# Construction on Curriculum System of Master's Degree Graduate Training for Logistics Management Major

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**Abstract:** The logistics industry is one of the fast-growing industries in modern society. The demand for highly educated and high-quality talents is growing. The master's degree in logistics management is an effective way to cultivate such talents. The curriculum system refers to the system that arranges and combines the various components of the curriculum under the guidance of certain educational values, so that each curriculum element is unified in the dynamic process and points to the system of the realization of the curriculum system. The construction of the curriculum system is an important part of the teaching reform. This study builds the curriculum system based on systematic research and gives a brief introduction to the main curriculum. The research results of this paper will help to improve and optimize the training process of postgraduate students in logistics management, and cultivate logistics professionals with high quality and social development needs.

### **1. Introduction**

Logistics management is an emerging comprehensive science. Taking logistics and supply chain systems as research objects, it studies the planning and design of resources and supply chain systems, the planning and control of logistics operations, and the engineering field of business management. Enhance micro and macro-economic benefits and enhance the competitive advantage of individual enterprises and enterprise clusters. Logistics management is an interdisciplinary subject between management and technology, compatible with basic theories and methods of natural sciences and social sciences, and management science and engineering, industrial engineering, information technology, transportation engineering, mechanical engineering, environmental engineering, construction and civil engineering, and military areas such as logistics are closely related. The master's degree in logistics management trains application-oriented and compound-level senior management talents. It has a solid foundation theory and broad professional knowledge in the field of logistics engineering, and masters the application of logistics facilities, system planning and design. We must also master the advanced technologies and methods of logistics management, and have the ability to independently undertake logistics technology and operational management. Specifically, it serves the logistics enterprise, engages in the strategic planning and operation management of logistics enterprise development, the planning of logistics system of logistics enterprise, the design of logistics solution, the development and construction of logistics information system, the management of logistics project, the planning and operation of transportation, inventory and distribution. Logistics management also serves manufacturing companies or other enterprises, engaged in procurement and supply management, enterprise supply chain management, enterprise logistics facilities and network layout planning and design. Logistics management should also serve the government administrative department, engage in modern logistics industry development planning, urban or regional logistics infrastructure planning, urban or regional logistics information platform planning, logistics industry development policy planning, industry management and guidance. Logistics management should also serve logistics consulting and education and training institutions, and engage in logistics engineering project consulting, education and training.

Curriculum reform is a comprehensive system engineering, including comprehensive reform of concept change, teacher and student orientation, curriculum system construction, classroom model construction and evaluation standards. Curriculum system construction is an important part of curriculum reform. The curriculum system refers to the system that arranges and combines the various components of the curriculum under the guidance of certain educational values, so that each curriculum element is unified in the dynamic process and points to the system of the realization of the curriculum system. The curriculum system is the carrier to achieve the training objectives and the key to guarantee and improve the quality of education. The construction of the curriculum system needs to follow the principle of unity of comprehensiveness and system, the principle of unity of practicality and development, the principle of unity of discipline and life, and the principle of unity of improvement and popularity. The logistics industry is one of the fast-growing industries in modern society. The demand for logistics management professionals, especially those with high academic qualifications and high quality, is growing. Through the research of this subject, it will help to improve and optimize the training process of postgraduate students in logistics management, and help to cultivate high-quality and professional logistics professionals who meet the needs of social development, and help to improve the ability and quality of postgraduate students in logistics management.

#### 2. Composition of Curriculum System

Implement the system curriculum, reasonably arrange the content of the course gradually, realize the choice of "live module, multi-direction", reduce the classroom teaching time, strengthen independent learning, and flexible and diverse module teaching. The composition of the postgraduate talent training curriculum system of the Master of Logistics Management is shown in Fig. 1.

(1) Required curriculum. Required curriculums are courses that must be studied, including public required curriculums, professional basic courses, and professional core courses. Among them, public required curriculums, courses offered to graduate students of the whole school. The basic course of professional basic courses, direct contact with professional knowledge and skills, is a pre-requisite course for students to study professional courses, usually for professional majors. A relatively broad professional foundation is conducive to the professional learning of students and the need to adapt to social development and scientific and technological development after graduation. The professional core course, which is at the core of the curriculum system, has a part of the curriculum that generates power and forms an organic and intrinsic connection with other parts of the curriculum system. The goal is to cultivate professional core skills.

(2) Elective curriculum. Elective curriculums refer to the courses prescribed by the various disciplines or professional teaching plans of higher education institutions. Some elective curriculums are to introduce advanced science and technology and the latest scientific achievements; some elective curriculums are to expand the knowledge of students; and some elective curriculums are to meet the interests of students and develop a certain talent. Elective curriculums are divided into designated electives and optional electives. Designated electives are those in which students must take an elective in the field of a subject or a group of courses. Any elective curriculum is not subject to the above-mentioned regulations. In order to adapt to individual differences, students are taught in accordance with their aptitude and their expertise is exerted. Master's degree students mainly train senior professional talents, and the proportion of elective courses is relatively small.

