

# BODY OF TERM PROJECT REPORT (*F.K. Wilson*)

The body of your report should be 4 pages plus a **cover page** (**total 5 pages**). The font should be **Times New Roman, size 12**. Line spacing should be single; margins should be **Normal** (1" around).

**Title:** Unsupervised Landsat TM Classification of Baltimore, Maryland using ENVI.

Please run the classification for the following class types:

- (1) Urban/Built-Up Area;
- (2) Vegetative Area;
- (3) Water Bodies; and
- (4) Marsh/Wetland.

## BODY of the Report:

### I. INTRODUCTION

Find out what is a report an introduction and then write about half a page of introduction about your Term Project

### II. STUDY AREA

Your study area is Baltimore, Maryland, and is important to write something about your study area. Readers would like to get some idea about your study area. Write about half a page and include a figure (Landsat Image in some kind of **color composite display**) of your study area.

### III. DATA

Your data for this Term Project is Landsat Thematic Mapper 5, which was provided, courtesy of USGS; it was acquired in 2010. Write something about your data so that your readers would be able get a idea of your data.

#### IV. METHOD (please use your notes, the ENVI Tutorial, & emailed materials)

You will be using the environment for visualizing images (ENVI) to conduct an **unsupervised Isodata classification**. The bands used (**Spectral Subset**) for your classification were provided (2 bands). For the IsoData Parameters: the number of classes (**Default Setting, 5 Min and 10 Max**); the number of **Iteration** = 2; and the **Change Treshold** = 65%. Please save your classification (**navigate to your Workspace** and save in your CEGR 110 folder).

#### V. RESULTS and CONCLUSION

Please about Results and Conclusion. Use your classification result (the different classes obtained) for your result. Make a figure (Figure 2) of the classified TM image and save in JPEG format. You should also make a **table of your results** (Statistical Analysis – Table 1) and use the **percentages** in your write-up.

In conclusion, what can you say about this project and the outcomes?  
How important were the class breakdown (% of features) in Baltimore?

### References (following the Results and Conclusion)

Please check out what is a reference. The materials used in conduction this project must be listed including your Textbook, web site visited, and remote sensing books/papers/periodicals read. Please note that for this report, it should be about a quarter of a page.

### Appendix (a separate page following your Report – page 6)

Please find out what appendix is and how it can be used. Please note that for this report, it should be just 1 page.

# HINTS TO HELP IN YOUR WRITING

By asking yourself some questions such **as listed below** and coming up with the answers will help you write your report. Just imagine you are talking to someone about what you did. Use the third person singular such as (i) “Landsat Thematic Mapper (TM) 5 was used for this term project” or (ii) “An unsupervised IsoData classification procedure was conducted, using Landsat TM bands 6 and 7”.

## The 4 Ws and H:

1. **What?** — Title (informs about the project)
2. **Why?** — Justification (importance of the project/task)
3. **Where?** — Study Area (where project was conducted)
4. **When?** — Time Period (acquisition date)
5. **How?** — Method (processes involved)