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| Óbudai University Donát Bánki Faculty of Mechanical and Safety Engineering | | Institute of Mechatronics and Vehicle Engineering | | |
| Course name and Neptun-code: Informatics II. BGRIA2ENND, BGRIA2KTNC | | | | Credits: 3 |
| <i>Full time, 2nd Semester of the Academic year 2016/17.</i> | | | | |
| Faculties in which the subject is taught: BSc in Mechatronics | | | | |
| Supervised by: Tóthné Dr. Laufer Edit | | | | |
| Prerequisites conditions: (Neptun Codes) | | | Informatics I. BGRIA1ENND | |
| Lessons per week: | Theory: 2 | Practice (in Auditorium): 0 | Lab: 0 | Consultation: |
| Exam type (s,v,f): | v | | | |
| The Syllabus | | | | |
| Aim: Developing algorithmic thinking, introducing the basic tools of programming, which are needed during engineering work. The acquisition of basic algorithms and data structures. | | | | |
| Schedule | | | | |
| Weeks | Topics | | | |
| 1. | The aim and tools of computer programming. Structured programming. Event-driven programming. | | | |
| 2. | Basic data structures and their operations. (integers, real, boolean). Conditional statement. | | | |
| 3. | Loops. Array data structure. Graphics. | | | |
| 4. | Elementary programming items. Sort and search algorithms. | | | |
| 5. | Object oriented programming (inheritance, encapsulation) | | | |
| 6. | Object oriented programming (polymorphism, static and virtual methods) | | | |
| 7. | Test paper I. | | | |
| 8. | Character and string type. | | | |
| 9. | File management. | | | |
| 10. | Holiday. | | | |
| 11. | Relational database management. SQL basics. | | | |
| 12. | National day. | | | |
| 13. | Test paper II. | | | |
| 14. | Test paper retake | | | |
| Requirements | | | | |
| Weeks | Test papers | | | |
| 8 | Test paper I. | | | |
| 14 | Test paper II. | | | |
| <i>The evaluation criterias</i> | | | | |
| The participation is governed by TVSZ III.23.§ (1)-(4). | | | | |
| All main areas of the course are evaluated by test papers. The course is to be considered successfully executed and a signature is obtained if and only if both test papers are written. | | | | |
| Based on the Study Regulations III.6.(4), the student receive offered grade if he/she has written both test papers with grades higher than 3. | | | | |
| All matters which are not covered in this document, the Study and Examination Rules and the provisions of the Study Regulations, valid at Óbuda University, prevails. | | | | |
| The semester closing method (method of examination: written, oral, testing, etc.). | | | | |
| Written exam | | | | |
| Literature: lecture notes | | | | |
| Quality Assurance: | | | | |