

1. Record Nr.	UNINA9910966114403321
Titolo	Emerging technologies and ethical issues in engineering : papers from a workshop, October 14-15, 2003 // National Academy of Engineering of the National Academies
Pubbl/distr/stampa	Washington, D.C., : National Academies Press, c2004
ISBN	9786610208661 9780309165723 0309165725 9781280208669 128020866X 9780309544696 0309544696
Edizione	[1st ed.]
Descrizione fisica	1 online resource (167 p.)
Disciplina	174/.962
Soggetti	Engineering ethics Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Emerging technologies -- State of the art in engineering ethics -- Ethics in engineering education.
Sommario/riassunto	Engineers and ethicists participated in a workshop to discuss the responsible development of new technologies. Presenters examined four areas of engineering--sustainability, nanotechnology, neurotechnology, and energy--in terms of the ethical issues they present to engineers in particular and society as a whole. Approaches to ethical issues include: analyzing the factual, conceptual, application, and moral aspects of an issue; evaluating the risks and responsibilities of a particular course of action; and using theories of ethics or codes of ethics developed by engineering societies as a basis for decision making. Ethics can be built into the education of engineering students and professionals, either as an aspect of courses already being taught or as a component of engineering projects to be examined along with research findings. Engineering practice workshops can also be

effective, particularly when they include discussions with experienced engineers. This volume includes papers on all of these topics by experts in many fields. The consensus among workshop participants is that material on ethics should be an ongoing part of engineering education and engineering practice.
