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Godesy and its Basic principles

LECTURE 7



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7.1 Introduction

- Geodesy is defined as the science of measurement and mapping of the earth's surface.
- Geodesists also study geodynamical phenomena such as crustal motion, tides and polar motion
- For this, they design global and national control networks, using space and terrestrial techniques while relying on datums and coordinate systems



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7.2 Principles of Geodesy

- Coordinates and Coordinate Reference Systems
- Earth and the Geoid
- Ellipsoids (Spheroids)
- Geodetic Datums
- Geographical Coordinates (Latitude and Longitude)
- Latitude and Longitude are not Unique
- Global Positioning System (GPS)
- Coordinate Transformations



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THANK YOU