

# Shell Eco-Marathon "Aggielanders"



## SEM 2017

- Purpose of participation: Senior Design Project.
- Location: SEM Asia-Singapore at Changi Exhibition center from March 16<sup>th</sup> -19<sup>th</sup>, 2017.
- Length of track: 12.7 km (9 laps, 1.41 km each).
- Time to be completed: 25 minutes.
- Justification of selection: Gas to Liquid (GTL) is the option decided upon this year in line with Qatar's attempts to remain the GTL capital of the world.

# ACHIEVEMENTS/RESULTS

- Team succeeded in passing technical inspection
- Car completed three full runs
- Runs were invalid due to car going over the specified time limit of 25 minutes
- Run 1: 25 min 49 sec
- Run 2: 26 min 10 sec
- Run 3: 25 min 8 sec

#### VEHICLE MANAGEMENT SYSTEM





#### YANMAR ENGINE

- 4-stroke 1 Cylinder
- Dry Weight: 32.0 Kg
- Length: 332 mm
- Width: 378 mm
- Height: 417 mm
- Maximum Output: 4.7 Hp
- Yanmar L48N5 –Electric start



#### FUTURE RECOMMENDATIONS

- Design a lighter body.
- Design a better fuel line system.
- Tune Engine for top performance.
- Electrical Wiring should be labelled more precisely and have enhanced protection.
- VMS should include be more user friendly and have a better design.

### VEHICLE BODY



# ELECTRICAL SCHEMATIC DIAGRAM

