

# Utilizing Drone Technology in Civil Engineering

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**Abstract:** *An attempt has been made in this project to use drone technology in the civil engineering. Drones as a tool that increase communication between construction participants, improves site safety, uses topographic measurements of large areas, with using principles of aerial photogrammetry is possible to create buildings aerial surveying, bridges, roads, highways, saves project time and costs, etc. The use of UAVs in the civil engineering can brings many benefits creating real-time aerial images from the building objects, overviews reveal assets and challenges, as well as the broad lay of the land, operators can share the imaging with personnel on site, in headquarters and with sub-contractors, planners can meet virtually to discuss project timing, Their benefits range from on-site safety to a level of project monitoring which wasn't previously possible. The purpose of this research is to assess the current status of employing UAVs and immersive technologies towards digitalizing the construction industry and highlighting the potential applications of these technologies, either individually or in combination and integration with each other. This project includes how basically aerial robotic technology has potential for use in wide variety of civil engineering applications. This project focuses on only applications of drones in civil infrastructure.*

**Keywords:** Drones, Unmanned Aerial Vehicle (UAV), Construction technology, Aerial Image

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