JSC "ALT University named after Mukhamedzhan Tynyshpaev"

APPROVE
US decision dated
"27" March 2025 (Protocol №8)
President-Rector
Zharmagambetova M.S.

EDUCATIONAL PROGRAM

Name: 7M11377 SUPPLY CHAIN MANAGEMENT

Level of training: master profile

Code and classification of areas of study: 7M113 Transport services

Code and group of educational programs: M151 Transport services

Date of registration in the register: 10.06.2025

Registration number: 7M11300066

Almaty, 2025 г.

CONTENT

1. INFORMATION ABOUT CONSIDERATION, APPROVAL AND APPROVAL OF THE PROGRAM, DEVELOPERS, EXPERTS AND REVIEWERS

DEVELOPED:

JSC ALT University named after Mukhamedzhan Tynyshpaev, Ph.D. in Technical Sciences, Associate Professor	*(signature)*	Gauhar Jumashevna Kenzhebayeva
General Director Transline LLP	*(signature)*	Ulyana Gennadievna Pak
1st-year Master's student, group MN-L-24-1	(signature)	Dauren Zhambulovich Sasambaev

EXPERTS:

Transport Manager at AsteraCargo LLP	*(signature)*	Meruert Duisembekovna Akhmetova
Department of «Organization of traffic, transport management and logistic» PhD, associate professor of MTSU	*(signature)*	Raigul Serikovna Ustemirova

REVIEWER:

Director Irbis Forwarding LLP	*(signature)*	Natalia Vadimovna Sakhani

REVIEWED AND RECOMMENDED:

Meeting of the Academic Committee of the Department of Transport Services and Business (protocol No. 1 «17» February 2025)	*(signature)*	Musalieva Roza Dzhalilovna
Meeting of the COC UMB Institute of "Logistics and business" (protocol No. 7 «20» February 2025)	(signature)	Musaeva Gulmira Serikovna
Meeting of the Academic Methodological Council (AMC) (protocol No.4 «20» March 2025)	*(signature)*	Kodzhabergenova Asemgul Kuntuarovna

APPROVED by decision of the Academic Council dated March 27, 2025, protocol No.

UPDATED 10. 06. 2025 y.

2. NORMATIVE REFERENCES

The educational program is developed on the basis of the following legal acts and professional standards:

1. Law of the Republic of Kazakhstan “On Education” dated July 27, 2007 No. 319-III (as amended and supplemented as of March 27, 2023).

2. National qualifications framework, approved by the protocol of March 16, 2016 by the Republican Tripartite Commission on Social Partnership and Regulation of Social and Labor Relations.

3. Industry qualifications framework for the field of Education, approved by the Minutes of the meeting of the industry commission of the Ministry of Education and Science of the Republic of Kazakhstan on social partnership and regulation of social and labor relations in the field of education and science dated November 27, 2019 No. 3.

4. State compulsory standard of higher education (Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated February 20, 2023 No. 66).

5. Qualification reference book for positions of managers, specialists and other employees, approved by order of the Minister of Labor and Social Protection of the Population of the Republic of Kazakhstan dated August 12, 2022 No. 309.

6. Rules for organizing the educational process on credit technology of education in organizations of higher and (or) postgraduate education, approved by Order of the Minister of the Ministry of Education and Science of the Republic of Kazakhstan No. 152 dated April 20, 2011 (with additions and changes dated April 4, 2023 No. 145).

7. Classifier of areas of training for personnel with higher and postgraduate education, approved by order of the Minister of Education and Science of the Republic of Kazakhstan dated October 13, 2018 No. 569 (with amendments and additions as of June 5, 2020).

8. Algorithm for inclusion and exclusion of educational programs in the Register of educational programs of higher and postgraduate education, approved by Order of the Minister of Education and Science of the Republic of Kazakhstan dated December 4, 2018 No. 665 (with additions and changes as of December 23, 2020 No. 536).

