



ENGINEERING IN PRACTICE

INTRODUCTION

In this assignment, I will be reviewing my engineering knowledge and my capability skills set before and after this module. I'm looking to use my expertise in engineering learned in this module. At the beginning of this module, my technology skills weren't that great if you ask me but over these past couple of months, my technology skills have improved massively thanks to our incredible professors. Before this module, I did 2 years at a previous course that I was studying at which is called Performing Engineering Operations, my technology skills at the time were none existent because it wasn't the requirement of the course it was more hand-to-hand kind of work.

CAD stands for Computer-Aided Design which means the use of different softwares to make an engineering drawing/sketch both in 2D and 3D modeling. If you are from an engineering background or currently in the engineering industry you should be knowing about engineering digital resources and softwares. There are different types of digital resources and software used by Industry professionals in engineering for example:

- Solidworks

- Vectorworks Architect

- Autodesk

- Space Design

- CIATA

- ZW3D

- Redesigned

All these apps have their own unique software and engines that will take your work and craft to the next level. But the one software I benefited a lot from further training is SolidWorks (currently using myself) because it's an understandable software for people who are just getting into engineering, it's not too complicated, and therefore Solidworks helped me nail down the basics of the software in engineering, and I love how SolidWorks it's available in different versions there's SolidWorks Standard, SolidWorks Professional, and SolidWorks Premium it gives you varieties. Another software I think would benefit me in my further training is ZW3 is a well-known CAD/CAM solutions provider. Their ZW3D is an all-in-one CAD/CAM solution that is designed for the complete product design and development process. This engineering design tool features an easy-to-use 3D CAD module that greatly reduces design time. The key features for this are firstly it has the fastest kernel for solid-surface hybrid modelling, secondly makes full use of existing drawings with powerful data exchange when product planning which is really helping, thirdly has multiple methods of verification to guarantee the quality of your design, thirdly it enhances internal and external cooperation with sample making and lastly like Solidworks it is available in several versions, including ZW3D Standard, ZW3D Professional, ZW3D Premium, ZW3D 2X Machining, ZW3D 3X Machining, ZW3D Lite, and ZW3D Student Version. Another software I would benefit from is CIATA its the world's leading solution for product design and innovation. This engineering design tool is used by leading organizations and is applicable in multiple industries. I believe this software would take me to the next level with CATIA, I would have the ability to model products in the context of real-life behavior which is next level. The features of this app that appeal to me are firstly its social design environment accessibility through powerful 3D dashboards that drive business intelligence, real-time concurrent design, and collaboration across all stakeholders. Secondly, it provides an instinctive 3D experience with world-class 3D modeling and simulation capabilities that optimize the effectiveness of each user. Lastly, it delivers an inclusive product development platform that easily integrates with existing processes and tools, it enables me multiple disciplines to leverage powerful and integrated specialist applications across all phases of the product design and development process.

I could source appropriate CPD development by doing a lot of research.

