

HACK YOUR DEVICE FUNDAMENTALS OF CYBER SECURITY (3RD EDITION)

14.FEB-14.MAR.2025

SAP OVERVIEW

Attention adventurous students! "Hack Your Device, Fundamentals of Cyber Security" is a SAP coordinated by FHV with TUS, NHL Stenden, Polytechnic of Leiria, and IPCA. In this course, you'll team up to perform a penetration test on an Internet of Things (IoT) device of your choice. You'll learn to hack the device, showcasing your creativity and problem-solving skills. The outcome includes a pentesting report, a presentation, and a lot of fun. The course covers IoT threats, attack and vulnerability detection, effective communication, and applying business principles in cyber security.

The course requires basic computer knowledge, and a level of comfort with technology.

LEARNING OUTCOMES

- Gain fundamental knowledge about the Internet of Things and cyber security.
- Apply this knowledge to diagnose and investigate (apply) cyber threats related to the Internet of Things:
 - Diagnose attacks on an organisation's computer systems and networks.
 - Apply critical thinking and problem-solving skills to detect current and future attacks on an organisation's computer systems and networks.
- Apply business principles to analyse and interpret data for planning, decision-making, and problem solving in an information security environment.
- Effectively communicate in a professional setting to address information security issues.
 - Communicate orally and in writing, propose information security solutions to technical and non-technical decision-makers.

+INFO: www.run-eu.eu

Organised by: FHV, TUS, NHL Stenden, Polytechnic of Leiria, IPCA

DATE From **14 February to 14 March 2025**

Face-to-Face Week: FHV, Dornbirn, Austria 17-21 February

MODE OF DELIVERY Blended

LANGUAGE OF INSTRUCTION English

ECTS CREDITS 3

ACADEMIC RECOGNITION

To be defined by each Home Institution. In general terms, most students will have this RUN-EU SAP certified in the Diploma Supplement, as a minimal condition.

ELIGIBLE PARTICIPANTS

RUN-EU students from any study cycle.

HOW TO APPLY

Fill in the application form ([QR](#) or [website](#))



DEADLINE FOR APPLICATIONS

12 December 2024

CONTACT DETAILS

armin.simma@fhv.at

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SELECTION CRITERIA

Students will be selected based on information provided in the submitted application concerning motivation. The maximum number of places on this SAP is 35.

LEARNING AND TEACHING STRATEGY

Based on Active Learning.

PREREQUISITES

- Computer knowledge and willingness to quickly learn more.
- Basic knowledge of computer networks and basic capabilities to work on a command line.
- Basic programming skills.
- Comfortable with technology.
- Personal laptop.

COURSES LEADERS | LECTURERS

Course leader

Armin Simma (FHV)

Lecturers

Jaqueline Berghout (NHL Stenden)

Nuno Lopes (IPCA)

Stephen McCombie (NHL Stenden)

Ken Oakley (TUS)

Jeroen Pijpker (NHL Stenden)

Leonel Santos (Polytechnic of Leiria)

Mike Winterburn (TUS)

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PHYSICAL MOBILITY | SCHOLARSHIPS AVAILABLE

Finland - Austria: 862 EUR

Ireland - Austria: 862 EUR

Netherlands - Austria: 862 EUR

Portugal (Barcelos) - Austria: 862 EUR

Portugal (Leiria) - Austria: 862 EUR

Belgium - Austria: 862 EUR

Spain - Austria: 862 EUR

For further information concerning scholarships, please contact your Home Institution RUN-EU Office.

MEANS AND CRITERIA FOR ASSESSMENT

Professional Product (the result is a report, paper, and presentation of the penetration testing for the IoT device) at the end of the overall SAP (14 March 2025). The assessment is for the whole team. The LOs are the assessment criteria.

CERTIFICATION

The participants who successfully complete this RUN-EU SAP will receive a Certificate of Participation, and a Transcript of Records jointly issued by the organising institutions.

