1. Record Nr. UNINA9910337916403321

Titolo	FlexSim in Academe: Teaching and Research / / edited by Pawel Pawlewski, Patrycja Hoffa-Dabrowska, Paulina Golinska-Dawson, Karolina Werner-Lewandowska
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-04519-6
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (VIII, 143 p. 72 illus., 50 illus. in color.)
Collana	EcoProduction, Environmental Issues in Logistics and Manufacturing, , 2193-4614
Disciplina	003.3
Soggetti	Computer simulation Industrial engineering Production engineering Production management Business logistics Learning Instruction Simulation and Modeling Industrial and Production Engineering Production Logistics Supply Chain Management Learning & Instruction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	FlexSim use in didactics, thesis and research in the context of competences for the Industry 4.0 -- On the use of projects in simulation courses -- Increasing High School Students' Interest in Industrial Engineering through a Summer Camp -- Teaching Old Dogs New Tricks -- DES as tool for the decision-making in an offshore manufacturing foundation process -- 3D Discrete Events Simulation to Evaluate the Internal Logistic Strategies in a Shipyard -- The

	methodology of modeling and simulation of human resources and industrial robots in FlexSim -- Determining of the optimal number of trailers for Milk-Run intralogistics system -- Implementation of calculation for simulation of Milk-run intralogistics system -- Using CSP Solvers as Alternative to Simulation Optimization Engines. .
Sommario/riassunto	This book describes a variety of teaching and academic research applications that effectively utilize FlexSim to: (1) provide guidelines, methods and tools for simulation modeling and analysis in a variety of educational settings and (2) address a variety of important design and operational issues in industry. Simulation is increasingly proving to be an important tool for supporting decision-making and problem-solving processes in many disparate domains, including the design, management and improvement of a wide range of operations systems in manufacturing, logistics, healthcare, etc. Achieving resource efficiency and minimizing negative externalities from operations represent two of today’s greatest challenges; modern simulation methods can help to overcome them. FlexSim is a prominent software package for developing discrete-event, agent-based, continuous, and hybrid simulations.