

Information sheet for the course Management of technical systems

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| University: <i>Alexander Dubček University of Trenčín</i> | | | | | |
| Faculty: <i>Faculty of special technology</i> | | | | | |
| Course unit code: <i>UŠMT/I/1-27/d</i> | | | Course unit title: <i>Management of technical systems</i> | | |
| Type of course unit: <i>compulsory</i> | | | | | |
| Planned types, learning activities and teaching methods: <i>Lecture 1 hours per week, 1 hours per week of exercise</i> | | | | | |
| Number of credits: 2 | | | | | |
| Recommended semester: <i>3st semester in the 2nd year (full-time)</i> <i>3th semester in the 2nd year (part-time)</i> | | | | | |
| Degree of study: <i>II. (engineer)</i> | | | | | |
| Course prerequisites: <i>UŠMT/I/1-47/d Measurement and testing of technology, UŠMT/I/1-66/d Construction of special mobile technique I.</i> | | | | | |
| Assessment methods: <i>Continuous assessment: 100% attendance and active creative work on laboratory exercises, the attainment of goals of laboratory practice, mastery of technical terminology, min. 60% attendance at lectures. Twice during the semester written test. The ongoing evaluation is necessary to obtain min. 30 points. Final assessment: test in a written test with emphasis on theoretical knowledge of the subject and the support of the oral response. From the maximum of 30 points, it is required to obtain: (E) - 20 points, (D) - 22 points (C) - 24 points (B) - 26 points (A) - 28 points.</i> | | | | | |
| Learning outcomes of the course unit: <i>The student can analyze factual knowledge, principles and processes, general concepts in a broad context of work and management of technical systems, the definition of system, definition of systems with the specification on the technical systems, can address the issue of managing technical systems in terms of the definition of the technical system of technical analysis system and its functions, synthesis and its draft technical resources management system. It must be able to define the anticipated role and governance structure of the technical system concretized by the practice of the operation and maintenance of special mobile technique.</i> | | | | | |
| Course contents: <i>Definition of the system. Specifics of management. Characteristics and behavior of systems approach in the mathematical and physical description and solutions. The structure of the system. Changes in behavior of systems. Classification systems. The dynamic system continuous and discrete. Cybernetic system. Properties of systems. Modeling, identification and simulation of technical systems with pre-defined for the operation and maintenance of special mobile technique. Optimization of technical systems and adaptive systems. Experimental methods of identification systems with application maintenance of special mobile equipment</i> | | | | | |
| Recommended of required reading: <i>BORŠČ, M. - HURTA, F. - VITKO, A.: Systémy automatického riadenia. Trenčianska univerzita v Trenčine, 2001. ISBN 80-88914-48-5.</i> <i>FREIWALD, A.: Diagnostika a opravy automobilov 1, EDIAS, 2005, 277 strán, ISBN 80-8070-267-5</i> <i>BALÁTĚ, J.: Automatické řízení. BEN Praha, 2004, ISBN 80-7300-148-9.</i> | | | | | |
| Language: <i>Slovak</i> | | | | | |
| Remarks: <i>The subject is provided in the summer semester in the 2nd year of full-time study. The subject is required.</i> | | | | | |
| Evaluation history: <i>Total number of students being evaluated: 0</i> | | | | | |
| A | B | C | D | E | FX |
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| Lecturers: <i>doc. Ing. Peter Lipták, CSc.</i> |
| Last modification: <i>15.4.2014</i> |
| Supervisor: <i>prof. Ing. Alexej Chovanec, CSc., guarantee of the study program „Maintenance and Repair of Special Mobile Technology“.</i> |