere began in 2007. The system of the management, the methodological sphere, and the system of qualification were deeply reformed. Instead of the existed three levels two levels of the professional education were adopted. The aim of the reform became the target preparation of highly-qualified specialists in the short period of time.

Secondary Education comprises 3 years and its graduation a graduate receives a secondary school leaving certificate (see Fig. 2).

Higher Educational System:

There are the following types of higher education institutions in Georgia: College, Institute, and University. There is a three-cycle system in Georgia: Bachelor's Programme -240 ECTS credits; Master's Programme – 120 ECTS credits and Doctoral Programme – 180 ECTS credits.

There is a Certified Specialist's Programme that represents a short cycle with 120 – 180 ECTS credits.

Certified Specialist's Programme – for admission to this level of study a secondary school Leaving Certificate is required. After completion of this programme a graduate is awarded a Certified Specialist's Diploma, those with excellent marks are awarded a Diploma with Honour.

Bachelor's Programme – for admission to this level of study a Secondary School Leaving Certificate is required. After completion of this programme a graduate is awarded the Bachelor's degree (Diploma), those with excellent marks are awarded a Diploma with Honours.

Master's Programme – the owner of Bachelor's or the relevant degree is eligible for a Master's programme. After completion of this programme a graduate is awarded the Master's degree (Diploma), those with excellent marks are awarded a Diploma with Honours.

Doctoral Programme – the owner of Master's or the relevant degree is eligible for a doctoral programme. After completion of the programme and defense of a PhD thesis a graduate is awarded the Doctor's Degree (Diploma).

Access to Higher Education Institution:

Only the applicants who have successfully passed the Unified National Examinations are eligible for state accredited programmes at an accredited higher education institution.

