

DESIGN AND IMPLEMENTATION OF  
REAL-TIME FEASIBLE PATH PLANNING  
FOR UNINHABITED AERIAL VEHICLE  
(UAV)



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Dated:

**CERTIFICATE**

We accept the work contained in the degree project report titled (Design and Implementation of real-time feasible path planning for UAV) as a confirmation to the required standard for the partial fulfilment the degree of BEE.

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## **ABSTRACT**

The Uninhabited Aerial Vehicle (UAV) is used in the surveillance, Agricultural industry, military applications, Search and rescue, Pollution monitoring, pipeline monitoring & oil gas security. The effective path planning for UAV is design and implemented to achieve a collision free path. The goal is to achieve smooth flyable path which is done by implementing Bezier and clothoid curve techniques; lately a comparison has been made between the two techniques, which are done by using Matrix Laboratory (MATLAB) software.

The main aim is to avoid the UAV from collision; there is be no problem when the UAV is moving in a straight line but as it takes turn near the edge of any obstacle it will face certain problems. To overcome such problems a Bezier curve method is being used, which is the best solution to make the curvature near the edge of any obstacle without colliding with the obstacles or resistance. To conclude we can say that Bezier curve method is the best solution for the path planning of UAV. Previously a clothoid curve method was used for the path planning.

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