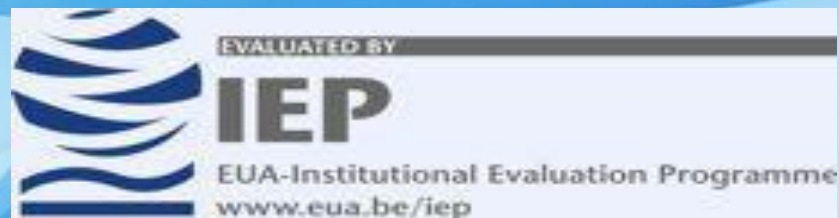




*HIGH LEVEL OF
TRUST*

“Mircea cel Bătrân” Naval Academy

Constanta, Romania





MISSION

- **Polytechnical higher education establishment;**
- **Provides education and training for engineers-officers of the Romanian Navy, Coast Guard and the Merchant Marine – bachelor and master degree;**
- **Research & Development and innovation in the field of naval engineering, marine engineering, naval logistics and management.**

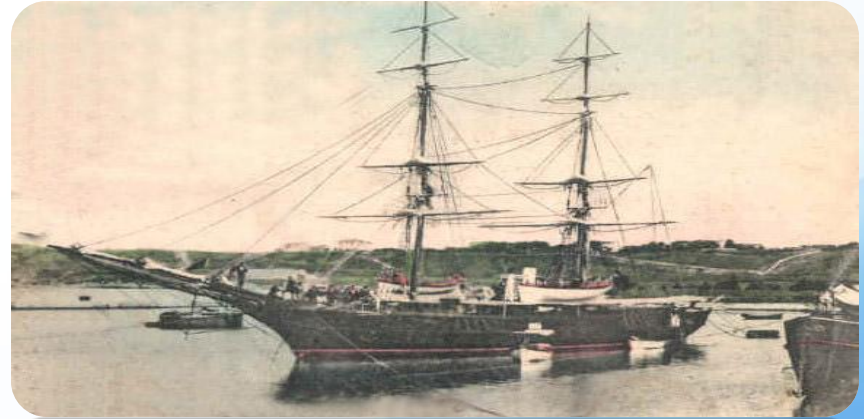
MAIN OBJECTIVES

- **Lining up the educational process with national, European and Euro-Atlantic orientations;**
- **Adapting the study programmes to the requirements of the labor market and the beneficiaries;**
- **Developing scientific applied research projects;**
- **Ensuring quality in compliance with national and international standards**
- **Increasing institutional visibility.**



Historical milestones

1872 - The establishment of Flotilla School, by the Decision of the War Minister, no. 15 from the 17th of November, with the headquarters in Galati



1920 - The reorganization into a complex higher education institution, named the Naval School

1956- Integration within the Romanian polytechnical education system

1974 - The school receives the symbolic name of “Mircea cel Batran”,

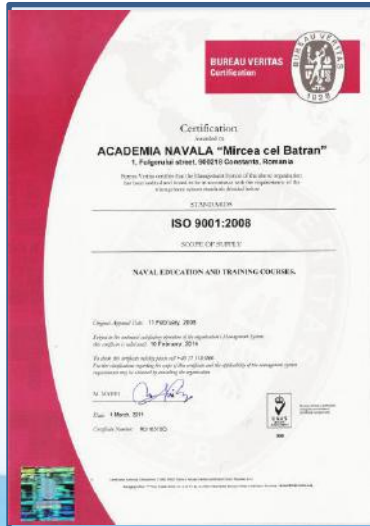
1990 - Following the December 1989 revolution, the Marine Institute has been transformed into the “Mircea cel Batran” Naval Academy as a higher education military institution.



Accreditation



The “Mircea cel Bătrân” Naval Academy has been evaluated in November 2015 by the ROMANIAN ASSURANCE AGENCY FOR THE QUALITY OF THE ROMANIAN HIGHER EDUCATION obtaining the “HIGH LEVEL OF TRUST” rank .