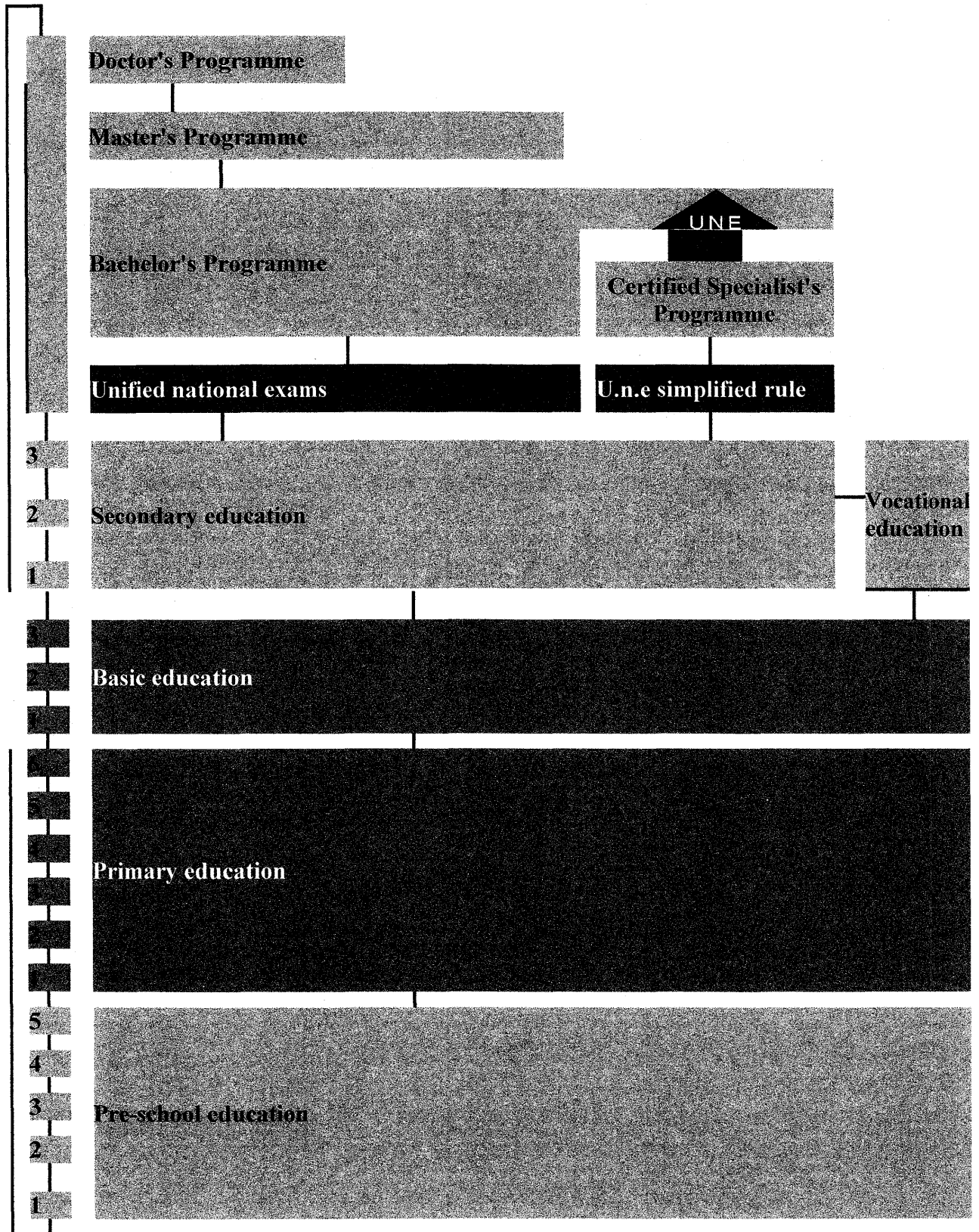


Fig. 2. Schematic Review of Georgian Education System

3. MET OF THE BASIC EDUCATIONAL ESTABLISHMENT IN GEORGIA – BMA

BMA is the basic educational establishment of Georgia. The incorporation of International Standards in preparation of specialists is implemented on basis of cooperation with such authoritative centres of maritime education as Southampton Maritime Institute, Admiral Makarov State Maritime Academy, Maritime Faculty of Istanbul Technical University and World Maritime University in Malmo, Gdynia Maritime University and Odessa National Maritime Academy. Our Academy is a member of Training-Methodological Union of higher maritime institutions of the Russian Federation.

Since 2000 the world-recognized International Quality Management System ISO 9001:2000 is incorporated at the Academy according to the requirements of International Convention STCW 78/95. The system ensures conformity in respect of development of educational programs, methods of instruction and Maritime higher Education specialists training in accordance with International and National requirements of Maritime Law. Batumi Maritime Academy is one of the first institutions in post-soviet area in which this system has been incorporated.

In 2006 BMA joined the International Association of Maritime Universities (IAMU). The aim of this Association is to render actual methodic and academic assistance to Higher Maritime Institutions in such question as preparation of highly-qualified maritime specialists.

At present two faculties function at Batumi Maritime Academy: Maritime and Business and Management Faculty. Training and Certification Centre also functions at the Academy.

Maritime Faculty functions at the Academy since 1992. It comprises three specialties: Marine Navigation, Marine Engineering and Electrical Engineering. During this time the faculty has prepared 2000 highly-qualified maritime specialists. The high percentage of employment of graduate students of BMA (88 % of Navigational, 70 % of Marine Engineering and almost all Electrical Engineering graduates) indicates high level of Maritime education in Georgia.

Educational programs are compiled according to International Maritime Organization recommended Model courses and in compliance with STCW 78/95 requirements. Educational program meet the requirements Law of Seafarer's Training and Certification of Georgia (2000), Law of Higher Education of Georgia (2005), and Law of Vocational Education of Georgia (2007).

When the Law on Vocational Education was ratified, BMA developed and presented two higher professional educational programs ("Marine Navigation" and "Marine Engineering" everyone on 180 ECTS credits) and two programs of the first (support) level ("Able Seamen» and "Motormen" everyone for 10 months of training) for the State Accreditation.

Programs of the first (support) level are trained in the Training and Certification Centre.

Maritime Faculty has Bachelor (Marine Navigation, Marine Engineering and Electrical Engineering) and Vocational (higher professional – Marine Navigation and Marine Engineering) educational programs.

The curriculum of Bachelor Program consists of 240 ECTS credits, 1 ECTS credit is equal to 29 astronomic hours. One academic year consists of 42 weeks. The duration of studies is 4 years and 12 month cadets have shipboard training on vessels of the leading shipping companies.

The curriculum of Vocational (higher professional) Program consists of 180 ECTS credits. The duration of studies is 3 years and 12 month cadets have shipboard training on vessels of the leading shipping companies.

At present 900 cadets study by the Bachelor Program and 160 cadets by the Vocational (higher professional) Program.

The process of studies at the faculty includes classical studies at auditory and also the modern methods of training using the latest simulator and information computer technologies. This is applied as to general as well to special courses. During the whole period of studies the cadets are taught the English language.

Cadets receive the first training practice on the basis existed at the Academy – in tackle, locksmith, and turner's, electric and gas welding, electric installation workshops. Cadets receive the second practice shipboard training on vessels of auxiliary fleet of Batumi, Poti and Kulevi sea Ports where they master how to fulfill duties of sailors, motormen, electricians and get practical working skills necessary for ships' rank.

