

1. Record Nr.	UNINA9910337653303321
Titolo	Additive Manufacturing – Developments in Training and Education // edited by Eujin Pei, Mario Monzón, Alain Bernard
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-319-76084-X
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (235 pages)
Disciplina	621.988
Soggetti	Manufactures Technical education Industrial Management Engineering design Machines, Tools, Processes Engineering and Technology Education Engineering Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction to Additive Manufacturing and Related Applications -- The Growing Need for Training and Education for AM -- "What's in a word?" --The use and background for terms and definitions in additive manufacturing -- Professional Training of AM at the European Level -- Case Studies of Using Additive Manufacturing for Prototyping in Design -- Knowledge transfer and standards needs in Additive Manufacturing -- What you need to take into account during your design for Additive Manufacturing -- Continuing education and part-time training on Additive Manufacturing for people in employment -- Additive Manufacturing through Problem Based Learning -- Additive Manufacturing: Instrumental Systems in Research, Education and Service -- Introducing state-of-the-art AM research in Education -- XIII: Measuring the cost of Additive Manufacturing -- Training and Teaching Strategies for Medical Applications of Additive Manufacturing Systems -- IPRs and 3D Printing -- AM validation methods, technology transfer based on case studies -- FoFAM and AM-Motion Initiatives: A

strategic framework for additive manufacturing deployment in Europe.

Sommario/riassunto

This book provides an overview of training and teaching methods, as well as education strategies, for Additive Manufacturing (AM) and its application in different business sectors. It presents real-world applications and case studies to demonstrate the key practical and theoretical fundamentals of AM training, written by international experts from the field. Additive Manufacturing is a rapidly developing technology, and having a well-trained workforce is essential. Accordingly, readers are introduced to new training approaches and recent breakthroughs that can facilitate and accelerate the design, application and implementation of AM. The book's contributors discuss many topics to provide readers a fundamental grasp of AM, including: · collaboration among educational bodies, and between industry and governments; · strategies for implementing AM training; · new teaching methods; · training programs that provide alternative employment choices; · the need for certification by professional bodies; and · promoting awareness of AM in society. This book offers an excellent source of information for researchers and industrial engineers who are interested in expanding their AM expertise, and learning how to implement it. It will also be of interest to readers who want to learn about the practicalities of adopting training and teaching for AM.