**ISO Certification
9001 : 2008**

**“B” CATEGORY UNIVERSITY “research
and education”
according to the MECTS decree
no. 5262/05.09.2011 regarding the
results in universities classifications**



**European
University
Association**



“Mircea cel Bătrân” Naval Academy

Key Facts & Actual Figures

4 Departments organized in 2 Faculties

MBNA University Library – 70.000 titles

MBNA Maritime Museum – 90 square meters exhibition area

Life Long Learning Center – RoNoMar follow-up, 24 LL courses

2000 students

136 –
Navy Cadets

1030 – Merchant
Marine Students
Bachelor full time

620 – Merchant
Marine Students
Bachelor part time

414 – Merchant
Marine Students
– Master

70 – teaching staff

Own income represents 25% of the overall MBNA budget



Executive Board

RECTOR

Senate

**Vice-rector for
education**

**Vice-rector for
scientific research**

**Vice-rector for
International affairs**

**Vice-rector for
continuous
development of
human resources**

**Deputy
staff officer**

**Administrative
director**

**Marine Engineering
Faculty**

- Department of Marine Engineering and Naval weapons
- Department of Marine Electric and Electronic Engineering
- Part - time learning structure
- Scientific research center
- Students organization

**Navigation and
Naval Management
Faculty**

- Department of Navigation and Ship Transport
- Department of Naval and Port Engineering and Management
- Part - time learning structure
- Scientific research center
- Students organization

**Life Long Learning
Center**

- Main Center for Foreign Languages Constanta
- Center for Foreign Languages Mangalia
- Center for foreign languages Brăila
- Learning and Resources center
- Students organization

Infrastructure

- Education & research and training
- Seamanship and nautical sports Center
- Training Ship Squadron
- Welfare
- Medical, Religious & other Services



Main Divisions of the Naval Academy :



Marine Engineering Faculty



Navigation and Naval Management
Faculty



Lifelong Learning Center



Education, training and research
infrastructure



Marine Engineering Faculty

MISSION

- Delivers education and training for officers-engineers for the Navy as well as for other civilian beneficiaries, providing fundamental, specialty and military training and academic courses;
- Full time education, 4 year period for undergraduate programmes, full and part time.

Study programmes – Bachelor Degree

Military Specialization – full time studies, 4 year period

- Navigation, hydrography and naval equipment,
- Naval electromechanics;

Civilian Specialization - full and part time studies, 4 year period

- Naval electromechanics;
- Electrical engineering;

Study programmes – Masters Degree

Civilian Specialization – full time studies, 2 year period

- Electromechanical naval systems.



Navigation and Naval Management Faculty

MISSION

- Delivers education and training for engineers and specialists in the naval and port industry;
- Full and part-time learning, 4 years period, undergraduates programs, full and part time programs.

Study programmes – Bachelor Degree

Civilian Specialization - full and part time studies, 4 years period

- Navigation and maritime and river transports;
- Naval and port engineering and management.

Study programmes – Masters Degree

Civilian Specialization – full time studies, 2 years period

- Nautical sciences;
- Naval and port engineering and management;
- Management of Logistic Systems.



Educational and Research Infrastructure



- Social spaces (collegiate halls with 1247 housing spaces, collegiate mess room with 4 saloons with a total capacity of 1440 seats)
- Educational spaces (2 auditoriums, 6 amphitheatres, 2 halls for common teaching, 76 classrooms, seminar and study rooms).



- **Training Ship Squadron** includes: training ship “Mircea”, training ship “Albatros” and training boats.





- **The Information Technology Center**
- **The Mechanical Engineering Laboratory and Training Center**





- ✓ 61 simulators, labs, cabinets and specialization halls with modern adequate endowment;
- ✓ **Damage Control Training Center** (firefighting, waterflood simulation);





- ✓ **Olympic size swimming pool**
- ✓ **Modern sports facilities (including: athletics stadium, 5 multifunctional indoor facilities, 18 outdoor sports fields, 4 firing ranges, etc.)**





Seamanship and sailing training center





Training ship "Mircea"





Enrollment process in the Mircea cel Bătrân Naval Academy

Military Specialization – Bachelor Degree

Medical exam
Psychological test
PT test
Psycho-technical test

Eliminatory round: English language test – minimum admission grade 6,00

Admission exam: Mathematics exam

2016 –
40 enrollment
places

No limitations
for female
candidates

Civilian Specialization - Bachelor Degree

- Enrollment process is based on candidates' files assessment - ranking criteria is the baccalaureate grade
- 2016 - 600 applicants applied for 450 positions

Masters Degree (Civilian Specialization)

File application assessment - ranking criteria is the bachelors degree average – free access for military graduates



Study Programmes provided by Mircea cel Bătrân Naval Academy

The educational process is based on curricula certified by National Agency for Quality Assurance in Higher Education, for both military and civilian programs.