REFERENCE READING

Practical IoT Hacking, The Definitive Guide to Attacking the Internet of Things by Fotios Chantzis, March 2021, 464 pp. ISBN-13: 9781718500907

<https://practical-iot-hacking.com/>

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PROGRAMME AT A GLANCE

+INFO: www.run-eu.eu

FACE-TO-FACE WEEK

	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+2											
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00
MONDAY 17/2	WELCOME & OPENING		BASICS OF CYBER SECURITY & NETWORKS		LUNCH BREAK	TEAM FORMATION/ DBE/INTERCULTURAL SENSITIVITY		SETTING UP YOUR HACKING ENVIRONMENT			
TUESDAY 18/2	BASIC HACKING		IOT GETTING STARTED		LUNCH BREAK	IOT GETTING STARTED	BUS	INDUSTRIAL IOT VISIT TO DOPPELMAYR			
WEDNESDAY 19/2	PENTESTING IOT DEVICES		PUBLIC SPEAKING		LUNCH BREAK	FIRST EXPERIMENTS WITH THE DEVICE		DAILY REFLECTION			
THURSDAY 20/2	INTERIM PRESENTATIONS	WRITING A PENETRATION TESTING REPORT		LUNCH BREAK	PENETRATION TESTS WITH THE DEVICE		DAILY REFLECTION				
FRIDAY 21/2	PLANNING OLIVE WEEKS: CREATING A CONCEPT AND A TASK SCHEDULE			LUNCH BREAK	PENTESTING CONCEPT/PLAN OF ACTION PRESENTATIONS		FAREWELL PARTY				

There will be 15 minutes breaks between the sessions; not shown in this schedule.

SHORT ADVANCED PROGRAMME

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PROGRAMME AT A GLANCE ONLINE SESSIONS

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GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00
TUESDAY 25/2	GROUP WORK (3H TEAM WORK - NO SPECIFIC TIME)										
WEDNESDAY 26/2	GROUP WORK (3H TEAM WORK - NO SPECIFIC TIME)										
THURSDAY 27/2	GROUP WORK (3H TEAM WORK - NO SPECIFIC TIME)										
FRIDAY 28/2	COACHING (2H TEAM & COACHING WORK - NO SPECIFIC TIME)										

SHORT ADVANCED PROGRAMME

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PROGRAMME AT A GLANCE ONLINE SESSIONS

+INFO: www.run-eu.eu

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00
TUESDAY 4/3	GROUP WORK (3H TEAM WORK - NO SPECIFIC TIME)										
WEDNESDAY 5/3	GROUP WORK (3H TEAM WORK - NO SPECIFIC TIME)										
THURSDAY 6/3	GROUP WORK (3H TEAM WORK - NO SPECIFIC TIME)										
FRIDAY 7/3	COACHING (2H TEAM & COACHING WORK - NO SPECIFIC TIME)										

SHORT ADVANCED PROGRAMME

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PROGRAMME AT A GLANCE

ONLINE SESSIONS

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GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00
TUESDAY 11/3	GROUP WORK (3H TEAM WORK - NO SPECIFIC TIME)										
WEDNESDAY 12/3	GROUP WORK (3H TEAM WORK - NO SPECIFIC TIME)										
THURSDAY 13/3	GROUP WORK (3H TEAM WORK - NO SPECIFIC TIME)										
FRIDAY 14/3									OVERALL QUALITY ASSESSMENT SESSION		

SHORT ADVANCED PROGRAMME

RUN
REGIONAL
UNIVERSITY
NETWORK

EUROPEAN UNIVERSITY

HACK YOUR DEVICE FUNDAMENTALS OF CYBER SECURITY (3RD EDITION)

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14 FEBRUARY

FRIDAY 14H00-15H00 GMT+1 - ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00
FRIDAY 14/2							OPENING SESSION				

Opening Session

🕒 14h00-15h00

📖 Lecture

👤 Jaqueline Berghout (NHL Stenden)

Elisabeth Summerauer (FHV)

📄 Preparation for the following week. Students have the possibility to ask (organisational, technical) questions. Students get a web link where they must download software in advance.



