SYLLABUS

1. Course title:

ENGINEERING GRAPHICS AND CAD

2. Code:

LRUDICAD

3. Cycle of study:

1

4. ECTS credits:

4

5. Type of course:

Elective

6. Prerequisites:

No

7. Class restrictions:

No

8. Duration / semester(s):

1 6

9. Weekly contact hours and student workload:

	Semester (1)	Semester (2)	(for two-semester courses)	Workload: (hours)	
9.1. Lectures	2		Classes:	33,75	
9.2. Seminars	0		Individual work:	68,67	
9.3. Laboratory / Practice classes	1		In total:	102,42	

10. Faculty:

Mining, Geology and Civil Engineering

11. Department/study program:

Mining Engineering

12. Lecturer:

PhD Adila Nurić Full Professor

13. Course aims:

The course goals are to:
- Provide students with fundamental theoretical and practical knowledge in graphic communication.
- Enable students to independently apply graphic methods, devices, and systems during their studies.

• Consider the knowledge from this field as part of basic engineering literacy.
• Improve students' intellectual skills in applying acquired knowledge to solve various problems.
• Enhance students' communication skills.
• Improve students' skills related to continuous work throughout the academic year.

14. Learning outcomes:

By the end of the semester/course, successful students, who have consistently completed their obligations throughout the entire teaching period, will be able to:
• Use available literature to solve various problems related to this course.
• Solve problems of varying complexity, both individually and in teams, and present them.
• Understand the significance of this course for subsequent related courses.
• Pass the final exam in the first available exam sessions at the end of the semester.

15. Course content:

Introductory Session: Presentation of the course syllabus for Engineering Graphics and CAD (literature, course content; course objectives; expected competencies by the end of the course; teaching and evaluation methods; additional course information; rights and obligations of course participants; etc.).
Introduction; basic concepts, standards, and types of technical drawings.
Methods of representing objects in drawings; orthogonal projection.
Axonometric projection of objects.
AutoCAD; introduction to AutoCAD; coordinate systems.
Drawing lines; drawing circles.
Zooming; drawing arcs; precisely selecting points on objects.
Drawing ellipses.
Commands for moving, copying, and deleting objects; commands for selection.
Line types, thickness, and color; adding hatch patterns.
Adding text to drawings; dimensioning; printing drawings.

16. Learning methods:

For the efficient delivery of the course and the achievement of the expected course objectives and student competencies by the end of the semester, the following teaching methods are used:
• Lectures
• Laboratory exercises
• Individual assignments
• Tests

17. Assessment methods:

To assess the acquired knowledge in the course, the following methods are used:
• Written (computer-based) methods
• Oral methods
The written methods include written knowledge checks through tests or mini-exams after certain sections of the syllabus (task completion on a computer), while the oral methods involve short discussions on key topics related to the subject matter.

18. Assessment components:

SYSTEM OF GRADING AND EVALUATION
• Test I: 40 points
• Activity: 10 points
• Pre-exam activities: 50 points
• Final exam: 50 points
Total points: 100
The final success of the student, after all forms of knowledge assessment, is evaluated and graded according to a system comparable to the ECTS grading scale as follows:
a) 10 (A) - Excellent success with no or minimal errors, awarded 95-100 points;
b) 9 (B) - Above average, with some errors, awarded 85-94 points;
c) 8 (C) - Average, with noticeable errors, awarded 75-84 points;
d) 7 (D) - Generally good, but with significant shortcomings, awarded 65-74 points;
e) 6 (E) - Meets the minimum criteria, awarded 54-64 points;
f) 5 (F, FX) - Does not meet the minimum criteria, awarded less than 54 points.

19. Mandatory reading list:

1. H. Bećirović: Nacrtna geometrija sa tehničkim crtanjem i zbirkom zadataka, Tuzla 2000. Godine
2. AutoCad 14

20. Additional reading list:

21. Web sources:

22. Applicable from the academic year:

2025/26.

23. Adopted in the Faculty/Academy session: