MSc - Master of Science - LOGISTIC SYSTEMS MANAGEMENT (90 ECTS)

Study Program name:

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Introduction

The mission of the "LOGISTIC SYSTEMS MANAGEMENT" Master of Science Program, organized by the Faculty of Navigation and Naval Management ("Mircea cel Batran" Naval Academy), is to promote, to value and to enrich the logistics systems and supply chain management scientific and applied instruments and body of knowledge, in order to stimulate the entrepreneurial and business management skills, relying upon naval Academy regional expertise and academic soundness. The major values aimed to be implemented in order to assure the Naval Academy institutional success and to support the regional academic recognition are:

- the professionalism and commitment, the high respect and full responsibility for sustained activities, honesty and correctitude related to the educational and academic desiderates;
- the respect of the public interest, legal alignment, multicultural awareness, diversity acceptance, and respect for best educational practices, values and virtues, in fully accordance with the universal human values and European ideas.

After completing the studies the graduates will grant to full professional access to specific appointments in logistics systems management – supplying, SCM, operations management, distribution, warehousing, inventory management, resource planning and transportation – as specifically in naval and port industry, as: Head of MRO/Technical department; Head of Sells Department; Head of Procurement Department; Head of Operations Planning Department; Head of Logistic Department; Chief of Administration; Head of Distribution/Transportation Department; Supply Chain Manager; Consultant/Research engineer in logistic studies, cost structure, support activities, SCM; Planning or Operations Engineer with responsibilities in the operating/production resource planning, warehousing, inventory management, transportation; Safety Engineer, environmental protection and risk assessment specialist; Logistics Engineer; Teacher for undergraduates in technical disciplines or courses; Entrepreneur SME.

Duration

3 semesters on full time education

Credits

90 ECTS

Level

Higher education - post graduation programme

Degree

Master of Science in Logistic Systems Management

Prerequisites

BSc in engineering and management area or knowledge, or equivalent education.

Structure and organization

The study term span a period length of four semesters/two years, as following: first year is organized in two semesters, consisting in 14 weeks for direct teaching activities; the second year is limited to one semester of teaching in 14 weeks being followed by a three weeks time of dissertation work.

Throughout the education period of four semesters of study the students are attending mandatory and optional courses, being educated and instructed as specialists, approaching in program curriculum together engineering and managerial area of knowledge.

The optional courses are selected from an annual double discipline package, which is available to be chosen by students at the beginning of the first academic year.

The academic studies are finalized based on a graduation exam, consisting in a public defence of the graduation thesis (dissertation).

Program Goals

The major goals of "Logistic Systems Management" postgraduate program are associated to the engineering and management area of knowledge and particularly to the logistics systems and supply chain management, targeting to acquire those specialized competencies and business management knowledge, required to deal into an innovative and efficient manner with technical, logistic and managerial issues, associated to the engineering systems operations. The learning outcomes will be focused on the next academic topics:

- engineering and management theoretical and practical body of knowledge, in order to stimulate the innovation and creative business administration abilities, aiming the operations management dimensions of production planning, logistics support, supply chain management, distribution strategies, customer relations and administrative management;
- the scientific instruments of resource planning, from sourcing to the distribution and customer related services, including ERP, MRP, DRP and CRM technologies and ITC solutions, aiming to shed the light over the logistic support efficiency and effectiveness;
- the coordination of logistic processes and technical activities in business management endeavour, valuing innovative engineering techniques, into a multidisciplinary and interdisciplinary manner;
- the managerial aspects related to business administration, in order to organize and to lead international and multicultural teams, in the specific area of logistic operations as procurement, inventory management, forecasting, transportation, distribution and supply chain management;
- the efficient and effective planning and usage of enterprise resources in small and medium businesses, binding into a complex and interdisciplinary manner to the financial, economic, technical and logistic dimensions;
- the project management skills in logistic professional area of knowledge, using specialised software;
- the efficient management of logistic processes, valuing the procurement, supplying, storage and warehousing principles and techniques and using complex techniques, methods and instruments from engineering and management area of knowledge;
- the capacity to analyze and to interpret into a innovative manner different data and information, valuing the personal experience, in order to select the optimum decision in dynamic situations in logistic operations;
- the communication capacity within international and multicultural environment, into an international language, using technical and managerial specific concepts or the modern communication techniques and soft solutions from logistic area of knowledge.

All stated objective will be sighted by dedicated courses, in order to acquire declared learning outcomes, designed and transversal competencies.