(3) Practice links. Practice links is an effective way to consolidate theoretical knowledge and deepen understanding of theory. It is an important link for cultivating high-quality applied talents with innovative consciousness. It is an important platform for linking theory with practice and cultivating students to master scientific methods and improve their hands-on ability in order to improve student literacy and the formation of correct values. Logistics is an extremely operational industry. Masters in logistics management require not only comprehensive theoretical knowledge, but also practical operational techniques. Graduate students in logistics management must

participate in certain academic lectures, academic reports, social practice and social survey activities to strengthen the cultivation of self-learning ability, practical ability, expressive ability and writing ability.



Fig. 1. Curriculum system of master's degree graduate training for logistics management major

# 3. Brief Introduction of Curriculum System

The main courses of master's degree training in logistics management are briefly introduced as follows:

(1) Logistics system engineering. Logistics system engineering is a compulsory course for logistics management. This course takes the logistics system as the research object, applies the basic theories and methods of system engineering to the field of logistics, and studies the relationship between various subsystems and various components from the overall concept of logistics system. In order to find the best solution of the system, the overall effect of the logistics system is optimized.

Through this course, students will master the planning principles and analysis methods of the logistics system, and cultivate students' logistics system planning ability and industry application ability. To enable students to establish the idea of system engineering, to see logistics from a system perspective, to understand logistics from a system perspective, and to master the ability and skills of using system engineering methods to solve logistics management problems.

(2) Modern logistics management. Based on the latest theoretical and practical achievements in the development of modern logistics management, this course comprehensively and systematically analyzes theories, ideas, methods and techniques of modern logistics management, re-examines the essence of logistics from a new perspective, and timely tracks the development of international and domestic logistics management. The trend reveals the development law, characteristics and management mode of contemporary logistics management. It focuses on the basic concepts and connotations of modern logistics, and comprehensively analyzes the frontier theories and methods of modern logistics management from the perspectives of modern logistics management development, logistics management thinking, logistics management technology, logistics operation and logistics organization. Emphasis is placed on improving students' ability and level of applying basic theories and basic methods to solve practical problems.

(3) Logistics information system. The purpose of this course is to help students understand the status and role of logistics information, logistics information management and logistics information systems in logistics management activities. The main contents include the basic concepts and principles of logistics information system, the design process of logistics information technology and logistics information and evaluation of logistics information systems, as well as the important role of analysts and social factors in the realization and development of logistics information systems. Through the study of this course, students will be able to use the system perspective to abstract thinking ability, analyze problems and solve problems, and apply new technology capabilities, cultivate a good sense of information management, and enhance the consciousness of logistics information management.

(4) Logistics and supply chain management. Based on the theory of logistics, management and operation management, this course uses mathematical statistics, operations research methods and computer information processing as a means to study the logistics, information flow and capital flow of enterprises under the current global economic integration environment. Management and operation issues; the purpose is to make supply chain logistics operate reasonably, effectively organize logistics, capital flow and information flow activities in the supply chain, and effectively use information technology to form suppliers, manufacturers and distributors into a virtual whole. Information sharing and horizontal integration management will maximize the benefits of the entire supply chain. Through this course, students will have the basic knowledge and basic methods of supply chain management, establish global competition awareness, improve the performance of enterprises.

(5) Modeling and simulation of logistics system. The purpose of this course is to enable students to understand the basic theories and methods of system simulation, as well as the application of system simulation technology in logistics systems. Through the case analysis of logistics simulation system, students can understand the operation mode and process of logistics system in the system model. To enable students to truly understand the relationship between modern logistics and system simulation, and provide technical support for future work in the field of logistics. Through this course, we will master the basic theory and basic methods of system simulation. Through the combination of experimental teaching and on-the-spot observation, learn the theory and technology of learning, fully grasp the basic elements, models and steps of logistics system simulation, as well as the application and results analysis in the logistics system, and be skilled in applying this technology.

(6) Logistics operations management. This course defines the internal logic of the logistics operation management theory system, and it is carried out at three levels: strategy, tactics and

decision-making of logistics operation management. Through course study, master the relevant theoretical knowledge of logistics operation management, understand logistics operation management is a new type of integrated management that integrates information, inventory, warehouse and handling, and packaging activities, and provides users with the lowest possible cost. Best service. It is not only the management of real logistics, but also the management of intagible goods such as services. This course emphasizes the integrated management of logistics activities throughout the entire process of product value and implementation. It is also necessary to fully grasp the design of logistics organization, the establishment of rules and regulations, and the allocation of human resources.

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