

KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
COLLEGE OF COMPUTER SCIENCE AND ENGINEERING
COMPUTER ENGINEERING DEPARTMENT

COE - 400

PROJECT REQUIREMENTS

1. Introduction

The world of transportation is changing. Moving goods is becoming more and more automatic. The last area where automation did not yet arrive is the transportation of the goods within the city or between cities. This task is still completely relying on human intervention. The introduction of unmanned vehicles is becoming a trend to reduce this dependency. However, it is difficult to anticipate the introduction of unmanned trucks or cars because of the safety implications this will have on the other users of the roads.

2. Principle of Operation

A flying vehicle is to be designed in this project. Its requirements are listed below:

- Ability to provide fully automatic and unmanned transportation of goods from any location to any location.
- The flying vehicle should be reusable.
- Ability to take photographs or videos from a given altitude in specific locations.
- Ability to direct itself in the air
- Ability to take-off and land safely and smoothly
- Ability to cruise at a specified altitude
- Ability to be saved in case of emergency landing by using the help of an on-board parachute
- Ability to communicate with a base station to get its instructions