

Educating engineering designers for a multidisciplinary future

Tan, Adrian; Matzen, Detlef; Ericsson, Åsa; Bergström, Mattias

Publication date: 2007

Link back to DTU Orbit

Citation (APA): Tan, A. (Author), Matzen, D. (Author), Ericsson, Å. (Author), & Bergström, M. (Author). (2007). Educating engineering designers for a multidisciplinary future. Sound/Visual production (digital)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.

- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Educating engineering designers for a multidisciplinary future

DTU

Technical University of Denmari

Mattias Bergström Åsa Ericson Luleå University of Technology (LTU) Division of Functional Product Development Detlef Matzen Adrian Tan

Technical University of Denmark (DTU) Department of Mechanical Engineering Section of Engineering Design and Product Development

The northernmost University of Technology in Scandinavia World-sizes research and education















Case course @ DTU

- The student teams are first guided through an analysis of the initial product's product life cycle, yielding insights into four aspects of product design:
 - » identification of current environmental impacts,
 - » life phase systems the product encounters,
 - » activities that involve the human actor (i.e. customer) and the product,
 - actor-network that support and supply these activities throughout the product's life.
- Based on the analysis, goals are set for the improved solution and concepts are developed for a new product/service-system.
- This way the students are lead through
 - engineering and
 - socio-technical analysis tasks and thereby laying the foundation for their

DTU

- synthesis work
- in the concept development phase of the project

Product life gallery Produktlivsgalleri for lærebog - Colour and the Optical Properties of Materials Livscyklus Disponeringer МЕКА Møder Albertela arcent, f Annalatingeten Burnnegete Albertela arcent, f Material arcent, f Scotlauro Conteners 115 M Rávarer Sec. milli 111,111 Sector 557° 庶 .E 1111 m 1 Automatical Statement Produktet Produktion Trade Offs -4 Distribution . - Ruthmak syst - Ruthmak syst - Reductors - Reductors Brug ------ Tarfattar - Tarfag Opsamling DTU -Bortskaffelse 7 y da 12 10 Produkt/service systemer 42050 [design.ing student project, 2006]







