## **School of Industrial Engineering and Management**

## **Dissertation Standards**

- The dissertation should provide a focused, in-depth educational experience for the student. The result should be a dissertation of scholarly and literary merit which demonstrates the candidate's ability to carry out and present independent, original and creative research.
- The dissertation should reflect a level of competence that could not have been achieved without studies beyond the master's level. The research is expected to draw directly upon advanced learning in the student's major field and demonstrate mastery of that knowledge.
- The research should be a significant, unique contribution representing a genuine addition to the fundamental knowledge relevant to the field of Industrial Engineering and Management. The results of this research should be of sufficient substance and creativity to be published in the major technical journals within the student's field of interest.
- The research should possess the major characteristics of the scientific method, namely objectivity and reproducibility. The research hypotheses or the goals and specific objectives should be measurable and testable. Where appropriate, the use of actual problem environments to generate the hypotheses and models for testing is strongly encouraged.
- The dissertation should clearly indicate the relevance and importance of the problem, the relationship of the research to the literature of the field, and the significance, originality, and generality of the research results. Furthermore, the dissertation should address potential applications of the research results.
- The scope of the research should be such that it requires the time and effort equivalent to at least one academic year of graduate study.
- The dissertation should demonstrate a high degree of proficiency in written communication of research results. It should conform to the <u>Graduate College Thesis/Dissertation Handbook</u> requirements concerning organization and format.
- The Institutional Review Board (IRB) must approve all research involving human subjects. According to federal guidelines, a dissertation involving human subjects cannot be accepted without prior IRB approval.