9. RI-ALT-33 «Regulations on the procedure for developing an educational program for higher and postgraduate education»

10. Professional Standard «Cloud Technology Development» by the NCE RK «Atameken», Order No. 222 dated December 5, 2022.

11. Professional Standard "Actuary" approved by the Board of the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, Order No. 3 dated January 29, 2024

12. Professional Standard "Artificial Intelligence Application Development" approved by the NCE RK "Atameken", Order No. 222 dated December 5, 2022

13. Professional Standard "Teacher" approved by the Chairman of the Board of the NCE RK "Atameken", Order No. 500 dated December 15, 2022

14. Professional Standard "IoT Systems Development" approved by the Chairman of the Board of the NCE RK "Atameken", Order No. 222 dated December 5, 2022

15. Professional Standard "Big Data Processing and Storage Systems Development" approved by the Chairman of the Board of the NCE RK "Atameken", Order No. 222 dated December 5, 2022

16. Professional Standard "Software Maintenance" approved by the Chairman of the Board of the NCE RK "Atameken", Order No. 222 dated December 5, 2022

3. PASSPORT OF THE EDUCATIONAL PROGRAM

№	Field name	Note
1	Registration number	7M11300066
2	Code and classification of the field of education	7M11 Services
3	Code and classification of areas of study	7M113 Transport services
4	Code and group of educational programs	M151 Transport services
5	Name of the educational program	7M11377 Supply Chain Management (profile, 1 year)
6	EP type	New EP
7	EP purpose	Training managers who are able to strategically improve business processes using scientific approaches and modern technologies in the field of logistics and supply chain management to increase the competitiveness of companies
8	ISCED level	7
9	Level on NQF	7
10	Level on SQF	7
11	EP distinctive features	No
	Partner Higher education institution (joint educational program)	-
	Partner higher education institution (two-degree educational program)	-
12	Form of training	Full-time
13	Language of education	russian, kazakh, english
14	Volume of the credits	60
15	Awarded Academic Degree	Master of Services 7M11377 - Supply Chain Management
16	Availability of an appendix to the license for the direction of training	KZ87LAA00036465 от 28.06.2024
17	EP accreditation existence	Available
	Name of the accreditation body	ND "Independent Agency of Accreditation and Rating"(HAAP/IAAR)
	Validity period of accreditation	28.05.2022-27.05.2027 yes

4. COMPETENCE MODEL OF A GRADUATE

Educational program objectives:

1. Promoting the development of a graduate's ability to:

1) analyze, design, and optimize business processes in logistics and supply chain management at strategic, tactical, and operational levels;

2) apply modern methods, tools, and digital technologies for planning, forecasting, procurement, warehousing, transportation, and distribution of products;

3) make managerial decisions based on comprehensive data analysis, risk assessment, and economic efficiency of supply chains;

4) conduct research and analytical activities in the field of logistics and supply chain management, developing innovative solutions;

5) pursue professional and personal development, demonstrating readiness for continuous learning and adaptation to changes in the global market;

6) adhere to professional ethics, corporate standards, and international norms in logistics and SCM.

2. To contribute to the graduate's readiness to:

1) apply acquired knowledge and skills to solve complex professional tasks in supply chain management under conditions of the digital economy and global competition;

2) perform strategic and operational management of material, information, and financial resource flows;

3) develop and implement projects for optimization and integration of logistics processes at all stages of the product lifecycle;

4) use tools of system analysis, modeling, and forecasting in managerial decision-making;

5) apply modern standards, methods, and technologies (including Lean, Agile, ERP, SCM, WMS, TMS, etc.) in professional activities;

6) conduct professional communication in Russian and foreign languages, including negotiations and preparation of managerial and analytical documentation;

7) work in interdisciplinary and international teams, demonstrating leadership qualities, responsibility, and readiness for change management;

8) adhere to norms of professional ethics, corporate culture, and principles of sustainable development in professional activities.

Learning outcomes:

ON1 - Formulate scientifically based hypotheses and build theoretical models, build long-term business relationships and resolve conflicts in professional intercultural communication using scientific methodology.

ON2 - Demonstrate the development of professional knowledge in the field of management for solving managerial tasks, including the informed choice of information sources, critical analysis, synthesis and evaluation of data using modern analytical approaches.

ON3 - To implement the results and trends of the latest achievements of science and technology to solve problems in the field of supply chain management

ON4 - Analyze and develop integration solutions, recommend optimal methods for making managerial decisions, taking into account the prospective development of business processes in supply chain management

ON5 - Identify effective strategic approaches aimed at maximizing the use and development of the company's intellectual resources to achieve its goals

ON6 - Integrate the principles and tools of lean manufacturing into logistics processes in order to reduce costs and increase efficiency

ON7 - To develop methods of transformation of business processes of organizations using tools and techniques of modeling logistics systems to increase their efficiency, effectiveness and competitiveness

ON8 - Master the methods of planning and monitoring the implementation of plans, auditing information systems and operational procedures, risk assessment of ICT infrastructure and analysis of key performance indicators

Area of professional activity:

- development and implementation of supply chain management strategies at the enterprise, corporate, holding, or logistics network level;
- planning and optimization of flow processes, including procurement, production, distribution, and reverse logistics;
- implementation of digital technologies (ERP, SCM, WMS, TMS, CRM, etc.) for automation and integration of logistics processes;
- management of inventory, warehouse and transport systems, organization of logistics centers;
- design of logistics systems and supply networks, including global supply chains;
- supply chain risk and resilience management, ensuring business process continuity and adaptability;
- economic analysis and cost control, evaluation of the effectiveness of logistics solutions and projects;
- management of interaction with partners, suppliers and customers, development of collaboration and outsourcing mechanisms;
- research and analytical activities aimed at developing supply chain management methodologies and tools;
- ensuring environmental and social responsibility of logistics processes within the framework of sustainable development concept.

Objects of professional activity:

- industrial enterprises;
- trade, distribution and logistics companies;
- transport and forwarding organizations;
- IT companies developing solutions for logistics and SCM;
- consulting and analytical agencies;
- state and municipal government bodies;
- research and educational institutions.

Types of professional activity:

1. Managerial activity: Developing and implementing strategies to improve the efficiency and resilience of supply chains; coordinating the work of suppliers, manufacturers, distributors, transport and logistics companies; managing personnel and project teams in logistics and SCM; making managerial decisions under uncertainty and rapidly changing market conditions.

2. Analytical and project activity: Analyzing and modeling supply chain business processes; designing and optimizing logistics schemes, transport routes, and distribution systems; creating and utilizing digital models and KPI metrics for SCM effectiveness; conducting economic analysis, risk assessment, and forecasting logistics indicators.

3. Research activity: Conducting fundamental and applied research in logistics and supply chain management; developing innovative approaches and methodologies to enhance logistics systems; preparing scientific publications, participating in conferences and research projects; implementing research results into Supply Chain Management practices.

4. Consulting and expert activity: Diagnosing and auditing logistics processes; advising organizations on optimizing material, information, and financial flows; developing recommendations for implementing best practices in supply chain management and sustainable development.

Functions of professional activity:

- collection, processing, and interpretation of information on flow processes and supply chain performance indicators;
- analysis of the internal and external environment of an enterprise, identification of bottlenecks and factors affecting the efficiency of logistics operations;
- risk assessment, forecasting of demand, costs, and production indicators;
- development of analytical reports and proposals for improving supply chain management systems;
- planning, organizing, and coordinating the activities of supply chain participants;
- development and implementation of logistics management strategies, policies, and standards;
- resource allocation, budget formation, and monitoring of plan execution;
- ensuring consistency and continuity of logistics processes at all management levels;
- design and modeling of logistics systems and supply chains at various levels (regional, national, and international);
- development and implementation of innovative solutions in logistics and SCM;
- optimization of routes, inventories, warehouse processes, and distribution chains;
- implementation of projects for digitalization and automation of logistics infrastructure;
- conducting scientific research in logistics, operations management, and sustainable development of supply chains;
- development of methodological approaches and tools for analyzing and forecasting logistics processes;
- implementation of research results into management practices and educational processes;
- consulting enterprises on improving the efficiency of logistics processes and interaction with counterparties;
- conducting logistics audits and expert assessments of business processes;
- developing recommendations for improving the organizational structure and management mechanisms of supply chains;
- participation in the development of standards and regulations for logistics activities;
- conducting negotiations with suppliers, partners, clients, and government structures;
- representing the company's interests in professional and scientific communities;
- fostering a corporate culture of collaboration and knowledge sharing.

List of specialist positions:

- Logistics Manager / Supply Chain Manager;
- Head of Logistics Department / Chief of Logistics Service;
- Logistics Director / Head of Supply Chain;
- Supply Planning and Coordination Manager;
- Inventory Manager;
- Procurement / Purchasing Manager;
- Distribution and Transport Logistics Specialist;
- Head of Transport or Warehouse Logistics Department.

Professional certificates obtained upon completion of the program are provided.

Previous education requirements: higher education (bachelor's degree).

The specialized Master's degree program includes an internship.

The internship is conducted with the purpose of consolidating theoretical knowledge acquired during the study process, gaining practical skills, competencies, and professional experience in the Master's educational program, as well as mastering best practices.

Objective: To consolidate theoretical knowledge acquired during the study process and to form professional abilities and skills necessary for performing tasks in the field of supply chain management, logistics, and operations management.

