

MODULAR COURSES

in the discipline of *Civil engineering and transport*

No.	Subject	Course type - number of hours
1.	FEM applications in mechanics and engineering	W-20, L-10
2.	Mechanics of concrete and reinforced concrete	W-15
3.	Structural engineering of road pavement	W-15
4.	Continuum mechanics from a computer perspective	W-15, Lk-15
5.	Methods of multi-criteria comparative analysis	W-15
6.	Methodology of experimental testing of materials and structures	W-15
7.	Modeling and analysis of dynamic systems using stochastic hybrid methods	W-15
8.	Introduction to optimization	W-15
9.	Energy-efficient revitalization of historic buildings	W-15
10.	Structural stability and dynamics	W-15
11.	Statistics in experimental research	W-15, L-15
12.	Artificial neural networks (ANNs)	W-15
13.	Theory of experimentation	W-30
14.	Reliability and risk theory in engineering applications	W-15, P-15
15.	Plasticity theory and rheology	W-15
16.	Research and analysis methods in traffic engineering	W-18, L-12
17.	Transport system mesomodels	W-7, L-8
18.	Neural networks and genetic algorithms in transportation issues	W-15
19.	Simulation research technique in transportation and logistics	W-15, L-15
20.	Selected problems of mobility management	W-15
21.	Object-oriented models of transportation and logistics systems	W-15, L-15

W - lecture (L), L - laboratory class (Lc), Lk - computer class (Cc), P - project (P)