

2021 Final Year Project Definition Form

Project Title:

Optimization of tow motor routing in the supply of automotive assembly parts

Company details:

DSV Solutions

Providing a service to Ford Motor Company South Africa

Silverton

Pretoria

Gauteng

South Africa

Company background:

DSV Solutions provides automotive logistics to Ford that includes Receiving, Warehousing, Line Supply with various material supply streams.

Project description:

One material stream requires parts to be sequenced into/onto trolleys whereafter the trolleys are driven to the assembly line where the parts are assembled onto the vehicle. Due to the part complexity on site it requires the scheduling of roughly 50 tow motors which becomes a labour-intensive task. There are also regular material supply stream changes that requires re-planning of the tow motors. The project should aim to analyse the problem and come up with a model that could be used to optimize the routing of the tow motors.

Industry mentorship:

(Please indicate who from the company will be mentoring the student during 2020)

Industry mentor contact details:

Louwrens Cronje
(Engineering & Quality
Manager)

Louwrens.cronje@za.dsv.com

0837175082

Project topic application process:

*(Please stipulate your preferred application process and your application deadline for allocating a student to a project. Note that **students need to submit their industry-allocated projects by 30 March (strict)** where after each student will be allocated to a UP-supervisor).*

1. Full academic record to be submitted to louwrens.cronje@za.dsv.com for consideration before 26-Feb-2021 17h00. Favourite subjects to be marked or indicated clearly (Top 3 subjects). **Very short** reason for favourite subject to be submitted.
2. Shortlisted students will be contacted for an interview. This can be in person or electronically. If not contacted for an interview, consider your submission unsuccessful.
3. Successful student will be notified by 12-March-2021.

Any other relevant information:

(Please include any other relevant information)