

# HS502 Philosophy of Technology

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Credit : 3-0-0-3

Approval: Approved in 3rd Senate

Students intended for: B.Tech /MS/PhD

Elective or Core: Elective

Prerequisite: Consent of the faculty member

Semester: Even/Odd

## Course objective:

In today's world, technoscience, the convergence of science and technology, has radically challenged the traditional assumption that science advances purely by theory, which can be verified at best only much later. Contemporary philosophic reflections stress, however, the role of interdependence between science and technology; the technological infrastructure of modern science reveals on deeper examination human and epistemological influences that are as "revolutionary" as the changes of knowledge which occurred with so-called modernity. In this sense, philosophy of technology today calls for understanding that "all science in its production of knowledge is technologically embodied", i.e., that science uses technologies in a variety of unique and critical methods in the production of its knowledge. The present course seeks to examine the connection between science and technology and to examine the significant variables of this interaction, among them notably (1) human embodiment (2) role of technologies or instruments in the production of scientific knowledge (3) the cultural and historical situs of such productions, in order to stress the multicultural aspects of technoscience.

## Course content:

techne and episteme, technology and human self-conception; philosophies of science and technology, analytic and praxis traditions (pragmatism, phenomenology and the transformation of hermeneutics, critical theory), technoscience; cognitive issues and the human-technology interfaces; focal practices and device paradigms; transcendentalizing technologies and dystopian technologies; instrumentalism, 'epistemologic engines', simulation and modeling, gender issues;

alternative technologies, appropriate technologies, sustainable environmental practices; technology and social practice; technology transfer and cross-cultural issues

## Methods of Evaluation:

Term Paper plus End of Semester

## Prescribed Text:

Scharff, Robert C. and Val Dusek (eds.), *Philosophy of Technology: The Technological Condition*. London: Blackwell Publishers, 2003.

## References:

1. Achterhuis, Hans (ed.), *American Philosophy of Technology: The Empirical Turn*. Translated by Robert Crease. Bloomington: Indiana University Press, 2001.
2. Borgmann, Albert, *Technology and the Character of Contemporary Life: A Philosophical Inquiry*. Chicago: University of Chicago Press, 1984.
3. Feenberg, Andrew, *Critical Theory of Technology*. Oxford : Oxford University Press, 1991. Reprinted as *Transforming Technology*. Oxford : Oxford University Press, 2002
4. Feenberg, Andrew, *Questioning Technology*. London: Routledge, 1999.
5. Galison, Peter, *Einstein's Clocks, Poincare's Maps*. New York: W.W.Norton, 2003.
6. Hacking, Ian, *The Social Construction of What?* Cambridge, MA: Harvard University Press, 1983
7. Heidegger, Martin, "The Question Concerning Technology" in *Basic Writings*. New York: Harper /Collins, 311-341, [1954] 1993.
8. Hickman, Larry, *John Dewey's Pragmatic Technology*. Bloomington: Indiana University Press, 1990.

9. Higgs, Eric, Andrew Light, and David Strong (eds.), *Technology and The Good Life*. Chicago: University of Chicago Press, 2000.
10. Ihde, Don, *Technics and Praxis: A Philosophy of Technology*. Dordrecht: Reidel Publishers, 1979.
11. Ihde, Don, *Technology and the Lifeworld: From Garden to Earth*. Bloomington: Indiana University Press, 1990.
12. Ihde, Don, *Instrumental Realism: The Interface Between Philosophy of Science and Philosophy of Technology*. Bloomington: Indiana University Press, 1991.
13. Ihde, Don, and Evan Selinger (eds.), *Chasing Technoscience: Matrix for Materiality*. Bloomington: Indiana University Press, 2003.
14. Kuhn, Thomas *The Structure of Scientific Revolutions*. Chicago. University of Chicago Press, 1962.
15. Latour, Bruno and Steve Woolgar, *Laboratory of Life: The Social Construction of Scientific Facts*. Beverly Hills: Sage, 1979.
16. Latour, Bruno, *Science in Action*. Cambridge: Harvard University Press, 1987.
17. Pitt, Joseph, *Thinking about Technology: Foundations of the Philosophy of Technology*. New York. Seven Bridges Press, 2000.
18. Zimmermann, Michael, *Heidegger's Confrontation with Modernity: Technology, Politics, Art*. Bloomington: Indiana University Press, 1990.