UNIVERSITÀ DI PISA

NETWORK SECURITY

FABRIZIO ENRICO ERMINIO BAIARDI

Anno accademico	2019/20
CdS	COMPUTER SCIENCE
Codice	303AA
CFU	9

Moduli	Settore/i	Tipo	Ore	Docente/i
ICT RISK ASSESSMENT	INF/01	LEZIONI	72	FABRIZIO ENRICO ERMINIO BAIARDI

Learning outcomes

Knowledge
Discover vulnerabilities of ICT system Discover the elementary attacks enabled by these vulnerabilities Run a Penetration Test Evaluate and Manage the risk of ICT system Design and deploy countermeasures to manage the risk
Discover vulnerabilities of ICT system Discover the elementary attacks enabled by these vulnerabilities Run a Penetration Test Evaluate and Manage the risk of ICT system Design and deploy countermeasures to manage the risk
Discover vulnerabilities of ICT system Discover the elementary attacks enabled by these vulnerabilities Run a Penetration Test Evaluate and Manage the risk of ICT system Design and deploy countermeasures to manage the risk

Assessment criteria of knowledge
The student will be assessed on his/her demonstrated ability to discuss the main course contents using the appropriate terminology. - During the oral exam the student must be able to demonstrate his/her knowledge of the course material and be able to discuss the reading matter thoughtfully and with propriety of expression.
Methods:

- Final essay
- Laboratory report
- Oral report

Further information:
The student can select as a final exam either a seminar or some project work. In the latter case, several students may be involved in the projects
The student will be assessed on his/her demonstrated ability to discuss the main course contents using the appropriate terminology. - During the oral exam the student must be able to demonstrate his/her knowledge of the course material and be able to discuss the reading matter thoughtfully and with propriety of expression.
Methods:

- Final essay
- Laboratory report
- Oral report

Further information:
The student can select as a final exam either a seminar or some project work. In the latter case, several students may be involved in the projects
The student will be assessed on his/her demonstrated ability to discuss the main course contents using the appropriate terminology. - During the oral exam the student must be able to demonstrate his/her knowledge of the course material and be able to discuss the reading matter thoughtfully and with propriety of expression.
Methods:

- Final essay
- Laboratory report
- Oral report

Further information:
The student can select as a final exam either a seminar or some project work. In the latter case, several students may be involved in the projects

Teaching methods

Delivery: face to face
Attendance: Advised
Learning activities:

- attending lectures
- participation in seminar
- preparation of oral/written report
- participation in discussions
- individual study
- Laboratory work

Teaching methods:

- Lectures
- Seminar
- project work

Delivery: face to face
Attendance: Advised
Learning activities:

- attending lectures
- participation in seminar
- preparation of oral/written report
- participation in discussions
- individual study
- Laboratory work

Teaching methods:

- Lectures
- Seminar
- project work

Delivery: face to face
Attendance: Advised
Learning activities:

- attending lectures
- participation in seminar
- preparation of oral/written report
- participation in discussions
- individual study
- Laboratory work

Teaching methods:

- Lectures
- Seminar
- project work

Syllabus

The basic notions to evaluate and improve the security of any ICT system: Threat, threat model, vulnerability, attack, complex attack, countermeasure, risk, risk assessment Resiliency, robustness, cost effectiveness Differences between safety and reliability. Peculiarities of security of ICT systems Cloud Computing: definition and enabling technologies Security Problems of Cloud Computing Challenging Security Issues in Cloud Computing

The basic notions to evaluate and improve the security of any ICT system: Threat, threat model, vulnerability, attack, complex attack, countermeasure, risk, risk assessment Resiliency, robustness, cost effectiveness Differences between safety and reliability. Peculiarities of security of ICT systems Cloud Computing: definition and enabling technologies Security Problems of Cloud Computing Challenging Security Issues in Cloud Computing
The basic notions to evaluate and improve the security of any ICT system: Threat, threat model, vulnerability, attack, complex attack, countermeasure, risk, risk assessment Resiliency, robustness, cost effectiveness Differences between safety and reliability. Peculiarities of security of ICT systems Cloud Computing: definition and enabling technologies Security Problems of Cloud Computing Challenging Security Issues in Cloud Computing

UNIVERSITÀ DI PISA

Bibliography

Security Engineering by Ross Anderson is a recommended but not mandatory reading.
Security Engineering by Ross Anderson is a recommended but not mandatory reading.
Security Engineering by Ross Anderson is a recommended but not mandatory reading.

Updated: 24/09/2019 12:18