

Course title: Computer hardware
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Course code	Course status	Semester	Number of ECTS credits	Lecture hours
132003122	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:

Students are introduced with hardware of personal computers, cause-effect relationship between elements, future trends in the area of computer hardware as well as usual malfunctions.

Teacher(s) and assistant(s):

Ph.D. Nikša Tadić, assistant professor – teacher, Mr Milutin Radonjić, assistant, Dipl. ing. Željko Vujović – assistant

Teaching method:

Lectures and laboratory exercises. Studying and individual doing home exercises. Consultations.

Course synopsis:

Preliminary weeks	Preparation and semester enrolment.
I week	History of the development of analogue and digital computers
II week	Central processor unit
III week	Motherboard
IV week	Buses and ports
V week	First test
VI week	Electronic memories
VII week	Free week
VIII week	Optoelectronic memories
IX week	Magnetic memories
X week	Video cards and monitors
XI week	Second test
XII week	Keyboard and mouse
XIII week	Power supply
XIV week	Usual malfunctions
XV week	Future trends in digital computers development
XVI week	Final exam
Final week	Administrative procedures.
XVIII-XXI week	Additional lessons, correction of the final exam and administrative procedures.

STUDENT WORKLOAD

<u>per week</u>	<u>per semester</u>
6 credits x 40/30 = 8 hours	Teaching and the final exam: (8 h) x 16 = 128 h
Working hours structure:	Necessary preparation (before semester): 2 x (8 h) = 16 h
3 hours for teaching	Total work hours for the course: 6 x 30 hours = 180 hours
2 hours for laboratory exercises	Additional hours 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).
3 hours for individual work, including consultations.	Work hours structure:
	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: Scott Mueller, Nadogradnja i popravka PC-a, 14. izdanje, CET, Beograd, 2003.

The forms of knowledge testing and grading:

- 5 home exercises carry 5 points total.
- Laboratory exercises tests carry 5 points.
- Each test carries 20 points (40 points total).
- Final exam carries 50 points.

Student gets the passing grade by collecting 50 points at least.

Special remarks for the course: Laboratory exercises are organized for student groups with 3 students.

Teacher(s) who provided the information: Ph.D. Nikša Tadić, assistant prof.

Remark: