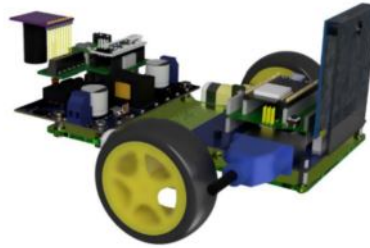


1 Aim

The aim of the project is to design and build an autonomous rover system that could be used in a remote location without direct supervision.



The rover will have the following main functionalities:

- Receive movement commands and send status data through a processing unit.
- Detect and avoid obstacles in its working area.
- Build a map of its local working area including obstacles on an offsite data store.
- A charging station will be designed and implemented to charge the rover batteries.

2 Timeline

- **11 - May:** Introductory session
- **12 - May - 26 - May:** Design and practice sessions
- **14 - June - 25 - June:** Assessment period

3 Deliverables

- Report containing:
 - Design process of the Mars Rover
 - Technical specifications and details of components
 - Reflection essay on coursework lecture
- Video demo on Mars Rover operation
- Oral exam

4 Project submodules

The Mars Rover project is composed of six submodules which are managed by each individual member of the team.

4.1 EEE: Drive

4.2 EEE: Energy

4.3 EEE: Integration

4.4 EIE: Command

4.5 EIE: Control

4.6 EIE: Vision