

IMT3491 Ethical Hacking and Penetration Testing - 2010-2011

Emnekode:

IMT3491

Emnenavn:

Ethical Hacking and Penetration Testing

Faglig nivå:

Bachelor (syklus 1)

Studiepoeng:

5

Varighet:

Høst

Språk:

Engelsk

Anbefalt forkunnskap:

IMT2282 Operating systems

Forventet læringsutbytte:

The course will address the methodology of penetration testing, learning how penetration tests are constructed and experimenting with penetration testing tools in the laboratory. The course will look at vulnerabilities in software both at server and client side, with a high focus on network applications.

The students should after the end of the course have a good overview of how an effective penetration test should take place and of the threats that exists towards software, networks, and network services. A deeper analysis and a set of practical exercises will be the foundation for a deeper understanding into some specific security vulnerabilities that exists.

Emnets temaer:

- Ethical Hacking and Penetration Testing – definitions
- Penetration Testingx Methodologies
- Password attacks
- Privilege escalation
- Network mapping
- Software vulnerabilities
- Web application problems
- XSS, parameters, persistence
- SQLinjection
- Data mining
- Fuzzing

Pedagogiske metoder:

Forelesninger
Gruppearbeid
Lab.øvelser
Oppgaveløsning

Vurderingsformer:

Skriftlig eksamen, 2 timer
Vurdering av prosjekt(er)

Vurderingsformer:

- Written exam (51%), depending on the number of student the exam might be oral
- Project (49%)
- Both parts must be passed

Karakterskala:

Bokstavkarakterer, A (best) - F (ikke bestått)

Sensorordning:

Evaluation by the lecturer and external examiner

Utsatt eksamen (tidl. kontinuasjon):

- Ordinary re-sit examination
- New project(s) at next course dates

Tillatte hjelpebidrifter:**Tillatte hjelpebidrifter (gjelder kun skriftlig eksamen):**

None

Obligatoriske arbeidskrav:

2 approved exercises

Ansvarlig avdeling:

Avdeling for informatikk og medieteknikk

Emneansvarlig:

Førsteamannusis Lasse Øverlier

Læremidler:

Articles and book chapters. Specifics to be announced at course start.

Supplerende opplysninger:

In case there will be less than 5 students that will apply for the course, it will be at the discretion of Studieprogramansvarlig whether the course will be offered or not and if yes, in which form.

Klar for publisering:

Ja