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17 FEBRUARY

MONDAY 9H00-16H30 - FHV

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00
MONDAY 17/2	WELCOME & OPENING	BASICS OF CYBER SECURITY & NETWORKS		LUNCH BREAK	TEAM FORMATION/ DBE/INTERCULTURAL SENSITIVITY		SETTING UP YOUR HACKING ENVIRONMENT				

Welcome & Opening

- 🕒 9h00-10h00
- 📖 Lecture
- 👤 Armin Simma (FHV)

📄 The overall idea of the SAP project will be presented. A short introduction to the topic will be given. The learning outcomes will be presented.

Setting up your Hacking Environment

- 🕒 14h30-16h30
- 📖 Workshop
- 👤 Jeroen Pijpker (NHL Stenden)
Leonel Santos (Polytechnic of Leiria)
Armin Simma (FHV)

📄 "Setting up your hacking environment" provides essential skills to create a secure and effective hacking setup. Participants will learn to select an operating system, configure virtual machines, install hacking tools, and implement security best practices.

Basics of Cyber Security & Networks

- 🕒 10h00-12h00
- 📖 Lecture
- 👤 Nuno Lopes (IPCA)
Armin Simma (FHV)
Michael Winterburn (TUS)

📄 This course provides an introduction to cyber security, covering key topics such as the current state of cyber threats, common attack methods, and hacker tools. It also includes basic networking principles (e.g., OSI model, Wi-Fi, IP, and Ethernet addressing). Lastly a basic and short examination of cryptography will be explored.

Team formation: Intercultural sensitivity and diversity in the context of Design Based Education and Cyber Security

- 🕒 13h00-14h30
- 📖 Workshop
- 👤 Nuno Lopes (IPCA)
Jeroen Pijpker (NHL Stenden)
Leonel Santos (Polytechnic of Leiria)

📄 This workshop explores intercultural competence and neurodivergence in cyber security and design-based education. Participants will learn the importance of diversity in teams, particularly in pen testing, and gain strategies for building strong, inclusive teams.

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18 FEBRUARY

TUESDAY 9H00-16H00 - FHV

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00
TUESDAY 18/2	BASIC HACKING		IOT GETTING STARTED	LUNCH BREAK	IOT GETTING STARTED	BUS	INDUSTRIAL IOT VISIT TO DOPPELMAYR				

Basic Hacking

- 🕒 9h00-11h00
- 🔧 Workshop
- 👤 Jeroen Pijpker (NHL Stenden)
- 👤 Armin Simma (FHV)

📄 This workshop provides an introduction to IoT pentesting tools in Kali/Parrot OS. Students will learn the basic phases of penetration testing – information gathering, vulnerability analysis, sniffing and spoofing, attack phase, and password attacks – using tools like nmap, Metasploit, and Wireshark. The session includes a demonstration of a simple pentest and offers hands-on practice in a virtual environment.

Internet of Things - Getting started

- 🕒 11h00-12h00
- 🔧 Workshop
- 👤 Nuno Lopes (IPCA)
- 👤 Jeron Pijpker (NHL Stenden)

📄 This workshop covers IoT product design, programming, and integration with a focus on security vulnerabilities. The first part introduces IoT fundamentals and architectures.

Internet of Things - Getting started

- 🕒 13h00-13h30
- 🔧 Workshop
- 👤 Nuno Lopes (IPCA)
- 👤 Jeron Pijpker (NHL Stenden)

📄 The second part of this workshop addresses IoT threats, vulnerabilities, and mitigation strategies. Students will examine IoT security, future trends, case studies, and regulatory recommendations.

Industrial IoT visit to Doppelmayr

- 🕒 14h00-16h00
- 🔧 Industrial visit
- 👤 Armin Simma (FHV)

📄 This tour will make you aware of the current state of the art in relation to cyber security survey from a local industry partner.

