

1. Record Nr.	UNINA9910299509703321
Titolo	Engineering a Better Future [[electronic resource]] : Interplay between Engineering, Social Sciences, and Innovation // edited by Eswaran Subrahmanian, Toluwalogo Odumosu, Jeffrey Y. Tsao
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-91134-1
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XXIX, 200 p. 40 illus., 28 illus. in color.)
Disciplina	607.11
Soggetti	Technical education Technology—Sociological aspects Engineering design Management Industrial management Engineering/Technology Education Science and Technology Studies Engineering Design Innovation/Technology Management Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I: Engineering Education and social sciences -- Evolving from Single Disciplines to Renaissance Teams -- Knowledge, Skill, and Wisdom: Reflections on Integrating the Social Sciences and Engineering -- Innovations in Energy-Climate Education: Integrating Engineering & Social Sciences -- Reconnecting Engineering with the Social and Political Sphere -- Technology, Policy and Management: co-evolving or converging? -- Ecole des Mines de Paris: a few lessons from a long history -- Part II: Engineering and Social Sciences -- The Cult of Innovation: Its Myths and Rituals -- Does Law Wear out? -- Engineering and Society -- Dealing with the future: General considerations and the case of "mobility" -- Designing the future we want -- A Generative Perspective on Engineering: why the destructive force of artifacts is

immune to politics -- Part III: Study of science and engineering practice -- The Art of Science practice -- Do the best design ideas (really) come from conceptually distant sources of inspiration? -- Caring for nanotechnology? Being an integrated social scientist.

Sommario/riassunto

This open access book examines how the social sciences can be integrated into the praxis of engineering and science, presenting unique perspectives on the interplay between engineering and social science. Motivated by the report by the Commission on Humanities and Social Sciences of the American Association of Arts and Sciences, which emphasizes the importance of social sciences and Humanities in technical fields, the essays and papers collected in this book were presented at the NSF-funded workshop 'Engineering a Better Future: Interplay between Engineering, Social Sciences and Innovation', which brought together a singular collection of people, topics and disciplines. The book is split into three parts: A. Meeting at the Middle: Challenges to educating at the boundaries covers experiments in combining engineering education and the social sciences; B. Engineers Shaping Human Affairs: Investigating the interaction between social sciences and engineering, including the cult of innovation, politics of engineering, engineering design and future of societies; and C. Engineering the Engineers: Investigates thinking about design with papers on the art and science of science and engineering practice. .