After the theoretical course cadets have shipboard training, on board the long voyage ocean fleet vessels where they master specialties of junior officers: Navigational watch, Engineering watch and electrician.

On the basis of the training process and bachelor's project results the cadets are given the correspondent bachelor's academic degree in Navigation, Marine Engineering and Electrical Engineering.

After this the cadets pass qualification examination in specialty at the Academy. On the basis of this examination Maritime Transport Department of Georgia issues first Certificate of Competency for Officer in charge of a navigational watch, Officer in charge of an engineering watch, and electrician of second class according to Georgian Law on Seafarers Training and Certification, 2000 and International Convention STCW 78/95.

The Academy ensures the training and certification of its graduate cadets in all mandatory courses which are necessary for work on vessels according to the requirements of International Convention (STCW 78/95).

The graduates of Bachelor Program can occupy the position officer in charge (**Operational Level**) including the chief mate position (second engineer) and master (chief engineer) (**Management Level**) in conformity with the requirements of Georgian Law on Seafarers Training and Certification, 2000. The graduates of Vocational (higher professional) Program can occupy only the officer in charge position (**Operational Level**) (see Fig. 3).

Six departments are cooperated within the faculty. They are: Navigation, Marine Engineering, Electrical Engineering, Foreign Languages, Exact and Natural Sciences, General Technical Subjects Departments. The Academic staff of the faculty is composed of 13 professors, 16 associate professors, 18 assistant professors and 60 assistant lecturers. Among the above-mentioned staff there are 8 Masters Mariners, 7 Chief Engineers, 4 Electrical Engineers, some of them are acting mariners the others have a rich experience of work on board the vessels.

Since 2006 the new Training and Certification Simulator Centre functions at the Academy. The aim of this centre is to train, retrain and certify the students and marine fleet specialists using modern simulator technical means.

The process of training at the Centre is carried out according to the model courses prepared by IMO, the International Convention (STCW 78/95) and the requirements of the National Transport Department. The training courses at the Centre are divided into three categories:

1. Training and Certification in accordance with the "Mandatory" programs, by the new wording of the International (STCW 78/95).
2. Training and certification of seafarers and shipping companies staff according to "Non Mandatory" programs connected to the fleet management, ships safe operation and prevention of environmental pollution.
3. Specialized courses – work with special equipment on certain types of ships or other courses required by ship owner, shipping or crewing companies or other organizations.

