

1. Record Nr.	UNINA9911003695403321
Titolo	Bildung for Engineering Education and Practice : A New Agenda // edited by Anders Buch, Steen Hyldgaard Christensen
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-031-86581-2
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (XIX, 235 p.)
Collana	Philosophy of Engineering and Technology, , 1879-7210 ; ; 49
Disciplina	601
Soggetti	Technology - Philosophy Technical education Ethics Philosophy of Technology Engineering and Technology Education Moral Philosophy and Applied Ethics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introduction: Contesting Narrow Conceptions of Engineering Education and Practice through the Concept of Bildung -- Part I. Engineers' and Technological Experts' Need for Bildung -- 2. Rethinking Engineering Professionalism through the Concept of Bildung -- 3. Bildung under Conditions of Engineered Destruction -- 4. Bildung, Destruction, and Reconstruction – a Rejoinder to Carl Mitcham -- 5. From the Individual to the Collective Dimension of Bildung in Engineering Education through Challenge Based Learning -- 6. Thinking about Engineering Education: Between Bildung and Citizenship -- Part II. Intersections between Bildung and Efforts to Broaden Engineering Education -- 7. Bildung: Conformity or Transformation -- 8. Bildung, and how that Concept Sits with Traditional Notions of Teaching Students "how to think" like Engineers -- 9. Appropriateness and Value: Building Critical-Reflexivity and Socio-Political Competency Amongst Undergraduate Engineers in a Third-Year Design Course -- 10. Usefulness and Bildung: Engaging Students in a Bildung-oriented Engineering Education -- Part III. Bildung in Engineering across Cultural Contexts -- 11. Bildung and

Education for Engineering Practice -- 12. Developing A Self-Cultivation Theory for Engineering Education: A Confucian Perspective -- 13. Humanities and Engineering Education for Gaston Berger from the Perspective of Bildung -- 14. Conclusion: Bildung for Engineering Futures.

Sommario/riassunto

Using the concept of Bildung as a framework, which in late capitalism/postmodernity may be perceived to include critical knowledge, value consciousness, ethics, and social responsibility (including sustainability), this project aims to investigate the underlying aspirations, structures, and dynamics of change taking place in engineering education and practice through conversations between engineering, social sciences, and the humanities. Calling upon the spirit of philosophers on Bildung such as John Dewey, Jürgen Habermas and contemporaries, the focus of the present project is on broadening engineering education initiatives and practice that follow normative understandings of Bildung. This volume appeals to researchers and students working in philosophy, engineering, and education.
