

**Econ 411: Economics of Net Work and Internet: The Political Economy of
the Future: AI, Science Fiction & the Economy
Fall 2025 (METU)
(Subject to change)**

Instructor: Hasan Cömert (Trinity College-Hartford, PERI UMASS/ METU- Visiting)
Meeting time and place: Tuesdays, 14:30-17:40, FZ 14
Office hours: TBA
In-person with occasional asynchronous activities

Course Description

This course examines recent AI developments through a political-economy lens. We trace AI's history and hype cycles; analyze the techno-economic forces behind the current wave; compare dynamics with the first Industrial Revolution; explore near-term impacts in science/medicine, armament, finance, and media; evaluate the international political economy (chips, export controls, standards, the US-China rivalry); and debate medium- to long-run outcomes for work, inequality, democracy, money/finance, climate, and futures (including space economies). We will utilize book chapters, journal articles, policy reports, documentaries, and science fiction (SF) novels/movies. Guest talks will be scheduled (TBA).

General Academic Calendar Info

Classes begin Mon Sept 29, 2025; the first Tuesday class is Sept 30.

Republic Day Eve is Tue Oct 28 (half-day) and Republic Day is Wed Oct 29 (holiday) includes asynchronous work if our slot is after 13:00.

Last day of classes is Fri Jan 2, 2026;

Fall Final Examinations run Jan 5–17, 2026 (final novella project due inside this window).

Learning Goals

- Connect AI's technical drivers to political-economic structures, rents, and power.
- Compare present dynamics with 18th–19th-century industrialization and Schumpeterian 'creative destruction.'
- Evaluate governance regimes and geopolitical strategies
- Analyze distributional, labour-market, and monetary/financial implications of AI.
- Synthesize course ideas into an original short SF novella with an analytical reflection.

Assessment & Grading

- Quizzes (reading checks): 30%
- Midterm (in-class, essay + short answer): 30% (Week 8).
- Final Project : 40%: an original AI-themed SF novella (~4,500–8,000 words)

Topics to be Covered

- W1: Course Kickoff , Why the political economy of AI?
- W2: From Turing to today, Hype cycles and AI winters
- W3: What drives the AI wave? Computational power, modeling approaches, algorithms, and rents/profits
- W4: Industrial Revolution vs. AI Revolution, Continuities and breaks
- W5: Holiday
- W6: AI in Science and Medicine (from AlphaGo to AlphaFold) & AI in Armament and Security-Autonomy
- W7: AI, Predicting the Future, Fundamental Uncertainty, and Bounded Rationality
- W8: Hegemony and the International Political Economy of AI, U.S., China, and the EU
- W9: The Future of Finance, AI in Finance, Central Banking, and Monetary Policy (short to medium run)
- W10: The Future of the Labour Market and Productivity in the Age of AI (short to medium run)
- W11: Income and Wealth Distribution in the Age of AI (short to medium run)
- W12: The Environment and Climate Change in the Age of AI
- W13: Hell or Heaven I, The Medium- to Long-Run Future of Economics and Society, The Realm of Science Fiction
- W14: Hell or Heaven II, The Medium- to Long-Run Future of Economics and Society, The Realm of Science Fiction

Extended References (Texts & Core Materials (selection of these sources will be used))

- Books
 - Acemoglu, D., & Johnson, S. (2023). *Power and progress: Our thousand-year struggle over technology and prosperity*. New York, NY: Basic Books.
 - Benjamin, R. (2019). *Race after technology: Abolitionist tools for the New Jim Code*. Cambridge, UK: Polity.
 - Crawford, K. (2021). *Atlas of AI: Power, politics, and the planetary costs of artificial intelligence*. New Haven, CT: Yale University Press.
 - Merchant, B. (2023). *Blood in the machine: The origins of the rebellion against big tech*. New York, NY: Little, Brown and Company.

- Miller, C. (2022). *Chip war: The fight for the world's most critical technology*. New York, NY: Scribner.
- Mitchell, M. (2019). *Artificial intelligence: A guide for thinking humans*. New York, NY: Farrar, Straus and Giroux.
- O'Neil, C. (2016). *Weapons of math destruction: How big data increases inequality and threatens democracy*. New York, NY: Crown.
- Wooldridge, M. (2021). *A brief history of artificial intelligence: What it is, where we are, and where we are going*. New York, NY: Flatiron Books.
- Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. New York, NY: PublicAffairs.

