SYLLABUS

1. Course title:

Optimization of drilling parameters

2. Code:

LBEMODP

3. Cycle of study:

2

4. ECTS credits:

7

5. Type of course:

(•) Mandatory ( ) Elective

6. Prerequisites:

No

7. Class restrictions:

No

8. Duration / semester:

1 1

9. Weekly contact hours:

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

10. Faculty:

FMGCE Tuzla

11. Department/study program:

Well Production of Mineral Resources (WPMR) / Well Engineering (WE)

12. Lecturer:

Sanel Nuhanovic, Associate Professor

13. Lecturer's e-mail:

sanel.nuhanovic@untz.ba

14. Web site:

rggf.untz.ba

15. Course aims:

- familiar students with the basics methods for optimization of drilling and production parameters
- students will be able to understand, analyze and use a knowledge for practical problems solutions
- increase of verbal and written students communications skills
- provide a continuous work of students during the course time
- achieve a mutual communications between students and professors

16. Learning outcomes:

The students will be trained for:
- successful examination
- understanding of contents of this course for practical situations and problems solutions
- professional literature using for practical problems solutions
- individual and/or team problems solving

17. Course content:

- Selection of drilling rig
- Drilling optimization work flow; People and processes
- Drilling equipment optimization
- Motor and bits optimization
- Optimization of drilling variables
- Casing optimization
- Optimization of cementing works
- Drilling time optimization
- Drilling costs optimization
- Mathematical models of drilling optimization
- Optimization of oil and gas production methods

18. Learning methods:

Different teaching methods are used in the course for the purpose of efficient teaching and achievement of expected course goals and student competencies at the end of the semester:
- lectures,
- knowledge tests,
- final oral exam.

19. Assessment methods:

Student evaluation methods include the following criteria:
1. Attendance and activity at lectures
2. Tests
3. Final oral part of the exam.

Based on the above facts, at the end of the course, the professor will form a final final grade by scoring individual activities.

20. Assessment components:

The total number of points is obtained by summing the maximum possible number of points from all activities during the semester:attendance and activity in class, written/oral exam. It is scored as follows:
-Attendance and activity in class: 10 points -Tests: 40 points-Pre-exam activities 50 points -Final oral exam 50 points - Total 100 points
The student's final success after all the foreseen forms of knowledge assessment is evaluated and graded using a system comparable to the ECTS grading scale as follows:
a) 10 (A) - exceptional success with no errors or with minor errors, carries 95-100 points;
b) 9 (B) - above average, with some errors, carries 85-94 points;
c) 8 (C) - average, with noticeable errors, carries 75-84 points;
d) 7 (D) - generally good, but with significant shortcomings, carries 65-74 points;
e) 6 (E) - meets the minimum criteria, carries 55-64 points;
f) 5 (F, FX) - does not meet the minimum criteria, less than 55 points.

21. Required reading list:

- Bizjak, R.: ''Tehnologija bušenja sa projektovanjem', DIT NIS-Naftagas, Novi sad, 2004.
- Matanovic, D.: ''Tehnika izrade bušotina - priručnik sa primjerima'', RGNF Sveučilište u Zagrebu, Zagreb, 2007.

22. Web sources:

23. Applicable starting from the academic year:

2025/2026.

24. Adopted in the Faculty/Academy session:

19.06.2025.