SYLLABUS

1. Course title:

Process measurement technique

2. Code:

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3. Cycle of study:

1

4. ECTS credits:

5

5. Type of course:

(•) Mandatory ( ) Elective

6. Prerequisites:

7. Class restrictions:

(max. 150 characters)

8. Duration / semester:

1 3

9. Weekly contact hours:

9.1. Lectures:	3
9.2. Seminars:	0
9.3. Laboratory/Practice classes:	0

10. Faculty:

Faculty of Technology

11. Department/study program:

Chemical Engineering and Technologies

12. Lecturer:

prof. dr. sc. Zehrudin Osmanović

13. Lecturer's e-mail:

zehrudin.osmanovic@untz.ba

14. Web site:

untz.ba

15. Course aims:

At the end of the semester successful students who continued to perform their duties during the teaching period will be trained to:
- knowledge of regulatory measures related to industry measurement
- measurable measurement of the industry
- measurement in the industry.

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:
- find the literature necessary to measuring equipment in the process industry,
- solve problems of different complexity, both individually and teamly,
- knowledge of regulatory measures related to industry measurement

17. Course content:

Introduction to engineering measurements in practice. Planning and organization of measurements. International System of Units. Experiment planning. Characteristics of measuring instruments and processes. Measuring Instruments and Installations. Standards. Measures and measures. Measuring Regulatory Systems. Measuring places. Repeatability and Rejuvenation Measurement. Statistical analysis of measurement results. Principles of Instrument Construction. Passive and active experiments. Measuring Sensor, Transducer and Meter. Characteristics of the transducer, transfer function. Reliability. Calibrate. Traceability. Measurement errors and measurement uncertainty. Measurement of weight and weight. Measurement of temperature and pressure. Measurement of levels, flows, concentrations etc. Air humidity, wind velocity, etc. Meteorological instruments. Measurement of ionizing and nonionizing radiation. Legal Metrology. Measuring and testing laboratories.

18. Learning methods:

-lectures,
-presentation,
-individual and team projects,
-visits industrial plants.

19. Assessment methods:

Part 1.

Test No.1	30 points
Test No.2	30 points
Teaching activity	5 points
Individual Project	5 points
Team Project	5 points
Activity on exercises	5 points

Part 2.

Final exam	20 points

20. Assessment components:

Tests on the pre-exam should have at least 50% points. Presence of lectures is compulsory.

Score	points
0 - 53	5
54 - 63	6
64 - 73	7
74 - 83	8
84 - 93	9
94 - 100	10

21. Required reading list:

1.M.Mitrović, S.Končar-Đurđević, Merni instrumenti i elementi regulacije,TMF Fakultet , Univerzitet u Beogradu 1978. godine.

22. Web sources:

23. Applicable starting from the academic year:

2015-2016

24. Adopted in the Faculty/Academy session:

(max. 10 char.)