



# Cybersecurity 2022

part of Fabrizio d'Amore

6 of 9 ECTS

# contents

1. **Cybersecurity**, ~~CNS~~ and ~~Web security and privacy~~ (long and partially sad story)
2. Part of d'Amore (6 ECTS) and part of Coppa (3 ECTS)
3. Google classroom: **x25sl7n**
  - slides (both in advance - tentatively - and in retrospect; they may slightly differ)
4. Website: <https://sites.google.com/diag.uniroma1.it/cybersecurity/>
  - Calendar
  - Textbook
  - Log



Univer Google Cyber Cy x esiti C pend fi2-es pend fi2-es Copy esiti h Job S 12 Be Google Crypt +


sites.google.com/diag.uniroma1.it/cybersecurity/

Google Calendar Job Soul Tirocini | Sapienza... DICARLOBUS Cybersecurity we... BIAR 2021-22 MINR 22-23 Top 100 Network... INFOSTUD

CIS SAPIENZA Cybersecurity web site Home exams textbook Syllabus 2022-23

A.Y. 2022-23


Professors Coppa - d'Amore. N.B. Due to Sapienza rules, Prodigit is mandatory.



**Emilio Coppa**

Application-level security - 3 CFU

office hours: [send me an email](#)



**Fabrizio d'Amore**

Lower levels security - 6 CFU

[office hours](#)

Univer Google C x Cybe Prior esiti C pend fi2-es pend fi2-es Copy esiti h Job S 12 Be Google Crypt +

classroom.google.com/c/NTQ3NjM0NzQ5NTU5

Google Calendar Job Soul Tirocini | Sapienza... DICARLOBUS Cybersecurity we... BIAR 2021-22 MINR 22-23 Top 100 Network... INFOSTUD

Cybersecurity - d'Amore - 2022  
6 of 9 CFU - master in Eng. in Comp. Sci.

Stream Lavori del corso Persone Voti

Personalizza

Meet  
Genera link

Codice del corso  
**x25sl7n**

In consegna  
Nessun lavoro in consegna a breve  
[Visualizza tutto](#)

Pubblica un annuncio per il tuo corso

**Qui inserirai le comunicazioni per il tuo corso**  
Usa lo stream per condividere annunci, pubblicare compiti e rispondere alle domande degli studenti  
[Impostazioni dello stream](#)

# contents (continued)

5. Homeworks
6. Exam
  - Final grade is  $(2/3)(d'Amore) + (1/3)(Coppa)$
  - Oral exam optional (grade positive or negative)
  - Partial grade handling
7. Organization of the lectures
  - Only in presence
  - **Choose** between 90min and 45min+ break+45min
  - [Prodigit](#) (now not working)
8. Master theses
  - Many and demanding

# Syllabus 2022

1. Information security
2. Symmetric encryption
3. Data integrity
4. Public key encryption
5. Digital signatures and PKI
6. CSPRNG (Cryptographically Secure Pseudo-Random Number Generators)
7. Authentication
8. Secret sharing
9. Access control
10. Secure protocols (tls, ipsec, ssh)
11. Firewalls
12. Email security
13. Application security
14. Authentication again
15. CTF (Capture The Flag)

- Coppa
- d'Amore

- But **log** is the official reference

27/09/2022

# information security

everything starts here

```
graph TD; A[everything starts here] --> B[CIA requirements]; B --> C[other (non secondary) requirements]; C --> D[what is a requirement?]; D --> E[safety vs. security];
```

CIA requirements

other (non secondary) requirements

what is a requirement?

safety vs. security