Integrated design and manufacturing

For many years computers have been playing a prominent role in designing and manufacturing products.

There is now a critical need to address the role of computer technologies in an integrated fashion, emphasizing product data exchange as well as product data management.

This book, *Integrating Advanced Computer-Aided Design, Manufacturing and Numerical Control: Principles and Implementations*, written by Associate Professor Xun Xu (Mechanical Engineering) and published by IGI Global, presents basic principles of product modelling and management while featuring contemporary industrial case studies as well.

The book is a one-stop reference source for the latest international standards and industry practices. This is the only book on integrating design and manufacturing based on the concepts of STEP and STEP-NC. The book also expands beyond the traditional scope of the product development process to give a brief account of product data management (PDM) and product lifestyle management (PLM).

This book is appropriate for all academic and research libraries, as well as for anyone involved in the use of computer technology to aid in the design, drafting, manufacturing or prototyping of a part or product. This includes researchers, educators, students, practitioners, engineers, machinists and IT systems developers.

Xun Xu is an associate professor of manufacturing systems and leads the University’s Intelligent and Interoperable Manufacturing Research Group. He consults extensively with industry and has close ties with industries in New Zealand and overseas.

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