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Titolo	Notes for Manufacturing Instructors [[electronic resource]] : From Class to Workshop // edited by Diego Carou, J. Paulo Davim
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ISBN	3-031-48468-1
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Descrizione fisica	1 online resource (322 pages)
Collana	Materials Forming, Machining and Tribology, , 2195-092X
Altri autori (Persone)	DavimJ. Paulo
Disciplina	670
Soggetti	Industrial engineering Production engineering Industrial and Production Engineering
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Design for sustainability -- Design for additive manufacturing -- Machining using -- Plastic injection simulation -- Conventional machining: turning, drilling or milling -- Non-conventional machining -- Powder metallurgy -- Metal forming -- Finishing processes -- Foundry -- Mechanical fastening -- Adhesive joining -- Welding processes -- Coordinate measuring machines methodologies -- Tolerancing -- Design of experiments -- Machine learning.
Sommario/riassunto	This book offers an extensive guide to the most engaging computer and laboratory sessions for teaching manufacturing engineering topics. It serves as a valuable resource for educators in planning their practical coursework. The book comprises 14 chapters covering a wide range of subjects, including design and simulations, various manufacturing processes such as additive manufacturing, injection molding, forming, machining, casting, and non-conventional machining, as well as process monitoring, metrology, and inspection using computed tomography. It also explores the application of methodologies like the design of experiments and machine learning. These contributions enable both lecturers and students to apply manufacturing engineering theory in real-world scenarios, drawing from the best practices developed in engineering institutions worldwide. .

