**TEKNOFEST**

**AEROSPACE AND TECHNOLOGY FESTIVAL**

**ROBOTAXI-FULL SCALE AUTONOMOUS VEHICLE COMPETITION**

**(UNIQUE VEHICLE CATEGORY)**

**PRELIMINARY DESIGN AND SIMULATION REPORT**

**APPLICATION ID:** 468176

**TEAM NAME:** TUNSA Space Robotics

**VEHICLE NAME:** TUNSA’s Martian Settler Robotaxi (TUNMSR)

**TEAM CAPTAIN:** ELYES KHECHINE

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## Team Ambitions

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### Pedal-by-wire Design

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## Security Hardware

### Signal Lights

### Stop Lamps

## Battery Management System (BMS)

### Voltage Monitoring

### Current Monitoring

### Temperature Monitoring

### State of Charge (SOC)

### State of Health (SOH)

### Balancing System

## Electrical Safety

### Ingress Protection (IP)

### Low Current Emergency Disconnect Switch

### High Current Emergency Disconnect Switch

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