

Content

| Course Code | Course Name | Semester | Theory | Practice | Lab | Credit | ECTS |
|-------------|--------------------|----------|--------|----------|-----|--------|------|
| INF470 | Network Laboratory | 7 | 2 | 0 | 2 | 3 | 3 |

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| Prerequisites | |
| Admission Requirements | |

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| Language of Instruction | French |
| Course Type | Compulsory |
| Course Level | Bachelor Degree |
| Objective | To use and to practice the network knowledge obtained in the INF423 (7.semestre) |
| Content | Week 1. Introduction to Wireshark Week 2. Ethernet & ARP Week 3. IP Week 4. ICMP Week 5. TCP Week 6. DNS Week 7. DHCP Week 8. Socket programming Week 9. HTTP and applications Week 10. Package transmission and congestion control Week 11. Network Security: Security Levels Week 12. Network Security: Security Levels Week 13. Simulation Week 14. Simulation |
| References | 1. James F. Kurose and Keith W. Ross, "Computer Networking: A Top-Down Approach Featuring The Internet", 2003, Addison Wesley, Pearson Education. 2. Russell Bradford, "The Art of Computer Networking", 2007, Prentice Hall, Pearson Education. 3. Andrew Tannenbaum, "Computer Networks," 1996, Prentice Hall, Inc. 4. D. Bertsekas and R. Gallager, "Data Networks," 2nd Ed., 1992, Prentice Hall, Inc. 5. T.S. Rappoport, "Wireless Communications," 1996, Prentice Hall, Inc. |

Theory Topics

| Week | Weekly Contents |
|------|---|
| 1 | Introduction to Wireshark |
| 2 | Ethernet & ARP |
| 3 | IP |
| 4 | ICMP |
| 5 | TCP |
| 6 | DNS |
| 7 | DHCP |
| 8 | Socket programming |
| 9 | HTTP and applications |
| 10 | Package transmission and congestion control |
| 11 | Network Security: Security Levels |
| 12 | Network Security: Security Levels |
| 13 | Simulation |
| 14 | Simulation |