

Course program and reading list

Semester 3 Year 2024

School: Lauder School of Government, Diplomacy & Strategy M.A.

Israel's Cyber Policy and Strategy

Lecturer:

Maj.Ge Yigal Unna yigal.unna@post.runi.ac.il

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Teaching Assistant:

Ms. Lorena Atiyas Lvovsky latiyas@runi.ac.il

Course No.: Course Type: Weekly Hours: Credit:

3725 Lecture 1

Course Requirements: Group Code: Language:

Final Paper 243372500 English



This course will explore the complex realm of cyber terrorism, with a specific focus on the threats posed to Israel by different threat actors. Through in-depth analysis of key concepts, actors, cyber-attacks, and Israel's cyber defense strategy, the course will help gain a comprehensive understanding of Israel's cyber security policy and strategy. Throughout the course, we will analyze threat actors, including Palestinian and pro-Palestinian hackers, Iranian and Shia hackers, global jihadist actors, and cyber criminals. In addition, we will examine cyber-attacks during conflicts and cyber-terrorism vulnerabilities to critical infrastructures. The course will also focuse on Israel's Cyber Defense Strategy, including the role of the Cyber Authority, security agencies, and the private sector.



Students will develop a comprehensive understanding of cyber terrorism, and its implications to Israel's national security. They will gain insights into the motivations and tactics of various threat actors, analyzed real-world case studies, and explored Israel's Cyber Defense Strategy.



Grading

Students are required to individually write a final paper (100% of the course grade).



Teaching Assistant

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Azani E. & Haberfeld D. (2021)."Trends in Cyber-Terrorism 2021". ICT

https://ict.org.il/wp-content/uploads/2022/05/Trends-in-Cyber-Terrorism-2021.pdf

Tech against Terrorism (2022) " Trends in Terrorist and Violent Extremist Use of the Internet 2022".

https://www.techagainstterrorism.org/wp-content/uploads/2023/01/FINAL-State-of-Play-2022-TAT.pdf

ICT Cyber Desk (2018) "ICT Cyber-Desk Report: Jihadists' Use of Virtual Currency". ICT

https://ict.org.il/ict-cyber-desk-report-jihadists-use-of-virtual-currency/

ICT Cyber Desk (2015)" Op-Israel case study Anon Ghost". ICT

https://www.jstor.org/stable/pdf/resrep09462.7.pdf

Ben-Israel, I., & Tabansky, L. (2011). An Interdisciplinary Look at Security Challenges in the Information Age. Military and Strategic Affairs, 3(3)

https://www.inss.org.il/wp-content/uploads/2017/02/FILE1333532835-1.pdf

Plotnek, J. J., & Slay, J. (2021). Cyber terrorism: A homogenized taxonomy and definition. *Computers & Security*, 102, 102145.

Cohen M.S., Freilich C.D. and Siboni G. (2015). Israel and Cyberspace: Unique Threat and Response. International Studies Perspectives, Volume 17, Issue 3, Pages 307321, https://doi.org/10.1093/isp/ekv023

Cohen D. Levin D. (2014)."Operation Protective Edge: The Cyber Defense Perspective". INSS

https://www.inss.org.il/wpcontent/uploads/systemfiles/ Operation%20Protective%20Edge_%20The%20Cyber%20Defense%20Perspective.pdf

Handler S. (2022) "The cyber strategy and operations of Hamas: Green flags and green hats". Atlantic Council

https://www.atlanticcouncil.org/wp-content/uploads/2022/11/The-Cyber-Strategy-and-Operations-of-Hamas.pdf

Dolev B. & Siman-Tov D. (2022). "Iranian Cyber Influence Operations against Israel Disguised as Ransomware Attacks". INSS.

https://www.inss.org.il/wp-content/uploads/2022/01/special-publication-27012022-1.pdf

Spadoni G. (2019) "IRGC Cyber-Warfare Capabilities". ICT

https://ict.org.il/UserFiles/IRGC%20Cyber-Warfare%20Capabilities.pdf

Unna Y. (2019) National Cyber Security in Israel. INSS

https://www.inss.org.il/wp-content/uploads/2019/07/Cyber3.1ENG_3-169-175.pdf

Israel National Cyber Directorate (INCD): Israel International Cyber Strategy 2021

https://www.gov.il/BlobFolder/news/international_strategy/en/lsrael%20International%20Cyber%20Strategy.pdf

UNICRI & UNCCT (2021) Algorithms and Terrorism: The Malicious Use of Artificial Intelligence for Terrorist Purposes. https://unicri.it/News/Algorithms-Terrorism-Malicious-Use-Artificial-Intelligence-Terrorist-Purposes

Gunton, K. (2022). The Use of Artificial Intelligence in Content Moderation in Countering Violent Extremism on Social Media Platforms. In *Artificial Intelligence and National Security* (pp. 69-79). Cham: Springer International Publishing.

Recommended Reading:

Azani E. & Haberfeld D. (2021) "OpIsrael 2021". ICT (in Hebrew)

https://www.ict.org.il/

images/%D7%92%D7%9C%20%D7%AA%D7%A7%D7%99%D7%A4%D7%95%D7%AA%20%D7%A1%D7%99%D7%99%D7%91

Azani E. & Haberfeld D. (2021) Jerusalem Electronic Army claim responsibility for Israel's Railways website cyber attack". ICT (in Hebrew).

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Martin C. Libicki, "Cyberdeterrence and Cyberwar," The RAND Corporation (2009)

https://www.rand.org/content/dam/rand/pubs/monographs/2009/RAND_MG877.pdf