Network & Computer Security

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Course outline

1. Introduction
2. Cryptography and message authentication
3. Blockchain
4. Authentication and directories
5. Email & Messaging security
6. IP Security (IPSec & VPN) & WI-FI security
7. Web security
8. Virtualization technology & hyperconvergence
9. Firewalls and proxies
10. Viruses and intrusions
11. Security policies & AUP

Algorithm to obtain credits

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Subscription: 1 lecture to observe, than final subscription

Lecture : 2 hours – Wednesday, 14h15-16h
Practice : 2 hours – Wednesday 16h -18h
Grade = 1/2 exercises + 1/2 exam
HasCredit = FinalGrade>=4 ? 5 : 0

Exam : February 17th, 2021

Covid'19 special conditions

Algorithm

Do until 4 weeks

    If (IsYourIDEven) & (isCurrentWeekEven) then

        face-to-face lecture & practice (B104)

    Else

        remote (sessions are recorded)

    EndIf

After 4 weeks, we will see ..

Invariants (we scientists!)

Inside classrooms : Always keep your social distance or put a mask

Outside classrooms : Put a mask

Preconditions

Scan QR before entering the room

Red seat forbidden

Clean your seat / table

Recommended books

Network Security Essentials, 2th Edition, Stallings William, Prentice Hall; ISBN 0-13-120271-5

Applied Cryptography, Schneier, B., Wiley, 1996

Architectures PKI et communications sécurisées, Dumas, Laourcade, Redon, Dunod, 2015

Mastering Ethereum, Building smart contracts and apps, Antonopoulos & Wood, O'Reilly, 2018