4TU Cyber Security Master Specialization – Kick off

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https://4tu.nl/cybsec

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4TU.   TUDelft Delft University of Technology   TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY   UNIVERSITY OF TWENTE.   WAGENINGEN UNIVERSITY & RESEARCH

Agenda

- Introduction to the 4TU.CybSec degree program

- Presentation of various courses

- Questions & Answers

Characteristics of the program

- Risk management
- Technology (2/3) in context (1/3)
- 2 year full time program, start 2x per year
- Tele-lecturing + some travel (Corona-update: we're back to how it was before corona)
- Core courses
- Introductory and advanced electives
- Final year project
- Capstone Cyber Security
- Certificate
- Agreed Individual Study Plan (ISP)

Course portfolio

Core courses

1. CDA: Cyber Data Analytics
2. *CRM: Cyber Risk Mgmnt.*
3. Crp: Security and Crypto.
4. NeS/InS: Network/Internet Security
5. SoS/LBS: Software Security

Electives

6. ASA: Applied Sec. Analysis
7. BCE/BCT: Blockchain
8. Bio: Biometrics
9. *Cap: Capstone cyber sec.*
10. *CCS: Cyber Crime Science*
11. *CoE: Computer Ethics*

12. *CSM: Cyber Security Management*
13. *Ela: E-Law*
14. *EoS: Economics of Security*
15. (UT-only) ESA: Emp. Sec. Analysis & Eng.   *new*
16. (TUD-only) *ICI: Intro to Cloud as Infrastr.*   *new*
17. PET: Privacy Enh. Tech.
18. Q101: Fund. quant. inf. (only lecture recordings)
19. Q201: Quant. Comm&crypto.
20. SCC: Secure Cloud Computing
21. SDM: Secure Data Mgmnt.
22. SeV: Security Verification
23. SSI: Security Services for IoT
24. STR: SW test. & Rev. Eng.
25. SyS: System Security
26. (TUD-only) *UCS: User-Centred Security*   *new*

Focus (3 example courses each)

- Network : Crp, InS/NeS, SSI

- Software : SoS/LBS, SeV, STR

- Data : CDA, PET, SDM

- System : BCE/BCT, SCC, SyS

Advisory board

The ideal graduate:

- is an über technologist

- speaks a second language

- is able to translate strategic questions into technical questions and vice versa

- enjoys solving technical problems and is capable of abstract thought.

Alumni work as

- Computer and network security specialist
- Chief Technical Officer
- Developer
- Digital expert police
- Entrepreneur
- Ethical hacker
- Information security advisor
- Lead engineer
- Lecturer
- Management consultant

- PhD student
- Privacy advisor
- Researcher
- Security & privacy consultant
- Security analyst
- Security consultant
- Senior analyst and test consultant
- System Architect
- Software engineer
- Technical consultant

Practical information

- Lectures and exams at your own university (check updates on COVID-19 situation)
- ASA and Cap require travel
- You must be enrolled at both universities
- Not all lectures are recorded (but most are)
- The academic year 2021 – 2022 in Delft starts one week before it start in Twente; see here for implications: https://www.4tu.nl/cybsec/en/course-program/Peculiarities/

- FAQ: https://www.4tu.nl/cybsec/en/faq/

Tele-Lecturing / Hybrid Education

- New hybrid education setup → bear with us and **provide feedback**

- Live lectures will in parallel be offered **via Zoom** (connection info in chat)

- Your cooperation is needed to ensure smooth lecturing:
  - **DO NOT share** the Zoom information outside of the 4TU.CybSec environment
  - Make sure that **your mic is muted during lectures**, unless the teacher explicitly gives you the floor → use the chat to ask questions
  - **Act civilized and respectful** both in your general behavior as well as in your language (also when using the chat)

What to do now?

- Register at the other university
- Make a draft individual study plan (ISP), see http://www.4tu.nl/cybsec/en/course-program/study-plans/
- Pay attention to the pre-requisites
- Agree your ISP with your program mentor
- Sign up for your courses at both universities

- Follow us on:

Extra-curricular activities

Fun ahead!

Twente Hacking Squad (THS)

(extra-curricular activity)

Hands-on Hack1ng

Software Explo1tation

D1gital Incident Investigation

Code Break1ng

&

Hacking Competitions

https://ths.eemcs.utwente.nl/

NEW
CTF Workshop series starts in Sep 2021 (check the website):
Web hacking, reverse engineering, crypto, forensics, …

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Twente Hacking Squad (THS)

(extra-curricular activity)

THS students win the national "Challenge the Cyber" CTF-contest (>100 participants)!

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