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19 FEBRUARY

WEDNESDAY 9H00-16H30 - FHV

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00
WEDNESDAY 19/2	PENTESTING IOT DEVICES		PUBLIC SPEAKING	LUNCH BREAK	FIRST EXPERIMENTS WITH THE DEVICE		DAILY REFLECTION				

Pentesting IoT devices

🕒 9h00-11h00

📄 Lecture

👤 Nuno Lopes (IPCA)
Jeroen Pijpker (NHL Stenden)

📄 This lecture explains the concept and process of penetration testing an IoT device. Students will learn how to perform IoT device pentesting, the 8 steps of hacking IoT devices, the structure of IoT architecture, draw data flow diagrams, conduct threat modeling, and learn about MiTM (Man-in-the-Middle) attacks.

Public Speaking

🕒 11h00-12h00

📄 Lecture

👤 Stephen McCombie (NHL Stenden)
Michael Winterburn (TUS)

📄 This lecture provides practical tips for giving presentations, helping students reduce anxiety, and improve performance. It covers managing nerves, understanding the audience, being authentic, using body and voice effectively, using slides, and maintaining audience attention. Students will also have the chance to present their progress using these tips.

First experiments with the device

🕒 13h00-15h30

📄 Workshop

👤 Nuno Lopes (IPCA)
Jeroen Pijpker (NHL Stenden)

📄 In this workshop students start to work with their IoT device: They will setup and configure the device including network access. After that they will perform first vulnerability scans.

Daily reflection

🕒 15h30-16h30

📄 Reflection

👤 Jeroen Pijpker (NHL Stenden)
Armin Simma (FHV)

📄 In this reflection students will reflect about their learning and experience which they learned during the experiments. The teams can exchange their findings.

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20 FEBRUARY

THURSDAY 9H00-16H30 - FHV

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GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00
THURSDAY 20/2	INTERIM PRESENTATIONS	WRITING A PENETRATION TESTING REPORT		LUNCH BREAK	PENETRATION TESTS WITH THE DEVICE		DAILY REFLECTION				

Interim Presentations

- 🕒 9h00-10h00
- 📄 Presentations
- 👤 Ken Oakley (TUS)

📄 Each team presents its members: what is the educational background, what are the interests? Each team should already present a first rough idea about the focus of their pentests.

Writing a Penetration Testing Report

- 🕒 10h00-12h00
- 📄 Lecture
- 👤 Ken Oakley (TUS)

📄 This course covers penetration testing methodologies and standards, focusing on gathering and reporting test results. Students will conduct a real penetration test, learn technical report writing, and present their findings to peers.

Penetration tests with the device

- 🕒 13h00-15h30
- 📄 Workshop
- 👤 Jeroen Pijpker (NHL Stenden)
Leonel Santos (Polytechnic of Leiria)
Armin Simma (FHV)

📄 Each team will continue to pentest their device: They can decide which area they will focus on, e.g. network pentests, web application tests or reverse engineering software.

Daily reflection

- 🕒 15h30-16h30
- 📄 Reflection
- 👤 Jeroen Pijpker (NHL Stenden)
Armin Simma (FHV)

📄 In this reflection students will reflect about their learning and experience which they learned during the experiments. The teams can exchange their findings.

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21 FEBRUARY

FRIDAY 9H00-16H30 - FHV

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00
FRIDAY 21/2	PLANNING OLINE WEEKS: CREATING A CONCEPT AND A TASK SCHEDULE			LUNCH BREAK	PENTESTING CONCEPT/PLAN OF ACTION PRESENTATIONS			FAREWELL PARTY			

Planning online weeks: Creating a concept and a task schedule

- 🕒 9h00-12h00
- 👥 Team work
- 👤 Nuno Lopes (IPCA)
Jeroen Pijpker (NHL Stenden)
Armin Simma (FHV)

📄 The teams will continue with their individual penetration tests. They can either continue the same focus as the day before or try another attack surface. Each team must also prepare the presentation for the afternoon.

