SYLLABUS

1. Course title:

Reverse engineering

2. Code:

Do not fill up

3. Cycle of study:

1

4. ECTS credits:

3

5. Type of course:

○ Mandatory ◉ Elective

6. Prerequisites:

There is no

7. Class restrictions:

There is no

8. Duration / semester:

1 6

9. Weekly contact hours:

9.1. Lectures: 2

9.2. Seminars: 0

9.3. Laboratory/Practice classes: 1

10. Faculty:

Faculty of mechanical engineering

11. Department/study program:

Production Mechanical Engineering

12. Lecturer:

Slađan Lovrić, assistant professor

13. Lecturer's e-mail:

sladjan.lovric@untz.ba

14. Web site:

www.mf.untz.ba

15. Course aims:

The basic objective of the course "Reverse Engineering" is to understand the significance, role and ability of the reversible engineering system to apply in the contemporary approach to product development and to master the necessary theoretical and practical skills in the field of subject studies.

16. Learning outcomes:

At the end of the semester, successful students, who continued to perform their duties throughout the academic year, will be trained to: understand the roles of the system of reversible engineering, understand the role and significance of 3D digitization in the process of product development, adopt the possibilities of application of reversible engineering system, independently execute 3D digitization of physical objects and processing of collected data, perform 3D digitization for CAD inspections, self-perform CAD inspection And analyze the results of the inspection.

17. Course content:

The concept of integral product development, The notion of 3D digilization, Notion and development of reversible engineering systems, Pasive methods of 3D digitalization, Hardware and software components of system of passive 3D digitization, Active methods of 3D digitalization, Hardware and software components of system of active 3D digitization, Modes record date in RE systems, Copyright and Design Rights, The notion of industrial CAD inspection, 3D digitalization in industrial inpection, Reverse engineering and rapid prototyping.

18. Learning methods:

Lectures, laboratory exercises, tests, seminar / graphic works and consultations

19. Assessment methods:

Lectures - theoretical lectures, active two-way communication student professor, mandatory attendance of students;
• Laboratory exercises - problem solving with topics related to subject matter, active two-way communication student - assistant;
Tests from theory - solving tests;
• Seminar / Graphic Works - independent student work on solving the problem;
• Consultations - clarify possible ambiguities related to the topic of the subject being studied.

20. Assessment components:

To get the student to get a signature in the index must be present at more than 70% of lectures and exercises.

Examination of 10 points, Theory tests (2 tests per 10 points) 20, Seminar work 15 points, Examination on laboratory exercises 5 points, Laboratory exercise report 15, Final exam (oral) 35,

00 to 54 points 5 (Five) ,
55 to 63 points 6 (six),
64 to 72 points 7 (seven),
73 to 81 points (Eight),
82-90 = 9, (Nine)
90-100 = 10 (Ten)

21. Required reading list:

1. Ulrich, K.T., Eppinger, S.D.: Product Design and Development; McGraw-Hill; 2004.
2. T. Wohlers: "The Rapid Prototyping/Manufacturing Industry"2008.

22. Web sources:

www.mf.untz.ba

23. Applicable starting from the academic year:

2015/16

24. Adopted in the Faculty/Academy session:

01.06.2015