Educational programmes can be structured as following:

- Academic education;
- Vocational training, including management and leadership;
- Training stages - onboard ships / work placements / cadetship.



Categories of Academic & Vocational Courses

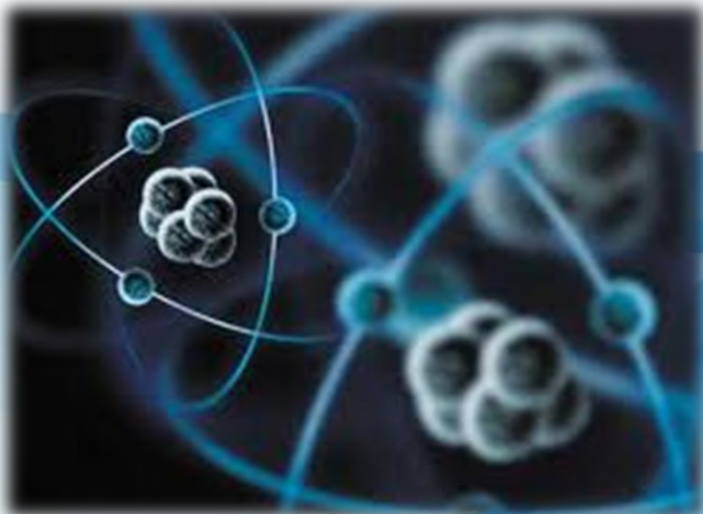


Fundamental subjects: Mathematics, Physics, Chemistry, Numerical Analysis, General Management, Computer Programming etc.

Basic domain subjects: Seamanship Basics, Navigation Basics, Electrotechnics, Electric Machines and Drives, Material Strength, Mechanics and Fluid Mechanics, Automatic Control of Systems, Logistics, etc.

Specialization subjects: Naval Kinematics, Radar Navigation, Weapon Systems, C2 Integrated Systems, Firing Theory, etc.

Complementary subjects: Leadership, Public Affairs, English Language, Physical Education





Practical stages – Military Cadets

Seamanship training – 1st year



Training onboard N.S. “Mircea” – 2nd year



Training placement onboard Ro Navy ships – 3rd year





Cadetship on the Training ship "Mircea"





Work placements – Civilian Study Programs

We offer our students with the possibility to participate in training voyages on board the Training Ship Albatros .

We also provide them with the full support in finding onboard training positions with shipping agencies where they can perform the mandatory cadetships – including in Erasmus+ work placement mobilities (an average of 120 students/year participates in Erasmus+ work placements).

For Engineering and Management study programme we provide support in finding work placements for students with port operators or logistic operators.





Graduation process

Bachelor's degree exam:

Test no. 1 – Evaluating fundamental and specialization knowledge.

- Computer multiple choice test – Navigation, weaponry systems and naval communication systems;
- Practical exam on the integrated navigation simulator - simulator

Test no. 2 – Displaying and asserting the Bachelor's degree project.

