

Product Design Engineering: a unique course at Swinburne University of Technology, Melbourne, Australia.

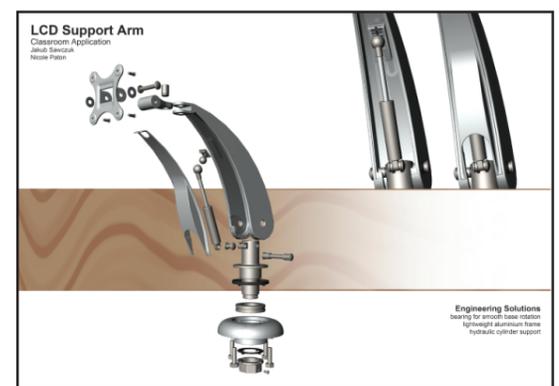
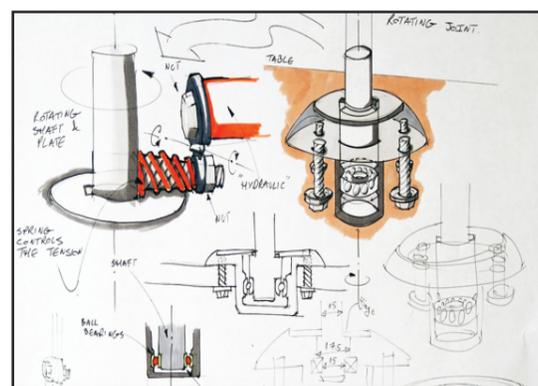
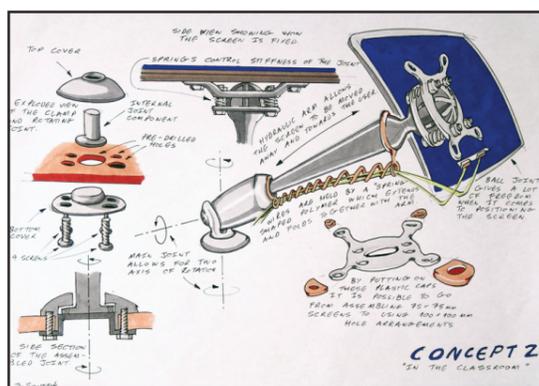
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Introduction

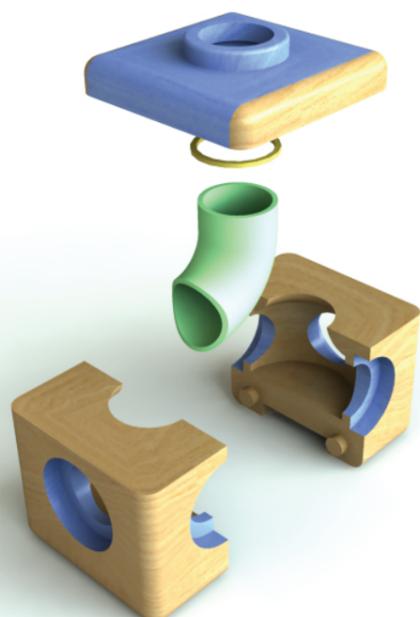
Product Design Engineering at Swinburne University of Technology provides a combination of Industrial Design and Engineering studies. It was determined that this is a natural combination of these two diverse areas as products conceptualised in the area of Industrial Design would naturally require engineering for detailing the design and preparing for manufacturing.

Integration of Study

Engineering and Industrial Design studies are integrated, rather than completing all engineering studies before commencing design studies or vice versa. The course curriculum provides engineering knowledge in time for its implementation through 'Project Based Learning'. For example; Machine design studies are completed prior to a design studio based project of an adjustable computer screen. (Below)



Above: LCD Support Arm: An example of a third year Product Design Engineering project, showing a mix of design and engineering solutions. Below: Final Year Project, Early Childhood Development Toy.



“play + learn” projects

During their final year, Product Design Engineering students are required to take a yearlong project which has the objective of identifying and addressing a social need by designing a product to fulfil that need. Four case studies are displayed in this presentation where students researched the area of interest, identified a need and then proceeded to design a product. Each has an outcome which is original and has its unique characteristics not found in any existing products on the market.