UCLouvain

lepl1801

2023

Engineering ethics

3.00 credits	22.5 h + 15.0 h	Q1

Teacher(s)	. SOMEBODY ;Guay Alexandre ;
Language :	French
Place of the course	Louvain-la-Neuve
Learning outcomes	
Evaluation methods	First session: Written exam (85%), continuous evaluation (15%). Second session: written exam (100%)
Teaching methods	If possible, teaching and practical work will be provided in person. If not in a comodal way or fully online.
Content	1 - Introduction: Norms in technologies 2 – Concept: risk et expertise 3 – Ethical theory: consequentialism 4 – Concept: professional codes 5 – Ethical theory: deontology 6 – Concept: value and interests 7 – Ethical theory: virtue ethics 8 – Concept: context and Complex: From context to 9 – Ethical theory: care ethics 10 – Application: Numerical governance 11 – Application: Drones and robots 12 – Application: Transition and sustainability
Inline resources	Class Moodle website.
Bibliography	**Bibliographie sommaire** Chamayou, Grégoire. *Théorie du drone*, La fabrique: Paris, 2013. 363 p. Dumouchel, Paul ; Damiano, Luisa. *Vivre avec les robots : essai sur l'empathie artificielle*, Seuil: Paris, 2016. 224 p. Friis, Jan Kyrre Berg Olsen ; Pedersen, Stig Andur ; Hendricks, Vincent F. *A companion to the philosophy of technology*, Wiley-Blackwell: Chichester,, 2009. xv, 571 p. Hansson, Sven Ove, éd. 2017. *The Ethics of Tecnology,* Rowan & Littlefield: London. Jasanoff, Sheila. *The ethics of invention : technology and the human future*, W. W. Norton: New York (N.Y.), 2016. x, 306 p. Johnson, D.G. 2020. *Engineering Ethics*, Yale University Press. Kroes, Peter, et Peter-Paul Verbeek, éd. 2014. *The Moral Status of Technical Artefacts*. Vol. 17. Philosophy of Engineering and Technology. Dordrecht: Springer Netherlands. http://link.springer.com/10.1007/978-94-007-7914-3. Martin, M.W. et R. Schinzinger. 2005. *Ethics in Engineering*, fourth edition, McGraw-Hill. Mitcham, Carl ; Ferre, Frederick. *Ethics and technology*, JAI Press: Greenwich, 1989. XVIII, 306 p. Murphy, Colleen, Paolo Gardoni, Hassan Bashir, Charles E. Harris Jr., et Eyad Masad, éd. 2015. *Engineering ethics for a globalized world*. New York, NY: Springer Berlin Heidelberg. Poel, Ibo, et David Goldberg, éd. 2010. *Philosophy and Engineering:* Vol. 2. Philosophy of Engineering and Technology. Dordrecht: Springer Netherlands. http://link.springer.com/10.1007/978-90-481-2804-4 **Poel, Ibo van de, et Lambèr M. M. Royakkers. 2011. *Ethics, Technology, and Engineering: An Introduction*. Malden, Mass: Wiley-Blackwell.** Une bonne introduction au sujet, si vous deviez ne lire qu'un livre, ce serait celui-là. Verkerk, Maarten Johannes ; Hoogland, Jan ; van der Stoep, Jan ; Nelson, Mark. *Philosophy of technology : an introduction for technology and business students*, Routledge/Taylor & Francis: London, 2016. xvii, 336 p. Vermaas, Pieter E., éd. 2009. *Philosophy and design: from engineering to architecture*. Dordrecht: Springer. Waelbers, Katinka. 2011. *Doing Good with Technologies:* Vol. 4. Philosophy of Engineering and Technology. Dordrecht: Springer Netherlands. http://link.springer.com/10.1007/978-94-007-1640-7.
Faculty or entity in charge	BTCI

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Engineering	FSA1BA	3		🔍