Learning outcomes

The major learning outcomes of "Logistic Systems Management" postgraduate program are focused on the logistic science body of knowledge, valued within the curriculum and course syllabuses, to shape the professional profile of the graduates in professional matter of solving the strategic and operational problems, within logistic systems activities. The major program learning outcomes are:

- to shape a creative and innovative professional behaviour of acting and thinking based on specific methods and instruments, in order to solve and to manage specific logistic and administrative tasks, considering and operating with the fundamental science and engineering knowledge,;
- developing and implementing technical and managerial solutions to design the supply chains, procurement systems, materials flow, distribution strategies and administrative policies, as team members or head of specialized departments;
- advanced knowledge usage and transfer regarding the design and the process management of logistic systems in small and medium enterprises, into a sustainable and environmentally friendly manner;
- developing the decisions making abilities at middle and top management level, facing technical or economic problems in professional issues of sourcing, inventory management, operations management, resource planning, distribution and customer relations policies, valuing the supply chain managerial instruments;
- developing the decisions making abilities at middle and top management level, regarding the procurement processes, sourcing strategies, inventory management, distribution policies and orders management, using specialized knowledge, professional software and ITC instruments;
- organizing transportation, inventory management, and service operations for customers, dealing with specific software solutions as ERP (Enterprise Resource Planning), CRM (Customer Relations Management), MRP (Material Resource Planning) or DRP (Material Resource Planning);
- managing the logistics system in SME valuing modern concepts as JIT (Just in Time), EOQ (Economic Order Quantity) or VMI (Vendor Managed Inventory);
- using specific techniques of risk management in business and getting professional HR management abilities, considering the multicultural, diversity and interdisciplinary factors;
- ability to plan and to undertake the MRO policies within enterprises, valuing both technical and economic knowledge and instruments;
- developing the capability to understand and to use modern computing and communication techniques, acquiring presentation skills of oral and written materials into an international language, getting ability to work within international team and to coordinate groups acting within uncertain, stressful and risky environment;
- developing leadership skills in order to get ability to plan, organize, coordinate, manage and control specific logistic processes;
- acquiring the capability to understand and to identify the training opportunities and learning desired skills through study cases and effective use of information sources or communication resources (as Internet portals, specialized software, databases, online courses, etc.), both in Romanian and into a international language;

Teaching methods

Teaching methods are: lecturing, heuristic conversation, explanation, discussion, case study, problem-solving, simulation of situations, methods of group work, individual and frontal methods for developing critical thinking, study references, project based learning or problem solving learning. Class time is primarily devoted to lectures. There will be used different materials from the supplementary readings or other visual elements, in order to illustrate some of the basic points in the daily lecture, and to encourage discussions and debates around these points. Homeworks, projects and work papers will be written with accuracy, focusing on the results' interpretation that allows the issue of valuable judgments.

Internationalization

All subjects are taught in Romanian. Selected courses will provide didactic resources in English.

CODE	Course title	Credits	0/V *	Credits per semester		
				S1	S2	S3
MSL-1101A	Logistics software solutions	6	0	6		
MSL-1102A	Leadership and organizational behavior	6	0	6		
MSL-1103S	Logistics activities and systems	6	0	6		
MSL-1104C	Ethics and academic integrity	2	0	2		
MSL-1105A / MSL-1106A	Transport legislation / Human resources management	5	V		5	
MSL-1107S	Professional practice S1	5	0	5		
MSL-1208A	Methods and techniques in logistics projects	5	0		5	
MSL-1209A	Supply and procurement management	5	0		5	
MSL-1210A	Energy efficiency in logistics	6	0		6	
MSL-1211C	Managerial communication in English	4	0		4	
MSL-1212A	Environmental protection in logistics systems	5	0		5	
MSL-1213S	Professional practice S2	5	0		5	
MSL-2114S	Supply chain management	5	0			5
MSL-2115A	Engineering and quality management in logistics processes	5	0			5
MSL-2116A	Risk and safety in logistics activities	5	0			5
MSL-2117A	Practice for the elaboration of master thesis	3	0			3
MSL-2118A / MSL-2119A	Multimodal transport / Special transports	4	V			4
MSL-2120A / MSL-2121A	Maintenance of logistics systems / Maintenance of military equipment	4	V			4
MSL-2122A	Elaboration of master thesis	4	0			4
-	Master thesis	10	0			10
-	TOTAL	90+10	-	30	30	30+10

 $^{^{*}}$ O - Mandatory course, V - Optional course