

Course description

Code: 2Y009	Abbr: TS_E	Title: Transportation Systems	
Bc. degree programme in: Transport machines and equipment, Vehicles and Engines Environmental Technology For specialisation in:			
Lecturer:	Doc. Ing. Juraj Grenčík, PhD., Department of transport and handling machines		
Semester: summer	Number of hours: <i>Lectures - Seminars - Laboratory work</i>		ECTS Credits:
Recommended: 2	Per week: 2-0-0	Total per semester: 39-0-0	2
Prerequisites:			
Assessment: written and oral examinations			
Aims and objectives: Obtaining a general overview on transportation systems and technical means for land transportation in connection to transport infrastructure and functional requirements asked of them; technical means for combined transportation and for material handling.			
Course content: Importance of passenger and cargo transportation and its classification. History and development of transport systems – infrastructure and means of transport of rail, road, water and air transport and unconventional transport means. Basic theory of design of road and rail vehicles. Classification and technical characteristics of lifting and handling technology and technical means for combined transport. Trends in the development of technical means in transport and material handling. Basics of transportation systems operation.			
Recommended texts: Kalinčák, D. - Grenčík, J.: Dopravné systémy. ŽU v Žiline, 2006. ISBN 80-8070-530-5. Adámek, W. - Jelínek, V. - Lata, M. - Kalinčák, D.: Speciální vozidla a stroje pro práci na železničních tratích. Univerzita Pardubice 1998. ISBN 80-7194-126-3. Müller, J.: Mobilní prostředky a trakční zařízení I. VŠB – TU Ostrava, 1998. ISBN 80-7078-452-0. Müller, J. a kol.: Mobilní prostředky a trakční zařízení II. VŠB – TU Ostrava, 1999. ISBN 80-7078-591-8. Gajdoš, J.: Manipulácia s materiálom. ALFA Bratislava 1990. ISBN 80-05-00510-5.			
Note:		Date of the last revision: 05.12.2022	