Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
INF443	Distributed Systems and Applications	7	4	0	0	4	6

Prerequisites	INF103 VE INF223
Admission Requirements	INF103 VE INF223

Language of Instruction	
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	This course restructures the notions that have been studied in operating system course for expanding them in distributed systems architectures. The course focuses on theoretical aspects of computer architectures, low level software architectures, distributed systems and its applications. Java RMI and CORBA platforms are specifically centered. Practical Laboratory part of the course presents Java concepts related to distributed applications (synchronization, serialization, network, etc.). Then Java RMI and CORBA are introduced and applied.
Content	Week 1. Introduction Week 2. Hardware Architecture Week 3. Software Architecture Week 4. Interaction Models Week 5. Network Protocols Week 6. Message-oriented communication Week 7. Remote Procedure Call Week 8. Remote Method Invocation Week 9. Standard services of a distributed system Week 10. Introduction to Java RMI Week 11. Description Java RMI Week 12. Introduction to CORBA Week 13. Description of CORBA Week 14. Conclusion and outlook
References	• Distributed Systems: Concepts and Design, 4th edition, George Coulouris et al, Addison Wesley, 2006. • Distributed Systems - Principles and Paradigms, 1st edition, Andrew S.Tanenbaum & Maarten van Steen, Prentice Hall, 2002. • Core Java2 vol.1: Fundamentals, 7th edition, Cay S.Horstmann & Gary Cornell, Prentice Hall, 2005. • Core Java2 vol.2: Advanced Features, 7th edition, Cay S.Horstmann & Gary Cornell, Prentice Hall, 2005.

Theory Topics

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