



Introduction to Security & Network Engineering Master 2026/27

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- ▶ We will give you some practical information about your studies
- ▶ You will get to meet your colleagues and some fellow lecturers/staff members

Network Engineering

- ▶ What is Network Engineering?

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- What is Network Engineering? The design, implementation, management and troubleshooting of any networked system.



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- ▶ What is Network Engineering? The design, implementation, management and troubleshooting of any networked system.



- ▶ Computer Networks form the entire backbone of our digital society
- ▶ The SNE MSc aims to teach you how to tackle the complexity of the modern, world-spanning communication infrastructure

Security Engineering

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Security Engineering

- ▶ What is Security Engineering? One question, multiple answers!



- ▶ Secure network communications, mathematical cryptography, software vulnerabilities, hardware tampering, data privacy and regulations
- ▶ Computer Security is a very fragmented subject, yet SNE aims to teach you how to navigate this critical system component

SNE Intake Statistics

- For the first time in 2026/27 SNE observed a noticeable increase in applications and students

Year	2020	2021	2022	2023	2024	2025	2026
No of students	21	34	34	40	27	43	>70

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*The old world is dying, and the new world struggles to be born;
is now is the time of monsters?*

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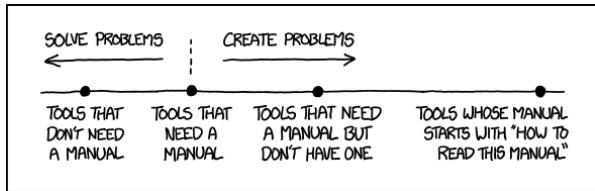
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- ▶ The SNE graduates can shape the science and industry of modern technology and infrastructure
- ▶ Thus they can shape them in a way that advances peace and prosperity for the people of NL, EU and this planet
- ▶ Our education goal should be to give them the skills to do so effectively



Practical Information

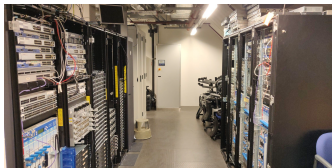


SNE Locations

- ▶ B1.23 Main lecture/Lab room
- ▶ B1.2ab Lab room
- ▶ B1.24cde Lab room
- ▶ B1.45c Server room



Main room



Server room

Studying in SNE

Study Attitude:

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Community and Collegiality:

- ▶ You must often work in teams and you must learn how to be a team
- ▶ Communicate well and don't freeload
- ▶ Try to assist others when ahead

SNE Schedule

A Typical Week in SNE:

- ▶ 24 fixed work hours
i.e. 4 days times 6 hours per day
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- ▶ Lectures and Labs from 10:00 until 16:00 on Monday, Tuesday, Thursday, Friday with mandatory presence

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- ▶ Reserved for colloquia, external visits, catch-up days, lab extensions and self-study
- ▶ Colloquia and external visits have mandatory presence

SNE Schedule

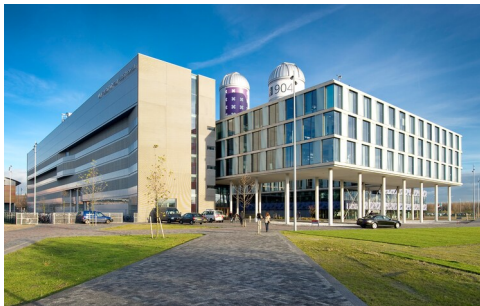
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- ▶ Find the schedule here:
<https://www.os3.nl/2026-2027/schedule>

Building Access

Building Opening hours:

- ▶ Monday - Friday: 07:00 - 22:00
- ▶ Saturday & Sunday: 10:00 - 18:00
- ▶ UvA card gives access to labs and server room



UvA Card

Request your UvA card:

- ▶ For Dutch students: <https://www.mijnuvapas.nl>
- ▶ For international students: during the Getting Started Appointment with the Service & Information Centre

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Card usage:

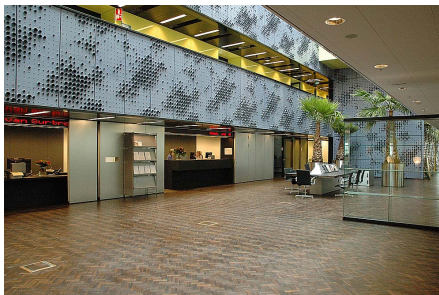
- ▶ Provides individual access to main, lab and server rooms
- ▶ Make sure to close the lab if you are the last to leave!
- ▶ Don't give access to others



