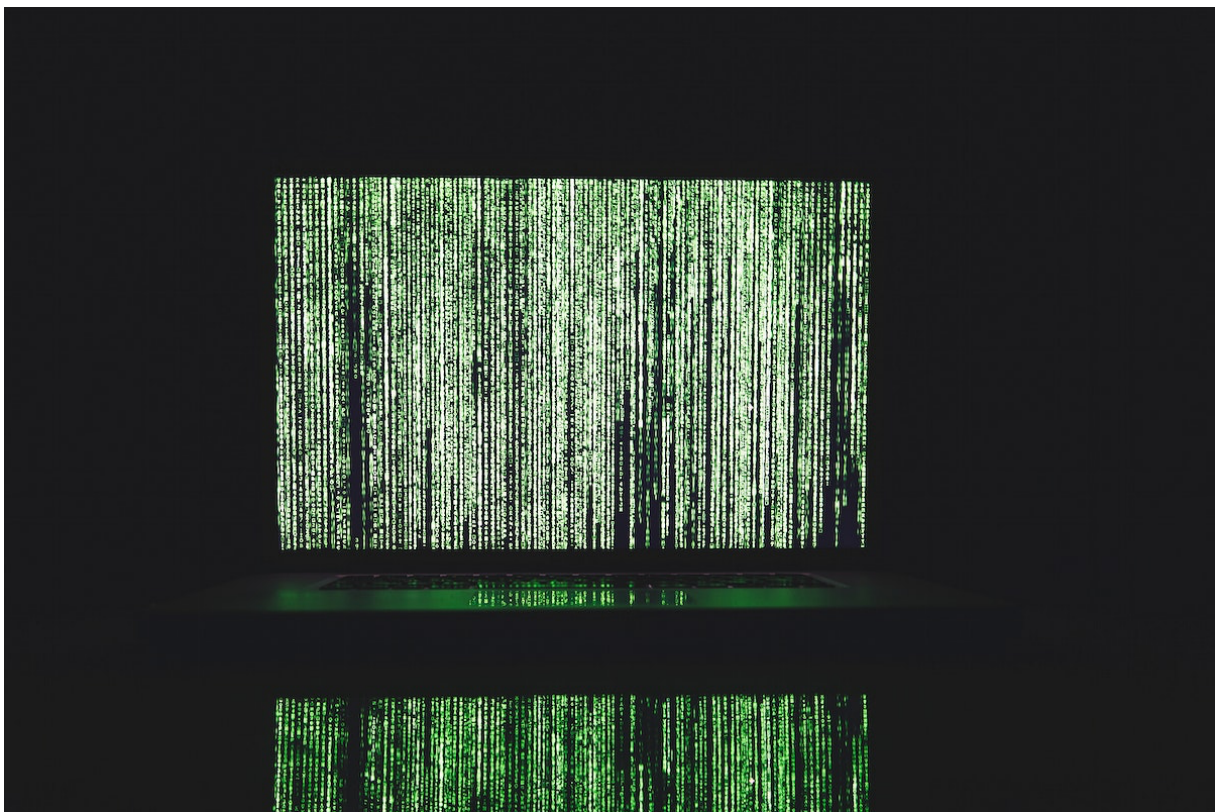


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MASTER OF PEACE AND SECURITY STUDIES 2025/2026



96-4.15 DIGITAL TECHNOLOGIES IN GLOBAL SECURITY: DOING CRITICAL SECURITY STUDIES WITH (AND AGAINST) AI

TUE 10.15-11.45

IFSH, ROOM NO. 2/23

CONSULTATION HOURS: ONLINE UPON REQUEST
CONTACT: ROTHE@IFSH.DE

COURSE OUTLINE

14 October 2025 Session 1
10:15-11:45 Course introduction and formalities

No class on October 21 and 28!

PART I: THEORETICAL PERSPECTIVES

4 November 2025 Session 2
10:15-11:45 Co-production and socio-technical imaginaries

Mandatory readings:

- Jasanoff, Sheila. 2004. *States of knowledge: the co-production of science and the social order*. Routledge, chapter 1: pp. 1-6 (until “essays in co-production”); chapter 2: pp. 39.-43 (from subheading “Ordering instruments” on).
- Jasanoff, Sheila, and Sang-Hyun Kim. 2015. “Future Imperfect: Science, Technology, and the Imaginations of Modernity.” In: *Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power*. University of Chicago Press, chapter 1, pp. 1-7 (until “Imagination as a social practice” on; pp. 28-43 (from “Sociotechnical imaginaries” on).

Additional literature:

- Lindskov Jacobsen, Katja, and Linda Monsees. 2019. “Co-production: The study of productive processes at the level of materiality and discourse” In *Technology and Agency in International Relations*, edited by Matthias Leese and Marijn Huijtink, 24-41. London/New York: Routledge.
- Martins, Bruno Oliveira, and Jocelyn Mawdsley. 2021. “Sociotechnical Imaginaries of EU Defence: The Past and the Future in the European Defence Fund.” *JCMS: Journal of Common Market Studies*.
- Klimburg-Witjes, Nina. 2024. “A Rocket to Protect? Sociotechnical Imaginaries of Strategic Autonomy in Controversies About the European Rocket Program.” *Geopolitics* 29 (3): 821-848.

11 November 2025 Session 3
10:15-11:45 Actor-Network-Theory and the agency of non-humans

Mandatory readings:

- Law, John. 2009. “Actor Network Theory and Material Semiotics.” In *The new Blackwell companion to social theory*, 141-158. Malden, MA & Oxford: Blackwell.

Additional literature:

- Best, Jacqueline, and William Walters. 2013. "Actor-Network Theory" and International Relationality: Lost (and Found) in Translation." *International Political Sociology* 7 (3): 332-334.
- Balzacq, Thierry, and Myriam Dunn Cavelty. 2016. "A theory of actor-network for cyber-security." *European Journal of International Security* 1 (2): 176-198.
- Nexon, Daniel H., and Vincent Pouliot. 2013. "Things of Networks": Situating ANT in International Relations." *International Political Sociology* 7 (3): 342-345.
- Amicelle, Anthony, Claudia Aradau, and Julien Jeandesboz. 2015. "Questioning security devices: Performativity, resistance, politics." *Security Dialogue* 46 (4): 293-306.

18 November 2025 Session 4

10:15-11:45 Critical race studies and postcolonial STS

Mandatory readings:

- Benjamin, Ruha. 2019. *Race After Technology: Abolitionist Tools for the New Jim Code*. London: Polity Press. Ch. 1: Introduction, pp. 1-48.

Additional literature:

- Amaro, Ramon. 2022. *The Black technical object: On machine learning and the aspiration of black being*. London: Sternberg Press.
- Anderson, Warwick. 2002. "Introduction: Postcolonial Technoscience." *Social Studies of Science* 32 (5-6): 643-658.
- Browne, Simone. 2015. *Dark matters: On the surveillance of blackness*. Duke University Press.
- Chandler, David, and Farai Chipato. 2025. "Artificial Intelligence, Governance, and Race." In *The Routledge Handbook of Artificial Intelligence and International Relations* edited by Diego Brasioli, Laura Guercio, Giovanna Gnerre Landini and Andrea de Giorgio, 15. London: Routledge.

25 November 2025 Session 5

10:15-11:45 Making and doing: The politics of critical security methods

Mandatory readings:

- Austin, Jonathan Luke, Rocco Bellanova, and Mareile Kaufmann. 2019. "Doing and mediating critique: An invitation to practice companionship." *Security Dialogue* 50 (1): 3-19.
- Weitzel, Michelle D. 2023. "Making Political Science: Material-Aesthetic Approaches to Knowledge Production." *Global Studies Quarterly* 3 (4).