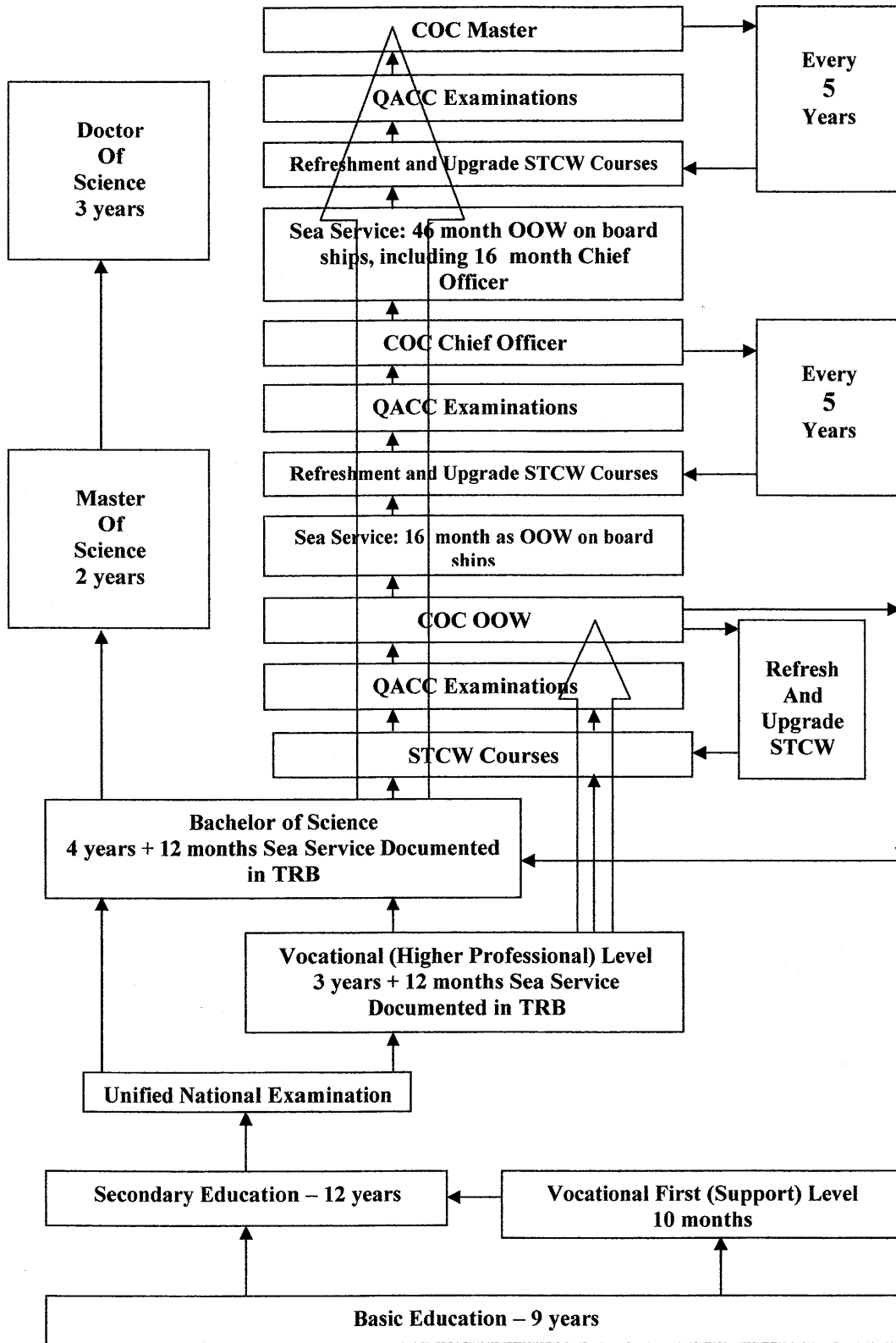


Fig. 3. The Certificates of Competency (Deck) according to the STCW and Law of Seafarer’s Training and Certification of Georgia (2000)

All instructors of the Training Centre hold the certificates of special instructors issued by training centers of simulator manufacturing companies. The certificates are recognized by Maritime Transport Department of Georgia.

For the purpose of training and certification the world-famous simulator systems producing corporation “TRANSAS Set the Standard’s” simulator systems are used at the Academy.

Integrated navigational simulator – Navi-Trainer Professional 4000 including – instructor’s workplaces, main navigational bridge with real equipment, visualization and additional navigational bridge.

GMDSS simulator TGS 4100 including – 1 instructor’s and 6 trainee’s workplaces, one real GMDSS system workplace.

Engine Room Simulator ERS 4000 including – 1 instructor’s and 4 trainee s workplaces, computer-based electrical plant and all equipment and systems of real-size engine room of tanker type ship.

Since the Academy has joined Bologna process trainings are intensively held at the Academy where European credit system; curricula and syllabuses in all subjects for receiving the qualification on bachelor’s level are discussed.

The specialists from other countries are invited to the Academy. During the last two years specialists from Canada, the Ukraine, Greece and Turkey visited and shared their experience with the Academy.

Professors’ and Lecturer’s of the Academy were sent on business trips to Russia, the Ukraine, Poland, Holland, Germany Greece and Sweden.

QACC – Qualification Assessment Commission of Competency.

COC – Certificates of Competency.

OOW – Officer in charge of the watch.

TRB – Training Record Book.

4. CONCLUSIONS

Maritime Academy is managed by the qualified and innovation-aimed administration. In our opinion, the problem is the requirements of the Georgian Law on the Higher education which, being acceptable for big universities, are, at the same time less effective for small specialized institutions like BMA.

At the current level of development we think that the key problem for BMA is the lack of retrain conditions of the teaching staff.

It is especially connected with the instructors of the special subjects who have no experience of the sailing on board the modern ships.

Under the Georgian Law on Higher Education each professor has a right of one-year paid vacation with the aim of professional skills retraining and refreshment.

The key problem of this article realization is the high price for sea training for the instructors of special subjects.

The salary of the instructor of the academy is lower than the salary of the acting mariner, that’s why it is very hard to involve the acting mariners to the education process. The second problem is that no all mariners can be an effective teacher.

Taking into account the above problems IMO has developed special methods of preparing maritime officers to academic career which help them to learn methods of training the young people both on board and shore.

One of the means to involve the experienced mariners (first of all masters and chief engineers) is to give them possibility to act at Academy to between the voyages.

The curriculum of the Academy is based on IMO STCW 78/95 requirements and at the same time the requirements of crewing companies, being the key employers of the cadets under the existed contacts are taken into consideration.

We positively estimate the cooperation with the crewing companies. In our opinion the cooperation with them will be more useful in the case the companies will grow their financial share in the sphere of Maritime education.

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