**Course program for the first, second and third degree of studies**

1. **Course title**: Engineering graphics
2. **Code**: 157
3. **Study group(s)**: All groups
4. **The organizer of the study program** (unit, institute, department): Faculty of Mechanical Engineering - Skopje, Ss. Cyril and Methodius University in Skopje
5. **Level (first, second, third)**: First
6. **Academic year / semester**: I/1
7. **Number of ECTS credits**: 6
8. **Instructor**: Prof. Risto Tashevski, PhD
9. **Prerequisites**: none
10. **Course objectives (competences)**: 
    - Presentation of objects in a 3D coordinate system and orthogonal projections, defining of visual and 3D presentation of the shape of the object, preparation of technical drawings and technical documentation.
11. **Course content**: 
    - Basic principles of the projection, 
    - geometric operations required to determination of sections of the solid objects and surfaces, 
    - 3D presentation of objects, 
    - technical drawing and technical documentation.
12. **Study methods**: interactive lectures, auditory practice and/or laboratory practice, self running and/or team work projects, self learning
13. **Total hours**: 180
14. **Hours allocation per activity**: 
    - Lectures/Lab: 
      - Teaching lectures: 15 x 2 = 30 hours 
      - Practice, seminars, team work: 15 x 3 = 45 hours 
    - Project Work/Assignments: 
      - Project assignments: 0 hours 
      - Selfrunning assignments: 105 hours 
      - Home studying: 0 hours 
15. **Points/Marks**: 
    - Tests: 30 + 50 = 80 points 
    - Projects: 0 points 
    - Attendance: 20 points 
16. **Grading scale**: 
    - Under 50: 5 (five) (F) 
    - 51 - 60 points: 6 (six) (E) 
    - 61 - 70 points: 7 (seven) (D) 
    - 71 - 80 points: 8 (eight) (C) 
    - 81 - 90 points: 9 (nine) (B) 
    - 91 - 100 points: 10 (ten) (A) 
17. **Prerequisites for taking the final exam**: Realized activities 15.2. and 16.2.
18. **Language of Instruction**: Macedonian language
19. **Course evaluation**: Mechanisms of internal evaluation and questionnaire
20. **Textbooks**
    
<pre><code>| No. | Author     | Title                  | Publisher  | Year |
|-----|------------|------------------------|------------|------|
| 1.  | R. Tashevski | Engineering graphics   | Alfa 94, Skopje | 2008 |
| 2.  |            |                        |            |      |
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Supplemental Instruction Materials