

**Course title: Computer graphics (CAD tools)**

Course code	Course status	Semester	Number of ECTS credits	Lecture hours
132003151	Mandatory	III	6	3+0+2

**Study program:**

Basic applied studies, ELECTRICAL ENGINEERING, study program: Computer engineering (studies last for 6 semesters, 180 ECTS credits).

**Prerequisites:** No prerequisites required.

**Course aims:**

Through this course students are introduced with current computer graphics issues and its application in technical documentation preparation, as well as in other areas of human activities.

**Teacher(s) and assistant(s):**

Ph.D. Djordje Jovanović – teacher, Mr Vladan Radulović - assistant, Mr Saša Mujović – assistant, Mr Zoran Miljanić – assistant.

**Teaching method:**

Lectures and laboratory exercises organized in computer classroom/laboratory. Studying and individual doing home exercises. Consultations.

**Course synopsis:**

Preliminary weeks	Preparation and semester enrolment.
I week	Basic AutoCAD possibilities.
II week	Coordinate system. Basic graphical entities.
III week	Precise point selection. Coordinate filters.
IV week	Working regime. Complex graphical entities.
V week	Operations with graphical entities. Node points.
VI week	<b>First test</b>
VII week	<b>Free week</b>
VIII week	Characteristics of graphical entities. Layers.
IX week	Blocks. Groups. Textual style.
X week	Templates. Hatch.
XI week	Dimensioning style.
XII week	<b>Second test</b>
XIII week	Paper range.
XIV week	Proportion adjusting. Details drawing.
XV week	Printing. Input-output formats.
XVI week	<b>Final exam</b>
Final week	Administrative procedures.
XVIII-XXI week	Additional lessons, correction of the final exam and administrative procedures.

**STUDENT WORKLOAD**

per week	per semester
6 credits x 40/30 = 8 hours	<b>Teaching and the final exam:</b> (8 h) x 16 = 128 h
<b>Working hours structure:</b> 3 hours for teaching 2 hours for laboratory exercises 3 hours for individual work, including consultations.	<b>Necessary preparation</b> (before semester): 2 x (8 h) = 16 h
	<b>Total work hours for the course:</b> 6 x 30 hours = 180 hours
	<b>Additional hours</b> for preparing correction of the final exam, including the exam taking: up to 36 hours (the rest of the time from the first two items, up to the total work hours for the course, 180 hours).
	<b>Work hours structure:</b> 128 h (lectures) + 16 h (preparation) + 36 hours (additional work)

Lessons attendance is mandatory for students, as well as doing home and laboratory exercises and both tests.

**Literature:** Osnove AutoCAD-a 2004, CET, Beograd;  
G. Omura, AutoCAD 2004, Mikro knjiga, Beograd.

**The forms of knowledge testing and grading:**

- 4 home exercises carry 10 points total (2.5 points each).
- Each test carries 20 points (40 points total).
- Final exam carries 50 points.

Student gets the passing grade by collecting 51 points at least.

**Special remarks for the course:** The teaching is organized for student groups of about 40 students, and laboratory exercises for student groups with 10 students.

**Teacher(s) who provided the information:** Ph.D. Djordje Jovanović

**Remark:**