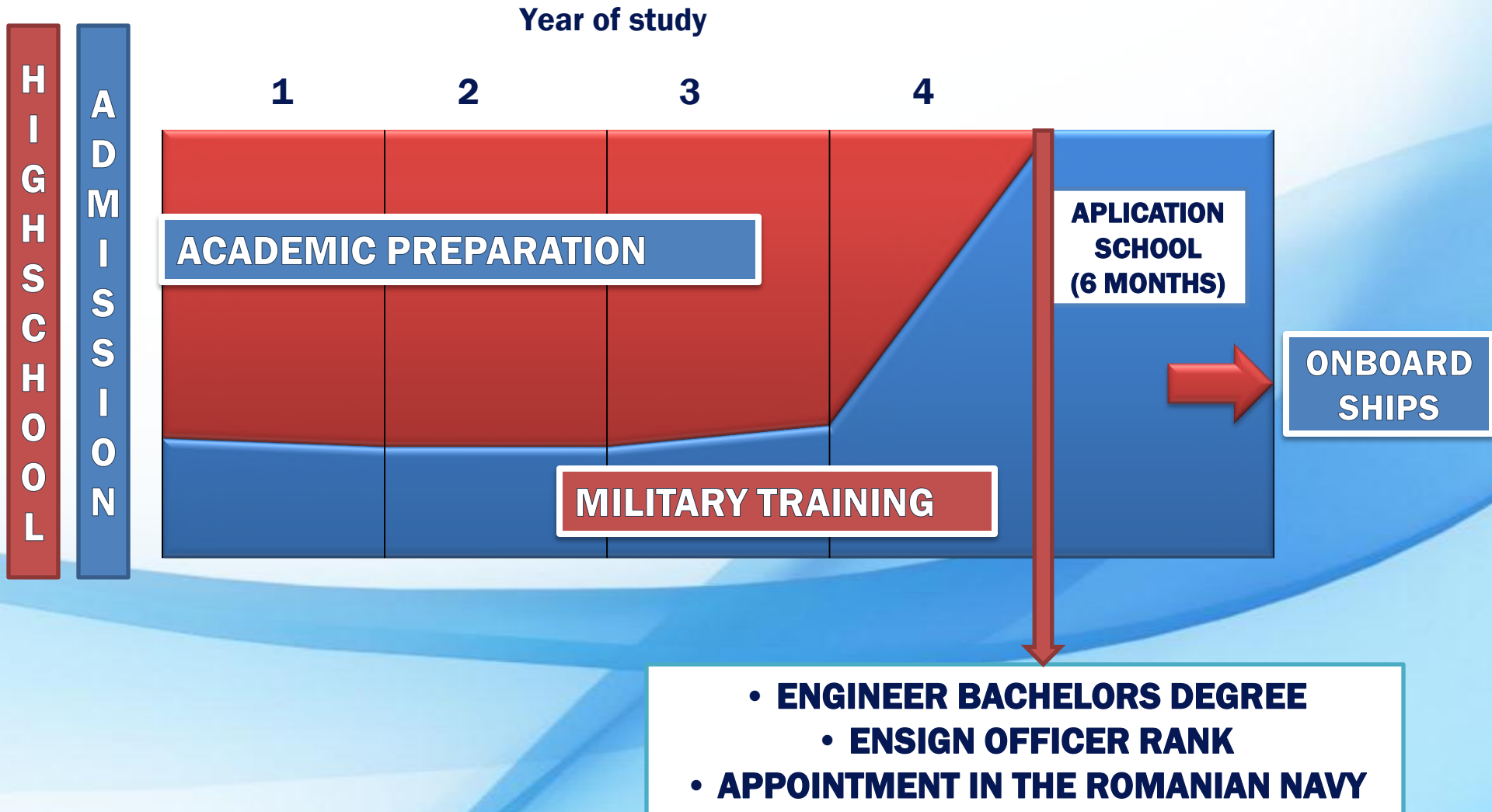


Masters Degree

- Public defence of the Dissertation paper



Carrier route for an Officer of the Romanian Navy



CARRIER ROUTE FOR A MERCHANT MARINE OFFICER

- | | | |
|--|--|--|
| <p>MARITIME HARBOUR MASTER</p> <ul style="list-style-type: none"> ➤ Has a license as an maritime harbor officer available ➤ Has a period onboard ship on a duty for 24 months(of which 12 in the last 5 years) ➤ Has graduated a managerial level course | <p>MARITIME HARBOUR CHIEF ENGINEER</p> <ul style="list-style-type: none"> ➤ Has a license as an maritime harbor officer available ➤ Has a period onboard ship on a duty for 24 months(of which 12 in the last 5 years) ➤ Has graduated a managerial level course | <p>MARITIME HARBOR CHIEF ELECTRICIAN</p> <ul style="list-style-type: none"> ➤ Has a license as an maritime harbor officer available ➤ Has a period onboard ship on a duty for 24 months(of which 12 in the last 5 years) ➤ Has graduated a managerial level course |
|--|--|--|

- | | | |
|---|---|---|
| <p>MASTER – Approved course for promotion from operational level to managerial level</p> | <p>MASTER – Approved course for promotion from operational level to managerial level</p> | <p>MASTER – Approved course for promotion from operational level to managerial level</p> |
|---|---|---|

- | | | |
|---|---|--|
| <p>MARITIME HARBOR DECK OFFICER</p> <ul style="list-style-type: none"> ➤ Has a period onboard ship on a duty for 24 months as a deck officer(of which 12 in the last 5 years) + a training book | <p>MARITIME HARBOUR CHIEF ENGINEER</p> <ul style="list-style-type: none"> ➤ Has a period onboard ship on a duty for 6 months as a chief engineer+ a training book | <p>MARITIME HARBOR CHIEF ELECTRICIAN</p> <ul style="list-style-type: none"> ➤ Has a period onboard ship on a duty for 6 months as a chief electrical engineer+ a training book |
|---|---|--|

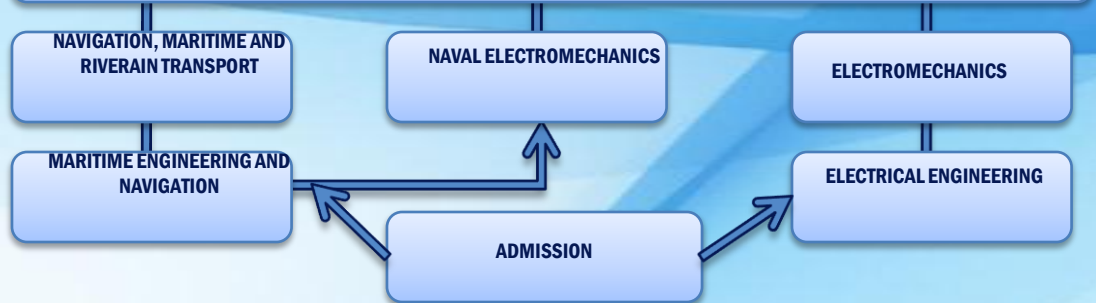
LICENSE EXAM

BACHELOR'S EXAM

TRAINING PERIODS

ENSIGNED MARINE OFFICER
 Deck officer/ mechanic/ electrician license given of the 1st year graduation

ACADEMIC BACHELOR STUDIES
 Academic activity: IMO classes



POSITIONS AT A OPERATIONAL LEVEL IN THE NAVAL AND HARBOR DOMAIN

POSITIONS AT A MANAGERIAL LEVEL IN THE NAVAL AND HARBOR DOMAIN

MASTER

BACHELOR'S EXAM

ACADEMIC ACTIVITY

TRAINING PERIODS

BACHELOR ACADEMIC STUDIES

HARBOR AND NAVAL MANAGEMENT AND ENGINEERING

MANAGEMENT AND ENGINEERING

ADMISSION

- ❖ C.N. APM Constanța
- ❖ The administration of navigable channels
- ❖ Romanian Naval Authority
- ❖ Harbor Operators
- ❖ Companies in the field of connected harbor services
- ❖ Naval construction and maintenance



Lifelong Learning Center

The purpose of LLC is to develop the capacity of the “Mircea cel Batran” Naval Academy Constanta, to collaborate with crewing companies and local authorities by performing maritime safety classes, particularly to introduce and improve services of perpetual building-up, by means of post academic courses and technological transfer offered by the institution

LLC is a professional build-up supplier.

LLC’s main activity objective is to organize programs of continuous education, destined to people inside or outside of academic community, by means of achieving professional build-up



COMPULSORY MARITIME SAFETY COURSES

IMO type courses provided by Naval Academy

Course name	No. hours	Form
Radar navigation, radar plotting and the usage of ARPA – operational level	40	8 seminar / 32 workshop
Maritime English	28	seminar
GMDSS-GOC operator license	144	72 seminar / 72 workshop
Dangerous cargo handling and transport	32	8 seminar / 24 workshop
Marine environment polluting prevention MARPOL 73/78	32	8 seminar / 24 workshop
Competence in the usage of survival means and lifeboats, others than the fast lifeboats	32	24 seminar / 8 swim class
Basic safety course		
On sea individual techniques of survival	16	8 seminar / 8 workshop
Individual protection and social responsibilities onboard	16	8 seminar / 8 workshop
Fire fighting and prevention	24	8 seminar / 16 workshop
First aid	24	8 seminar / 16 workshop



