

HINDUSTAN COLLEGE OF ENGINEERING  
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# **ABSTRACT**

The main aim of the project is to design a sub-sonic Amphibious tiltrotor with the combination of a helicopter, to carry a payload of 50 passengers which can take off from water as well as ground and land on water or ground. Here we are assigned with overall weight estimation, and thrust of single engine, drag estimation, wing and aerofoil selection, its performance characteristics and to draw a prototype model. At the end of this preliminary design, the airplane configuration is frozen and precisely defined. The end of the preliminary design phase brings a major decision to commit to the manufacture of the airplane or not.