- Academic Articles & Reports
 - Autor, D. H. (2015). Why are there still so many jobs? The history and future of workplace automation. *Journal of Economic Perspectives*, 29(3), 3–30.
<https://doi.org/10.1257/jep.29.3.3>
 - Acemoglu, D., & Restrepo, P. (2019). Automation and new tasks: How technology displaces and reinstates labor. *Journal of Economic Perspectives*, 33(2), 3–30.
 - Goldfarb, A., & Tucker, C. (2019). Digital economics. *Journal of Economic Perspectives*, 33(1), 3–20.
 - Korinek, A. (2023). *Machines of mind: The case for an AI-powered productivity boom*. Washington, DC: Brookings Institution.
 - International Monetary Fund. (2024). *Gen-AI: Artificial intelligence and the future of work* (Staff Discussion Note 2024/001). Washington, DC: Author.
 - Organisation for Economic Co-operation and Development. (2024). *OECD Employment Outlook 2024: AI and the labour market*. Paris: OECD Publishing.
 - Pagano, U. (2014). The crisis of intellectual monopoly capitalism. *Cambridge Journal of Economics*, 38(6), 1409–1429.
 - Mazzucato, M. (2018). Mission-oriented innovation policy: Challenges and opportunities. *Research Policy*, 47(4), 936–950.
 - Foster, J. B., & McChesney, R. W. (2011). The internet's unholy marriage of surveillance and monopoly capital. *Monthly Review*, 62(10).

- Science Fiction Books & Stories
 - Asimov, I. (1951). *Foundation*. New York, NY: Gnome Press.
 - Asimov, I. (1950). *I, Robot*. New York, NY: Gnome Press.
 - Chiang, T. (2010). *The lifecycle of software objects*. Burton, MI: Subterranean Press.
 - Dick, P. K. (1968). *Do androids dream of electric sheep?* New York, NY: Doubleday.

- Forster, E. M. (1909). *The machine stops. The Oxford and Cambridge Review*.
- Gibson, W. (1984). *Neuromancer*. New York, NY: Ace Books.
- Older, M. (2016). *Infomocracy*. New York, NY: Tor.com.
- Pohl, F., & Kornbluth, C. M. (1953). *The space merchants*. New York, NY: Ballantine Books.
- Robinson, K. S. (2020). *The ministry for the future*. New York, NY: Orbit.
- Stephenson, N. (1992). *Snow crash*. New York, NY: Bantam Books.
- Doctorow, C. (2017). *Walkaway*. New York, NY: Tor Books.
- Films (Science Fiction Movies)
 - Kubrick, S. (Director). (1968). *2001: A space odyssey* [Film]. Metro-Goldwyn-Mayer.
 - Scott, R. (Director). (1982). *Blade runner* [Film]. Warner Bros.
 - Villeneuve, D. (Director). (2017). *Blade runner 2049* [Film]. Warner Bros./Sony Pictures.
 - Spielberg, S. (Director). (2002). *Minority report* [Film]. 20th Century Fox/DreamWorks.
 - Garland, A. (Director). (2014). *Ex machina* [Film]. A24.
 - Cameron, J. (Director). (1984). *The terminator* [Film]. Orion Pictures.
- TV Episodes (*Black Mirror*)
 - Harris, O. (Director). (2016). *Nosedive* (Season 3, Episode 1) [TV series episode]. In C. Brooker (Creator), *Black mirror*. London: House of Tomorrow/Netflix.
 - Harris, O. (Director). (2013). *Be right back* (Season 2, Episode 1) [TV series episode]. In C. Brooker (Creator), *Black mirror*. London: Zeppotron/Channel 4.
 - Stone, B. (Director). (2011). *The entire history of you* (Season 1, Episode 3) [TV series episode]. In C. Brooker (Creator), *Black mirror*. London: Zeppotron/Channel 4.
 - Jones, J. (Director). (2016). *Hated in the nation* (Season 3, Episode 6) [TV series episode]. In C. Brooker (Creator), *Black mirror*. London: House of Tomorrow/Netflix.
- Documentaries & Videos
 - Docherty, N., & Fanning, D. (Directors). (2019). *In the age of AI* [Documentary film]. FRONTLINE/PBS.
 - Kantayya, S. (Director). (2020). *Coded bias* [Film]. 7th Empire Media/Independent Lens.
 - Kohs, G. (Director). (2017). *AlphaGo* [Documentary film]. Moxie Pictures.
 - Orłowski, J. (Director). (2020). *The social dilemma* [Film]. Exposure Labs/Netflix.

- Harari, Y. N. (Speaker). (2023, May). *AI and the future of humanity* [Video]. Frontiers Forum.
- Harari, Y. N. (Speaker). (2023). *Yuval Noah Harari: The dangerous rise of AI* [Video]. TED.

Policies & Expectations

- Attendance & participation: Come prepared; bring notes and questions.
- Quizzes: Short closed-book checks at the start of class; no make-ups except documented emergencies.
- Academic integrity: METU regulations apply.
- AI tools policy: Assume AI tools are not allowed unless a task explicitly permits them. When permitted, disclose the tool, prompt, and what you kept/edited.
- Accessibility: If you need accommodations, contact the instructor as early as possible.
- Communication: University email and ODTU Class

Disclaimer

The schedule and readings may be adjusted. Any changes will be announced in advance.