POST GRADUATING MARITIME IMO type courses provided by Naval Academy

Course name	No.	Form
Bridge Team Management	40	40 seminar
Engine Room Team Management	40	40 seminar
Advanced Bridge Team Management	40	40 seminar
Advanced Engine Room Team Management	40	40 seminar
Ship handling	40	40 seminar
ECDIS – Electronic Chart Display and Information System	40	40 seminar
Acomodation course with the deck simulator	24	
Acomodation course with the engine room simulator	24	
Improving practical capacities course with the deck simulator	16	
Improving practical capacities course with the engine room simulator	16	
Ship handling and maneuvering course	16	



International Projects implemented by Naval Academy

RoNoMar – Romanian Norwegian Maritime Programme

1.6 mil. Euro

Res-Op-Dev- Bulgarian/Romanian cooperation for green energy development

250.000 Euro

Marine – Maritime Network of Education in the Black Sea Basin

350.000 Euro

DECOMAR – Development of Common Curricula Modules for Merchant Marine Officers

150.000 Euro

EU Funded Projects

Assistance during the labor market insertion for future marine officers - European Social Fund

220.000 Euro



International exchanges (academic year 2015-2016)

Erasmus+	144 students, 12 teachers
Military Erasmus	9 students
Bilateral Agreements	15 teachers
DECOMAR (KA1)	24 students, 22 teachers, 150.000 Euro
ECGFA	14 Partners, 2 teachers
EEA Grants	1 Partner, 5 students



Erasmus+ Exchanges – 2014/2020

Erasmus (outgoing 2014-2016)

Student mobilities for study:

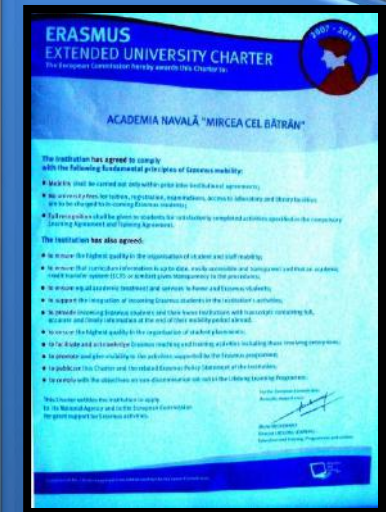
- 17 students in 2015-2016
- 16 students in 2014-2015

Student placements:

- 125 students in 2015-2016
- 78 students in 2014-2015
- Practice onboard EU commercial vessels