Education Service Desk

Educational Support:

- ▶ Course registrations, Course grades, Diplomas
- ▶ Science Park 904, 1098 XH, Amsterdam
- ▶ Phone: +31 20 525 7100
- ▶ Email: servicedesk-esc-science@uva.nl



SNE Services & Websites

Useful Services & Websites:

- ▶ SNE email address
`<Firstname.PrefixLastname@os3.nl>`
- ▶ SNE website – `os3.nl` for info on courses, scheduling and access to wiki
- ▶ UvA email address
`<Initials.PrefixLastname@student.uva.nl>`
- ▶ Canvas – `canvas.uva.nl` for info on courses, use UvA email address
- ▶ Datanose – `datanose.nl/` for info on course scheduling
- ▶ EduVPN – `student.uva.nl/en/topics/vpn`
- ▶ SIS (Student Information System) for grades
- ▶ UvA Library – `uba.uva.nl/en/home`
- ▶ Glass – `glass.uva.nl` for course registrations
- ▶ Eduroam – `student.uva.nl/en/topics/wi-fi` for Wifi

Support for Students

Study advisor:

- ▶ Andrea Jessen-Yuen
- ▶ Contact through email or book a personal appointment
- ▶ `studyadviser-sne-science@uva.nl`
`student.uva.nl/sne/contact/study-adviser/study-adviser.html`
- ▶ Contact your study adviser if you have questions about or need counselling support with:
 - ▶ Personal circumstances
 - ▶ Study planning or delay
 - ▶ Facilities for students with disabilities
 - ▶ Referral to student counselor or psychologist
 - ▶ Regulations and procedures

Support for Students

Programme coordinator:

- ▶ Aletta Roos – a.v.roos@uva.nl
- ▶ Contact the coordinator if you have questions about or need help with:
 - ▶ Teaching and Examination Regulations (TER) and various student websites, including the course catalogue
 - ▶ Course schedules
 - ▶ Admissions
 - ▶ Events (introduction, graduation)

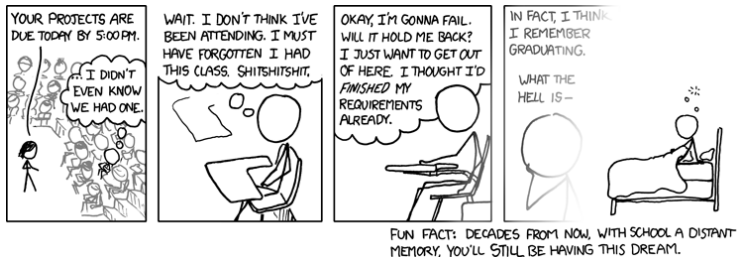
Confidential advisor (vertrouwenspersoon):

- ▶ student.uva.nl/en/topics/confidential-advisers

Security & Network Engineering

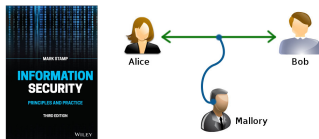


SNE Courses

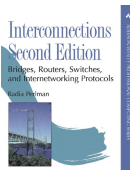


SNE Courses: Period 1 (September - October)

- ▶ **SSN:** Security of Systems and Networks
- ▶ Jaap van Ginkel – jaap.vanginkel@os3.nl
- ▶ Zhuoran Liu – z.liu@uva.nl

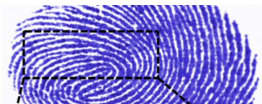


- ▶ **INR:** InterNetworking and Routing
- ▶ Marios Avgeris – m.avgeris@uva.nl



SNE Courses: Period 2 (November - December)

- ▶ **CCF:** CyberCrime and Forensics
- ▶ Jaap van Ginkel – jaap.vanginkel@os3.nl



- ▶ **LS:** Large Systems
- ▶ Shashikant Ilager – s.s.ilager@uva.nl



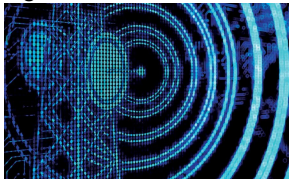
SNE Courses: Period 3 (January)

