

# **Research on GPS and its application in digital map simulation using MapInfo**

**Nguyen Quoc Hung**

**Abstract:** This topic aims to outline the role of modern Global Positioning System (GPS) in creating and managing digital map data. The context of the topic stems from the increasingly high practical demand for providing accurate geospatial information for various applications. The objective of the research is to explore how GPS is used to build an effective digital map system, while deploying the application on the MapInfo platform. The approach includes theoretical analysis of GPS and experimentation with the MapInfo tool to process geographic data. The expected results will significantly contribute to enhancing the usability of GIS technology in the field of local resource management.

**Keywords:** GPS, Digital Map, MapInfo, Satellite Positioning, Resource Management