ITEC451
Research Project Guideline

1. Submit a proposal (a write-up; between 1~2 pages) of your research idea. The proposal must include:
   a. Introduction
      i. Justification on your topic
         You need to justify or explain why your topic is interesting to be investigated
      ii. Background knowledge.
         Background knowledge of the research field to help a reader understand your proposal
   b. Proposed Idea (Problem Statement)
   c. Literature Survey
      Summary of existing research by other researchers on the similar topics
   d. Approach to Solve the Problem
   e. Timeline to Conduct the Research
   f. References

2. Get an approval on your proposed idea from me.
3. Submit your final paper (6~10 pages) and prepare a presentation (20 minutes) on your research result. Your final paper and the presentation must include:
   a. Introduction
      i. Justification on your topic
         You need to justify or explain why your topic is interesting to be investigated
      ii. Background knowledge.
         Background knowledge of the research field to help a reader understand your proposal
   b. Literature Survey.
         Summary of existing research by other researchers on the similar topics
   c. Problem Statement
   d. Approach to Solve the Problem
   e. Results
         Theoretical result and/or simulation result can be included.
   f. Concluding Remark
   g. References

Paper Format
We will follow IEEE transaction paper format.

Important Dates (The proposal and the final paper must be emailed to the instructor by the following deadline)
Proposal Due: 1:59PM on April 18 (Friday)
Final Paper Due: 1:59PM on April 30 (Wednesday)
Presentation Slide Due: 1:59PM on April 30 (Wednesday)
Presentation Dates: In class during April 30~May 2

Suggested Topics
❖ Linear Programming, Integer Programming, Mixed Integer Programming problems, or Game Theory, Markov Chain on:
1. Routing in Mobile Ad-Hoc Networks (MANET)
2. Topology Control of Wireless Sensor Networks

3. Security Issues in Mobile Ad-Hoc Networks
4. Security Issues in Wireless Sensor Networks
5. Quality of Service of Grid Computing Networks
6. Security Issues in Grid Computing Networks
7. What is Ubiquitous Computing Network?
8. What is Utility Computing Network?
9. Service Discovery and Service Composition in Grid Computing Networks
10. Or your own preference