Pentesting Concept/Plan of Action Presentations

- 🕒 13h00-15h30
- 👤 Presentations
- 👤 All lecturers

📄 Each team presents their focus of penetration test. If the team already was successful in attacking the device they will present the attack scenario. As a minimum each team presents which attack surface and which vulnerability scan they tried. Each team must present a plan for the following online weeks: it should be clear what tasks they will fulfil and who is focusing on which area.

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25 FEBRUARY

TUESDAY 3H · ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

TUESDAY
25/2

GROUP WORK
(3H TEAM WORK - NO SPECIFIC TIME)

Group work

- 🕒 No specific time - 3h team work
- 👥 Group work

📄 The online tasks include Reconnaissance, Discovery (e.g., Nmap), Vulnerability Analysis, Exploitation, and Post-Exploitation. Teams may focus on network, web, firmware, or hardware attacks. A Pentest Report with security recommendations for the IoT device is required.

26 FEBRUARY

WEDNESDAY 3H · ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

WEDNESDAY
26/2

GROUP WORK
(3H TEAM WORK - NO SPECIFIC TIME)

Group work

- 🕒 No specific time - 3h team work
- 👥 Group work

📄 The online tasks include Reconnaissance, Discovery (e.g., Nmap), Vulnerability Analysis, Exploitation, and Post-Exploitation. Teams may focus on network, web, firmware, or hardware attacks. A Pentest Report with security recommendations for the IoT device is required.



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27 FEBRUARY

THURSDAY 3H - ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

THURSDAY
27/2

GROUP WORK
(3H TEAM WORK - NO SPECIFIC TIME)

Group work

- 🕒 No specific time - 3h team work
- 👥 Group work
- 📄 The online tasks include Reconnaissance, Discovery (e.g., Nmap), Vulnerability Analysis, Exploitation, and Post-Exploitation. Teams may focus on network, web, firmware, or hardware attacks. A Pentest Report with security recommendations for the IoT device is required.

28 FEBRUARY

FRIDAY 2H - ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

FRIDAY
28/2

COACHING
(2H TEAM & COACHING WORK - NO SPECIFIC TIME)

Coaching

- 🕒 No specific time - 2h team
- 👥 Coaching
- 👤 tba
- 📄 The teams have the opportunity to ask their coaches specific questions, e.g. details on the results of a vulnerability scan or whether an attack that has been tried but has not yet led to any results is promising.



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4 MARCH

TUESDAY 3H · ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

TUESDAY
4/3

GROUP WORK
(3H TEAM WORK - NO SPECIFIC TIME)

Group work

- 🕒 No specific time - 3h team work
- 👥 Group work

📄 The online tasks include Reconnaissance, Discovery (e.g., Nmap), Vulnerability Analysis, Exploitation, and Post-Exploitation. Teams may focus on network, web, firmware, or hardware attacks. A Pentest Report with security recommendations for the IoT device is required.

5 MARCH

WEDNESDAY 3H · ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

WEDNESDAY
5/3

GROUP WORK
(3H TEAM WORK - NO SPECIFIC TIME)

Group work

- 🕒 No specific time - 3h team work
- 👥 Group work

📄 The online tasks include Reconnaissance, Discovery (e.g., Nmap), Vulnerability Analysis, Exploitation, and Post-Exploitation. Teams may focus on network, web, firmware, or hardware attacks. A Pentest Report with security recommendations for the IoT device is required.



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6 MARCH

THURSDAY 3H - ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

THURSDAY
6/3

GROUP WORK
(3H TEAM WORK - NO SPECIFIC TIME)

Group work

- 🕒 No specific time - 3h team work
- 👥 Group work
- 📄 The online tasks include Reconnaissance, Discovery (e.g., Nmap), Vulnerability Analysis, Exploitation, and Post-Exploitation. Teams may focus on network, web, firmware, or hardware attacks. A Pentest Report with security recommendations for the IoT device is required.

