Study program / course: Mechanical Engineering

Type and level of study: Bachelor academic studies

Course: MAINTENANCE OF MOTOR VEHICLES AND ENGINES 1

Lecturers: Krstic V.Bozidar

Status of course: Obligatory for module M8, VI semester

Number of ECTS: 6
Precondition: none

# The objective of course

Make students closer themes such as: Maintenance process of motor vehicles and engines; Reasons for making motor vehicles and engines broken; Maintenance system of motor vehicles and engines (Characteristics, Maintenance methods, Maintenance concepts, Maintenance organization, Maintenance technology); Making maintenance project for motor vehicles and engines; Integral system support and using computer technology for maintenance of motor vehicles and engines; Manage with spare parts of motor vehicles and engines during maintenance process; Kind of doing analysis and giving opinion for maintenance system of motor vehicles and engines; Making project for motor vehicles and engines from maintenance aspect.

#### The outcome of course

Analyzing reasons for making motor vehicles and engines broken; Giving definition for maintenance system of motor vehicles and engines (Characteristics, Maintenance methods, Maintenance concepts, Maintenance organization, Maintenance technology); Making maintenance project for motor vehicles and engines; Giving definition for integral system support and using computer technology for maintenance of motor vehicles and engines; Manage with spare parts of motor vehicles and engines during maintenance process; Doing analysis and giving opinion for maintenance system of motor vehicles and engines; Making project for motor vehicles and engines from maintenance aspect.

### **Syllabus**

#### Theoretical study

- 1. Primary concept and definitions; subject and goal.
- 2. Maintenance engineer and safety function of motor vehicles and engines
- 3. Maintenance process. Condition of motor vehicles and engines, periodical condition, models of maintenance process for motor vehicles and engines.
- 5. Changing condition of motor vehicles and engines and their reasons

Changing conditions caused by their weaknesses. Changing conditions caused by wrong manage. Changing condition caused by corrosion, abrasion and lassitude. Changing condition caused by fuel, grease and other technical fluids. Changing condition caused by maintenance. Giving definition of changing condition motor vehicles and engines.

8. Maintenance system of motor vehicles and engines.

System characteristics of maintenance motor vehicles and engines.

Maintenance method for motor vehicles and engines

Maintenance concept of motor vehicles and engines

Maintenance organization of motor vehicles and engines

Maintenance technology of motor vehicles and engines.

Making system project for maintenance of motor vehicles and engines.

Logistics, integral system support and using computer technology for maintenance of motor vehicles and engines

Manage with spare parts during maintenance of motor vehicles and engines.

Analysis and rating maintenance system of motor vehicles and engines.

9.Making project for motor vehicles and engines from maintenance aspect

## **Practical Studies:**

Student has commitment to be present on practical part of subject and to finish one homework.

# **Recommended reading**

1. B. Krstic: Serviceability of motor vehicles and engines, University of Mechanical Engineering, Kragujevac, 1997.

2. D. Zelenovic, J. Todorovic: Reliability theory of technical systems, University of technical science, Novi Sad, 2004

The number of hours of active teaching:

Theory: 3 Practical classes: Other forms of teaching: 0.6 Other study: 1.4 Other forms of teaching: 0.6 Other study: 1.4 Other classes: 1.4 Other study: 1.4 Other study:

#### Methods of teaching

Course consist two parts: theoretical and practical. Getting marks is very easy: all the student has to do is to past two tests during semester and one written work, so called in Serbia, "seminars work". Base on that, student can get min 30points and max 70points. The final, speak test, is obligate. There is another way of getting mark; et the end of the semester, student can show his knowledge on the written and speak test, in front of professor.

Evaluation of knowledge	çе
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Evaluation of Milowieuge				
Pre-final exam obligations	points	Final exam	points	
Activities during the classes:	5	oral exam	30	
Tests:	45			
Seminar(s):	20			