Course title: Information Technology of Logistics	**Neptun code: GEALT411-a**
Course coordinator: Dr. Tamás Bányai, PhD, dr. habil., professor	
type of lesson and number of lessons: **lecture (2)**	
method of evaluation: colloquium	
curriculum location of the subject: (autumn/spring semester): autumn and spring	
pre-study conditions *(if any)*: -	

The task and purpose of the subject:

The aim of the course is to provide a comprehensive understanding of the structure and functioning of IT systems in logistics, focusing on their role in the design, control, management, and diagnostics of logistics operations. It covers essential topics such as data collection, coding, data transmission, and exchange, as well as the integration of modern technologies like EDI, e-commerce, and Industry 4.0 in logistics.

Course description:

Structure of IT systems in logistics. Information for design, control, management and diagnostics of logistics systems. Data collection. Coding. Data transmission and data exchange in logistics systems. EDI, e-commerce in logistics. Virtuality in logistics. Impact of telecommunication on logistics performance. Telecooperation. Industry 4.0 technologies.

Required literature:

1. Bányai, T.: Design of Material flow systems. 2021. ISBN 978-963-358-237-4
2. Bányai, T., Petrillo, A., De Felice, F.: Industry 4.0 - Impact on Intelligent Logistics and Manufacturing. London: IntechOpen, 144 p. (2020) ISBN: 9781789854534

Recommended literature:

1. Langford, J.: Logistics principles and applications, Sole Press, ISBN-10: 0-07-147224-X, 2007.