

Technische Hochschule WILDAU



CAUCASUS UNIVERSITY



Graduate Program in  
Digital Logistics Management  
as Joint Master

<b>Program Name</b>	Digital Logistics Management
<b>Degree level</b>	Master's
<b>Type of the educational program</b>	Academic
<b>Instruction Language</b>	English
<b>Awarded Qualification, Code</b>	Master of Engineering Logistics (Joint Degree)
<b>Date of Program Approval</b>	xx. Juli 2020
<b>Academic head of the Program</b>	Prof. Dr. Frank Gillert, Professor at TH Wildau Prof. Dr. Giorgi ?????, Professor at Caucasus University
<b>General Information</b>	<p>The extra-occupational master „Digital Logistics Management“ in the graduate program is certified as a Master of Engineering Logistics. The content of the program is oriented on diverse requirements: Digitalisation of the economy, personal leadership, competences in project management, sustainable development in technical and environmental topics as well as the use of strategies in the area of logistics and supply chain management. All highly needed skills are claimed by the society, economy, industrial sector and political administration as competence requirements for the wider logistics sector.</p> <p>During the program development it was taken into the consideration the experience of foreign universities, having the degree programs in the similar filed; The recommendations of leading specialists and professors of the partner university (Wildau Technical University of Applied Sciences) obtained through the exchange visits of school administration and professors to Georgia. The feature of the program is the in-depth examination of a number of issues that have been selected in light of current and growing demands on Logistics Information Technology managers both in the Georgian labour market and internationally as well.</p> <p>The program curriculum has a technical focus and gives good understanding of business operations and strategy. Students will learn how IT must be aligned with the strategy of the organization. The teaching process of the program is based on modern methodologies of practice-oriented teaching taking into account the elements of scientific research. It focuses on in-depth learning of the disciplines enriched with the latest scientific or practical information management technologies. Compatible with modern international standards, the program enables the student to acquire deep theoretical knowledge in the content field and to master good practical skills. The thoughtful proportion of the theoretical and practical components of the program provides the basis for a graduate to pursue a career as a prospective Digital Logistics Mangement specialist, both in Georgia and abroad. It is divided in the stages “Engineering” , “General Mangement“ and „IT and Mangement“, which have a special view on digitilization in logistics.</p> <p>The study program is organized as a Joint Master of the both universities in English language which extends the audience of the program beyond Georgia. This leads in the experience of the last years to a higher number of</p>

successful absolvents of the international study program in comparison to the classical double degree program which were often focussed on a selected student group.  
Over all the study program is focussed on already professional proved younger management in the area of logistics. In ther area of southern Caucasus along the silk road a dynamic and sustainable sector of logistics industry is devolpping. The need of IT-competence and IT-skills for the integration of information tool in the logistics sector is obviously.

#### **Program Objectives**

The objectives of the program in Digital Logistics Management are to:

- Give students an opportunity to develop research skills in logistics engineering and management, deep knowledge of information technology as well as business management methodologies and thereby ensure their employment in leading positions according to their qualifications;
- Preprare up-to-date specialist in Digital Logistics Management with deep knowledge of logistics information technologies and good analysis of business environment and strategy, competence in innovative methods of management and analytical problem solving skills.

#### **Learning Outcomes**

Upon completion of the Master's degree program in Digital Logistics Management, the graduate will acquire the following competencies:

- Understand and share the role of logistics information technologies through the knowledge of the latest theories in information systems, management methodologies and international standards;
- Effectively plan the structure of the logistics technology in the organization, develop information technology service delivery strategies, capacity to develop and manage service delivery and service processes;
- Use methods to assess the strengths and weaknesses of an organizational environment, identify strategic risks, and use assessment tools. Ability to operate independently while planning and managing in a risky and dynamically changing environments;
- Work with modern tools and applications of logistics system planning and logistics process modelling;
- Adapt and apply modern business technologies in the organization, evaluate complex problems of logistics systems, analyze results and solve them in an innovative way;
- Outline the specific ethical problems inherent in the information technology field, and discuss logistical information security issues;
- Conduct scientific theoretical and practical research in the field of logistics information managemnt and apply modern methodology in scientific research;
- Calculate and evaluate environmental effects of logistical approaches.

#### **Material and Technical Resources**

For reaching the outcomes envisaged by the Program, the University infrastructure and material and technical resources unrestrictedly accessible for the students and the academic personnel, namely: Auditoria equipped with appropriate equipment and conference hall; Computer classes/labs, computers connected to the internet and intranet and specially tailored software guaranteeing smooth operation of learning/teaching process;

The material resources of the University ensure the goals set by the Program are reached and the planned, outcomes are realized:

Premises: the Program is conducted on the University premises where sanitary-hygiene and safety rules are adhered to. The University building fully complies with technical requirements established for Universities; the University has auditoria designed for lectures and practical classes fully equipped with appropriate equipment and devices (projectors, desks and chairs, whiteboards, etc.).

Library: - The University library has printed and electronic fund necessary for implementation of the Program accessible for the students and academic personnel. The library has an electronic catalogue. The library has a Reading Room equipped with appropriate property (chairs, desks, computers). The Reading Room allows students to use internet and international electronic resources.

Information-Communication Technologies – laboratories and computer equipment appropriate to Program meeting modern requirements, connected to the internet and accessible for the students, academic, invited and administrative personnel are available at the University. The computers are equipped with appropriate instruments/applications. The auditoria and computer classes are equipped with local net and internet.

The University operates an electronic system for organizing the educational process, which fosters academic process and makes monitoring of the students' academic performance possible at all times. The University makes the catalogue of the educational programs and the information on implementation of the educational programs and conducting the educational process public and accessible at all times.

Software applications - within the study program modern software applications and tools will be used which will be dedicated to plan and modeling transportation and logistics processes.

The mentioned resources are accessible for the University students, academic, invited and administrative personnel. All the interested persons are informed on the possibility of using these resources and are familiar with the rules and procedures of their utilization.

For the efficient implementation of the specific logistical tools a dedicated logistic laboratory will be used.

Therefore a draft of a logistic laboratory with diverse logistical software tools has been developed. Beside logistical software for location, transport and tour planning an important part will be ERP software like SAP which will be introduced by the German university partner.

**Program Curriculum**

The study program is divided into the stages “Engineering”, „General Management“ and „IT and Management“ which regard the content areas of Logistics and Digitalisation:

- Modules for the core competences of the students investigating advanced approaches and using tools and strategies of calculating and evaluating on a scientific level.
- Modules for the development of quantitative and qualitative competences for decision making in tactical and strategic situations.
- Modules for the knowledge and assessment of the technical development along the logistic Added Value Chains.
- Administration responsibility Semester I and II: Caucasus University
- Administration responsibility Semester III and IV: UOAS TH Wildau
- TH Wildau will be responsible for a facultative (optional) internship at industrial and logistical partners for students.

№	Digital Logistics Master	Year				ECTS
		I		II		
		ECTS				
		I Semester	II Semester	III Semester	IV Semester	
1.	Decision Support Systems in Logistics	6				6
2.	Presentation and Leadership Methods	6				6
3.	Financial Management	6				6
4.	Intermodal and Terminal Management	6				6
5.	Energy storage and Energetic Drive technologies	6				6
6.	ERP Systems and Applications		6			6
7.	Global Logistics using IT-Systems		6			6
8.	Traffic and Transport planning Systems		6			6
9.	Traffic evaluation and environmental Effects		6			6
10.	Road Rail Air Maritime shipping		6			6
11.	Advanced Logistics Network Operations - art.			6		6
12.	Business analytics and Digital Transformation			6		6
13.	Logistics Quality and Environmental Management			6		6
14.	Digital Warehouse Management			6		6
15.	Digital Risk and Change Management			6		6
16.	Master Thesis (24 ECTS Documentation + 6 ECTS Oral defense)				30	30
17.	Sum	30	30	30	30	120