



“ M i r c e a c e l B ă t r ă n ” N A V A L A C A D E M Y
FACULTY OF NAVIGATION AND NAVAL MANAGEMENT
DEPARTAMENT OF NAVAL AND PORT ENGINEERING AND MANAGEMENT

BASICS OF LOGISTICS

LABORATORY

1. Destination

The laboratory ensures the development of practical activities in the disciplines: *Logistics Management, Port Logistics, Maintenance Management, Transport Logistics and Logistics Systems Maintenance.*

2. General objective

Learning the basics of logistics and maintenance system and training skills in using software solutions for logistics system management within an organization.

3. Specific objectives

- ✓ learning the basics of using software in the field of logistics;
- ✓ mastering various methods of information processing in logistics management;
- ✓ skills training to solve low and medium complexity problems using dedicated computing technology and software (including choosing the right work tools);
- ✓ developing practical skills in the use of enterprise resource planning (ERP) software;

- ✓ acquiring practical skills in working with equipment management and control programs, creating maintenance plans, creating worksheets, recording resources consumed (spare parts, fuel, costs), repair history and maintenance analysis reports;
- ✓ mastering the practical skills of working with equipment for aligning dynamic equipment and the technique of measuring vibrations produced as a result of defects; mastering the practical skills of working with lubricating oil testing and analysis equipment, as a means of assisting the decision on the execution of predictive maintenance works.

4. Facilities

- 🖥️ 9 individual workstations equipped with state-of-the-art computers with internet connection;
- 📺 video projector and projection screen;
- 💻 business management software - Odoo Enterprise version, a professional ERP system that includes modules for CRM, e-commerce, invoicing, accounting, manufacturing, warehousing, project management and inventory management, etc .;
- 💻 maintenance management and organization software - ManWinWin Express version, optimized for the management of all aspects related to maintenance: dynamic coding system of equipment, detailed recording of technical characteristics, images and technical documents, operation records, maintenance management, parts management exchange, report generation and performance indicators
- 💻 systems and equipment to assist the decision on the execution of works in the framework of predictive maintenance:
 - data collector and vibration analyzer ADSAH A4900 Vibrio;
 - portable laboratory for monitoring lubricants GESERCO CEVM;
 - EasyLaser XT440 coupling laser alignment system.

5. Laboratory work performed

- 🚢 process simulations in the field of logistics;
- 🚢 analyzing the problems of purchasing products from the supplier, storing them in warehouses and delivering them to customers;
- 🚢 monitoring, analysis and optimization of the course of products, payments and information in a logistics system;
- 🚢 management of all aspects related to maintenance: equipment coding system, registration of technical characteristics, management of maintenance works, spare parts management, generation of reports and performance indicators;
- 🚢 practical work on the application of predictive maintenance policies (analysis of lubricating oil and analysis of global vibration measurements)

and spectral analysis of vibrations of dynamic machines due to imbalances, alignment defects, bearing defects).



