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| 1. | Course title | Computer Components | | |
| 2. | Course code | | | |
| 3. | Study program | ICE, CSE, NT, AET, CE | | |
| 4. | Unit offering the course | FCSE | | |
| 5. | Undergraduate/postgraduate/PhD | Undergraduate | | |
| 6. | Year/semester 1 / summer / elective | 7. ECTS: 6 | | |
| 8. | Teacher(s) | Prof. Kosta Mitreski, Assoc. Prof. Dimitar Trajanov, Asst. Prof. Sonja Filiposka, Assist. Prof. Igor Mishkovski | | |
| 9. | Course prerequisites | None | | |
| 10. | Goals (competences): Познавање на структурата на компјутерските системи, хардверските компоненти, поврзувањето и начинот на работа, карактеристиките и стандардите што се употребуваат Familiarizing with the structure of the computer systems, their hardware components, and connections between the components, organization and functions. Hardware components characteristic and used standards. | | | |
| 11. | Course content: Introduction to the computer systems structure. Computer systems components. Processor and mother boards families. Chipsets and buses. Memory, I/O ports, housing. Internal I/O ports: serial ports, parallel ports, adapters. Mass data storage mediums. Computer peripherals: display devices, keyboards, monitors, printers, scanners, digital cameras, modems, etc. Basics of using software and software tools, popular hardware monitoring software tools. Networking devices. Managed and unmanaged devices. Connecting different devices. Installing and administration of an operating system, attaching external devices and driver installations. | | | |
| 12. | Teaching methods: Lectures supported by slide presentations, interactive lectures, trainings (using lab equipment and software packages), team work, case studies, invited guests and lectures, individual practical assignments presentations, seminar paper, e-learning (forums, consultations). | | | |
| 13. | Total available time | Total available time | | |
| 14. | Distribution of the available time | 30+45+30+30+45 = 180 h | | |
| 15. | Teaching activities | 15.1. | Lectures | 30 hours |
| | | 15.2. | Training (labs, problem solving), seminar and team work | 65 hours |
| 16. | Other activities | 16.1. | Project work | 30 hours |
| | | 16.2. | Self study | 20 hours |
| | | 16.3. | Home work | 35 hours |
| 17. | Grading | | | |
| | 17.1. | Mid-term exams (2) | | 60 points |

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| | 17.2. | Project | | | | 30 points |
| | 17.3. | Active participation | | | | 10 points |
| 18. | Grading criteria | | | | up to 50 points | 5 (five) (F) |
| | | | | | from 51 to 60 points | 6 (six) (E) |
| | | | | | from 61 to 70 points | 7 (seven) (D) |
| | | | | | from 71 to 80 points | 8 (eight) (C) |
| | | | | | from 81 to 90 points | 9 (nine) (B) |
| | | | | | from 91 to 100 points | 10 (ten) (A) |
| 19. | Final exam prerequisites | Successful completion of activities 15.1 and 15.2 | | | | |
| 20. | Course language | Macedonian and English | | | | |
| 21. | Quality assurance methods | Internal evaluation mechanisms supported by student polls | | | | |
| 22. | Literature | | | | | |
| | 22.1. | Compulsory | | | | |
| | | No. | Authors | Title | Publisher | Year |
| | | 1. | A. Agarwal and J. H. Lang | Foundations of Analog and Digital Electronic Circuits | Morgan Kaufmann | 2005 |
| | | 2. | R. Jaeger, T. Blalock | Microelectronic Circuit Design | McGraw-Hill | 2010 |
| | | 3. | | | | |
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| | 22.2. | Additional | | | | |
| | | No. | Authors | Title | Publisher | Year |
| | | 1. | W. Kleitz | Digital Electronics: A Practical Approach | Prentice Hall | 2004 |
| 2. | | C. Alexander, M. Sadiku | Fundamentals of Electric Circuits | McGraw-Hill | 2008 | |
| 3. | | | | | | |