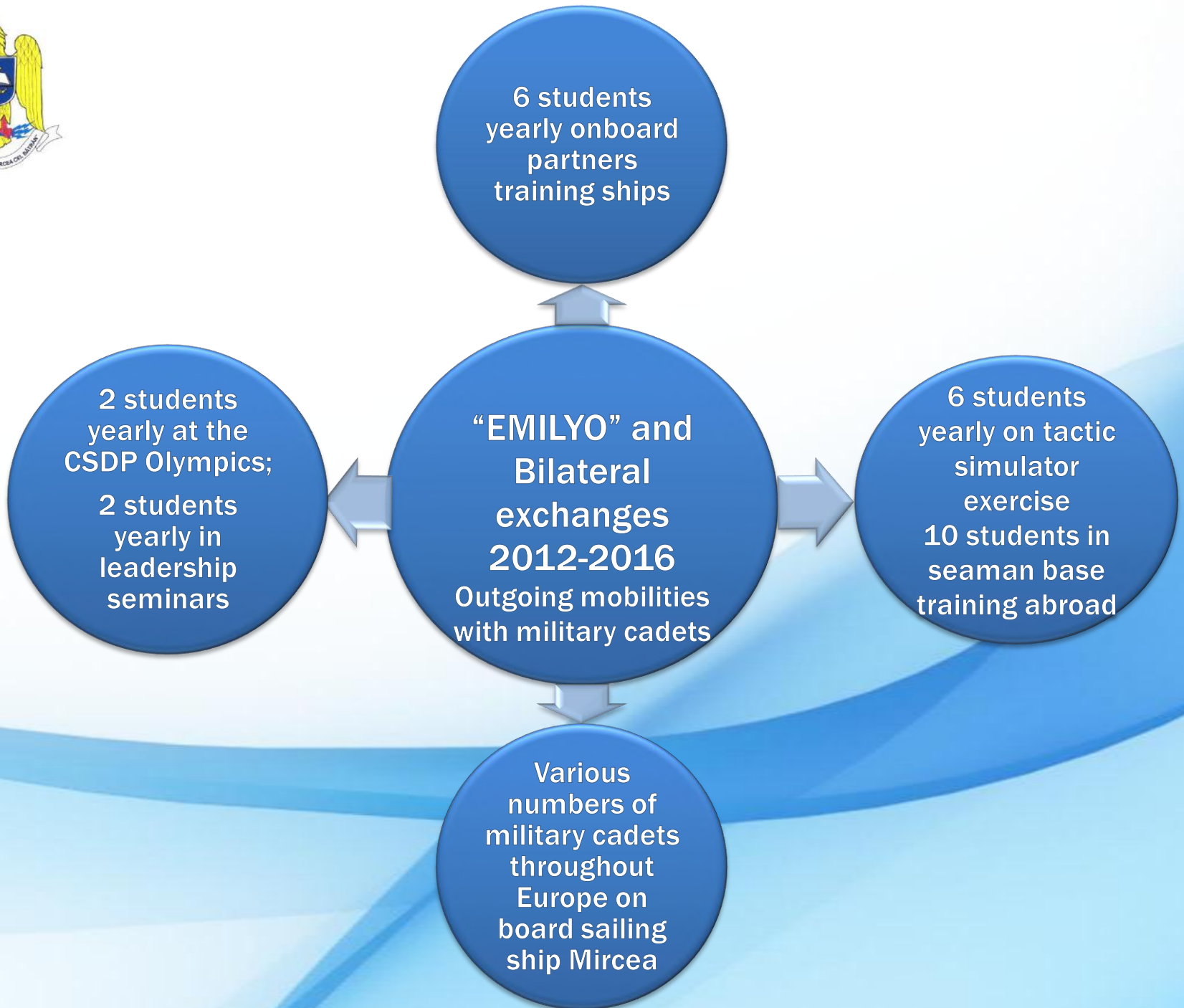
Teaching assignments

- 12 teachers in 2015-2016
- 16 teachers in 2014-2015



Erasmus (incoming 2014-2016)

- 28 students
- 21 teachers





Scientific research

In the “Mircea cel Bătrân” Naval Academy the scientific research is being carried out by the teaching staff, scientists and students according to the annual research plan and the operational plan.

Annual research-development plan of the Naval Academy “Mircea cel Batran”

- The Ministry of Defense Research & Development Plan;
- MBNA institutional RDI Plan.

-The National Research-Development-innovation Plan;
-EU Structural Funds

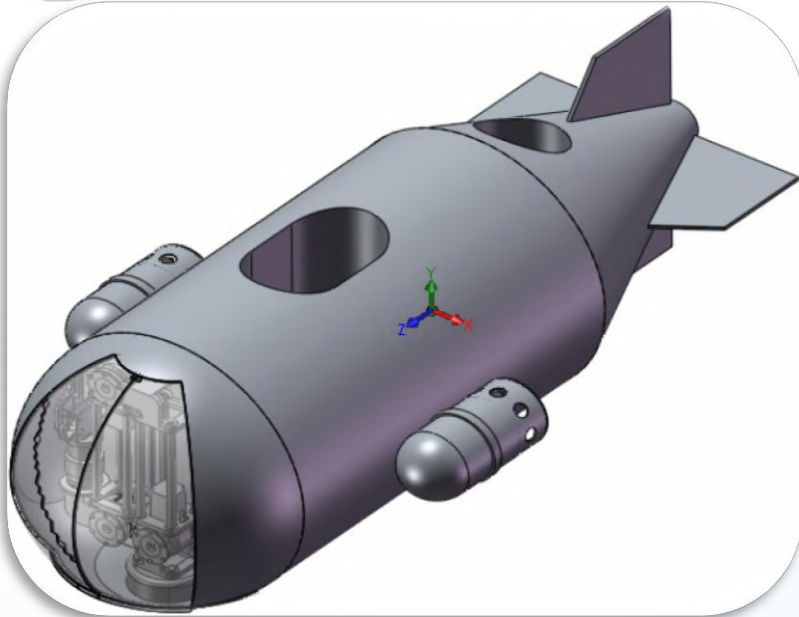
International contracts:
-Horizon 2020;
-Black Sea Basin;
-EU Comission calls;
-Cross Border Program

-SME research partnerships (RDI private contracts on demand)

The teaching staff, the researchers and the students are stimulated to apply for different calls or project proposals on national and international competitions.