- ▶ **OT:** Offensive Technologies
- ▶ Zhuoran Liu – z.liu@uva.nl
- ▶ Kostas Papagiannopoulos – k.papagiannopoulos@uva.nl

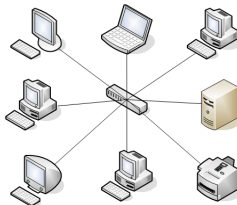


SNE Courses: Period 4 (February - March)

- ▶ **AS:** Advanced Security
- ▶ Jaap van Ginkel – jaap.vanginkel@os3.nl

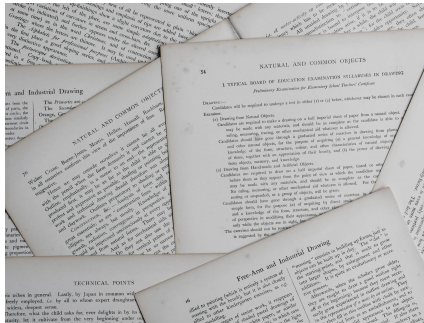


- ▶ **AN:** Advanced Networking
- ▶ Chrysa Papagianni – c.papagianni@uva.nl



SNE Courses: Periods 5 and 6 (April - June)

- ▶ **SNE Thesis: Research Thesis**
- ▶ **External Supervisor** – someone@somewhere.xyz
- ▶ **Internal Supervisor** – someone@uva.nl
- ▶ **Thesis Coordinator:** Kostas Papagiannopoulos – k.papagiannopoulos@uva.nl



A Generalized Fingerprinting Framework for Deriving Searchable Features to Identify Publicly Exposed Infrastructure

Bilal Hassan
bilal.hassan@student.unl.nl



Figure 5.1: Azure VM-based pattern: Virtual Machine to SQL Database

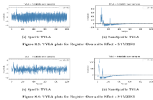
Agentic AI for Fault Injection Vulnerability Detection in Hardware-Software Systems

Victor Vlugt
victor.vlugt@student.unl.nl

A General Framework for Differential Analysis of Protocol Implementations

Mahak Taky
mahak.taky@student.unl.nl

Residential Proxies in Telecom Networks



Securing Yivi's EUDI Wallet Transition with an HSM-Based Architecture

Owen Pount
owen.pount@student.unl.nl



Figure 5: Intra-site VXLAN overlay extension using VTEP reachability proxying. A proxy or

Secure optimization of HQC-KEM algorithm on Vectorized RISC-V architecture

Ignacio de Eusebio
ignacio.deeusebio@student.unl.nl

Balancing Speed and Integrity in Forensic Automation

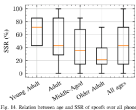


Figure 8: Simplified attack path to which a fake candidate bypasses remote-hiring controls and gains insider access. Controls may be applied during hiring (1) and after onboarding (2).

Staff List & Conclusion

- ▶ Educational Director: Ana Oprescu – a.m.oprescu@uva.nl
 - ▶ Programme Developer: Kostas Papagiannopoulos – k.papagiannopoulos@uva.nl
 - ▶ Systems Engineer: Niels Sijm – niels.sijm@os3.nl
 - ▶ Aletta Roos – a.v.roos@uva.nl
 - ▶ Andrea Jessen-Yuen – studyadviser-sne-science@uva.nl
 - ▶ Educational Technical Coordinator: Jose Zerna Torres – j.e.zernatorres@uva.nl
 - ▶ SSN, CCF, AS teacher: Jaap van Ginkel – jaap@os3.nl
 - ▶ INR teacher: Marios Avgeris – m.avgeris@uva.nl
 - ▶ LS teacher: Shashikant Ilager – s.s.ilager@uva.nl
 - ▶ SSN, OT teacher: Zhuoran Liu – z.liu@uva.nl
 - ▶ OT teacher, Thesis coordinator: Kostas Papagiannopoulos – k.papagiannopoulos@uva.nl
 - ▶ AN teacher: Chrysa Papagianni – c.papagianni@uva.nl
-
- ▶ Finally, let's meet each other! Tell us about yourself, your interests, studies and background.