# International, cross-program course
# Secure Computer Systems 1

**Advanced level, 5 credits, period 2, code 1DT072**

Main teacher: Björn Victor (bjorn.victor@it.uu.se)

"What everyone should know about computer security"

How do you avoid writing insecure programs?

How is my privacy affected?

How do you protect against attacks?

How do you attack insecure systems?

**Concepts**  **Principles**  **Theory**  **Practice**

Authentication and authorization

Network security

Malware and Software security

Access control

Effects on society

Web security

Sandboxing and Virtualization

Privacy and tracking

Ethical + legal aspects

## Active lectures

In-class problem solving and discussion



## Computer labs and assignments

| practice | tool knowledge and practical skills |
| train | theory, creativity, problem solving |
| through | active participation in group work |

Linux  ssh
some programming
OS    networking
advanced level:
own research needed

## Continuous assessment + Basic final exam

in groups                     individual

written + oral