7 MARCH

FRIDAY 2H - ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

FRIDAY
7/3

COACHING
(2H TEAM & COACHING WORK - NO SPECIFIC TIME)

Coaching

- 🕒 No specific time - 2h team
- 👥 Coaching
- 👤 tba
- 📄 The teams have the opportunity to ask their coaches specific questions, e.g. details on the results of a vulnerability scan or whether an attack that has been tried but has not yet led to any results is promising.

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11 MARCH

TUESDAY 3H · ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

TUESDAY
11/3

GROUP WORK
(3H TEAM WORK - NO SPECIFIC TIME)

Group work

- 🕒 No specific time - 3h team work
- 👥 Group work

📄 The online tasks include Reconnaissance, Discovery (e.g., Nmap), Vulnerability Analysis, Exploitation, and Post-Exploitation. Teams may focus on network, web, firmware, or hardware attacks. A Pentest Report with security recommendations for the IoT device is required.

12 MARCH

WEDNESDAY 3H · ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

WEDNESDAY
12/3

GROUP WORK
(3H TEAM WORK - NO SPECIFIC TIME)

Group work

- 🕒 No specific time - 3h team work
- 👥 Group work

📄 The online tasks include Reconnaissance, Discovery (e.g., Nmap), Vulnerability Analysis, Exploitation, and Post-Exploitation. Teams may focus on network, web, firmware, or hardware attacks. A Pentest Report with security recommendations for the IoT device is required.



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13 MARCH

THURSDAY 3H - ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

THURSDAY
13/3

GROUP WORK
(3H TEAM WORK - NO SPECIFIC TIME)

Group work

- 🕒 No specific time - 3h team work
- 👥 Group work
- 📄 The online tasks include Reconnaissance, Discovery (e.g., Nmap), Vulnerability Analysis, Exploitation, and Post-Exploitation. Teams may focus on network, web, firmware, or hardware attacks. A Pentest Report with security recommendations for the IoT device is required.

14 MARCH

FRIDAY 14H00 - 17H00 - ONLINE

GMT+2	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00	20h00
GMT+1	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00	19h00
GMT	8h00	9h00	10h00	11h00	12h00	13h00	14h00	15h00	16h00	17h00	18h00

FRIDAY
14/3

OVERALL QUALITY
ASSESSMENT SESSION

Overall Quality Assessment Session

- 🕒 14h00 - 17h00
- 👥 Quality Assessment
- 👤 All lecturers
- 📄 The teams must give a final presentation and submit the pentest report beforehand. Lecturers will ask questions about the content and approach. Students should share their SAP experiences, including what they learned, the effort involved, and what worked well or needs improvement. The assessment will be based on the report, individual engagement, and presentations.

SHORT
ADVANCED
PROGRAMME

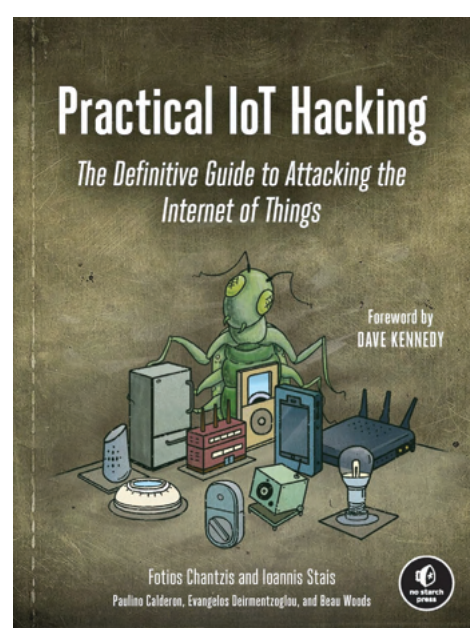
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14.FEB-14.MARCH.2025

REFERENCE READING

+INFO: www.run-eu.eu



Fotios Chantzis, Ioannis Stais, Paulino Calderon, Evangelos Deirmentzoglou, Beau Woods. (2021).

**Practical IoT Hacking,
The Definitive Guide to
Attacking the Internet of
Things.**

Penguin Random House



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