



# Geospatial Numerical Analysis

## CIVILEN 5461

**Credit Hours:**

4.00 - 4.00

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**Course Levels:**

Undergraduate (1000-5000 level)

Graduate (5000-8000 level)

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**Course Components:**

Lecture

Lab

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**Course Description:**

Application of adjustment techniques to geo-spatial information including but not limited to GPS, Photogrammetry GIS and remote sensing.

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**Prerequisites and Co-requisites:**

Prereq: 2410 (400), or Grad standing.

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**Course Goals / Objectives:**

- Application of numerical analysis and adjustment techniques to geo-spatial information
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**Course Topics:**

- a-posteriori variances
  - representation of residuals
  - condition equations
  - prior information
  - classification of errors
  - measures of dispersion
  - statistical tests
  - applications to geo=spatial data
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**Designation:**

Elective