Examples of MBNA research achievements



Submerged remote controlled vehicle designed for research in maritime and River area.

Inflatable naval target designed for naval artillery exercises





Examples of MBNA research achievements (cont.)



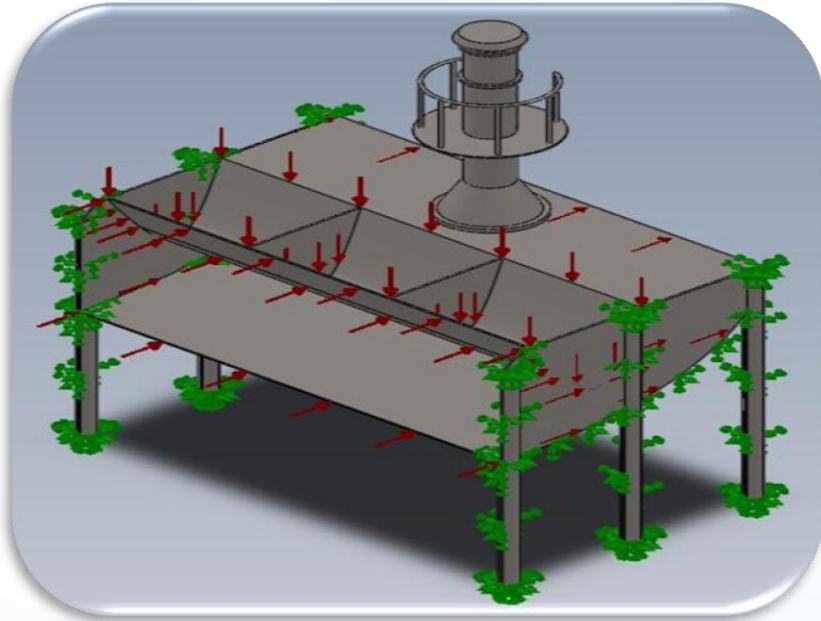
Naval and road system for rapid reaction in natural disasters. Ensuring people, livestock and property evacuation during natural disasters

Unconventional warfare component meant to interfere with C4I systems by generating strong electromagnetic pulses .





Examples of MBNA research achievements (cont.)



Hydropneumatic electric plant - experimental model - harnessing wave energy, especially Black Sea wave energy



Technological platform for remote cable operated utility and recreational minirobots, with low visibility operational capability (polluted environment, chemical substances, fuel tanks)

Main Internal Partners

- The National Institute of Research and Marine Development “Grigore Antipa”

The National Institute of Research and Development in the field of Electrical Engineering

- Technical University of București
- „Ovidius“ University
- The Military Technical Academy

- The Navy Center for Scientific Research

The National Institute of Research and Development for Marine Geology and Geo-ecology GEOECOMAR

- Petroleum Service Group GSP
- CMA CGM Ships

- Technical University of Timisoara

- The Maritime Hydrographic Direction

- The National Agency for Fishing and Aquaculture
- Constanta Coast Guard





Main External Partners



- “Nikola Y. Vaptsarov” Naval Academy, Bulgaria
- Angel Kanchev University of Ruse, Bulgaria
- “Piri Reis” University, Turkey
- Turkish Naval Academy, Turkey
- Polish Naval Academy, Poland
- University College of Alesund, Norway
- Escuela Naval Militar de Oficiales, Pontevedra, Spain
- Catholic Portuguese University, Portugal
- Delft University of Technology, the Netherlands
- European Security and Defence College, Bruxelles, Belgium
- Michigan State University, USA
- Liepaja Maritime College, Latvia
- University of Liubljana, Slovenia
- University of Split, Croatia
- Hellenic Naval Academy, Greece