Additional literature:

- Aradau, Claudia, Tobias Blanke, and Giles Greenway. 2019. "Acts of digital parasitism: Hacking, humanitarian apps and platformisation." *New Media & Society* 21 (11-12): 1461444819852589.
- Aradau, Claudia, Jef Huysmans, Andrew Neil, and Nadine Voelkner. 2014. "Introducing critical security methods." In *Critical Security Methods: New Frameworks for Analysis*, edited by Claudia Aradau, Jef Huysmans, Andrew Neil and Nadine Voelkner, 1-22. Aingdon/New York: Routledge.
- Huysmans, Jef, and Claudia Aradau. 2014. "Critical methods in International Relations: The politics of techniques, devices and acts." *European Journal of International Relations* 20 (3): 596–619.
- Jarrahi, Mohammad Hossein. 2025. "Interviewing AI: Using qualitative methods to explore and capture machines' characteristics and behaviors." *Big Data & Society* 12 (3): 20539517251381697.
- Ragazzi, Francesco. 2024. "Mapping as a Critical Making Practice in International Relations." *Global Studies Quarterly* 3 (4).

PART II: BUILDING BLOCKS AND FIELDS OF DIGITAL SECURITY

2 December 2025 Session 6

10:15-11:45 Algorithmic security: AI in contemporary warfare

Mandatory readings:

- Aradau, Claudia. 2023. "Algorithmic security and conflict in a datafied world." In *Digital International Relations*, 177-197. Routledge.

Additional literature:

- Amoore, Louise, and Rita Raley. 2017. "Securing with algorithms: Knowledge, decision, sovereignty." *Security Dialogue* 48 (1): 3-10.
- Bellanova, Rocco, Kristina Irion, Katja Lindskov Jacobsen, Francesco Ragazzi, Rune Saugmann, and Lucy Suchman. 2021. "Toward a Critique of Algorithmic Violence." *International Political Sociology* 15 (1): 121-150.
- Downey, Anthony. 2025. "The alibi of AI: Algorithmic models of automated killing." *Digital War* 6 (1).
- Wilcox, Lauren. 2017. "Embodying algorithmic war: Gender, race, and the posthuman in drone warfare." *Security Dialogue* 48 (1): 11-28.
- Suchman, Lucy. 2020. "Algorithmic warfare and the reinvention of accuracy." *Critical Studies on Security* 8 (2): 175-187.

9 December 2025 Session 7

10:15-11:45 The platformization of global security: Corporate power in the digital age

Mandatory readings:

Hoijtink, Marijn, and Anneroo Planqué-van Hardeveld. 2022. "Machine Learning and the Platformization of the Military: A Study of Google's Machine Learning Platform TensorFlow." *International Political Sociology*.

Additional literature:

Amoore, Louise. 2020. *Cloud ethics*: Duke University Press.

Baur, Andreas. 2024. "European Dreams of the Cloud: Imagining Innovation and Political Control." *Geopolitics* 29 (3): 796-820.

Bratton, Benjamin H. 2016. *The stack: On software and sovereignty*. Cambridge, MA: MIT Press.

Lagerwaard, Pieter. 2020. "Flattening the international: producing financial intelligence through a platform." *Critical Studies on Security* 8 (2): 160-174.

Srnicek, Nick. 2017. *Platform capitalism*: John Wiley & Sons.

Van Dijck, José. 2021. "Seeing the forest for the trees: Visualizing platformization and its governance." *New Media & Society* 23 (9): 2801-2819.

16 December 2025 Session 8

10:15-11:45 Big data and interoperability: Governing (through) digital borders

Mandatory readings:

Trauttmansdorff, P., & Felt, U. (2023). "Between Infrastructural Experimentation and Collective Imagination: The Digital Transformation of the EU Border Regime." *Science, Technology, & Human Values*, 48(3), 635-662.

Additional literature:

Amoore, Louise. 2021. "The deep border." *Political Geography*: 102547.

Aradau, Claudia. 2022. "Experimentality, surplus data and the politics of debilitation in borderzones." *Geopolitics* 27 (1): 26-46.

Glouftsiou, Georgios, and Stephan Scheel. 2021. "An inquiry into the digitisation of border and migration management: performativity, contestation and heterogeneous engineering." *Third World Quarterly* 42 (1): 123-140.

Leese, Matthias, Simon Noori, and Stephan Scheel. 2022. "Data Matters: The Politics and Practices of Digital Border and Migration Management." *Geopolitics* 27 (1): 5-25.

Trauttmansdorff, Paul. 2025. "Against interoperability? Terrains of technopolitical contestation and the remaking of EU border infrastructure." *Big Data & Society* 12 (2): 20539517241307909.

06 January 2026 Session 9
10:15-11:45 Digital twins: Planetary security in virtual environments

Mandatory readings:

Rothe, Delf. 2024. "When the World Is an Object: On the Governmental Promise of a Digital Twin Earth." *International Political Sociology* 18 (3).

Additional literature:

- Amoore, Louise. 2025. "Because the twin is not a copy: On the politics of digital twins." *New Media & Society* 27 (8): 4549-4564.
- Horn, Zoe, and Michael Richardson. 2025. "Digital twins and the logistical mode of prediction." *New Media & Society* 27 (8): 4443-4460.
- Parks, Lisa. 2002. "Satellite and Cyber Visualities: Analyzing Digital Earth." In *The Visual Culture Reader*, edited by Nicholas Mirzoeff, 279-290. London: Routledge.
- Rothe, Delf, Ingrid Boas, Carol Farbotko, and Taukiei Kitara. 2024. "Digital Tuvalu: state sovereignty in a world of climate loss." *International Affairs* 100 (4): 1491-1509.
- Wickberg, Adam, and Susanna Lidström. 2025. "Digital twins of the ocean: Wet environing media and marine futures." *New Media & Society* 27 (8): 4461-4477.

13 January 2026 Session 10
10:15-11:45 Generative AI: Global politics and security in a synthetic age

Mandatory readings:

- Amoore, Louise, S. J. Bennett, Alexander Campolo, Benjamin Jacobsen, and Ludovico Rella. 2025. "Politics of the prompt: Government in the age of generative AI." *Economy and Society*: 1-24.
- Tacheva, Jasmina, and Srividya Ramasubramanian. 2023. "AI Empire: Unraveling the interlocking systems of oppression in generative AI's global order." *Big Data & Society* 10 (2): 20539517231219241.

Additional literature:

- Amoore, Louise, Alexander Campolo, Benjamin Jacobsen, and Ludovico Rella. 2024. "A world model: On the political logics of generative AI." *Political Geography* 113: 103134.
- Bode, Ingvild. 2024. "AI Technologies and International Relations." *The RUSI Journal* 169 (5): 66-74.
- Gillespie, Tarleton. 2024. "Generative AI and the politics of visibility." *Big Data & Society* 11 (2): 20539517241252131.
- Jacobsen, Benjamin N. 2023. "Machine learning and the politics of synthetic data." *Big Data & Society* 10 (1): 20539517221145372.
- Suchman, Lucy. 2023. "The uncontroversial 'thingness' of AI." *Big Data & Society* 10 (2): 20539517231206794.

20 January 2026 Session 11
10:15-11:45 A planet-destroying machine: Securing the ecological costs of AI

Mandatory readings:

Hogan, Mél. 2015. "Data flows and water woes: The Utah Data Center." *Big Data & Society* 2 (2): 2053951715592429.

Jacobsen, Benjamin N. 2025. "Data, algorithms and the asymmetric politics of extraction." *The Sociological Review*, online first, 00380261251352378.

Additional literature:

Crawford, Kate. 2021. *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*: Yale University Press.

Crawford, Kate, and Vladan Joler. 2019. "Anatomy of an AI System." Accessed September 7 2025.

Estampa Collective. 2025. "Cartography of generative AI." Accessed 12 October 2025.
<https://cartography-of-generative-ai.net>.

Nost, Eric, and Emma Colven. 2022. "Earth for AI: A Political Ecology of Data-Driven Climate Initiatives." *Geoforum* 130: 23-34.

BLOCK III: PRESENTATION AND DISCUSSION OF GROUP PROJECTS

27 January 2026 Session 12
10:15-11:45 Concluding discussion and pitch of group projects

24 February 2026 Sessions 13 & 14
10:00-13:00 "Poster session": Presentation of group results