During the internship, the master's student must:

study:

- corporate standards, procedures, and internal regulations of supply chain management;
- the process of monitoring and controlling the execution of logistics and production plans;
- methods of cost analysis, identifying bottlenecks and optimization opportunities;
- implementation of automated solutions for process optimization;
- laws, standards, and regulations governing transportation, warehousing, procurement, and foreign economic activity;
- principles of environmental and social responsibility in supply chains;
- requirements for certification and quality control of logistics processes.

perform:

- collect, process, and analyze data on material, information, and financial flows;
- study and apply in practice methods of inventory management, procurement, transportation, and warehouse logistics;
- participate in organizing work with suppliers, partners, and clients;
- master the use of corporate and analytical Supply Chain Management systems;
- maintain data recording, processing, and visualization for managerial decision-making;
- use digital solutions for monitoring kpis and process efficiency;
- prepare a final internship report including analysis of the enterprise's activities and recommendations for process improvement;
- prepare a presentation of the internship results for defense before the internship supervisor and committee.

Master's Student Experimental Research Work (ERR)

Within the framework of the ERR, the master's student's individual work plan includes mandatory scientific internship in research organizations and/or organizations in relevant industries or fields to familiarize with innovative technologies and new types of production. The ERR is scheduled concurrently with other types of academic work or in a separate period.

At the end of each stage of the experimental research work, the master's student prepares a report on the results. The final outcome of the ERR is the master's thesis.

Requirements for the ERR:

1. Corresponds to the profile of the master's educational program under which the master's thesis is prepared and defended;
2. Based on modern achievements in science, technology, and production, and includes specific practical recommendations and independent solutions to managerial tasks;
3. Carried out using advanced information technologies;
4. Includes experimental-research (methodological, practical) sections addressing the main defended propositions.

The department implementing the master's program defines specific requirements for the research component of the master's student's training.

Specific requirements include:

- proficiency in current issues within the field of knowledge;
- possession of specific knowledge related to the scientific problem studied by the master's student;
- ability to practically conduct scientific research and experimental work in the scientific area related to the master's program (master's thesis);
- ability to work with specific software products and internet resources.

Supervisors are responsible for ensuring high-quality organization of the ERR and its methodological setup.

The main content of the Experimental Research Work (ERR) is reflected in the master's student's individual work plan.

The experimental research work at the department may be carried out in the following forms:

- completion of tasks assigned by the scientific supervisor in accordance with the approved experimental research work plan;
- participation in scientific-practical seminars, theoretical seminars (related to the research topic), and in the scientific work of the department;
- presentation at young scientists' conferences;
- preparation and publication of abstract reports and scientific articles;
- preparation and defense of scientific reports on the directions of conducted research;
- participation in a real research project carried out at the department within the framework of budgeted or extra-budgetary research programs (or within a received grant), or at a partner organization involved in master's training;
- preparation and defense of the master's project.

The list of forms of experimental research work at the department for master's students in specialized training may be specified and supplemented, depending on the specifics of the master's program.

The objective of the work is to develop the master's student's skills in conducting scientific research, applying modern methods of analysis, modeling, and optimization of supply chain management processes, and preparing for the completion of the master's thesis.

Tasks of the experimental research work:

1. Study of theoretical foundations and modern research methodologies in the field of logistics and supply chain management.
2. Analysis of current business processes and logistics systems at an enterprise or in a virtual/simulation environment.
3. Development of models, methodologies, and tools for assessing the efficiency of supply chains and optimizing processes.
4. Application of digital technologies and software (ERP, SCM, WMS, TMS, analytical and simulation platforms) for modeling and forecasting.
5. Analysis and interpretation of the obtained results with the formulation of practical recommendations for improving logistics processes.
6. Development of scientific writing skills and preparation of publications based on research results.

The scientific internship is conducted with the following objectives:

- fulfilling the tasks of the master's thesis;
- familiarization with innovative technologies and new types of production;
- familiarization with the latest theoretical, methodological, and technological achievements of domestic and foreign science;
- familiarization with modern methods of scientific research, processing, and interpretation of experimental data;
- consolidation of theoretical knowledge acquired during the study process, gaining practical skills, competencies, and professional experience in the field of study, as well as mastering advanced foreign experience.

Final Attestation of the Master's Student.

The purpose of the final attestation is to assess the learning outcomes and key competencies achieved upon completion of the Master's educational program. The final attestation of the master's student is conducted in the form of writing and defending a master's thesis.