2017 Final Year Project Definition Template

**Project Title:**
Develop Methods to optimise flow in a Manufacturing Workshop (Airbus Production Line)

**Name of the company:**
Aerosud Aviation Pty (LTD)

**Background about the industry and/or company:**
Aerosud is an established leader in the aviation industry supplying products mainly to Airbus and Boeing. Aerosud was formed in 1990 with its main focus on high engineering, low production programs. Currently Aerosud manufactures a variety of products including Composites, Sheetmetal, and Thermoplastics.

In order to remain a competitive supplier, Aerosud has to continuously improve to ensure that the products are delivered on time, in full and to excellent quality at the best cost. Aerosud has a strong focus on the Theory of Constrains methodology to improve company performance.

**Project Description, Problem Statement, or Opportunity for Improvement and Scope:**
The complete production line for Airbus Sheet metal has to be analysed to identify constrains and optimise the process to be able to achieve the increase in customer demand. The following tasks are envisaged:

- Create process maps
- Capacity analysis, including time studies
- Identifying current problems, constraints, limitations and inefficiencies
- Performing literature study on methods to improve production performance and problem solving
- Create simulation models
- Defining and creating methods or systems to achieve the required customer demand as well as increasing Throughput and reducing Inventory and Operating Expense.
- Developing implementation process to support the demand increase and improve overall flow and efficiency.

**Mentorship:**
Strong guidance will be provided by Industrial Engineers in the Continuous Improvement Department as well as Project Managers and Production managers, who will also be responsible to provide necessary information and access to the relevant required information and processes. Support from UP will also be provided.

**Project application process and contact details:**
Students must apply for this project before 3 February 2017. Feedback will be given by 10 February 2017.

**Contact details:**
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