

Abu Dhabi Polytechnic

Students' Graduation Project Abstract			
Department:	EMET	Semester:	Spring-2022
Project Title:	Cost Effective Kamikaze Drone		
Supervisor:	Eng. Soumya Ambramoli		

Abstract:

In this report, a self-destructive unmanned aerial vehicle will be presented. The mechatronics system will utilize a ready-made ammunition (RPG-7 warhead) that will be integrated into the fuselage of a fixed wing UAV. The system equipped with a detonation method (crashing pressure) caused by gravity and kinetic energy of the falling UAV. The fuselage will be made out of fiberglass, which gives it the advantage of rigidity and agility. The UAV will consist of an open-source controller, a brushless DC motor, servo motors that will guide the UAV flight, receiver and transmitter, a controller equipped with a screen that sends video feedback back to the soldier. This system will provide soldiers the ability to hit invisible short-range targets. Due to the abundancy of RPG-7 warheads this UAV will be cost effective method for hitting ground vehicles, enemy personals, and targets in tight environments.