



INTERNSHIP 2022

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Tasks completed last week

- [#2] Sub-system fabrication and assembly

1. Motor coupling mounting
2. Motor housing mounting on the E-tricycle
3. Rear brake caliper mounting





Tasks in this week

- [#5] Aesthetic finishing of E-tricycle
 - ✓ Cleaning welds, washing and painting
- [#3] Final assembly of the E-tricycle
- [#4] Further research into Shujaa tractor gearbox
 - ✓ looking into viability of the existing unit in conjunction with an electromagnetic clutch system and electro-mechanical actuators as shifting mechanisms

TIMELINE

Month	Intern week	Tasks
Jan	Week 1	Taking measurements and 3D modelling of the tricycle
	Week 2	Identification of parts Design of chain drive Shaft design Disassembly of the tricycle

Feb	Week 3	Acquisition of parts Fabrication of tricycle components Literature review on E-tractors
	Week 4	Identification of parts to be replaced on the shujaa tractor Calculation of power requirements for the shujaa tractor Measurement of chassis
	Week 5	Design of various transmission components 3D modeling of the Shujaa tractor
	Week 6	Vibration and stress analysis Acquisition of parts for the tricycle
March	Week 7	Design of the transmission system of shujaa tractor Fabrication of motor shaft attachment for the tricycle Fabrication of motor housing
	Week 8	Final fabrication of parts for the tricycle Assembly of the E-tricycle Design and acquisition of the gearbox (shujaa tractor)