

Information sheet for the course
Mobile technology

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of special technology</i>	
Course unit code: <i>ŠST/B/1-63/d</i>	Course unit title: <i>Mobile technology</i>
Type of course unit: <i>compulsory</i>	
Planned types, learning activities and teaching methods: <i>2 hours of lectures per week, 2 hours laboratory exercises per week</i>	
Number of credits: 5	
Recommended semester: <i>5th semester in the 3rd year of study /full-time / 7th semester in the 4th year of study /part-time /</i>	
Degree of study: <i>I.</i>	
Course prerequisites: <i>none</i>	
Assessment methods: <i>100% attendance and active creative work on laboratory exercises, the attainment of goals laboratory practice, mastery of technical terminology, min. 60% attendance at lectures, semester work properly. Twice during the semester written test. The ongoing evaluation is needed to get 40 points. Final assessment: test in a written test with emphasis on theoretical knowledge of the subject and the support of the oral response, which is a verified deal activity description functional part of mobile technology. Of the 80 points is required to evaluate the minimum obtained: (E) - 55 points, (D) - 60 points (C) - 65 points (B) - 70 points (A) - 75 points.</i>	
Learning outcomes of the course unit: <i>The student has knowledge of cross-department focusing on application usage at a level corresponding to the current state of knowledge, has extensive knowledge of the structure and operation of the functional components of mobile technology.</i>	
Course contents: <i>The definition of mobile technology tracked and wheeled chassis. The characteristics, distribution, basic and conceptual design of mobile technology. The system of forces and moments acting on the mobile technology. Definition, classification, conceptual design and principle of operation of reciprocating internal combustion engines. Fixed and movable parts of piston internal combustion engines. Purpose of the main activity and cooling, lubricating and fuel system reciprocating internal combustion engines. Non-conventional internal combustion engines and drives. Gears of mobile technology, characteristics, purpose, main parts, construction and operation of mechanical clutches, transmissions, gearboxes and additional rozvodoviek mobile technology, coupling and shafts. Characteristics of a core group of chassis. Purpose, distribution, main parts, construction and operation of axles, wheels and tires, suspension and damping of oscillations, control, power steering, braking, frames and bodies. Arrangements chassis tracked vehicles. Electrical equipment of mobile technology.</i>	
Recommended of required reading: <i>ELIÁŠ, J.: Mobilná technika I [skriptá]-1.vyd.-Trenčín:TnUAD,2013.- 308 s. - ISBN 978-80-8075-608-6.</i> <i>ELIÁŠ, J.: Mobilná technika II [skriptá]-1.vyd Trenčín:TnUAD,2013.-308 s. - ISBN 978-80-8075-609-3.</i> <i>SLOBODA, A.-FERENCEY, V.- HLAVŇA, V.- TKÁČ, Z.: Konštrukcia kolesových a pásových vozidiel. [učebnica] - 1.vyd. TU Košice., Sjf TU Košice, 2008. - 558 s. ISBN 978-80-89232-28-4.</i> <i>ELIÁŠ, J.: Energetické stroje v mobilnej technike.-1.vyd.-Trenčín: TnUAD, 2011.-224 s. ISBN 978-80-8075-507-2</i> <i>ELIÁŠ, J.: Mobilná technika na kolesových podvozkoch [skriptá]: charakteristiky, technické údaje a popis/. - 1.vyd. - Trenčín: TnU AD, 2002. - 338 s. - ISBN 80-88914-62-0.</i> <i>ELIÁŠ, J.: Špeciálna mobilná technika na pásových podvozkoch [skriptá]: Charakteristiky, technické údaje a popis/- 1.vyd. - Trenčín: TnUAD FŠT, 2002. - 266 s. - ISBN 80-88914-63-9.</i>	
Language: <i>Slovak</i>	
Remarks:	

Evaluation history:*Total number of students being evaluated: 476*

A	B	C	D	E	FX
3,57	18,49	29,20	30,04	16,18	2,52

Lecturers: *prof. Ing. Peter Droppa, PhD., Ing. Jozef Eliáš, PhD. - lecturers,
Ing. Štefan, Timár, PhD. - instructor*

Last modification: *15.4.2014*

Supervisor: *prof. Ing. Jiří Balla, CSc., guarantee of the study program Special Mechanical Engineering Technology*