



Examen de Licenta - sesiunea iunie 2019

Tematica probei scrise la programul Informatica Aplicata in Limba Germana

Algoritmica

- Divide et Impera
- Greedy

Structuri de date

- Arbori de cautare

Baze de date

- Modelul entitate-relatie (concepte, normalizare)
- Baze de date NoSQL (tipuri, caracteristici)

Programare

- Mostenire. Polimorfism (Java, C#)
- Tratarea exceptiilor (Java, C#)

Tehnologii Web

- Elemente HTML5
- Reguli C553
- JavaScript (event handlers; recunoasterea elementelor dintr-o pagina Web; functii predefinite si functii utilizator)
- Bootstrap (Grids, Navbars, Carousel, Blog, Sign-in page)

Inginerie Soft

- Modelarea UML a aspectelor structurale ale unui sistem soft
- Arhitectura 4+1 a solutiei unui sistem soft din perspective UML

Securitatea IT

- Politica de securitate

PHP

- Sesiuni utilizator

Referinte bibliografice

1. P. Chen, *The Chert: Entity-Relationship Approach to Logical Database Design* Wiley & Sons, 1993.
the Original Work of Dr. Chen, Ji
2. C. Aldea, *Baze de date - notite de curs*, 2017.
3. L. Sangeorzan, C. Aldea, M. Dumitru, *JAVA. Aplicatii*, Ed. Infomarket, 2001.
4. I. Griffiths, M. Adams, J. Liberty, *Programming C# 4.0*, O'Reilly, 2010.





5. L. Sangeorzan, 5. George, N. Enache-David, *Web Development Techniques for Applications and Websites*, Ed. Univ. Transilvania, 2016.
6. C. Carstea, Note de curs, *Ingineria sistemelor Software*, 2016-2017.
7. C. Aldea, *Elemente de securitate a datelor ?n retele de calculatoare*, Ed. Univ. Transilvania, 2010.
8. T. H. Cormen, C. E. Leiserson, R. L. Rivest, C. Stein, *Introduction to Algorithms*, Third Edition, The MIT Press Cambridge, Massachusetts London, England, 2009.
9. <https://www.w3schools.com/bootstrap4/>
10. <http://www.gailer-net.de/>