

The Hong Kong University of Science and Technology

UG Course Syllabus

[Course Title]	Artificial Intelligence Ethics
[Course Code]	COMP1944
[No. of Credits]	3
[Any pre-/co-requisites]	N/A

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Course Description

Artificial intelligence (AI) is disrupting every sphere of our work and lives, bringing unprecedented risks to society. This introductory course surveys the explosive area of AI ethics, illuminating relevant AI concepts with no prior background needed. Fake news bots. AI driven social media displacing traditional journalism. Drone warfare. Elimination of traditional jobs. Privacy-violating advertising. Monopolistic network effects. Biased AI decision/recognition algorithms. Deepfakes. Autonomous vehicles. Automated hedge fund trading. No area remains untouched. Policy think tanks, governments, and tech companies around the world have started paying serious attention to AI ethics. How will human civilization survive the rise of AI? What are the new rules? What are the ethical frameworks needed to avoid extinction? What are engineers' and entrepreneurs' ethical responsibilities?

Assessments:

Assessment Task	Contribution to Overall Course grade (%)
Participation	15%
Quizzes	10%
AI news presentation (Individual)	5%
Reading response (Individual)	15%
Peer review of reading response	5%
Case study analysis (Individual)	15%
Peer review of case study analysis	5%
Debate (Group)	15%
Debate review (Individual)	15%

Required Texts and Materials

Reference books (all available in HKUST library online resources or book collections):

- Virginia Dignum. Responsible Artificial Intelligence: How to Develop and Use AI in a Responsible Way. Springer, 2019.

- Mark Cockelbergh. *AI Ethics*. MIT Press, 2020.
- Edited by Markus D. Dubber, Frank Pasquale, and Sunit Das. *The Oxford Handbook of Ethics of AI*. Oxford University Press, 2020.
- Virginia Eubanks. *Automating Inequality: How High-tech Tools Profile, Police, and Punish the Poor*. St. Martin's Press, 2018.
- Cathy O'Neil. *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. Crown, 2016.